The Role of Affect in the Positive Self: Two Longitudinal Investigations of Young Adolescents in the United States and China

Xin Zhang and Eva M. Pomerantz
University of Illinois at Urbana–Champaign

Yang Qu
University of Illinois at Urbana–Champaign

Peipei Setoh
Nanyang Technological University

Meifang Wang
Shandong Normal University

This research investigated the role of American and Chinese children’s affect in the valence of their views of themselves. In 2 studies (Ns = 825 and 397), children in the United States and China reported on their affect (e.g., positive and negative emotions) and described themselves multiple times over the 7th and 8th grades. The more positive and less negative children’s affect, the more positive their descriptions of themselves over time in both studies. These pathways were more consistent than those in the reverse direction (i.e., from children’s self-descriptions to their affect). Notably, regardless of direction, the strength of the pathways was similar in the United States and China. The findings suggest that counter to some theoretical perspectives, affect is not more important in American than Chinese children’s judgments about the self.

**Keywords:** adolescents, self-concept, affect, China, culture

Individuals’ affective experiences can play a pervasive role in their lives, shaping their judgment and decision making (for reviews, see Clore & Huntsinger, 2007; Weber & Johnson, 2009), motivation and achievement (e.g., Mega, Ronconi, & De Beni, 2014; for a review, see Lyubomirsky, King, & Diener, 2005), as well as psychological and physical well-being (e.g., Kok et al., 2013; for reviews, see Diener & Chan, 2011; Pressman & Cohen, 2005). Such experiences may do so in part via how individuals view themselves. Research with both children and adults indicates that positive affect can facilitate positive self-conceptions, whereas negative affect can undermine such self-conceptions (e.g., Cole, Martin, Peeke, Serozynski, & Hoffman, 1998; Isbell, McCabe, Burns, & Lair, 2013). However, the research to date on the role of affect in individuals’ views of themselves has been conducted almost exclusively in the West, which is surprising given arguments that the collectivist orientation of East Asia may lead affect to be less influential in this region (e.g., Markus & Kitayama, 1991; Schimmack, Oishi, & Diener, 2005; Suh, Diener, Oishi, & Triandis, 1998). The major goal of the current research was to evaluate the role of children’s affect in the valence of their views of themselves in the United States and China.

The Role of Affect in Self-Conceptions

There has been much attention to the idea that individuals’ affective experience shapes how they view themselves. The mood congruency hypothesis posits that affect acts as a cue that shapes encoding and retrieval of self-relevant knowledge (Bower, 1981). The idea is that because humans are motivated to maintain their current affective state, they make judgments about themselves in line with their current feelings (Bower, 1981; Clark & Isen, 1982; Forgas, Bower, & Moylan, 1990). Hence, ambiguous information relevant to the self may be encoded in line with individuals’ affective experience (Sedikides & Skowronski, 1991)—for example, when children are feeling happy, they may see an invitation to a birthday party as indicating that they are popular. Positive affect can also activate a search for favorable knowledge about the self, leading individuals to retrieve disproportionate positive information about themselves, thereby fostering positive self-conceptions. Negative affect, in contrast, makes negative attributes of the self more cognitively accessible.

The role of affect in self-conceptions has also received attention in work concerned with depression. Lewinsohn and colleagues (Lewinsohn, Steinmetz, Larson, & Franklin, 1981; Lewinsohn, Zeiss, & Duncan, 1989; Rohde, Lewinsohn, & Seeley, 1990) make the case that negative cognitions—including views of the self—ensue from an episode of depression, leaving a scar, which puts individuals at further risk over time. Such a scar may manifest itself in multiple ways, but one is in how individuals view themselves, with depression generating more negative self-conceptions.
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relationships (e.g., Kitayama, Ishii, et al., 2006; Uchida,

stresses maintaining harmonious relationships within the group,

manifest in depressive and anxiety symptoms among children and

adults (e.g., Cole et al., 1998; Cole, Martin, Peeke, Serocynski, &

Fier, 1999; Cole, Peeke, Dolezal, Murray, & Canzoniero, 1999;

McGrath & Repetti, 2002; Nolen-Hoeksema, Giris, & Seligman,

1986; Pomerantz & Rudolph, 2003). Specifically, such symptoms

predict dampened perceptions of competence in both the academic

and social arenas over 6 or more months adjusting for earlier

perceptions; the reverse effect—perceptions of competence pre-

dicting depression and anxiety symptoms over time—has also

been documented but is not as strong or consistent (e.g., Calvete,

Orue, & Hankin, 2013; Cole et al., 1998; McCarty, Vander Stoop,


The Role of Affect in Self-Conceptions in the West and East Asia

Because the research to date has been conducted in the West, it

is unclear if the influence of affect on judgments about the self

is evident in cultures where the emphasis on the individual is weaker. Culture-specific perspectives suggest that affective experience is

of more significance to judgments about the self in individualistic

than collectivistic cultures. For example, the emphasis on unique-

ness and autonomy in individualist cultures has been suggested to

lead internal states, such as affective experience, to be prioritized (e.g., Kashima, Siegal, Tanaka, & Kashima, 1992; Markus &

Kitayama, 1991). Affect is seen as an important marker of one’s

unique identity (Markus & Kitayama, 1991; Suh et al., 1998), with

some investigators arguing that individuals are seen as responsible

for their affect (e.g., Kitayama, Ishii, Imada, Takemura, & Ramos-

wamy, 2006). The East Asian collectivist orientation, however, stresses maintaining harmonious relationships within the group,

with personal feelings subordinated to the goals of the group,

leading to less attention to one’s affect (e.g., Kashima et al.,

1992; Suh et al., 1998). In collectivist cultures, affect may also be viewed

as interpersonally situated, occurring in the context of specific

relationships (e.g., Kitayama, Ishii, et al., 2006; Uchida,

Townsend, Markus, & Bergsieker, 2009). Thus, affect is not re-

garded as the individual’s responsibility as in the United States,

making it less relevant to judgments about the self.

Other perspectives suggest that the influence of affect in the

West and East Asia may depend on the type of affect. Along these

lines, Tsai and colleagues (e.g., Tsai, 2007; Tsai, Knutson, &

Fung, 2006; Tsai, Louie, Chen, & Uchida, 2007) make the case

that high-arousal positive emotions (e.g., excited and enthusiastic)

are valued more in the West (vs. East Asia), whereas low-arousal

positive emotions (e.g., calm and peaceful) are valued more in East

Asia. In a different vein, Kitayama and colleagues (e.g., Kitayama,

Mesquita, & Karasawa, 2006; Kitayama, Park, Sevincer, Karasawa, & Uskul, 2009) argue that socially disengaging emo-

tions—that is, emotions grounded in separateness from others

(e.g., proud and angry)—affirm the independence prioritized in

individualistic cultures; in contrast, socially engaging emotions,

such as caring and guilt, that reflect the “relationally embedded

nature of the self” (p. 891; Kitayama, Mesquita, et al., 2006) affirm

the interdependence prioritized in collectivistic cultures. Such per-

spectives point to the possibility that high (vs. low) arousal emo-

tions and socially disengaging (vs. engaging) emotions are more

influential in the United States, with the inverse being true in

China.

In contrast to the culture-specific perspectives, proposals that

affect serves an evolutionary function (e.g., Fredrickson, 1998,

2013; Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008) suggest

that its effects may be universal. That is, affective experience may

shape self-conceptions similarly regardless of a culture’s orienta-

tion toward individualism versus collectivism. According to the

evolutionary line of reasoning, the large majority of affect that

humans experience is universal (Ekman, 1992). As such, affect

may serve the function—developed over time—of providing

information about one’s surroundings. Negative affect signals dan-

ger, which may lead to action (i.e., fight or flight) to preserve

oneself (e.g., Fredrickson, 2013). Positive affect, in contrast, sig-

nals that all is well, thereby permitting exploration of the environ-

ment as well as the development of useful skills that require

psychological resources (e.g., Fredrickson, 2013; Lyubomirsky et

al., 2005). If affect serves such a fundamental function, despite

differences in its expression in the West and East Asia (e.g.,

Matsumoto, 1990; Matsumoto, Yoo, & Fontaine, 2008), it may be
equally influential in the two regions, similarly shaping the valence

of self-conceptions.

Although the research to date has not directly investigated the

role of affective experience in judgments about the self in the

West and East Asia, research on the role of affect in other types of

functioning yields support for both culture-specific and culture-

universal claims. For example, research on the association between

affect and judgments of life satisfaction among adults suggests that

affect is more influential in individualistic (vs. collectivistic) cul-

tures (for a review, see Diener, Oishi, & Lucas, 2003): In individu-

alist cultures, emotions are the most powerful predictor of overall

life satisfaction, whereas in collectivist cultures, perceived ac-

ceptance by in-group members (e.g., family and friends) contributes

as much as emotions to life satisfaction (Suh et al., 1998; Suh &

Diener, 2001). However, Pomerantz and Qin (2014) found that

children’s negative affect predicted dampened autonomous moti-

vation in school over time during early adolescence similarly in the

United States and China, with positive affect predicting heightened

autonomous motivation only in China. Research has yielded mixed

findings as to whether the effects of affect on health vary among

adults in the West and East Asia, leading to debate over the issue

(e.g., Curhan et al., 2014; Pressman, Gallagher, & Lopez, 2013;

Pressman, Gallagher, Lopez, & Campos, 2014). In terms of spe-
specific types of affect, the link between socially disengaging positive emotions and more general positive emotions is stronger among American (vs. Japanese) college students, whereas the link for socially engaging positive emotions with more general positive emotions is stronger among Japanese college students (e.g., Kitayama, Markus, & Kurokawa, 2000; Kitayama, Mesquita, et al., 2006).

**Overview of the Current Research**

Research conducted in the West has provided substantial insight into the role of affective experiences in self-conceptions. However, this phenomenon has not been examined in East Asia, where it has been argued that affect may be less influential. To address this lacuna, we studied children as they navigated the early adolescent years in the United States and China. At this time, there is substantial development in children’s views of themselves along a number of dimensions, likely due in part to children’s emerging concern with establishing their own identity (for a review, see Harter, 2006). In both the United States and China, change over early adolescence is evident in terms of not only the organization (e.g., around social vs. nonsocial personal attributes) but also the valence of children’s self-conceptions (Setoh, Qin, Zhang, & Pomerantz, 2015). Children’s affect may be particularly likely to contribute to these changes because it is prone to frequent ups and downs during this phase of development (e.g., Larson, Moneta, Richards, & Wilson, 2002)—at least in the West—which may make it a salient source of information.

We took a multidimensional approach to examining affect: We assessed both positive and negative emotions, as well as internalizing symptoms (i.e., anxiety and depression). Our positive and negative emotion measures also allowed us to explore the role of different types of emotions in children’s views of themselves. Low and high arousal emotions as well as socially engaging and disengaging emotions were examined given prior theory and research indicating that their value differs in the United States and China. The multidimensional approach permitted an evaluation of whether differences and similarities are broad in that they cut across a variety of dimensions of affect or whether they are nuanced, varying with type of affect. In assessing self-conceptions, we used open-ended methods in which children either completed “I” statements in a modified version of the Twenty Statements Test (Kuhn & McPartland, 1954; Study 1) or listed attributes that described them (Study 2); the valence of their responses were then coded. Such open-ended methods do not impose cultural constraints on children’s descriptions of themselves.

Given the mixed findings in regards to the role of affect in the West and East Asia, two studies were conducted to ensure replication of the results not only with slightly different methods (e.g., in how self-conceptions were assessed), but also in different areas of the United States and China. The longitudinal designs of the two studies allowed us to examine the extent to which children’s affect predicts their self-conceptions over time as well as the reverse pathway in which children’s self-conceptions predict their affect over time. Children’s affect and self-conceptions may both be susceptible to other influences, which could lead to the appearance of effects over time when this is not actually the case. We took two steps to address this possibility. First, our analyses accounted for concurrent associations between affect and self-conceptions as well as their autoregression (see Figure 1). Second, we controlled for two major aspects of children’s lives that may shape their affect and self-conceptions—their grades in school (Study 1 and 2) and the quality of their relationships with their parents (Study 1), both of which have been linked to their affect and self-conceptions (e.g., Branje, Hale, Frijns, & Meeus, 2010; Brock & Kochanska, 2015; Marsh & Craven, 2006).

**Study 1**

**Method**

**Participants.** The University of Illinois U.S.–China Adolescence Study started when children entered middle school in the seventh grade and concluded at the end of the eighth grade in the suburbs of Chicago in the United States and the suburbs of Beijing in China. Participants were 374 American (187 boys and 187 girls; mean age \( \bar{X} = 12.78 \) years, \( SD = .34 \) in the fall of seventh grade) and 451 Chinese (240 boys and 211 girls; mean age \( \bar{X} = 12.69 \) years, \( SD = .46 \) in the fall of seventh grade) children. In both countries,
children attended either average or above-average achieving public schools in predominantly working- or middle-class areas (for more information, see Pomerantz, Qin, Wang, & Chen, 2009; Qin, Pomerantz, & Wang, 2009). Reflecting the ethnic composition of the areas from which they were recruited, American children were mainly European American (88%) with 9% Hispanic American, 2% African American, and 1% Asian American. Chinese children were from areas where over 95% of the residents were of the Han ethnicity, which is the majority ethnicity in China (Beijing Municipal Bureau of Statistics, 2005).

**Procedure.** Beginning in the fall of seventh grade, children completed questionnaires during two 45-min sessions every 6 months until the end of the eighth grade. In total, there were four waves of data collection: Fall of seventh grade (Wave 1), spring of seventh grade (Wave 2), fall of eighth grade (Wave 3), and spring of eighth grade (Wave 4). Trained native research assistants read the instructions and items aloud to children in their native language in the classroom; children completed questionnaires on their own. Attrition over the entire study was 4% (6% in China and 2% in the United States). Ninety-six percent of children attended either average or above-average achieving public schools in predominantly working- or middle-class areas (for more information, see Pomerantz, Qin, Wang, & Chen, 2009; Qin, Pomerantz, & Wang, 2009). Reflecting the ethnic composition of the areas from which they were recruited, American children were mainly European American (88%) with 9% Hispanic American, 2% African American, and 1% Asian American. Chinese children were from areas where over 95% of the residents were of the Han ethnicity, which is the majority ethnicity in China (Beijing Municipal Bureau of Statistics, 2005).

**Measures.** The measures were initially developed in English. Standard translation and back-translation procedures (Brislin, 1980) were employed with repeated discussion among American and Chinese members of the research team to modify the wording of the items to ensure equivalence in meaning between the English and Chinese versions (Erkut, 2010). Linguistic factors were taken into account to ensure that the measures were comprehensible to children in both the United States and China. The means and standard deviations for each measure along with the correlations between measures are presented in Table 1.

**Self-conception valence.** At each wave during the first of the two 45-min sessions, a modified version of the Twenty Statement Test (TST; Kuhn & McPartland, 1954) was given before any other measure. A variety of versions of the TST have been used with Western and East Asian children and adults (e.g., Trafimow, Triandis, & Goto, 1991; Wang, 2004). Following prior modifications (e.g., Chang & Hue, 1991; Hong, Ip, Chiu, Morris, & Menon, 2001; Wang, 2001), children were asked to describe themselves on a sheet of paper with the header “Who I am” (我说我自己), with 10 lines that began with “I” (我). We used only the “I” (我) stem to ensure that there were not syntactical constraints that could lead to differences in the types of descriptions generated in the two countries (Chang & Hue, 1991; Hong et al., 2001; Li, 2006). Ten, instead of 20, statements were employed to get at the most accessible aspects of children’s self-views. Children were given 5 min to write each description in the order they appeared in their heads.

Children’ descriptions were coded in terms of their valence, capturing the evaluative quality of children’s self-conceptions (e.g., Bond & Cheung, 1983; Wang, 2004). Positive descriptions could be globally positive (e.g., “I am great.”), but were more often behaviors or qualities valued by children or society (e.g., “I am nice.”), socially valued preferences (e.g., “I like to study.”), or positive evaluations of relationships to individuals or groups (e.g., “I am close to my sister.”). Negative descriptions were globally...
negative (e.g., “I wish I were a better person.”), including behaviors or qualities not valued by children or society (e.g., “I am lazy.”), referenced preferences that are not socially valued (e.g., “I like violence.”), or were negative evaluations of relationships to individuals or groups (e.g., “I had a fight with my friend.”). Neutral descriptions were neither positive nor negative or ambiguous with regard to valence (e.g., “I like the color of blue”; “I am twelve”; “I am a son”). The three valence categories were mutually exclusive in that each description could be coded into only one of the categories. Repetitions of the same sentence within the 10 statements were coded only once. Children’s descriptions were coded in their original language by trained native coders. The descriptions were coded in sets that included all four waves so that the four were coded simultaneously to ensure that drift in coding across waves did not create problems in equivalence over time. Each set was coded by two native coders who overlapped on approximately half of the descriptions (60% in the United States and 54% in China). There was substantial agreement between coders (Cohen’s κ = .88 to .97 in the United States and .76 to .96 in China). To ensure equivalence in the coding of the American and Chinese descriptions, a bicultural coder fluent in English and Chinese and familiar with American and Chinese culture coded 10% of the statements from each country (Cohen’s κ = .74 to .92 for the bicultural coder with the American coders and .73 to .93 for the bicultural coder with the Chinese coders). Coders met after coding each set to resolve discrepancies, with the agreed resolution being the final code.

For each of the three valence categories, children’s descriptions were given a 1 if they fell into the category and a 0 if they did not; the sum across descriptions falling into each category was taken. Proportion indexes were calculated by dividing the number of descriptions in each category by the total number of codable descriptions children provided. These indexes were arcsine transformed to ensure an even distribution (Cohen & Cohen, 1983). The distributions of the arcsine-transformed positive descriptions at each wave were less skewed (skewness statistics = 0.01 to 0.09) than the distributions of the arcsine-transformed neutral (skewness statistics = 0.12 to 0.24) or negative (skewness statistics = 2.29 to 2.80) descriptions. Children’s positive descriptions were consistently inversely associated with their neutral descriptions ($r_s = -.93$ to -.96 in the United States and $-.84$ to -.87 in China, $ps < .001$) and negative descriptions ($r_s = -.24$ to -.26 in the United States and $-.29$ to $-.34$ in China, $ps < .001$). These associations were stronger than those between children’s neutral and negative descriptions ($r_s = -.04$ to $-.11$ in the United States and $-.16$ to $-.29$ in China), $z_s > 19.41, ps < .001$. Given the dependence of the three categories, the analyses focused on the proportion of positive descriptions children provided as they were least skewed and most consistently inversely associated with the other two valence categories.

**Affect.** Children’s affective experience was assessed with three measures. Positive emotions were assessed with 16 items selected from scales used in prior research (Diener, Smith, & Fujita, 1995; Patrick, Skinner, & Connell, 1993; Watson, Clark, & Tellegen, 1988), with some modifications to ensure they were appropriate for children (Pomerantz, Wang, & Ng, 2005). Children indicated how often in the past week (1 = never, 5 = very often) they experienced a variety of positive emotions (e.g., happy, joyful, caring, liking, excited, enthusiastic, calm, and relaxed) identified as meaningful in prior theory and research (e.g., Diener et al., 1995; Tsai, Knutson, & Fung, 2006): The emotions were combined (as = .90 to .94 in the United States and .87 to .92 in China), with higher numbers indicating more positive emotions. Children’s negative emotions were assessed with 18 items used in prior research (Diener et al., 1995; Patrick et al., 1993; Watson et al., 1988). Children rated how often in the past week (1 = never, 5 = very often) they experienced a variety of negative emotions (e.g., sad, unhappy, guilty, ashamed, afraid, worried, irritated, and mad) identified as meaningful in prior theory and research (e.g., Diener et al., 1995). The emotions were combined (as = .90 to .92 in the United States and .91 to .93 in China), with higher numbers indicating more negative emotions. Children’s anxiety symptoms were assessed with a modified version (Pomerantz & Rudolph, 2003) of the Revised Child Manifest Anxiety Scale (Reynolds & Richmond, 1978). Children indicated how often (1 = never, 5 = very often) they experienced 25 anxiety symptoms (e.g., “I get nervous when things do not go the right way”) in the past week. The items were combined, with higher numbers indicating more anxiety symptoms (as = .94 to .95 in the United States and .93 to .95 in China). As shown in Table 1, negative emotions and anxiety symptoms were substantially associated ($r_s = .70$ to $.73$ in the United States and $.60$ to $.70$ in China); hence, they were combined to represent a single construct of negative affect. 1

Using Amos 20.0 (Arbuckle, 2011), two-group confirmatory factor analyses (CFAs) were conducted to examine the metric invariance of the affect measures over time and between the United States and China in the context of structural equation modeling (SEM). Such invariance is essential and sufficient for making valid comparisons of the associations (Little, 1997; Chen, 2007), which was done in the central analyses of this report. An unconstrained model for each type of affect (e.g., positive emotions) was compared with a corresponding constrained model. The unconstrained models contained the same latent construct repeatedly assessed over the four waves yielding a total of four latent constructs that were allowed to correlate with each other. The latent construct for positive emotions was represented by four conceptually determined indicators (i.e., joyful, socially engaging, high-arousal, and low-arousal positive emotions) each based on three to five emotions, which was also the case for the latent construct for negative emotions (i.e., sadness, shame, fear, and anger). The latent construct for anxiety symptoms was represented by two randomly determined indicators (i.e., the average of the odd-numbered items and the average of even-numbered items). Errors of the same indicators were allowed to correlate with one

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1 To ensure that by focusing on positive self-conceptions, we were not somehow missing an important difference between the United States and China given differences between the West and East Asia in self-enhancement and self-effacement (e.g., Heine, Lehman, Markus, & Kitayama, 1999), we conducted the central analyses (see Figure 1) replacing the positive descriptions with negative and neutral descriptions—each in a separate model. The paths between affect and self-conceptions over time did not differ in the United States and China, $\Delta \chi^2 < 2.54, ns$, with one exception—negative affect predicted negative self-conceptions over time strongly in the United States than China, $\Delta \chi^2 = 22.61, p < .001$. 2 When the central analyses (see Figure 1) were conducted for negative emotions and anxiety symptoms separately, the results were practically identical to those examining them together, with no differences between countries, $\Delta \chi^2 < 3.95$. ns.
another over time when suggested by modification indexes from the CFAs conducted on the sample with no missing data.

The parameters in the unconstrained models were freely estimated without any between-country or across-time equality constraints. In the constrained models, the factor loadings of the same indicators were forced to be equal between countries and across waves. For all three affect measures, both the unconstrained and constrained models fit the data adequately, $\chi^2 < 463$, $p < .001$, comparative fit indexes (CFIs) $>.96$, Tucker–Lewis Indexes (TLIs) $>.94$, root mean square errors of approximation (RMSEAs) $< .04$. Although chi-square difference tests are considered appropriate for hypothesis testing purposes, the current consensus is that they are not appropriate for evaluating measurement invariance (e.g., Chen, 2007). Using the criteria advocated by Chen (2007) based on modeling studies, we found that the decreases in CFIs from the unconstrained models to the constrained models were less than .01, with increases of RMSEAs of no more than .015. Hence, the affect measures possess metric invariance over time and between the two countries, thereby allowing us to make valid comparisons of their associations.

**Parent–child relationship quality.** The Inventory of Parent Attachment (Armsden & Greenberg, 1987) was used to assess the quality of children’s relationships with their parents. The measure assesses three aspects of relationship quality: trust (e.g., “My parents respect my feelings”), communication (e.g., “My parents can tell when I’m upset about something”), and alienation (e.g., “I feel angry with my parents”). Children indicated how true each of 24 statements was of them ($1 = not at all true$, $5 = very true$). Children’s responses were combined (as $=.79$ to $.82$ in the United States and $.80$ to $.82$ in China), with higher numbers reflecting better quality relationships. Two-group CFAs in the context of SEMs indicated that this measure possesses metric invariance over time and between the United States and China (for more information, see Pomerantz et al., 2009): The constrained and unconstrained models fit well, $\chi^2 < 218$, $p < .001$, CFIs $>.98$, TLIs $>.95$, RMSEAs $< .05$, with differences in the CFIs and RMSEAs of less than .01.

**Grades.** Children’s grades in the four major subjects in each country were obtained from school records. The grades in the United States were originally in letters and were converted to numbers ($0 = F$ to $12 = A+$). The grades in China were originally numerical ranging from 0 to 100 in one school and from 0 to 120 in the other. Grades in each subject were standardized within each school in the two countries. The standardized grades in the four subjects were then combined, with higher numbers representing better grades.

**Results**

**Cross-lagged paths between affect and self-conception valence.** As shown in Figure 1, we examined the contribution of children’s affective experience to the valence of their self-conceptions in the context of bidirectional cross-lagged SEMs, with separate models for positive and negative affect. Positive affect was treated as a latent construct using the positive emotion indicators described above for the measurement invariance analyses; negative affect was represented by two indicators (i.e., negative emotions and anxiety symptoms), with the latent construct being invariant over time and between countries as indicated by two-group CFAs. The valence of self-conceptions was treated as a manifest variable using the positive proportion index. The valence of children’s self-conceptions was predicted from their affect at the prior adjacent waves, such that each path represented a 6-month lag (e.g., affect at Wave 1 predicted self-conception valence at Wave 2 and affect at Wave 2 predicted self-conception valence at Wave 3). Conversely, children’s affect was predicted from the valence of their self-conceptions at the prior adjacent waves. Autoregression was taken into account by including the stability of each construct over time in the model with paths between adjacent waves. The concurrent associations between affect and valence were also included by allowing the constructs (Wave 1) or error variances (Wave 2, 3, and 4) to correlate within each wave. These models were evaluated in the context of two-group SEMs evaluated with Amos 20.0 (Arbuckle, 2011). Amos handles missing data with full information maximum likelihood estimates, which provide more reliable standard errors under a wider range of conditions than does not only list and pairwise deletion but also mean imputation (Wothke, 2000).

We did not anticipate differences in the cross-lagged paths across the three time frames (i.e., Wave 1 to 2, Wave 2 to 3, and Wave 3 to 4); preliminary analyses also suggested that there were not consistent differences between the three. Hence, the three cross-lagged paths for each direction of effects (e.g., all of the a paths in Figure 1) were forced to be equal to each other (e.g., affect at Wave 1 predicting self-conception valence at Wave 2, affect at Wave 2 predicting self-conception valence at Wave 3, and affect at Wave 3 predicting self-conception valence at Wave 4 were set to be equal to each other), leading to a more parsimonious model. Other than this constraint, the parameters in the baseline models were unconstrained. The baseline models were compared with corresponding constrained models in which the cross-lagged paths from affect to self-concept valence (i.e., the a paths in Figure 1) were forced to be equal across the United States and China and one in which the cross-lagged paths from self-concept valence to affect (i.e., the b paths in Figure 1) were forced to be equal across the two countries. Country differences were determined by chi-square differences between the two models. The final models constrained all the cross-lags that did not differ between the United States and China to be equal (see Table 2). Both the baseline and constrained models fit the data adequately, $\chi^2 < 528$, $p < .001$, CFIs $>.97$, TLIs $>.95$, RMSEAs $< .04$.

As shown in Table 2, children’s positive and negative affect predicted the valence of their self-conceptions over time: The more positive and less negative children’s affect, the more children saw themselves in a positive light 6 months later, taking into account the valence of their prior views of themselves. Comparison of the baseline models with the models constraining the cross-lags to be equal between the United States and China indicated that the strength of the pathways from children’s affect to the valence of their self-conceptions did not differ in the two countries, $\Delta \chi^2 < 2.63$, $ns$. The valence of children’s self-conceptions also predicted their positive affect over time, such that the more children viewed themselves positively, the more they experienced positive affect 6 months later, over and above their earlier positive affect (see Table 2). The strength of these paths did not differ in the United States and China, $\Delta \chi^2 = 1.05$, $ns$. The valence of children’s self-
conceptions did not appear to matter when it came to their experience of negative affect. Self-conception valence did not predict negative affect 6 months later in either country, $\chi^2 < 1$.

Although the models took into account concurrent associations and autoregression, it is still possible that the cross-lags identified reflect another force shaping both affect and self-conception valence. To address this issue we added children’s grades in school to the original models (see Figure 1), $\chi^2 < 1000$, $ps < .001$, CFIs $>.95$, TLI$s > .90$, RMSEAs $< .06$. Children’s grades were allowed to correlate with their affect and self-conception valence at each wave; the stability of children’s grades from one wave to the next was also included. The key additions were cross-lags between children’s grades and affect as well as their grades and self-conception valence. The better children’s grades, the more positive their self-conceptions 6 months later ($\gamma$s $= .04$ to $.05$ in the United States and $.04$ to $.06$ in China, $ps < .05$), with these paths being of similar strength in the two countries, $\Delta \chi^2 < 1$, $ns$. As shown in Table 2, despite these paths, positive and negative affect continued to predict self-conception valence over time, with self-conception valence also predicting positive affect over time. Notably, there were no differences between the United States and China in the cross-lags, $\Delta \chi^2 < 1.72$, $ns$.

A similar pattern emerged from the models including the quality of children’s relationships with their parents, $\chi^2 < 51.56$, $ps < .01$, CFIs $>.96$, TLI$s > .93$, RMSEAs $< .05$. The paths from affect to subsequent self-conception valence remained evident (see Table 2), with no differences in any of the cross-lags between the United States and China, $\Delta \chi^2 < 2.28$, $ns$. The fact that the paths from affect to self-conception valence remained is impressive given that relationship quality predicted both self-conception valence and affect over time: The better children’s relationships with their parents, the more positive their self-conceptions ($\gamma$s $= .06$ to $.07$ in the United States and $>.06$ to $.07$ in China, $ps < .01$) and the more positive ($\gamma$s $= .13$ to $.14$ in the United States and $.12$ to $.14$ in China, $ps < .001$) and less negative ($\gamma$s $= .06$ in the United States and $.05$ to $.04$ in China, $ps < .001$) their affect 6 months later, with these paths being similar in the United States and China, $\Delta \chi^2 < 1.78$, $ns$.

### Cross-lagged paths between specific types of affect and self-conception valence

Our central analyses focused on the paths between affect and self-conception valence over time, distinguishing between only the broad dimensions of positive and negative affect. However, it is possible that in examining such broad dimensions of affect, we missed important differences in the United States and China in the role of affect in self-conception valence. Hence, we examined specific types of affect with indexes based on subsets of emotions from the positive and negative emotion scales. For the indexes with more than one item (see below for items) the CFAs indicated that the measures possessed metric invariance. We replaced the affect constructs in the original models (see Figure 1) with specific types of affect, which we treated as manifest variables based on the means, $\chi^2 < 51.56$, $ps < .01$, CFIs $>.98$, TLI$s > .94$, RMSEAs $< .04$. The models examining low-arousal positive emotions (i.e., calm, relaxed, and peaceful; $\alpha = .65$ to .83 in the United States and $.49$ to $.62$ in China), high-arousal positive emotions (i.e., excited, active, enthusiastic, and energetic; $\alpha = .77$ to $.86$ in the United States and $.77$ to $.85$ in China), low-arousal negative emotions (i.e., tired and bored; $\alpha = .32$ to $.49$ in the

### Table 2

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<th>Wave 3 to 4</th>
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**Note.** Model 1 contained no covariates (see Figure 1); Model 2 included children’s grades predicting affect and self-conception valence concurrently and over time; Model 3 included the quality of parent–child relationship predicting affect and self-conception valence concurrently and over time. Estimates are for cross-lagged paths labeled in Figure 1, with path a representing the affect to self-conception valence path and path b representing the self-conception valence to affect path. Because there were no country differences, estimates are from the models in which the cross-lagged paths were constrained to be equal between the United States and China.

$^1 p < .10$.  $^* p < .05$.  $^{**} p < .01$.  $^{***} p < .001$. 

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**Figure 1**

This figure shows the cross-lagged paths from affect to self-conception valence. The paths from affect to self-conception valence are shown with solid lines, and the paths from self-conception valence to affect are shown with dashed lines. The figure includes the standardized estimates for the cross-lagged paths between affect and self-conception valence, with an arrow indicating the direction of the relationship. The model includes covariates such as grades and relationship quality, which are shown as arrows pointing to the affect and self-conception valence constructs.
United States and .31 to .49 in China), and high-arousal negative emotions (i.e., nervous, worried, anxious, afraid, frustrated, irritated, mad, and angry; $\alpha = .79$ to .84 in the United States and .85 to .88 in China), $\chi^2 < 51.56$, $p < .01$, CFI$s > .98$, TLI$s > .94$, RMSEAs $< .04$, did not reveal any differences between the United States and China in the cross-lags, $\Delta \chi^2$s $< 1.63$, $ns$. This was also the case for the models examining socially engaging (i.e., caring, liking, and loving; $\alpha = .70$ to .81 in the United States and .68 to .84 in China) and disengaging (i.e., proud) positive emotions as well as socially engaging (i.e., lonely, guilty, ashamed, and embarrassed; $\alpha = .61$ to .74 in the United States and .69 to .74 in China) and disengaging (i.e., frustrated, irritated, mad, and angry; $\alpha = .81$ to .88 in the United States and .82 to .85 in China) negative emotions, $\chi^2$s $< 51.19$, $p < .01$, CFI$s > .98$, TLI$s > .95$, RMSEAs $< .03$, $\Delta \chi^2$s $< 1.85$, $ns$.

**Study 2**

Given the inconsistency in prior research in the extent to which affective experience contributes to psychological and physical functioning, the goal of Study 2 was to determine if the similar role of affect in American and Chinese children’s self-conceptions identified in Study 1 was replicable. A key difference between Study 1 and Study 2 was the geographical location in which children resided. The Chinese children in Study 1 came from the suburbs of Beijing, which is one of the most modernized and developed areas in China. Residents in this area have been widely exposed to Western culture, which may have been why the role of children’s affect in their self-conceptions was so similar in the United States and China. In contrast, the Chinese sample in Study 2 came from Shandong Province, a large northeastern province. As the cradle of Chinese civilization and birthplace to Confucius, this area is more traditional, with less exposure to Western culture. Study 2 also included a measure of children’s depressive symptoms given that such symptoms have been identified as important for children’s self-conceptions (e.g., Cole, Pelle, et al., 1999; Lewinsohn et al., 1981; McGrath & Repetti, 2002).

**Method**

**Participants.** Children in the seventh grade ($N = 397$) in the United States and China participated in the University of Illinois Middle School Motivation Project, which spanned a 12-month period. In the United States, participants were 203 (93 girls; mean age = 12.76 years in the fall of seventh grade) children from five middle schools in a small urban area in the Midwest. Because the area is home to a major state university, a proportion of the residents are highly educated; however, an even larger proportion comes from working- and middle-class backgrounds. The middle schools achieved at or above the state average. American children were mainly European American (73%) with 16% African American, 5% of more than one race (e.g., African American and European American), 3% Asian American, and less than 2% Hispanic. In China, participants were 194 (89 boys; mean age = 12.62 years in the fall of seventh grade) children from two middle schools in the northeast province of Shandong. The suburban area is in close proximity to a major state university where families are primarily from working- and middle-class backgrounds. The middle schools achieved at or above the state average. Chinese children were all of the Han ethnicity.

**Procedure.** Beginning in the seventh grade, children took part in three waves of data collection 6 months apart from each other: Wave 1 took place in the fall of seventh grade, Wave 2 in the spring of seventh grade, and Wave 3 in the fall of eighth grade. In the United States, 9% of children dropped out of the study over the course of the three waves, but these children did not differ from those who remained in the study on any of the variables examined in this report. In China, there was no attrition.

**Measures.** The measures were initially developed in English, with translation carried out as described in Study 1. The means and standard deviations for each measure along with the correlations between measures are presented in Table 3.

**Self-concept valence.** At each wave, children were asked to describe themselves on a sheet of paper with the header “Who are you?” (你是谁). Children were instructed to list attributes (特征) or characteristics (品质) that described them. Five boxes were provided, with directions to list one description per box. Children’ statements were coded for valence (i.e., positive, negative, or neutral) as in Study 1. The statements were divided into sets including all three waves so that the three were coded simultaneously, thereby ensuring equivalence over time. Each set was coded by two native coders who overlapped on 33% to 50% of the statements. There was substantial agreement between coders (Cohen’s $\kappa = .76$ to .87 in the United States and .76 to .92 in China) as well as with the bicultural coder who coded 20% of the statements from each country (Cohen’s $\kappa = .81$ to .87 for the bicultural coder with the American coders and .76 to .86 for the bicultural coder with the Chinese coders). Coders met after coding each set to discuss discrepancies, with the final code being what had been agreed upon. As in Study 1, our analyses focused on the arcsine-transformed proportion of positive descriptions that children provided given that they were the least skewed and most inversely associated with neutral ($r = -.74$ to $-.79$ in the United States and $-.71$ to $-.80$ in China, $ps < .001$) and negative descriptions ($r = -.46$ to $-.56$ in the United States and $-.45$ to $-.68$ in China, $ps < .001$). Neutral and negative descriptions were only weakly associated with one another ($r = -.03$ to $-.06$ in the United States and $-.05$ to $.25$ in China).³

**Affect.** Four dimensions of children’s affect were measured. Positive affect was assessed with seven items used in prior research (Diener et al., 1995; Watson et al., 1988). Children indicated how often in the past week ($1 = never$, $5 = very often$) they experienced positive emotions (e.g., happy, joyful, caring, and liking). The emotions were combined ($\alpha = .87$ to .91 in the United States and .86 to .87 in China), with higher numbers indicating more positive emotions. Children’s negative emotions were assessed with nine items (e.g., guilty, ashamed, afraid, nervous, and sadness) used in prior research (Diener et al., 1995; Watson et al., 1988). The emotions were combined ($\alpha = .83$ to .90 in the United States and .87 to .90 in China), with higher numbers representing more negative emotions. Children’s anxiety symptoms were assessed with the modified version (Pomerantz & Rudolph, 2003) of the Revised Child Manifest Anxiety Scale

³ When the central analyses were conducted (see Figure 1) using the negative and neutral self-descriptions—each in separate models—they revealed no differences in the cross-lagged paths between affect and self-conceptions in the United States and China, $\Delta \chi^2$s $< 3.21$, $ns$. 
Correlations, Means, and Standard Deviations for Affect and Self-Conceptions: Study 2

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</tr>
<tr>
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<td>3.67</td>
<td>3.71</td>
<td>2.14</td>
<td>2.19</td>
<td>2.33</td>
<td>2.02</td>
<td>2.05</td>
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<td>SD</td>
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<td>0.63</td>
<td>0.66</td>
<td>0.70</td>
<td>0.75</td>
<td>0.72</td>
<td>0.71</td>
<td>0.71</td>
<td>0.77</td>
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<td>0.66</td>
<td>0.68</td>
<td>0.27</td>
<td>0.27</td>
<td>0.29</td>
</tr>
</tbody>
</table>

Note. Correlations for the American sample are presented in the lower triangle; those for the Chinese sample are presented in the upper triangle. Correlations with values greater than .17 at $p < .05$ are significant at $p < .05$.

Grades. Children’s grades in the four core subjects were obtained from school records. In the United States, grades were in letters and were converted to numbers ($F = 0$ to $A+ = 12$). In China, grades were numerical, ranging from 0 to 120. Grades were standardized within schools in each country. The average of the standardized scores across the four subjects was taken, with higher numbers indicating better school achievement.

Results

Cross-lagged paths between affect and self-conception valence. We evaluated two-group bidirectional cross-lagged SEMs for positive and negative affect in two separate models as in Study 1 (see Figure 1), with the exception that because there were three, instead of four, waves of data collection, there were two, instead of three, cross-lags. As in Study 1, based on preliminary analyses, the two cross-lagged paths for each direction of effects were forced to be equal to one another (e.g., affect at Wave 1 predicting self-conception valence at Wave 2 and affect at Wave 2 predicting self-conception valence at Wave 3 were set to be equal to one another). All the models fit the data adequately, $\chi^2 < 148$, $p < .001$, CFIs > .98, TLI > .96, RMSEAs < .05.

As shown in Table 4, children’s positive and negative affect predicted the valence of their self-conceptions over time: The more positive and less negative their affect, the more positive their views...
of themselves 6 months later, after controlling for the valence of their prior views of themselves. Comparison of the baseline models with the models constraining the cross-lags to be equal between the United States and China indicated that the strength of the pathways from children’s affect to the valence of their self-conceptions did not differ in the two countries, $\Delta \chi^2 < 2.03, ns$. The valence of children’s self-conceptions predicted their affective experiences over time, such that the more children saw themselves in a positive light, the more they experienced positive affect and the less they experienced negative affect 6 months later, over and above their earlier positive or negative affect (see Table 4), with the strength of these paths not differing in the United States and China, $\Delta \chi^2 < 1$.

As in Study 1, we examined whether the effects we identified could be accounted for by children’s grades, $\chi^2 < 198, ps < .001$, CFIs > .98, TLI = .94, RMSEAs < .05. As shown in Table 4, the cross-lags between children’s affect and the valence of their self-conceptions remained. Moreover, their strength did not differ in the United States and China, $\Delta \chi^2 < 2.13, ns$. Both positive and negative affect predicted children’s grades over time similarly in the United States and China, $\Delta \chi^2 < 2.12, ns$, with more positive ($\gamma_5 = .03$ to .10 in the United States and .02 to .08 in China, $ps < .05$) and less negative ($\gamma_5 = .13$ to .15 in the United States and .14 to .16 in China, $ps < .001$) affect predicting better grades.

**Cross-lagged paths between specific types of affect and self-conception valence.** Given that positive and negative affect were assessed with only a subset of the emotions used in Study 1, it was possible to examine only two specific types of affect: Socially engaging positive emotions (i.e., liking, caring, and loving; $\alpha_s = .79$ to .82 in the United States and .75 to .80 in China) and socially engaging negative emotions (i.e., lonely, guilty, and ashamed; $\alpha_s = .74$ to .76 in the United States and .64 to .73 in China). CFAs for each index indicated metric invariance. The models examining these emotions, $\chi^2 < 12.77, ps < .16$, CFIs > .98, TLI = .93, RMSEAs < .05, did not reveal any differences between the United States and China in the effects, $\Delta \chi^2 < 1.06, ns$.

**Discussion**

Much research in the West demonstrates that individuals’ affective experience shapes psychological and physical functioning (for reviews, see Diener & Chan, 2011; Lyubomirsky et al., 2005; Pressman & Cohen, 2005). However, there has been some speculation that affect may not be as influential in East Asia (e.g., Kuppens, Realo, & Diener, 2008; Schimmack et al., 2005), with the evidence being inconsistent (e.g., Pomerantz & Qin, 2014; Suh & Diener, 2001). Most recently, debate has emerged over whether affect contributes to health in East Asia to the same extent that it does in the West (Curhan et al., 2014; Pressman et al., 2013, 2014). Across two longitudinal studies of children navigating the early adolescent years, we found no evidence that the role of affect in the valence of self-conceptions differs in the United States and China. In both countries, children’s affect predicted the valence of their self-conceptions 6 months later over and above earlier valence. In line with prior research conducted in the United States (e.g., Cole et al., 1998; McGrath & Repetti, 2002; Nolen-Hoeksema et al., 1986), the more positive and less negative children’s affect, the more children came to form positive views of themselves over time. Notably, although specific types of affect (e.g., socially engaging and disengaging emotions) may be valued differently in the West and East Asia (e.g., Kitayama, Mesquita, et al., 2006; Tsai, 2007), they did not appear to contribute differently to the valence of children’s self-conceptions in the United States and China.

### Table 4

<table>
<thead>
<tr>
<th></th>
<th>Wave 1–2</th>
<th>Wave 2–3</th>
<th>Country difference ($\Delta \chi^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>U.S.</td>
<td>China</td>
<td>U.S.</td>
</tr>
<tr>
<td>Model: No covariate</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Positive affect</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path a</td>
<td>.09*</td>
<td>.11*</td>
<td>.09*</td>
</tr>
<tr>
<td>Path b</td>
<td>.03</td>
<td>.05</td>
<td>.05</td>
</tr>
<tr>
<td>Negative affect</td>
<td></td>
<td></td>
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<tr>
<td>Path a</td>
<td>-.13***</td>
<td>-.14***</td>
<td>-.14***</td>
</tr>
<tr>
<td>Path b</td>
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<td>-.08**</td>
<td>-.08**</td>
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<tr>
<td>Model: Grades covariate</td>
<td></td>
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<tr>
<td>Path b</td>
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<td>-.09***</td>
<td>-.08***</td>
</tr>
</tbody>
</table>

**Note.** Model 1 contained no covariates (see Figure 1); Model 2 included children’s grades predicting affect and self-conception valence concurrently and over time. Estimates are for cross-lagged paths labeled in Figure 1, with path a representing the affect to self-conception valence path and path b representing the self-conception valence to affect path. Because there were no country differences, estimates are from the models in which the cross-lagged paths were constrained to be equal between the United States and China.

* $p < .05$. ** $p < .01$. *** $p < .001$. 
These findings suggest that when it comes to the role of affect in self-conceptions, culture-specific perspectives are not applicable to the United States and China. There was no support for the idea that affective experience is prioritized in individualist cultures more than in collectivist cultures, thereby causing it to be more influential (e.g., Markus & Kitayama, 1991; Suh et al., 1998). The findings were also not consistent with the view that the role of some, but not other, types of affect vary with culture. High-arousal positive emotions are valued more in the West than East Asia where low arousal positive emotions are valued more (e.g., Tsai et al., 2006; Tsai, 2007). However, the comparability of the role of affect in the United States and China did not vary with arousal level. A similar pattern emerged for socially engaging and disengaging positive and negative emotions. Although socially engaging emotions are more common in the West and socially disengaging emotions are more common in East Asia (e.g., Kitayama, Mesquita, et al., 2006; Kitayama et al., 2009), they predicted the valence of children’s self-conceptions comparably in the United States and China. It will be important for future research to study additional countries, but the findings of the current research are consistent with the perspective that affect serves a universal function (e.g., Fredrickson et al., 2008; Fredrickson, 1998) in the development of children’s self-conceptions over early adolescence. A key direction for future research will be to determine if the mediating and moderating processes are also similar in the two countries.

The picture of universality is consistent with prior research demonstrating that affect has fairly comparable effects over time on American and Chinese children’s autonomous motivation during early adolescence (Pomerantz & Qin, 2014). It is also in line with findings that affect plays a comparable role in health during adulthood in a variety of countries, including the United States and China (Pressman et al., 2013, 2014). However, other studies point to the possibility that the role of affect differs in the West and East Asia. For example, research with adults suggests that affect plays less of a role in more collectivistic countries such as China when it comes to life satisfaction (Diener et al., 2003; Suh & Diener, 2001) and possibly health (Curhan et al., 2014). Moreover, socially disengaging emotions are associated with more general emotions more than socially engaging emotions among adults in the United States, with the reverse being true in Japan (e.g., Kitayama et al., 2000). What underlies the inconsistency in the role of affect in children’s functioning is unclear given that some studies with similar designs and dimensions of functioning yield disparate results, whereas others with dissimilar designs and dimensions of functioning yield similar results. One methodological issue in evaluating the findings is that with the exception of Pomerantz and Qin’s (2014) research, there has not been attention to whether the measures are invariant across countries, which could create problems in terms of either underestimating or overestimating differences between countries (e.g., Chen, 2008).

The current research is the first to examine the role of affective experience in views of the self outside the West. For several reasons, the findings are compelling in suggesting that culture does not influence the contribution of affect to self-conceptions. First, measurement equivalence between the United States and China was established through coding (i.e., similar agreement between native and bicultural coders in the two countries) and CFAs conducted in the context of SEM showing similarity in the factor loadings (i.e., metric invariance), which is necessary and sufficient for comparison of associations (e.g., Chen, 2007; Cheung & Rensvold, 2002; Little, 1997). Hence, measurement issues are unlikely to mask differences between the United States and China. Second, a longitudinal design was used in which we took into account concurrent associations as well as autoregression. Moreover, we controlled for significant aspects of children’s lives—namely their grades (Study 1 and Study 2) and the quality of their relationships with their parents (Study 1)—that could drive the observed effects. Even with these stringent controls, children’s affect predicted the valence of their self-conceptions comparably in the United States and China. Third, the findings held across two studies conducted in different regions in each country and using different measures. Fourth, the similarity between the United States and China was evident not only for children’s general positive and negative affect but also for specific types of such affect (e.g., low- and high-arousal emotions).

Given theory and research suggesting reciprocal processes between affect and self-conceptions over time, such that affect shapes self-conceptions, which in turn shape affect (Abramson et al., 1989; Beck, 1967; Lewinsohn et al., 1981), we investigated whether children’s self-conceptions predict their subsequent affective experiences. Consistent with prior research (e.g., Calvete et al., 2013; McCarty et al., 2007), the more positive children’s self-conceptions, the more positive and less negative their affect over time taking into account concurrent associations as well as autoregression. Notably, these effects were similar in strength in the United States and China. At first blush, this may appear surprising given Heine and colleagues’ (Heine, Lehman, Markus, & Kitayama, 1999; Heine et al., 2001) suggestion that individuals aspire to hold positive views of themselves more in the West than East Asia; indeed, in the current research, American children viewed themselves more positively than did their Chinese counterparts (see Tables 2 and 4; Setoh et al., 2015). Children in the United States may be quicker than children in China to come to positive conclusions about themselves, but for children in both countries the affective consequence of positive self-conceptions appear to be the same. The similarity of the effects of American and Chinese children’s self-conceptions in the current research is in line with concurrent studies yielding associations between children’s perceptions of competence and their academic and social psychological functioning of comparable size in North America and East Asia (e.g., Chen et al., 2004; Shen & Pedulla, 2000).

Consistent with prior research (e.g., Cole, Martin, et al., 1999; Pomerantz & Rudolph, 2003), the effects of children’s self-conceptions were inconsistent. Specifically, the valence of children’s self-conceptions predicted their positive, but not negative, affect in Study 1, with these cross-lags becoming marginal once the quality of children’s relationships with parents were included in the model (see Table 2); in Study 2, self-conception valence was predictive of negative, but not positive, affect. One possibility for the differences is that the affect measures used in Study 1 and Study 2 differed. However, when exactly the same sets of items were used across the two studies, the results did not change. Another possibility is that we assessed children’s self-conceptions differently in the two studies. In Study 1, children completed 10 “I...” statements; in Study 2 they listed five attributes describing themselves. It may be that the valence of attributes play a more powerful role in negative affect than does...
the valence of behaviors (e.g., “I run a lot.”) or preferences (e.g., “I like the color of blue.”), which were more frequent in Study 1, because of their centrality, stability, or other characteristics. However, it may be that the role of self-conceptions in affect during early adolescence is weaker than the reverse with a variety of moderating forces, thereby leading to inconsistent effects.

A key strength of assessing children’s self-conceptions by having them generate descriptions of themselves is that it does not impose cultural constraints on children’s views of themselves. Our assumption in using this approach was that it provides information on the valence of the characteristics children feel are most central to who they are. However, it is also possible that because we combined across such characteristics, we measured children’s global self-esteem. The concurrent associations between the positivity of children’s self-conceptions and their global self-esteem—as measured with Tafarodi and Swann’s (1995) scale in Study 1 and Rosenberg’s (1965) scale in Study 2—were modest in Study 1 ($r = .11$ to .25 in the United States and .18 to .32 in China) and Study 2 ($r = .18$ to .31 in the United States and .13 to .22 in China). Hence, it appears that the valence of children’s descriptions is not necessarily reflective of their feelings of worth. Indeed, our findings are more in line with the research on views of the self in specific domains such as academics (e.g., Cole, Martin, et al., 1999; Pomerantz & Rudolph, 2003) than that on global self-esteem, which finds that such self-esteem is a consistent predictor of depressive symptoms (for a review, see Orth & Robins, 2013).

**Limitations and Future Directions**

The current research has several limitations that point to important directions for future research. For one, we examined the role of affect in the valence of self-conceptions during early adolescence. Research conducted in the West suggests that affect is relatively salient during this phase of development due in part to the ups and downs of children’s affect (e.g., Larson et al., 2002). It is possible that because of its salience, affect plays a more universal role at this time than others. However, although formal comparisons have not been made, the effects of affect on self-conceptions prior, during, and after adolescence in the United States do not appear to vary sizably (e.g., Cole et al., 1998; McCarty et al., 2007; McGrath & Repetti, 2002). Beyond this issue, it is also possible that early adolescents have not fully internalized cultural norms in regards to affect. It will be important to examine the role of affect both before and after the early adolescent years in the United States and China to identify whether cultural similarity is evident at these phases of development as well. In another vein, despite the sophisticated analyses examining effects over time while taking into account a variety of factors, causal conclusions cannot be drawn from the current research. It will be fruitful for future research to address this issue by experimentally manipulating individuals’ affect in the West and East Asia.

Because the analyses focused on the valence of children’s views of themselves without attention to organization or content, it is unclear if such dimensions moderate the findings. This may be particularly significant in terms of whether children’s views of themselves are organized mainly around independence (e.g., unique attributes of the individual such as being smart or clumsy) or interdependence (e.g., connections to others). Reflecting the American emphasis on individualism, American (vs. Chinese) children describe themselves in more independent terms; consistent with the Chinese emphasis on collectivism, Chinese (vs. American) children describe themselves in more interdependent terms (e.g., Setoh et al., 2015; Wang, 2004). Although we coded whether children’s descriptions were independent or interdependent, the latter were not very frequent (10% to 20% of statements in Study 1 and less than 5% of statements in Study 2 were interdependent; for details, see Setoh et al., 2015) perhaps because we limited the number of descriptions that children could generate to 10 (for a similar approach, see Hong et al., 2001; Wang, 2001), rather than allowing children to provide as many descriptions as they desired as did Wang (2004). Future research using procedures to elicit more frequent interdependent descriptions should examine if children’s organization of their views of themselves moderates the reciprocal processes over time between their affect and the valence of their views.

Although different geographical locales were examined across the two studies, the American and Chinese samples do not fully reflect the demographic variability of the two countries. In China, there is a substantial urban–rural divide. Urban areas have become modernized, industrialized, and Westernized over the years; rural areas, in comparison, remain largely agricultural, following traditional norms. Individuals in rural areas in China have not been majorly influenced by economic growth or modernization. The Chinese samples in the current research came from relatively Westernized urban areas, which may have lead children’s experiences to operate similarly to those of their American counterparts. However, the Study 2 Chinese sample was not as Westernized as that in Study 1 given that it came from a traditional area of China, but the effects were similar in size to the United States. The American samples in the two studies were mainly of European American descent, but affective experience varies with ethnicity within the United States. For example, European Americans report more positive and less negative affect than do other ethnic groups, such as Hispanics and Asian Americans (e.g., Scollon, Diener, Oishi, & Biswas-Diener, 2004). Hence, it is possible that the effects of affect may vary among ethnic groups within the United States.

A key strength of the research is that it went beyond the broad distinction between positive and negative affect to finer distinctions (e.g., low- and high-arousal) that prior theory and research suggest are important in terms of the role that culture plays in shaping affective processes. However, because our measures were not designed for this purpose, caution should be taken in drawing conclusions about specific types of affect. For one, some of the measures were composed of very few items. Most notably, the socially disengaging positive emotion index was based only on the emotion of proud. Although this is due to the fact that our focus was on the broader distinction between positive and negative affect, it is a problem more generally in examining specific types of affect as there may not be a substantial number of emotions representing some types. For example, Kitayama, Mesquita, et al. (2006; see also Kitayama et al., 2009) assessed socially disengaging emotions with proud, superior, self-esteem (Study 1), and top of the world (Study 2), but the extent to which all of these are emotions is unclear.
Conclusions

Despite such limitations, the current research makes inroads into resolving the debate in regards to whether affective experiences in the West and East Asia. Across multiple dimensions of affect, affect predicted the valence of children’s self-conceptions over early adolescence in both the United States and China, with no difference in the strength of the effects in the two countries. These findings suggest that cultural orientations may not sizably shape how children use affect to inform the valence of their self-conceptions, at least in the initial years of adolescence. It appears that in both countries, affective experiences have lasting implications as they contribute to how children view themselves, which may ultimately shape other types of psychological functioning, such as judgment and decision making as well as motivation and achievement.

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