

Affirming the Interdependent Self: Implications for Latino Student Performance

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ABSTRACT

We examined whether culture-relevant affirmations that focus on family (i.e., family affirmation) would enhance performance for Latino students compared to affirmations that focus on the individual (i.e., self-affirmation). In Study 1 ($N = 82$), Latino middle school students exposed to a family affirmation outperformed Latino students exposed to a self-affirmation. In Study 2 ($N = 269$), Latino college students exposed to a family affirmation outperformed Latino students exposed to a self-affirmation and outperformed European American students across conditions. European American students performed equally well across conditions. The findings suggest that culture provides a meaningful framework for developing effective classroom strategies.

For many Americans, the classroom is a gateway to learning, but for others it is a site that represents a long history of exclusion and discrimination (Cohen & Garcia, 2005; Cremin, 1951; Ogbu & Simons, 1998). Specifically, for many ethnic minority students (e.g., Native Americans, African Americans, Latinos), the school system is fraught with messages that members of their group do not belong and cannot be successful (Covarrubias & Fryberg, 2015; Walton & Cohen, 2007). These messages exist in the form of low-ability stereotypes, mismatching cultural models, and a lack of self-relevance in school curriculum and instruction (Fryberg & Markus, 2007; Major & O'Brien, 2005; Purdie-Vaughns, Steele, Davies, Ditlemann, & Crosby, 2008; Steele, Spencer, & Aronson, 2002; Walton & Cohen, 2007). Research on stereotype threat, for example, reveals that the presence of negative stereotypes about one's social identity group in a given context undermines performance (e.g., Aronson, Fried, & Good, 2002; Johns, Schmader, & Martens, 2005; Schmader & Johns, 2003; Steele, 1997; Steele & Aronson, 1995; Steele et al., 2002). Similarly, when curriculum, instruction, and everyday school activities disregard one's social group, even when it is unintentional, a message is conveyed about who counts, who belongs, and who can be successful (Gay, 2000; Ladson-Billings, 1992, 1995; Lomawaima, 1995; Pewewardy & Frey, 2004; Wlodkowski & Ginsberg, 1995).

One particular, often subtle, way of excluding social groups in everyday school activities is by providing mismatching messages about the "normatively" appropriate

way to be a person or a "self" in the classroom context (Fryberg & Markus, 2007; Stephens, Fryberg, Markus, Johnson, & Covarrubias, 2012). According to Markus and Kitayama (1991), people in different cultural contexts hold different understandings or models of the "good" or "right" way to be a self. For example, the independent model of self, which is predominantly fostered in Western, White middle-class contexts, promotes an understanding of self that is autonomous and separate from others. On the other hand, the interdependent model of self, which is fostered in more collectivist contexts, such as Asian, Latino, Native American, and working-class contexts, promotes connectedness with important others (e.g., family members, tribal community; Gaines et al., 1997; Markus & Kitayama, 1991; Markus, Mullally, & Kitayama, 1997). In school contexts, these messages about the "good" way to be a person often stem from underlying assumptions that all students are the same and, thus, will respond in the same way to activities, curriculum, or instruction. For example, the assumption is that classroom activities that involve writing about or reflecting on one's self or creating representations of one's self (e.g., a "me" collage) are culturally neutral or are likely to yield similar results for all students.

Yet research that involves priming of the self suggests that these activities are not culturally neutral but, instead, are culture-specific activities (Cousins, 1989; Markus & Kitayama, 1991; Trafimow, Triandis, & Goto, 1991). For example, Cousins (1989) found that when using the Twenty Statements Test (TST; Kuhn &

McPartland, 1954), which asks students to answer “Who Am I?” 20 times, American high school students responded with more traitlike attributes (e.g., I am friendly), whereas Japanese high school students responded with more role- or situation-specific characterizations (e.g., I am a member of the tennis team). In a modified version of the task designed to place the self in a relational or situational context—students were asked to describe themselves in varying situations (e.g., me at home, me with friends, etc.)—Cousins found the opposite pattern. That is, Japanese students used more traitlike descriptors and American students used more situation-specific descriptors. Cousins argued that for Japanese students, those from more interdependent backgrounds and who are accustomed to thinking about themselves within relational situations, the modified TST was a natural way of conceptualizing the self. Yet American students felt more comfortable with the original TST because it represents a situation-free task that is typical of independent contexts: being an individual means being separate from one’s context or not bound by a particular situation or relationship. These findings suggest that culture provides a meaningful framework for thinking about the effectiveness of activities in the classroom that ask students to reflect on or conceptualize the “self.”

These different ways of conceptualizing the self are more likely to clash or to come into conflict with one another (Markus & Conner, 2013) in school contexts where different cultures interact, as in the United States or Canada. According to cultural mismatch theory, when individuals from one cultural context (e.g., a student from an interdependent context) engage with a context that is guided by a different cultural model (e.g., a classroom that promotes independence), there are consequences for belonging and performance (Fryberg, Covarrubias, & Burack, 2013; Fryberg, Troop-Gordon, et al., 2013; Stephens, Fryberg, et al., 2012). To illustrate, Stephens, Fryberg, et al. (2012) found that the majority of American university administrators who were polled characterized university cultural norms as independent focused (e.g., learning to express oneself, learning to work independently). For students from independent backgrounds (e.g., middle-class students, European Americans), the American classroom expectation of independence is a “match” that creates a relatively seamless transition. However, for students from interdependent backgrounds (e.g., Latinos, working-class students), the same classroom is a “mismatch” that is fraught with difficulties. For example, Stephens, Fryberg, et al. (2012) found that working-class students were more likely to endorse an interdependent model of how to be a “self” in the classroom compared to middle-class students, which, over 2 years, predicted

lower grades in college. Hence, when the U.S. educational system assumes one model of self, students who endorse an interdependent model of self are disadvantaged relative to students who endorse the matching independent model.

Strategies for improving performance: Self-affirmation and cultural matching

Whether the issue is cultural mismatching or negative stereotyping, research reveals that small interventions can yield large effects (for a review, see Yeager & Walton, 2011). One underlying mechanism for many of these interventions is that they increase feelings of acceptance or belonging. In other words, they promote identity safety—the belief that one is accepted and can be successful in a given context (Davies, Spencer, & Steele, 2005; Markus, Steele, & Steele, 2000; Purdie-Vaughns et al., 2008). Goffman (1963) argued that a key concern for stigmatized individuals is acceptance. That is, members of underrepresented, negatively stereotyped groups may never feel that issues of acceptance are resolved; they fluctuate in each new interaction and social setting depending upon the identities made salient.

For example, self-affirmation interventions, which involve reflecting on personally important values (Steele, 1988), have been shown to improve performance for students in contexts in which their identities are devalued (e.g., being negatively stereotyped in a classroom; Cohen, Garcia, Apfel, & Master, 2006; Cohen, Garcia, Purdie-Vaughns, Apfel, & Brzustoski, 2009; Martens, Johns, Greenberg, & Schimel, 2006; Steele, 1988). In standard self-affirmation procedures (Cohen et al., 2006; Steele & Liu, 1983), also known as values affirmation, students are presented with a list of values and write about a value that is important to them, whereas students in the control condition write about a value that is least important to them but important to someone else. By reflecting on important values to the self, students can gain a sense of legitimacy and restore one’s sense of self-worth in a context that poses a threat to one’s identity (Schimel, Arndt, Banko, & Cook, 2004). Cohen et al. (2006), for example, found that a self-affirmation treatment at the beginning of the academic year alleviated the achievement gap by 40% between African American and European American middle school students after 1 year, and that these effects persisted after 2 years (Cohen et al., 2009). The treatment had negligible effects on European American students. Similar performance effects were found for African American and female college students (Martens et al., 2006; Shapiro, Williams, & Hambarchyan, 2013) and Latino middle school students (Sherman et al., 2013).

Researchers argue, as Goffman asserted, that self-affirmations are effective because they reduce uncertainty about belonging (Cook, Purdie-Vaughns, Garcia, & Cohen, 2012; Shnabel, Purdie-Vaughns, Cook, Garcia, & Cohen, 2013). For example, Cook et al. (2012) found that, over a 2-year period, self-affirmed African American middle school students' belonging fluctuated less compared to those who were in the control condition. They also found that the intervention was most effective at improving academic performance for students who reported the lowest levels of belonging. In addition, Shnabel et al. (2013) found that writing about social belonging mediated the affirmation intervention and school performance link for African American middle school students. These findings are consistent with other work that finds that increasing or stabilizing belonging improves academic performance (Walton & Cohen, 2007). In effect, self-affirmation interventions improve performance by dispelling questions of acceptance and by securing a sense about one's potential to succeed.

Cultural reframing studies, in which cultural matches are established for students who hold mismatching cultural models of education, similarly foster identity safety. Stephens, Fryberg, et al. (2012), for example, found that working-class students exposed to a university welcome letter that reflected independence performed more poorly on a subsequent task and perceived the task to be more difficult compared to middle-class college students. However, when working-class students read a university welcome letter that contained additional messages of interdependence, they perceived the performance task as less difficult, performed better than working-class students who read an independent letter, and performed comparably to middle-class students. Middle-class students performed equally well in both the independent and interdependent conditions. Using the same welcome letters, Stephens, Townsend, Markus, and Phillips (2012) also found that the independent letter increased stress levels (i.e., cortisol) of working-class college students compared to middle-class college students, whereas the interdependent letter alleviated this gap. Similarly, Diekmann, Clark, Johnston, Brown, and Steinberg (2011) increased positive attitudes toward science careers for women by framing these careers as interdependent rather than independent.

In summary, interventions that affirm one's sense of self and legitimate cultural variation in self-concepts positively impact identity safety. Although the psychological benefits of culture matching and self-affirmations alone have been established, there is evidence that the two strategies may be more effective if used together. At issue is whether focusing on the

"interdependent self" is more relevant or culturally consistent for individuals from interdependent contexts than focusing on the "independent self" that is typical in a self-affirmation. The purpose of the current article is to explore whether culture-specific affirmations impact Latino middle school (Study 1) and college (Study 2) student performance.

Combining affirmation and culture strategies

Given the wealth of literature highlighting the important role of culture in shaping self-understanding and performance, we anticipate that culture-specific affirmations—in this case, interdependent affirmations—will enhance performance for students from interdependent contexts compared to independent affirmations. For example, in Latino cultural contexts, there is a strong preference to maintain close relationships with family members (Cuéllar & Maldonado, 1995; Triandis, 1995), to be loyal to family members (Kamo, 2000), and to closely involve family members in daily activities (Keefe, 1984). We focus on Latino students because, despite the growing numbers of Latino students in American classrooms (Fry & Gonzales, 2008), this cultural group continues to demonstrate lower achievement than European American students (Santiago, 2012). By investigating the effects of family affirmations on Latino student achievement, the goal is to alleviate the persisting achievement gap in a meaningful way.

We anticipate that affirming the interdependent self, such as one's family for Latino students, will be more effective than an independent affirmation for performance. In having students reflect on what they value in the school context, self-affirmations validate that the "self" belongs (Cohen et al., 2006; Cohen et al., 2009; Schimel et al., 2004). For example, Cook et al. (2012) argued that affirmations protect students against threats, such as negative feedback or poor performance, because they secure a global sense of acceptance and potential to succeed. For students from interdependent contexts, the "self" includes close connections to others. To legitimize this important part of the interdependent self, we include family in the affirmation process. By thinking about family on this task, students are able to bring something they value into the school context and secure a general sense of their fit and potential to succeed.

Although prior work has not examined culture-specific affirmations for Latino students, two studies do support our hypotheses. First, Hoshino-Browne et al. (2005), using the standard values affirmation procedure, examined whether an interdependent affirmation (i.e., select a value important to "you and your

family” and then explain why “you and your family” share that value) would reduce cognitive dissonance in Asian Canadian college students more than an independent affirmation (i.e., select a value important to “you” and then describe why the value “uniquely describes you”). They found that the interdependent affirmation reduced dissonance compared to the control (no affirmation) condition. However, negligible differences in dissonance were found between the interdependent and independent affirmation conditions, and between the independent and control conditions. Second, Derks, van Larr, and Ellemers (2009) affirmed female college students by giving them false positive feedback on their individual performance (i.e., “your personal performance... fell into the category above average”) or on their group’s performance (i.e., “the performance of women... fell into the category above average”). They found that although the individual affirmation increased personal self-esteem for all women, the group affirmation increased personal and collective self-esteem (i.e., feelings of group worth) for women who were highly identified with their group.

In the current work, we use Hoshino-Browne et al.’s (2005) values affirmation procedure and test whether an interdependent (i.e., family) affirmation improves performance compared to an independent (i.e., self) affirmation for Latino middle school (Study 1) and college (Study 2) students. In both studies, we hypothesize that Latino students in the interdependent affirmation condition will demonstrate greater performance than Latino students in the independent affirmation and no affirmation (control) conditions. With regard to anticipating differences between the independent and no affirmation control conditions, research largely supports the notion that independent “self” affirmations improve performance relative to control (no affirmation) conditions (Cohen et al., 2006, 2009; Cohen & Sherman, 2014; Martens et al., 2006). Yet Hoshino-Browne et al. (2005) utilized a values affirmation approach with Asian Canadian college students and found negligible differences in dissonance between the independent and no affirmation conditions. Given that our work follows similar procedures, we anticipate comparable performance for Latino students in both the independent affirmation and control conditions.

Study 1

Following the procedure used by Hoshino-Browne et al. (2005), in Study 1, students were asked to select a value important to “you and your family” (interdependent affirmation), to “you” (independent affirmation), or to someone else (control); elaborate on why the selected

value is important; and then complete a numbers task. Given the importance of family in Latino culture (Cuéllar & Maldonado, 1995; Gaines et al., 1997; Santisteban, Muir-Malcolm, Mitrani, & Szapocznik, 2002; Triandis, 1995), we predicted that the interdependent (family) affirmation would increase performance compared to the independent and control conditions for Latino middle school students and that negligible differences would be found between the independent affirmation and control conditions.

Method

Participants

Participants included 81 Mexican American (50 girls, 31 boys; M age = 12.75, SD = 1.00) middle school students (Grades 6–8) from Tucson, Arizona. Letters and consent forms were sent home with students in participating classes (approximately 42% of Mexican American students returned the forms). The class that returned the most forms, regardless of whether permission was granted, received snacks (paid for by the researchers).

Procedures and measures

Students were taken individually to a large classroom provided by the school, where they met with a research assistant in a one-on-one format. To account for differences in reading ability, students were offered the option to work independently (i.e., “You can do the activity by yourself”) or to have the experimenter read the questions aloud in an “interview” format (i.e., “I can read the questions to you and then you can mark down your response”). All students chose to work independently on the research packets.

The first part of the research packet included the experimental manipulation. Students were randomly assigned to an interdependent (family) affirmation, an independent (self) affirmation, or a control (no affirmation) condition. Students were given the same list of values (e.g., *athletic ability, being good at art, creativity, living in the moment, membership in a club, music, politics, relationships with friends, religious values, sense of humor*) used in past affirmation studies (Cohen et al., 2006; Cohen et al., 2009; Creswell et al., 2005; Hoshino-Browne et al., 2005). Students were then asked to mark the value that was “most important to you” (independent affirmation), that was “most important to you and your family” (interdependent affirmation), or that was “least important to you” (control condition). Following the same format, students in the independent and interdependent affirmation conditions were then asked to describe why the value was important to “you” or to “you and your family,” respectively.

Students in the control condition were asked to write about why their least important value “might be important to someone else.” Students then completed the performance task and demographic questions (e.g., age, gender, year in school). Participation in the study took approximately 30 minutes.

Performance was measured using a “numbers activity” that was age appropriate for participants. Specifically, participants were told, “Using any numbers, think of all the ways that you can make the number 37.” Participants were given an example of “ $10 + 10 + 10 + 7 = 37$ ” and 20 numbered lines to write responses. This is an example of the type of task that students can receive in math class as an assignment (i.e., students often create mathematical solutions in class). Participants were not informed of a time limit but were stopped after 10 minutes. Given the ease and flexibility of the task (i.e., we did not specify how many equations students should attempt), we received a wide range of equations attempted (six to 20). Prior research (Inzlicht & Ben-Zeev, 2000; Marx & Roman, 2002; Schmader, 2001) has accounted for a wide range of responses attempted by utilizing percent accuracy. Percent accuracy is computed by dividing the number of equations answered correctly by the number of equations attempted and then by multiplying that value by 100.

Results

Before examining differences in the main dependent measure (i.e., percent accuracy), we first examined whether number attempted (group $M = 17.27$, $SD = 4.41$, range = 6–20) and number correct (group $M = 16.46$, $SD = 4.31$, range = 6–20) differed by condition. First, students in both the interdependent condition ($M = 17.58$, $SD = 4.33$, $d = .22$) and the control condition ($M = 17.73$, $SD = 4.11$, $d = .26$) attempted more problems than students in the independent condition ($M = 16.59$, $SD = 4.80$), although these are smaller effects. Second, students in both the interdependent condition ($M = 17.04$, $SD = 4.22$, $d = .38$) and the control condition ($M = 17.04$, $SD = 3.99$, $d = .38$) answered more problems correctly than those in the independent condition ($M = 15.41$, $SD = 4.62$; small to moderate effects). Finally, there were negligible differences between the interdependent and control conditions on number attempted ($d = .0$) or number correct ($d = .03$).

The mean score of percent accuracy for the entire group was 95.30 ($SD = 5.73$), with scores ranging 75 to 100. As shown in Figure 1, the mean scores of the independent affirmation group and the interdependent affirmation group revealed differences on percent accuracy for the numbers task. As expected,

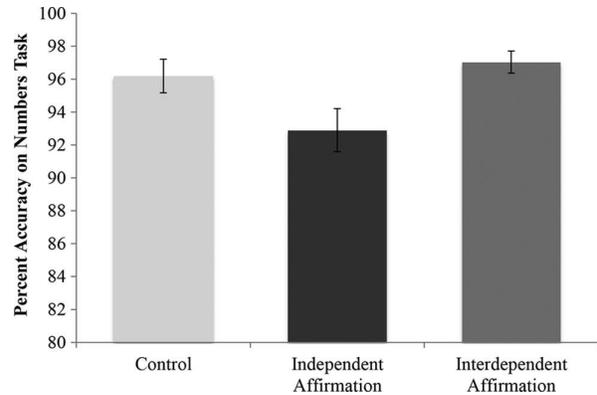


Figure 1. Study 1: Means and standard errors for affirmation condition on percent accuracy on the numbers task.

students in the interdependent affirmation condition performed better on the numbers task ($M = 97.04$, $SD = 3.50$) than students in the independent affirmation condition ($M = 92.90$, $SD = 7.06$), $d = .88$ (a large effect), but showed very small differences in performance compared to students in the control condition ($M = 96.19$, $SD = 5.18$), $d = .19$ (a small effect). Contrary to expectation, students in the control condition performed better than those in the independent affirmation condition ($d = .66$; a moderate effect).

Given this unexpected result, we looked at the written responses to the question of why their least important value “might be important to someone else.” We found that 15% of students in the control condition and 6% of students in the independent condition chose to write from the perspective of their family. By taking the perspective of their family, these students inadvertently gave themselves a family affirmation. To maintain power in our analyses and not reduce our sample size (i.e., not drop the 21% of participants), we examined differences in performance for students, across conditions, who wrote from the perspective of their family to those who did not. Specifically, a research assistant coded the written responses for whether participants specifically named a family member (i.e., athletic ability is important for my brother who runs track). Comparing the two groups (family perspective, no family perspective) revealed that students who took the perspective of their families ($M = 97.06$, $SD = 3.59$) outperformed those who did not ($M = 94.18$, $SD = 6.56$), $d = .54$ (a moderate effect).

Discussion

Study 1 revealed that the interdependent (family) affirmation improved performance scores compared to the independent (self) affirmation. Moreover, we found similar performance in both the interdependent affirmation

and control conditions. This initial test of our hypothesis yielded a small effect because a number of participants in the control condition explicitly wrote about family. When we examined differences in performance between those who wrote about family and those who did not, we found a large difference among these groups.

Hence, one issue in Study 1 is that some students defaulted to writing about family even when it was not asked of them explicitly. Another issue is that students, in general, did very well on the numbers task, suggesting that it may have been too easy. Third, although we found that interdependent affirmations have positive effects for students from interdependent backgrounds, we do not test whether these effects are specific to students from more interdependent backgrounds, such as Latinos, or generalizable to students from independent backgrounds, such as European American students. Do interdependent affirmations increase identity safety for all students or do they uniquely benefit students from more interdependent backgrounds? To address these issues, in Study 2, we adapted the standard affirmation procedure to ensure that students in the control condition did not write about family. In addition, we used a different performance measure to make the task more difficult for students. Finally, we extended the results of Study 1 to an older population, namely, Latino college students, and added a comparison group of students from more independent backgrounds, namely, European American students.

Study 2

Study 2 utilized the same procedure as Study 1 with two exceptions. First, to ensure that students in the control condition did not write from the perspective of their families, we changed the instructions to specify that they “think about why the value might be important for someone you don’t know.” Second, we used a more difficult anagram task for college students. Consistent with Study 1, we expected that the interdependent (family) affirmation would increase performance for Latino college students relative to the independent (self) affirmation or no affirmation. Moreover, assuming the new instructions prevent Latino college students from writing about family, consistent with Hoshino-Browne et al. (2005), we anticipated that there would be negligible differences between the independent (self) affirmation and the control condition.

With regard to differences in performance for European American students, we drew on findings from both culture matching (Stephens, Fryberg, et al., 2012) and self-affirmation (Cohen et al., 2006)

literature. Specifically, Stephens, Fryberg, et al. (2012) found that although interdependent messages improved performance for working-class students compared to independent messages, middle-class students performed equally well when they read the independent or interdependent messages. The authors argued that because ideas of independence are deeply embedded into the cultural fabric of the university, students from independent backgrounds—in this case, middle-class students—can perform well regardless of what messages they receive. Yet for students from backgrounds that are not well represented in the university, such as those from interdependent backgrounds, a culture-specific message promotes identity safety. Similarly, Cohen et al. (2006) found that self-affirmations have minimal impact on majority-group students, namely, European American students, who are not negatively stereotyped or threatened in the academic domain. Given the findings, we hypothesized that European American students would perform equally well across conditions.

Method

Participants

Participants included 269 undergraduate students (82 Latino, 187 European American; 112 male, 155 female, two missing; M age = 19.52, SD = 2.50) from Arizona State University. The original sample included 276 participants, but seven students did not complete the performance task, which was our main outcome variable, and, therefore, were not included in the final sample. Participants completed the survey for partial course credit in an introductory psychology class. We found differences in college grade point averages (GPA) between Latino and European American participants, such that European American students reported higher GPAs (M = 3.34, SD = .65) than Latino students (M = 2.61, SD = .99), d = .87 (a large effect). Given this, we used college GPA as a covariate in the analyses.

Procedures and measures

Students completed the study via Qualtrics, an online data collection software. Students were randomly assigned to the interdependent (family) affirmation, the independent (self) affirmation, or the control condition. The same instructions and procedures as Study 1 were used, except the performance task was more difficult and to prevent students in the control condition from writing about family, the directions were changed to “Think about why the value might be important for someone you don’t know.” Students were given the option to leave the survey at any time during the study without incurring penalties.

Performance was measured using a “word puzzle” anagram activity that has been used in past research (Stephens, Fryberg, et al., 2012). The activity consisted of rearranging words into new words by using all the same letters. Students were provided the following example: *The letters in the word “cone” can be rearranged to spell “once.”* Students were asked to rearrange 12 words (e.g., *chin, coin, earth, canoe, ample, caper, cause, selves, attic, alumna, ignore, disease*) and to provide their responses in the space provided. Students were also asked to mark whether they attempted the word puzzle, regardless if they could successfully rearrange the word or not. Given that students were explicitly instructed to attempt 12 word problems, we calculated the “number correct” to measure performance.

Results and discussion

Anagram task: Number correct

The mean score of the number correct for the entire group was 6.01 ($SD = 2.93$), with the range of scores being 1 to 12. We further compared the means in the 2 (ethnicity: Latino, European American) \times 3 (condition: independent affirmation, interdependent affirmation, control) between-subjects design.¹ There were very small ethnic group differences in number correct on the anagram task: The mean number of problems solved correctly for Latino students ($M = 6.35$, $SD = 2.97$) was similar to that of European American students ($M = 5.91$, $SD = 2.92$), $d = .15$ (a small effect). There were differences for condition, such that students in the interdependent affirmation condition solved more problems correctly ($M = 6.63$, $SD = 2.93$) than students in the independent affirmation condition ($M = 5.49$, $SD = 2.83$), $d = .41$ (a moderate effect), and in the control condition ($M = 5.99$, $SD = 2.97$), $d = .22$ (a small effect). Students in the control condition solved a similar number of problems correctly relative to those in the independent affirmation condition, $d = .17$ (a small effect).

The main effects were qualified by an Ethnicity \times Condition interaction. See Figure 2 for means and standard errors. As expected, Latino students in the interdependent affirmation solved more problems correctly compared to Latino students in both the independent affirmation ($d = .96$; a large effect) and control conditions ($d = .73$; a large effect) and compared to European American students in the interdependent affirmation condition ($d = .65$; a moderate effect). This suggests that an interdependent affirmation does not simply improve identity safety for all students but that the effect of this type of affirmation may be more

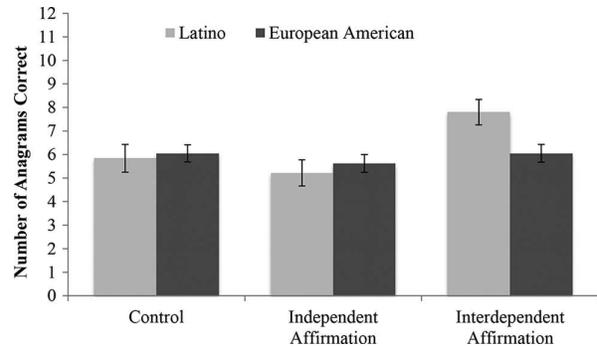


Figure 2. Study 2: Means and standard errors for the Ethnicity \times Affirmation condition interaction on number of anagrams solved correctly.

culturally specific for students from interdependent backgrounds (e.g., Latino students) than for students from independent backgrounds (e.g., European American students). There were very small differences between Latino students in the independent affirmation and control conditions ($d = .20$; a small effect). Consistent with culture matching (Stephens, Fryberg, et al., 2012) and self-affirmation (Cohen et al., 2006) findings, European American students performed similarly across affirmation conditions (all d values $< .14$, all small effects).

General discussion

The purpose of the present research was to test the impact of culture-specific affirmations, those that highlight one’s family, on performance for Latino students. Two studies revealed that a family affirmation enhanced performance relative to a self-affirmation for students from interdependent cultural backgrounds, namely Latino middle school (Study 1) and college (Study 2) students. In addition, in Study 2, we found that an interdependent affirmation improved performance for Latino college students compared to European American college students. Similar to past findings in the culture matching (Stephens, Fryberg, et al., 2012) and affirmation literature (Cohen et al., 2006), European American college students demonstrated similar performance across conditions.

Although these studies are the first to test family affirmations for Latino students, these findings are consistent with previous research that demonstrates the impact of interdependent affirmations on dissonance reduction for Asian Canadian college students (Hoshino-Browne et al., 2005) and collective self-esteem for female college students (Derks et al., 2009). One unexpected consequence of our methodology in Study 1, however, was that Latino students defaulted to

writing about family members when asked to reflect on a value important to “someone else.” Follow-up analyses revealed that Latino students who wrote about family members outperformed those who did not write about family. This suggests a need in self-affirmation studies to pay attention to the content students write, as this content can vary by cultural group (Cousins, 1989; Markus & Kitayama, 1991; Trafimow et al., 1991).

After addressing this limitation and clarifying the instructions in Study 2, we found negligible differences between the independent affirmation and the control conditions. Although this finding is consistent with research by Hoshino-Browne et al. (2005), it differs from research demonstrating the positive effects of self-affirmations for ethnic minority populations, namely, African American and Latino middle school students (Cohen et al., 2006, 2009). There are some potential explanations for this difference. First, Cohen et al. (2006) argued that self-affirmations are most effective during the beginning of a transition period, such as the beginning of a school year. Our studies were conducted toward the end of each school year, which may have neutralized the benefits of the independent self-affirmation. Second, participants in the control condition were instructed to reflect on why a value may be important to someone else; this is a perspective-taking strategy, which has associated benefits (Galinsky & Moskowitz, 2000; Hoffman, 2000). The lack of difference between the self-affirmation and control condition may be because students from interdependent backgrounds are getting a boost from taking the perspective of another person, rather than the self-affirmation not being effective. Future work should include a no-reflection control condition to test this supposition.

Taken together, the current two studies convey the importance of considering students’ cultural backgrounds for affirming their sense of self and, subsequently, for enhancing their performance. Yet there are some limitations to this work. First, unlike our outcomes, Cohen and colleagues (Cohen et al., 2006; Cohen et al., 2009) found long-term positive effects of self-affirmations. Future research is needed to investigate whether interdependent affirmations also yield positive long-term effects for Latino students. Similarly, it would be important to establish the effects of these affirmations on student grades or other measures of performance for Latino students, given the persisting achievement gap for this group (Santiago, 2012). Second, although research has begun to identify potential mediating variables in the self-affirmation process (e.g., higher level of thinking: Wakslak & Trope, 2009; higher attention to processing threat: Klein & Harris, 2009; decreased negative self-beliefs: Keough, Garcia, & Steele, 1998), we do

not offer such an explanation for interdependent affirmations. Prior research suggests that perceptions of task difficulty (Stephens, Fryberg, et al., 2012) and feelings of belonging (Shnabel et al., 2013) are two possibilities. Future work is needed to test these mediators with Latino students.

Finally, one important issue not examined in the current work is the variability in models of self that exists within cultural groups. To account for this variability, future work should measure participants’ level of interdependence and independence to examine the effect of culture-specific affirmations at the individual level. Similarly, future work should also examine level of biculturalism—the extent to which individuals integrate the cultural values and behaviors of two separate cultures (Benet-Martínez, Leu, Lee, & Morris, 2002; Berry & Sam, 1997; Chen, Benet-Martínez, & Bond, 2008; Haritatos & Benet-Martínez, 2002)—as a moderator for the effects of cultural affirmations on performance. Prior work on biculturalism with Chinese Americans (Hong, Morris, Chiu, & Benet-Martínez, 2000) suggests that bicultural individuals, such as Latino Americans, can respond differently to both interdependent and independent primes depending on which self is made salient. In addition, although we did not measure level of integration or generational status in our sample of Latino students, these students may differ on the extent to which they have adopted the values and practices of the larger independent American culture, which in turn shapes how they respond to both interdependent and independent affirmations. For example, future research should test whether Latino students who have integrated independent values into their self-concepts respond better to independent affirmations compared to students who have not integrated these values.

A common practice in American classrooms is to incorporate a “one model fits all” approach to benefit “all” students. Framing classrooms in this manner, however, ignores the different cultural understandings of self and culture-specific purposes for getting an education that students bring with them to the classroom. By ignoring these differences, whether intentional or not, we reify the achievement gap by privileging students whose understandings and purposes match the existing models in the classroom (e.g., middle-class students, European Americans) and undermining those who do not match (e.g., working-class students, Latinos). The current research suggests caution in utilizing a “one size fits all” model and instead encourages educators to consider and validate multiple viable ways of being.

The positive influence of affirmations that incorporate families for Latino students signifies the importance of integrating these close others into the school

environment. For example, teachers can empower Latino students by including important others, such as family members, in their school experiences. Given the positive effects on performance in our studies, teachers could utilize number or word problems that are culturally relevant (e.g., ratio of ingredients for your family's favorite meal, distance to travel to see your relatives). By framing affirmations to match students' ideas about what is a "right" self, teachers can create cultural matches that foster a learning environment that is welcoming, familiar, and safe for students who have been historically underserved in education.

Note

1. For consistency across the two studies, we also calculated percent accuracy ($M = 55.68$, $SD = 24.63$, range = 8.33–100) using the same formula as in Study 1. We compared group means for percent accuracy for the 2 (ethnicity: Latino, European American) \times 3 (condition: independent affirmation, interdependent affirmation, control) between-subjects design. There were very small differences in group means for ethnicity ($d = .10$), and the patterns for the main effect were similar to the reported results on "number correct" (i.e., the interdependent condition differed from the independent condition, $d = .30$; a small to moderate effect) except that students in the control condition demonstrated very small differences from those in the interdependent affirmation condition ($d = .05$). The interaction findings are also similar to the reported results on "number correct."

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