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Abstract

The current study examined the role of family orientations on the achievement motivations (i.e., achievement goal orientations and intrinsic motivation) of high school youths of different generational status (i.e., from immigrant or non-immigrant families) when their perception of their parents' goals and classroom goal structures were tested simultaneously as predictors. A total of 331 high school students (ninth grade; ages 13–16, with 96% of the students in the ages of 14 or 15; 141 boys and 187 girls) from one high school in the United States participated in the study, completing a series of assessments with regard to their math classes. The findings show the complex role of the family contexts (parent goals and family orientations) on the adaptive mastery goals for children of immigrant families, going beyond previous studies that reported the relationships between family orientation and performanceapproach or less adaptive performance-avoidance goals. This study still found that students' family orientations strongly predicted their desire to win over their peers with certain levels of internal pressure in order to meet their parents' expectations, aligned with previous literature. Through examining a context beyond the classroom context, studies should continue to examine the larger family and cultural context in understanding students with diverse backgrounds.

Keywords: family orientation, achievement goal orientation, children of immigrant families, parents' goals, classroom goal structures

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Orientación Familiar y Orientación al Logro de Objetivos entre los Hijos de Familias Inmigrantes

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Resumen

El estudio actual examinó el papel de las orientaciones familiares en las motivaciones de logro (es decir, orientación al logro de objetivos y motivación intrínseca) de jóvenes de escuela secundaria de diferente estatus generacional (es decir, de familias inmigrantes o no inmigrantes) cuando perciben los objetivos de sus padres y las estructuras de los objetivos del aula fueron probadas simultáneamente como factores predictivos. Un total de 331 estudiantes de secundaria (noveno grado; edades 13-16, con el 96% de los estudiantes de 14 o 15 años de edad; 141 niños y 187 niñas) de una escuela secundaria en los Estados Unidos participaron en el estudio, completando una serie de evaluaciones con respecto a sus clases de matemáticas. Los hallazgos muestran el complejo papel de los contextos familiares (objetivos de los padres y orientaciones familiares) en los objetivos de dominio adaptativo para los hijos de familias inmigrantes, yendo más allá de los estudios previos que reportaron la relación que existe entre la orientación familiar y el desempeño-rendimiento o los menos adaptables objetivos de desempeño-rendimiento. Aún encontramos que las orientaciones familiares de los estudiantes predijeron fuertemente su deseo de ganar a sus compañeros con ciertos niveles de presión interna para cumplir con las expectativas de sus padres, en línea con los estudios anteriores. Al examinar un contexto más amplio, más allá del contexto del aula, los estudios deben continuar examinando el contexto familiar y cultural más amplio para comprender a los estudiantes con antecedentes diversos.

Palabras clave: orientación familiar, orientación al logro de objetivos, hijos de familias inmigrantes, objetivos de los padres, estructuras de los objetivos del aula

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ccording to the U.S. Census Bureau (2012), approximately 25% of children in the United States have at least one foreign-born parent; for the most part, the parents are from Latin America or Asia. With such a large percentage of children coming from diverse backgrounds, it is unsurprising that there has been an increasing number of studies involving children from immigrant families. Observed differences in educational attainment among some immigrant youth have been followed by studies on how children from immigrant families may experience achievement motivation differently (e.g., Esparza & Sánchez, 2008; Fuligni, 2011; Perreira et al., 2010). Of particular interest has been how the strength of children's family orientation (Urdan, 2004; also called family obligation, Fuligni et al., 1999) connects to children's different types of achievement motivation (e.g., Fuligni, 2001; Perreira et al., 2010; Urdan, 2004). These studies have reported different connections between children's family orientation and their different types of achievement motivation, but more studies are needed to better understand how the family orientation of children from immigrant and nonimmigrant families predict different types, or qualities, of achievement motivation in the contexts of the broader classroom and family.

Using the achievement goal orientation theory framework, the current study aims to expand on past research by examining the role of family orientations on the different types of adaptive or less adaptive achievement motivations for the high school youths of different generational status (i.e., from immigrant or nonimmigrant families). The current study further examined the mediating role of high school students' family orientation in the relationships between their perceptions of parental goals and their different types of achievement goal orientations and intrinsic motivations in the broader context of goal-related messages, such as messages from the classroom or from one's parents.

Theoretical Framework

Achievement Goal Orientations

Achievement goal orientations and consequences. As one of the major theories of achievement motivation, the achievement goal orientation theory has been used to explain the various purposes behind individuals' engagement in achievement settings (Elliot & McGregor, 2001; Linnenbrink, 2005; Urdan, 2004). Through examining different types or qualities of achievement goal orientations, this theoretical framework aimed to explain different outcomes of pursuing goal orientations. For example, when students pursue mastery goals, they focus on developing competence through engagement and often prefer tasks that challenge them and help them learn and improve. The rewards students seek are more likely to be internal rather than external. Students' pursuit of mastery goals has been connected to adaptive outcomes such as intrinsic motivation, positive emotion, higher persistence, and self-regulation (Linnenbrink, 2005).

On the other hand, students pursuing performance-approach goals focus on demonstrating competence and desire to achieve high grades or to appear better than their peers. They typically prefer tasks that fit well within their ability. Students' pursuit of performance-approach goals has been connected to higher grades and both positive and negative emotions (Linnenbrink, 2005). Lastly, students pursuing performance-avoidance goals would seek to avoid the appearance of being incompetent and an undesirable outcome. This goal orientation has predicted negative emotion (e.g., anxiety) or maladaptive behaviors (e.g., self-handicapping), which could impede one's own success by providing an excuse for a lack of achievement (Urdan, 2004). Eventually, the theory developed into a multiple goal perspective in which a combination of different types of goal orientations, such as both mastery and performance-approach goals (but not performance-avoidance goals, which are considered less adaptive), can be beneficial for achievement outcomes (e.g., Linnenbrink, 2005).

Antecedents of achievement goal orientations. According to achievement goal orientation theory, social expectations—such as from teachers and parents—have been shown to be related to the development of different types of goal orientations (Bong, 2008; Friedel et al., 2007; Wolters, 2004). Research has shown that students adopt similar achievement goal orientations to the goals or messages that their teachers and parents are communicating in their particular context. For example, when students

believe their parents value mastery of a task and the associated deep understanding, the students reflect a similar goal (e.g., Bong, 2008; Friedel et al., 2007). On the other hand, when students feel that a classroom culture fosters a competitive environment, students adopt performance-approach or performance-avoidance goals (Wolters, 2004).

Achievement Goal of Immigrant Youth: Role of Family Orientation

Immigrant family context and development of family orientation. There has been increasing attention to examine the role of family in achievement motivation, particularly with regard to the growing number of youths who come from immigrant families. Fuligni and Yoshikawa (2004) contended that, regardless of their country of origin, immigrant families usually consider immigration to be an investment in a better life and expect higher returns from their children's educational attainment (e.g., Portes & Rumbaut, 2001). Fuligni and Yoshikawa (2004) also pointed out that immigrant families tend to have mutually interdependent goals for the children and the larger family, and the parents of these families consider their children. As the children understand their parents' investment and sacrifices during immigration, the immigrant students would demonstrate respect for their parents' sacrifices by wanting to do well in school, which can be seen in the immigrant students' experiences of achievement motivation.

In turn, immigrant youths have been reported to hold a higher sense of *family obligation* (defined as a child's duty to assist, respect, and support his or her family; Fuligni et al., 1999) than do their nonimmigrant peers (Fuligni, 2001; Fuligni et al., 1999; Perreira et al., 2010). According to Fuligni (2011), membership in this family implies certain obligations in order to be a relevant member, and adolescents would tend to develop more behaviors that involve "willingness to support, assist, and respect the authority of the family" (Fuligni, 2011, p. 103). A few years later, Urdan (2004) developed a shorter scale to measure the construct of Fuligni et al. (1999), which Urdan referred to as *family orientation*. Urdan (2004) defined family orientation as "students' desires to please or provide for family members through academic

achievement" (p. 255), as with the parallel construct of family obligation. Through the emphasis on academic orientation that aim to support family (e.g., "I want to do well in school so that I can be better prepared to take care of my family"; Urdan, 2004), compared to the students' expectations of how often they should assist family or beliefs about the importance of respecting family members (i.e., family obligation: Fuligni, 2001), Urdan (2004) similarly reported a higher sense of family orientation in immigrant youths compared to their nonimmigrant peers.

Family orientation as antecedents of different types of achievement motivation. There has also been evidence that greater levels of the beliefs of family obligation that immigrant students hold are connected to general academic motivation. For example, Fuligni and his colleagues (1999) found a connection between students' sense of family obligation and their aspiration and expectation for educational attainment among students with various ethnic backgrounds. Likewise, Urdan, Solek, and Schoenfelder (2007), through qualitative study, reported that children with a stronger sense of obligation to their families valued academic success more and had higher goals in education, particularly first- and second-generation students. Particularly for Latino immigrant and nonimmigrant high school students, Esparza and Sánchez (2008) reported that students' reported familism (measured by students' beliefs and attitudes toward general filial attitudes) predicted greater academic effort and class attendance but not expectancies for success or the intrinsic value. Loera, Rueda, and Oh (2015) similarly reported that Latino immigrant and nonimmigrant high school students' family orientations were significant predictors of their academic engagement and learning strategies.

Researchers have further questioned and examined whether students' family orientations predict different types, or qualities, of achievement motivation and their achievement. Interestingly, Fuligni's (2001) earlier study reported that family obligations of students with immigrant and nonimmigrant backgrounds predicted the students' self-reported utility value of education, math, or English but not the intrinsic value of math or English (from expectancy×value theory; Eccles & Wigfield, 2002). However, Perreira et al. (2010) further reported that a greater sense of family obligation of Latino students, who were mostly from immigrant families, predicted a more positive

view of school environments, and a positive school climate was associated with greater academic motivation of every dimension: importance, usefulness, future value, and intrinsic value of education.

Using the achievement goal orientation theory framework, which is the major framework of our study, Urdan (2004) reported that family orientation of students with immigrant and nonimmigrant backgrounds is connected to their performance goals with self-handicapping behavior and that their family orientation also partially moderates the relationships between the students' classroom performance-goal structure and performance-avoidance goals. Urdan and Mestas (2006) similarly reported that some described a desire to please their parents as one of the reasons to adopt the performance-approach goals. In these studies, Urdan and colleagues (2004; 2006), however, did not include mastery goal orientations in the study. When Urdan (2004) also found mean differences between the generational groups on the measures of performance goals, classroom performance-goal structure, family orientation, and achievement, all the differences were removed when family orientation was included as a covariate. This indicates that family orientation may be a mechanism explaining some of the differences between generational groups in the development of different goal orientations.

The Current Study

Expanding on these studies, we examined the role of family orientations on the achievement motivations of high school youths of different generational status (i.e., from immigrant or nonimmigrant families), when their perception of their parents' goals and classroom goal structures were tested simultaneously as predictors. The achievement motivations described in this study are intrinsic motivation and three types of goal orientations (i.e., mastery-approach, performance-approach, and performance-avoidance). Expanding on previous studies that examined the role of family orientation in performance goal orientations (e.g., Urdan, 2004; Urdan et al., 2007), our study included mastery goals in the scope of examining the roles of family orientations in achievement motivations. The current study chose to collect our data and based our questions in the math classroom context because every

high school student is required to take a math class, thus helping to ensure our data is representative of the school's population. STEM (Science, Technology, Engineering, and Math) classes are known to be areas in which students often experience struggle and wide ranges of motivation (Gafoor & Kurukkan, 2015; Nurmi & Aunola, 2005; Saad, 2005). Below we list the specific research focus that guided the current study and hypotheses tested.

Family orientations and students' adaptive and less adaptive goals. High school youths' family orientations have been reported to predict the students' own performance goal orientation (Urdan, 2004). Would family orientation be connected to youths' adaptive motivations (that is, mastery goal orientation and then intrinsic motivation), in addition to performance goals? Fuligni (2001) reported that students' family orientation predicted the utility value, or usefulness, of their education. Utility value would include students' understanding of the underlying value of the task either currently or in the future (Eccles & Wigfield, 2002), and students' motivation through understanding the underlying value of the task was reported to predict mastery goals (Kim et al., 2010). More recently, Perreira et al. (2010) reported the connection between the family obligation of Latino students and academic motivation of various dimensions: importance, usefulness, future value, and intrinsic value of education. In turn, we hypothesized that family orientation would predict mastery goals and then intrinsic motivation (see Figure 1). According to Urdan et al. (2007), students could perceive family obligation as either pressure or as an opportunity to show gratitude for their parents' sacrifice, which could predict different types of motivation.

The mediating role of family orientations between parents' goals and students' goal orientations. Next, high school students' goal orientation has been reported to be predicted not only by family orientations (Urdan, 2004) but also by the parents' goals of similar kinds (e.g., Friedel et al., 2007). Then, would high school youths' family orientation predict the different types of adaptive and less adaptive goal orientations, particularly as a mediator between their perceptions of parental goals and the different types of achievement goal orientations (and then intrinsic motivations)? Will the prediction of family orientation on their goal orientations in the classroom context remain significant even when their perceptions of classroom goal structures as a strong predictor of students' goal orientations were tested

simultaneously as predictors? Considering that family orientation is students' "desires to please or provide for family members through academic achievement" (Urdan, 2004, p. 255), the youths' family orientation was hypothesized to be predicted by their perceptions of their parents' goals for them and then predict their own goal orientations (see Figure 1).

The moderating role of generational status on relationship between parent's goals, family orientation, and students' goal orientations. Will the relationships between the predicting variables (i.e., parental goals, family orientation) and the students' goal orientations be dependent on the students' generational status? According to Fuligni and Yoshikawa (2004), immigrant families show interdependence, so for the children of immigrant parents, their connection between parental goals and their own achievement goals (e.g., among parental goals, family orientation, and one's own goals of a similar kind) could be stronger. According to Urdan et al. (2007), students with collectivist cultural backgrounds strive to please family members by succeeding academically more as an internal, rather than external, motivational orientation. To test the hypotheses, we included interaction terms to test the moderating effect of students' generational status on the relationships among their perceptions of parents' goals, family orientations, and achievement goals of a similar kind.

The moderating role of generational status on relationship between classroom goal structures and students' goals. Will the relationships between classroom goal structures and students' individual goal orientations be also dependent on the students' generational status? We could not develop a specific hypothesis for this question with the limited research examined in previous studies. Instead, Perreira et al. (2010) reported that having a greater sense of family obligation predicted a more positive view of school environments and that a more positive school climate, feeling respected and valued by the school, was associated with greater academic motivation: thus, in the current study, we hypothesized that high family orientation helps students perceive their classroom environment more positively (e.g., high classroom mastery goal structure).

Generational status, family orientation, and achievement goal orientations. Lastly, would students' immigration status explain their mean

differences of achievement goal orientations? As was reported in Urdan (2004), we hypothesized the mean differences in performance-goal orientations and students' perceptions of classroom performance-goal structures between the children of immigrant parents and those of nonimmigrant parents and that any such differences would be reduced when students' family orientation was included as a covariate.

Methods

Participants and Procedure

A total of 331 high school students (ninth grade; ages 13–16, with 96% of the students in the ages of 14 or 15; 141 boys and 187 girls) from one high school in the United States participated in the study, completing a series of assessments with regard to their math classes. The school had high attendance and low dropout rates (95% and <1%, respectively) and had 30% of the school population who were eligible for the free or reduced-price lunch program. Approximately, 5% of the school population were English language learners.

This high school was situated in the western United States and had a highly diverse immigrant population. Based on the students' self-reported pan-ethnic (e.g., Asian) and ethnic (e.g., Chinese) identifications, their identifications of their parents' ethnic (e.g., Chinese) background, and their reported generational status, we found the sample decomposition as shown in Table 1. We followed Fuligni (1997) and defined and coded *first generation* as students who were born outside of the United States but moved to America with their parents, *second generation* as students who were born in the United States but whose parents were born in another country, and *third+ generation* as students who were born in the United States to parents who were both also born in the United States.

For the current study, we considered the "children of immigrant families" as including the first-generation and second-generation categories into a group and the "children of nonimmigrant families" included the third-generation and all later generations. The proportion of generational status varied across students from various ethnic backgrounds (Table 1), similar to various studies reported earlier (e.g., Fuligni, 1997) and was consistent with both national and

local figures. For example, a majority of the students with Mexican or Chinese backgrounds were either first- or second-immigration generation, whereas few students of European backgrounds were of these two generations.

Table 1. Sample Decomposition According to Ethnic Background and Generation Status.

Ethnic background	First	Second	Third+	Total
Asian-American	22	52	8	82
African-American	1	4	10	15
Latin-American	12	52	24	88
European-American	4	9	58	71
Multiple Heritage	1	7	30	38
Middle East Asian-American	4	17	0	21
Total	44	141	130	315

Measures

All items used a 7-point Likert scale. We calculated Cronbach's α for scale reliabilities and performed a confirmatory factor analysis for each scale to identify distinct but correlated latent factors. We used the cut-off criteria based on a comparative fit index of CFI > .95 and RMSEA < .08 (Kline, 2015), and the fit indices of each scale were acceptable.

Personal achievement goals. We used the Patterns of Adaptive Learning Survey (PALS; Midgley et al., 2000) to measure the mastery (e.g., "It's important to me that I learn a lot of new concepts this year"; 5 items; alpha =

.87), performance-approach ("It's important to me that other students in my class think I am good at my classwork"; 5 items; alpha = .87), and performance-avoidance ("It's important to me that I don't look stupid in class"; 4 items; alpha = .74) goal orientations.

Perceptions of classroom goal structure. We used the PALS (Midgley et al., 2000) for classroom mastery goal structure (e.g., "In our class, really understanding the material is the main goal"; 5 items; alpha = .83) and classroom performance goal structure (e.g., "In our class, showing others that you are not bad at classwork is really important"; 7 items; alpha = .84).

Perceptions of parents' goals. We also used the PALS (Midgley et al., 2000) for parental mastery goals ("My parents want me to understand my classwork, not just memorize how to do it"; 4 items; alpha = .68) and parental performance goals ("My parents would like me to show others that I am good at classwork"; 5 items; alpha = .81).

Family orientations. We used items from Urdan (2004; "The main reason I try to do well in school is to bring honor to my family"; 4 items; alpha = .79), a shortened version of Fuligni et al. (1999).

Intrinsic motivation. We used Ryan and Connell's (1989) Self-Regulation Questionnaire–Academics to measure intrinsic motivation ("because I enjoy math"; 6 items; alpha = .87).

Demographic questionnaire. The demographic questionnaire included information about age, grade, gender, languages spoken at home, race/ethnicity, generational status, and place of birth of participants, their parents, and their grandparents.

Plan of Analyses

First, as preliminary analyses, the two generational groups (children of immigrant families or children of nonimmigrant families) were compared to determine whether there were mean differences on the measures of major variables. Family orientation was used as a covariate (one-way analysis of covariance) to determine whether family orientation may operate as the mechanism that produces significant differences between generational groups on these dependent variables. Then a correlation matrix with the bivariate correlations among all measured variables was constructed.

Then, to address the major aim of the study, we tested the hypothesized path model using *MPlus* version 8.2 (Muthén & Muthén, 1998–2018) and based the goodness of fit index on the cutoff criteria of Hu and Bentler (1999). The path model (Figure 1) included classroom goal structures and parent goals as predictors of the students' own goal orientation, and students' family orientation was hypothesized to be mediating the relationships between parents' goals and students' own goal orientation of a similar kind. Demographic variables such as generational status and sex were included in the path model, and interaction terms were included to test if the relationships between the predicting variables (i.e., classroom goal structures, parental goals, family orientation) and the youths' individual goal orientations were dependent on the youths' generational status.

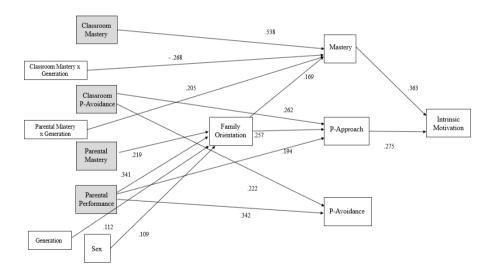


Figure 1. Path analysis results with significant standardized path coefficients. This shows the associations among students' perceptions of classroom goal structures, parental goals, family orientations, personal goals, and intrinsic motivations.

Note. All paths presented in Figure 1 are significant at the p < .05 level.

Results

Preliminary Analyses

We found significant mean differences between these generational groups: compared to the children of nonimmigrant families, the children of immigrant families had significantly higher scores for family orientation, parental performance goals, and classroom performance goals. When controlling for family orientation, for classroom performance goals, the differences between the children of immigrant families and the children of nonimmigrant families were nonsignificant: F(1, 290) = 3.33, p = .07 (Ms = 4.11 and 3.84, respectively). For parental performance goals, the differences remained significant even when controlling for family orientation: F(1, 290) = 6.62, p = .01 (Ms = 4.55 and 4.12, respectively).

A correlation analysis was conducted using Pearson's correlation to explore the relationships between variables (see Table 2).

Table 2. *Correlations Between Variables*.

	1	2	3	1	5	6	7	8	9	10	11
	1	2	3	4	3	U	/	o	9	10	11
Mastery goals	-										
Performance-approach goals	.25**	-									
Performance-avoidance goals	.21**	.76**	-								
Intrinsic motivation	.42**	.31**	.21**	-							
Parents' mastery goals	.41**	.19**	.18**.	32**	-						

Note. * p < 0.05, ** p < 0.01

Primary Analyses

When tested as a hypothesized path model, the fit indices were acceptable: $\chi^2(df=29)=46.46$, p<.02, CFI = .98, TLI = .96, RMSEA = .04 [.02, .07], SRMR = .03 (see Figure 1). Please see Table 3 for more detailed information on standardized direct, indirect, and total effects. Note that we found minimal between-class differences across the various math classes (i.e., the intraclass correlations for the variables were no greater than .08) and thus conducted a one-level path analysis (Wolters, 2004).

Table 3. Standardized Direct and Indirect Effects (for Paths with Significant Effects Only).

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Path	Direct	Indirect
To Mastery goals from		
Classroom mastery goals	0.54	
Classroom mastery goals x Generation	- 0.27	
Parents' mastery goals x Generation	0.21	
Parents' mastery goals (via Family orientation)		0.04
To Performance-approach goals from		
Classroom performance goals	0.26	
Parents' performance goals	0.19	
Parents' performance goals (via Family orientation)		0.09
To Performance-avoidance goals from		
Classroom performance goals	0.22	
Parents' performance goals	0.34	
To Intrinsic motivation from		
Classroom mastery goals (via Mastery goals)		0.20
Classroom mastery goals x Generation (via Mastery goals)		- 0.10
Parents' mastery goals x Generation (via Mastery goals)		0.08
Parents' mastery goals (via Family orientation and Mastery goals)		0.01
Parents' mastery goals (via Family orientation and Performance- app. goals)		0.02
Classroom performance goals (via Performance-app. goals)		0.07
Parents' performance goals (via Family orientation and Performance-app. goals)		0.02

Parents' performance goals (via Family orientation and Mastery goals) -- 0.02

Note. Only statistically significant path are reported at p < 0.05.

Mastery goals and testing moderation. Students' perceptions of the classroom mastery goals directly predicted their own mastery goals. Students' perceptions of their parental mastery goals did not directly predict their own mastery goals, but there was an indirect effect between the two variables via their family orientation. Interestingly, when predicting students' own mastery goals, we found interaction effects between classroom mastery goals and generation, as well as between parents' mastery goals and generation.

To further explore the interaction between students' classroom mastery goals and their own mastery goals, a simple slopes analysis was conducted (Aiken & West, 1991). Participants were divided into two different immigration generation groups (i.e., the children of nonimmigrant families and the children of immigrant families) and two levels of classroom mastery goals (low = 1SD below the mean and high =1SD above the mean). The results of the simple slopes analysis are presented in Figure 2. Results showed that the immigration generation moderated the effects of the classroom mastery goals on students' own mastery goals. Specifically, for the children of nonimmigrant families, the association between classroom mastery goals and students' own mastery goals was stronger (r = .56) compared to the children of immigrant families (r = .40).

In addition, the interaction between parents' mastery goals and students' own mastery goals was investigated. The results of the simple slopes analysis are shown in Figure 3. Results indicated that immigration generation groups moderated the effects of the parents' mastery goals on students' mastery goals. Moreover, for the children of immigrant families (r = .50), compared to the children of nonimmigrant families (r = .32), the association between parents' mastery goals and students' own mastery goals were stronger.

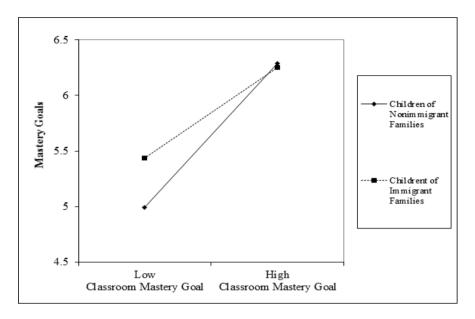


Figure 2. Students' own mastery goals as a function of immigration groups and classroom mastery goals.

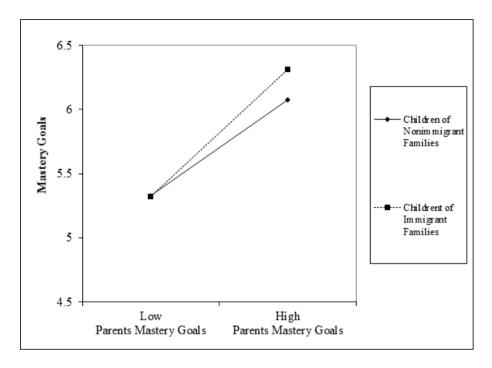


Figure 3. Students' own mastery goals as a function of immigration groups and parents' mastery goals.

Lastly, between students' family orientations and students' classroom mastery goal structures, the association was statistically significant (r = .41) for the children of immigrant families; although, for the children of nonimmigrant families, the relationship was not statistically significant.

Performance-approach and performance-avoidance goals. Students' perceptions of classroom performance goals directly predicted their own performance-approach and performance-avoidance goals. Students' perceptions of parental performance goals also directly predicted their own performance-approach and performance-avoidance goals. Family orientation mediated students' perceptions of their parents' performance goals and their

own performance-approach goals, but it did not mediate their own performance-avoidance goals.

Intrinsic motivation. Both the students' mastery and their performance-approach goals directly predicted their intrinsic motivation. In turn, we observed that the students' perceptions of classroom and parental goals had indirect effects on their intrinsic motivation, as mediated by their own mastery or performance-approach goals.

Discussion and Implications

The current study examined the complex role of the family orientations of high school youths from immigrant or nonimmigrant families on their own achievement goal orientations and intrinsic motivation. These relationships were examined when the students' perception of their parents' goals and classroom goal structures were tested simultaneously as predictors.

Family Orientations and Students' Adaptive and Less Adaptive Goals

The results supported students' family orientation as connected to adaptive goal orientations—mastery goal orientation, in addition to the performance goal orientations that have been reported earlier (Urdan, 2004). Students' pursuit of the mastery and performance-approach goal orientations then predicted the intrinsic motivation of the students. The study results are aligned with Perreira et al. (2010) that connected family respect and various kinds of achievement motivations, such as importance, usefulness, future value, and intrinsic value of education. Still, the strength from family orientation to goal orientation was more firmly connected to the one of performance-approach than to the one of mastery goals, indicating family orientation in itself could be felt by students more as internal pressure, but less as fully internalized values—as a chance to show gratitude to parents who have sacrificed for their children.

Interestingly, the family orientation did not connect to their performance-avoidance goals, which are considered as maladaptive. Earlier reports (Urdan, 2004) also showed students' family orientation predicted more strongly their performance-approach than their performance-avoidance goals. As a whole,

the findings indicate the youth's family orientation would support their willingness to *approach* toward the achievement task (instead of *avoidance* of the task). More examination of the current cultural and familiar values on adaptive motivation is needed.

Mediating Role of Family Orientations Between the Parents' and Students' Goals

As we hypothesized, high school students' own desires to please or provide for family members through academic achievement partially mediated the relationship between their perceptions of their parents' goals and their mastery and performance-approach achievement goal orientations (and consequently intrinsic motivations). The family orientation significantly predicted students' achievement goal orientations for learning math in their math classroom context, even when their perceptions of classroom goal structures, which Wolters (2004) reported as a strong predictor of students' goal orientations, were tested simultaneously as predictors. This result suggests that although students' achievement motivation is shaped by the classroom culture they experience from year to year, their achievement motivation could be rooted in their perceptions of and values from their families. Educators should be intentional in guiding classroom goal structures but should also consider that students could bring certain values to the classroom context from their home contexts. Ideally, educators would also potentially connect and collaborate with parents in supporting students' quality of motivation in the classroom.

Notably, strength of family orientation was more strongly based on students' perceptions of their parents' performance goals than on their perceptions of their parents' mastery goals. This indicates that family orientation could be perceived more strongly when students perceive their parents as focusing on achievement outcomes—expecting higher returns for their immigration as an investment (e.g., Fuligni & Yoshikawa, 2004; Portes & Rumbaut, 2001)—rather than the learning process itself. In this way, students' family orientation seems to strongly mediate between their internal pressure to win over their peers and their parents' goal related messages of a similar kind (Fuligni, 2001; Urdan, 2004; Urdan & Mestas, 2007). Although

the familiar value of students seems to be connected to both mastery and performance-approach goal orientations, educators should consider how the cultural and familiar values students bring might also shape their internal pressure to do well and could be better prepared to support students' pursuit of mastery goal orientations through potential collaboration with parents.

In this study, family orientation functioned as a mediator when we examined youths of both immigrant and nonimmigrant backgrounds as whole groups (e.g., Fuligni, 2001; Urdan, 2004). However, a few relationships between the predicting variables (i.e., parental goals, family orientation) and the youths' individual goal orientations were dependent on the youths' generational status, which is to follow in the section below.

Moderating Role of Generationals Status on the Relationships

In comparison of children from immigrant and nonimmigrant families, immigrant families' mutual interdependence between the children and the larger family (Fuligni & Yoshikawa, 2004) seemed to contribute to stronger connections between parents' and children's own mastery goals. Interestingly, this moderating effect of generation was the case for mastery but not performance goals (i.e., relationships between parental performance goals and children's performance-approach goals). Informed by Urdan et al. (2007), the current study also tested the hypothesis that for immigrant students with largely collectivist cultural backgrounds, striving to please family members by academic success could be considered more as an internal than an external motivational orientation. The hypothesis was not supported, however, because the relationship between family orientation and mastery goals was not stronger for children of immigrant families.

Perreira et al. (2010) earlier reported that students—mostly children of immigrant families—with high family orientation (focusing on family respect) perceived their school climate more positively through feeling respected and valued by the school, which was consequently associated with greater academic motivation. Aligned with their conclusion, we found statistically significant relationships between students' family orientations and their classroom mastery goal structures for children of immigrant families, but not for children of nonimmigrant families. The finding also

indicates more complex parental and familial roles (i.e., parent mastery goals and family orientation) in mastery goals among children from immigrant families. In other words, educators should appreciate how ethnically diverse immigrant students' family orientations serve as an important contributor to a classroom culture that emphasizes the value of mastery goals.

Generational Status, Family Orientation, and Achievement Goal Orientations

Aligned with previous reports, we found that the children of immigrant families had significantly higher scores for family orientation (e.g., Fuligni et al., 1999; Urdan, 2004) and performance goal-related constructs (e.g., Urdan, 2004) compared to children of nonimmigrant families. The differences were reduced for classroom performance goals when family orientation of students was included as a covariate (aligned with Urdan, 2004), although the differences for parent performance goals (which were not tested in Urdan, 2004) were not reduced. This suggests that family orientation explains a large portion of the differences between children of immigrant and nonimmigrant families in their construction of performance goals. Understanding students' family orientations could help educators understand students' performance goals in class.

There were no statistically significant mean differences between children of immigrant and of nonimmigrant parents in the mastery goal orientations or students' perceptions of classroom mastery-goal structures. This implies that children respond similarly to perceived classroom mastery goals regardless of generational status.

Limitations and Future Studies

Future studies could examine longitudinal relationships, particularly including other family-related demographic variables (e.g., parental level of education, socioeconomic status), as we only examined one-time data collection. Moreover, in our study, students from immigrant families versus nonimmigrant families differed both in ethnicities not just generational status

(i.e., confounded), so future studies could have a sample decomposition controlling the ethnic background of students of both groups. Importantly, the connection between family orientation and mastery goals of students from immigrant families was more complex than was expected, and more studies could examine the role of family- or parent-related constructs on adaptive motivations of students from immigrant families.

Conclusion

In this study, we showed the complex roles of family contexts (parents' goals and family orientations) on adaptive mastery goals for children of immigrant families, going beyond researchers who had a major focus on performance-approach or less adaptive performance-avoidance goals. Developing awareness and understanding of the various cultural and familiar sources of students' mastery, performance-approach, or performance-avoidance goals (which go beyond the classroom) could be an integral component of classrooms for the appreciation of students' diverse ethnic, cultural, and immigrational backgrounds. The findings in this study underscore the need for educators who often do not share a cultural background with many of their students—particularly in ethnically diverse areas—to develop awareness and understanding of the various cultural and familiar sources of students' achievement motivation. Assumptions regarding students' motivation and their cultural and familiar values may be counterproductive and dismissive of students' needs, values, and goals for achievement.

Teachers could be aware of not only their own goals for their students but also their students' family orientations and perceptions of their parents' goals, as these factors can potentially shape student achievement motivation. This potential might indicate that schools and classroom teachers, through better understanding of these dynamics, could place greater emphasis on collaborating with parents and families to shape students' quality of motivation (e.g., mastery and performance-approach) and support students with diverse backgrounds in the classroom. Scholars and educators in the field of research should also continue to examine larger family and cultural contexts beyond the classroom context (such as students' perceptions and

orientations constructed from their family contexts) for the purpose of understanding students with diverse backgrounds.

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