The conceptualization of costs and barriers of a teaching career among Latino preservice teachers

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ABSTRACT

We investigated the perceived costs and barriers of a teaching career among Latino preservice teachers and how these men conceptualized costs relative to their race-ethnic identity, gender identity, and planned persistence in the profession from an expectancy-value perspective. We used a mixed-method approach that included a content analysis of open-ended survey responses to identify salient costs and barriers and non-metric multidimensional scaling (MDS) of participants' responses to quantitative scales to capture phenomenological meaning of perceived costs, collective identity constructs, and planned persistence in the profession. Participants identified a range of drawbacks and barriers of a teaching career including concerns about job demands, work conditions, teacher preparation demands, emotional costs, social status, and salary, among other concerns. The MDS map for the whole sample suggested race-ethnic and gender identity were closely associated with status, salary, and morale; maps also provided insight into phenomenological meanings of different types of costs and cost measures. MDS maps for individual students demonstrated substantial diversity in individual meanings that are lost in group-level analyses. Results are discussed with attention to theoretical and practical implications for understanding and supporting men of color entering the teaching profession.

1. Introduction

The United States teaching workforce is mostly white, female, and monolingual—demographics that fail to reflect the increasing diversity of the student body. As of 2016, approximately 80 percent of all public school teachers were non-Hispanic White and 77% were women (Taie & Goldring, 2018). At the nexus of both gender and racial trends, male teachers of color are particularly underrepresented. Even in racially and ethnically diverse regions such as New York City, the context of the current study, men of color constitute less than 9% of teachers, while boys of color constitute 43% of the student population (NYC Men Teach).

The underrepresentation of men of color in the teaching corp represents a troublesome scarcity in talents, life experiences, and cultural knowledge that are increasingly important for the education of a diverse student population (Casey, Di Carlo, Bond, & Quintero, 2015; Sleeter, Neal, & Kumashiro, 2015). Many male teachers of color can leverage cultural knowledge and communication skills to make personal and curricular connections for students of color and effectively support their academic, social and emotional development (Cole, 1986; Gershenson, Holt & Papageorge, 2016; Foster, 1993; Graham, 1987; Howard, 2001; Irvine, 1989; Lynn, 2002; Villegas & Lucas, 2004). In

addition, men of color serve as important role models, particularly to the most academically vulnerable student population—boys of color (King, 1993; Klopfenstein, 2005). As a result, minority students tend to have higher academic performance when some of their teachers share their race (Dee, 2004, 2005; Gershenson, Hart, Lindsay, & Papageorge, 2017). Similarly, research suggests that boys' underachievement, alienation, and behavior problems can be partially attributed to the lack of male teachers (Casey et al., 2015; Dee, 2005; 2007; Epstein, Elwood, Hey, & Maw, 1998; Martino, 2008).

Although persons of color are entering teacher training programs in increasing numbers (US Department of Education, 2016), retaining these individuals through the teacher preparation pipeline remains a pressing challenge. Persons of color are less likely to complete teacher education programs and attain certification, and more likely to leave the profession than their white counterparts (Brown, 2014; Casey et al., 2015; Ingersoll, Merrill, & Stuckey, 2014). For example, 73% of white students majoring in education completed a bachelor's degree within 6 years while only 49% of Latinx¹ education students did (US Department of Education, 2016). Researchers have also observed higher rates of teacher turnover among minority teachers (Borman & Dowling, 2008; Casey et al., 2015; Ingersoll, Merrill, & Stuckey, 2014). Therefore, understanding how to retain men of color in teacher train-

ing programs and ensuring their successful induction into the field is an important endeavor.

Yet, research is scarce about how male preservice teachers of color perceive teaching, and what they consider to be salient costs and barriers of selecting and persisting in the profession. Such knowledge can inform efforts to support men of color in their teacher training and early professional development as teachers. In particular, the relatively little research that does exist on male teachers of color has focused on Black or African American teachers, with almost no research focusing exclusively on Latino preservice teachers (cf. Irizarry, 2011). The current study takes a step in addressing this gap by examining how Latino college students in teacher training programs conceptualize the barriers and drawbacks of a teaching career. Specifically, we employed a mixed-method approach to investigate the salience and meaning of barriers and costs of teaching for these preservice teachers and how these meanings relate to race-ethnic identity, gender identity, and planned persistence in the profession. In doing so, we adopt a race-reimagined and race-focused approach (DeCuir-Gunby & Schutz, 2014) to examine the culture-based meaning and salience of perceived costs and barriers in light of a particular social, political, and educational context. We begin by describing the educational context of Latinos in New York City and research on challenges faced by preservice teachers of color more broadly. Then, we briefly describe costs from the perspective of Expectancy-Value Theory and Factors Influencing Teaching Choice (FIT-Choice) models. We follow with a description of how we adopt a race-reimagined and race-focused approach to understanding costs and barriers of a teaching career.

1.1. Contextual circumstances of Latinx students

Currently, Latino students in the U.S. training to become teachers are schooled in an educational system that contains widespread inequalities in the outcomes and opportunities afforded to them. Consistent with national trends (Schott Foundation for Public Education, 2012), the educational outcomes of Latinx students in New York City (NYC) lag behind white students on a variety of indicators, and educational outcomes are particularly poor for Latino boys. High school graduation rates, college readiness, and post-secondary enrollment for Latinos trail those of Latinas and are well below those of white students. For example, while the overall high school graduation rate for the NYC school district is 74%, only 59% of Latino students in this district graduate. Latinos are less likely to have completed coursework and state exams that prepare them for academic success in post-secondary education, with only 11% having met college readiness standards, compared with 34% for white males (Villavicencio, Bhattacharya, & Guidry, 2013).

These poor educational outcomes reflect widespread systemic inequalities in educational opportunities that underscore the racial nature of educational opportunity gaps in the United States (Ladson-Billings & Tate, 1995). The majority of Latinx students attend schools that are racially segregated, over-crowded, and under-resourced (Darling-Hammond, 2004; Gándara & Contreras, 2009). Many schools with high proportions of Latinx students suffer from high teacher turnover, increasing the likelihood that Latinx students are taught by teachers who are poorly prepared and ineffective (Darling-Hammond,

2004). Furthermore, Latinx students are less likely than white students to attend schools that have adequate facilities or that offer rigorous curricula, including courses that are common requirements for college admissions (Villavicencio et al., 2013). Similarly, Latinx students, and especially Latino boys, are less likely than white students to be selected for gifted and talented programs (Gándara & Contreras, 2009) and more likely to be designated as requiring special education services (Villavicencio et al., 2013), where they may be less likely to experience appropriate academic challenge and rigor. Schools serving high proportions of Latinx students also often lack sufficient numbers of social workers and counselors (Schott Foundation, 2012), which amplify socio-economic and cultural factors that present unique barriers to academic success for Latinx students. In New York City, for example, many Latinx students come from families with low socio-economic status, have parents who immigrated to the United States or who immigrated themselves, and who speak Spanish at home and learn English as a foreign language (Villavicencio et al., 2013). While individual Latino students may have experiences that substantially differ from the trends described above, these macro-level patterns reflect an educational system that disadvantages the development and achievement of Latinos, and likely frames their perceived opportunities, expectancies for success, task values and perceived costs of different professions, and perceived barriers for pursuing different careers.

1.2. Experiences and challenges of Latino preservice and inservice teachers

Similar to the inequalities in educational opportunities for Latino students, Latino preservice teachers are also likely to encounter many racial-ethnic-related barriers and difficulties in teacher training programs and in the workforce (Brown, 2014; Godwin, 2018). Several studies have highlighted how preservice teachers of color perceive a misalignment between the cultural norms espoused in teacher training curricula and their own cultural background and knowledge (Gomez, Rodriguez, & Agosto, 2008; Irizarry, 2011; Meacham, 2000; Nguyen, 2008; Pailliotet, 1997; Sheets & Chew, 2002). Preservice teachers of color have also experienced overt acts of racism and racial discrimination in their programs, such as comments from white classmates espousing negative racial stereotypes and faculty members allowing racially insensitive comments to go unchallenged (Frank, 2003; Gomez et al., 2008; Nguyen, 2008). Alongside overt discrimination, preservice teachers of color may contend with psychological and social pressures associated with being a racial minority in their training programs, including experiencing stereotype threat (Steele, 1997) and social marginalization in their interactions with professors and students (Irizarry, 2011; Scott & Rodriguez, 2015). Certification exams present an additional barrier, with teachers of color passing certification exams at lower rates than white preservice teachers (Goldhaber & Hansen, 2010; Madkins, 2011; Petchauer, 2012).

Additional racial-ethnic-related challenges often await Latinos when they seek employment or begin a teaching job. Researchers have documented evidence of racially biased teacher hiring practices, where Black and Latinx applicants are less likely to be hired than white applicants are (D'amico, Pawlewicz, Earley, & McGeehan, 2017; DuBois & Schanzenbach, 2017). Teachers of color have also reported social isolation in their jobs and stress associated with the perpetual need to fight negative racial stereotypes (Bristol & Goings, 2018; Mabokela & Madson, 2003; Milner & Hoy, 2003). Similarly, minority teachers, especially men of color, are often assigned the role of disciplinarian for students of color and have their general pedagogical skills challenged or ignored (Bristol & Goings, 2018; Brockenbrough, 2015; Milner & Hoy, 2003). In addition, early career teachers of color are more likely to teach in high poverty, under-resourced schools, where teaching conditions are highly challenging and which likely contributes to higher rates of teacher turnover (Borman & Dowling, 2008; Casey et al., 2015;

¹ Defining and labeling individuals with Hispanic or Latino/Latina heritage is often problematic given the different meanings and methods of race-ethnic categorizations. In the current study, we use the term Latinx as a gender-neutral term to refer to an individual with Latin American heritage. We use the term Latino and Latina to refer to men/boys and women/girls of Latin American heritage, respectively. While we focus on similarities among Latinos in the current study, we recognize that Latinxs are highly heterogeneous as a group, including individuals who differ in language, ethnicity, race, national origin, and family historical relationship to the United States.

Ingersoll, et al., 2014). The prevalence of race-related challenges that Latinos are likely to face in their education and training and as teachers underscores the importance of understanding how they perceive the profession's drawbacks and barriers, which may undermine their motivation to persist in a teaching career.

1.3. Expectancy-value theory and FIT-Choice model

We frame our investigation of the meanings of barriers and drawbacks of teaching among Latinos with expectancy-value theory of motivation (EVT; Eccles et al., 1983; Wigfield & Eccles, 2000). Central to EVT is the assumption that expectancy beliefs—beliefs about the likelihood of success if effort is invested—and task values—subjective perceptions of the desirability of engaging in the task—are critical to an individual's decision to choose, persist, and succeed in academic tasks. In the Eccles et al.'s EVT model, task values are comprised of both adaptive task values and perceived costs. Adaptive task values enhance the desirability of a task and include three types of values: intrinsic value—inherent enjoyment derived from engaging the task; utility value—perceived usefulness of the activity for reaching short- or long-term goals; and attainment value—the importance of a task to affirming an aspect of the individual's identity. The other set of concepts—perceived costs—refer to subjective perceptions of undesirable features of task engagement that detract from the motivation to choose and persist in it (Eccles & Wigfield, 1995). According to EVT, the extent to which an individual values a task is the result of a cost/benefit combination of the adaptive task values and perceived costs.

Recent theoretical and empirical research has advanced the conceptualization of cost and its relation to performance and persistence within EVT (Andersen & Ward, 2014; Barron & Hulleman, 2015; Bergey, Parrila, & Deacon, 2018; Chiang, Byrd, & Molin, 2011; Conley, 2012; Flake, Barron, Hulleman, McCoach, & Welsh, 2015; Gaspard et al., 2015; Johnson & Safavian, 2016; Luttrell et al., 2010; Perez, Cromley, & Kaplan, 2014; Watkinson, Dwyer, & Nielsen, 2005). Although the research base on costs is rapidly expanding, extant literature converges around the perception that costs are multidimensional and can manifest in unique ways depending on the context. Eccles and her colleagues' (Eccles et al., 1983; Wigfield & Eccles, 2000) initially identified three types of costs: the effort required to be successful in a task, or effort cost; foregone opportunities because of engagement in a task, or opportunity cost; and emotional, or psychological costs. Flake et al. (2015) further distinguished between two types of effort costs: *task effort*, which refers to the time and effort expended to engage in the task and *outside effort cost*, which refers to time and effort expended to engage in tasks other than the task of interest.

In the context of teaching, Watt and Richardson (2007) applied an expectancy-value framework to develop the Factors Influencing Teacher Career Choice model (FIT-Choice). While FIT-Choice does not purport to assess costs directly, the model captures perception of task demands and task returns of a teaching career that can together act to discourage the choice of or persistence in a teaching career. Task demands include the perception that teaching is an expert career that requires high levels of technical and specialized knowledge, and that teaching is a highly demanding career that requires hard work and can be emotionally taxing. According to the FIT-Choice model, these task demands (i.e., costs) are moderated by task returns (i.e., benefits), which include perceptions of teaching as having a good salary, having high social status, and teachers having good morale. Presumably, perceptions of low task returns, such as inadequate salary, low social status, or low teacher morale might also act as perceived costs.

We make a distinction between perceived *costs* of a teaching career and *career barriers*, with *costs* referring to what is perceived to be lost, suffered, or given up as a result of task engagement (Eccles et al., 1983), and *barriers* referring to “events or conditions, either within the

person or in his or her environment, that make career progress difficult” (Swanson & Woitke, 1997, p. 434). In some cases, a condition or event may be perceived as both a cost and a barrier. For example, needing to take a semester off to save money for tuition reflects both an opportunity cost and a financial barrier to becoming a teacher. In other cases, perceived costs and barriers could be distinct. For example, the perception that teaching lacks social prestige might be more accurately characterized as a perceived cost, whereas struggling to cover the tuition bill of a teacher education program would be more accurately characterized as a barrier.

1.4. Race-reimagining costs and barriers of a teaching career

DeCuir-Gunby and Schultz (2014) highlighted the lack of educational psychological literature examining the role of race and advocated for research that adopts race-reimagined and race-focused approaches. Race-reimagined approaches refer to research that conceptualizes existing psychological theories and constructs through a racialized lens with the goal of illuminating how racial and cultural factors shape their meaning or function. Race-focused research centers analyses on racial constructs, such as racial identity. The current study “re-images” costs and barriers of a teaching career from EVT by examining how male Latino students in teacher training programs conceptualize costs and barriers in light of their particular social-cultural, political, and educational context. The study also examines how these men's race-focused construct of race-ethnic identity relates to their conceptualization of costs and planned persistence in the teaching profession. Consistent with DeCuir-Gunby and Schutz, we conceptualize race-ethnicity as a social-political construction that frames shared experiences of members of particular social groups and which influences how individuals make meaning of their world and their actions with it.

Multiple oppressive power structures interact to create unique forms of privilege and discrimination (Cabrera, 2011; Yosso, Smith, Ceja, & Solórzano, 2009). As a result, membership within multiple social groups—such as being male and Latino—intersect to shape unique experiences and meaning systems (Cole, 2009; Crenshaw, 1989; Syed, 2010). Latino men's aspirations for a teaching career occur within a social context in which they are systemically discriminated against as a non-White minority while having a privileged gender identity (Cabrera, Rashwan-Soto, & Valencia, 2016). The shared socialization that can result from intersecting group memberships shapes perceptions of masculinity, ethnic identity, and so forth (Hurtado & Sinha, 2008). While shared experiences may result in some similar perceptions, Latino men differ in their notions of masculinity and the salience of ethnicity identity (Torres & Phelps, 1997; Torres, Solberg, & Carlstorm, 2002). Accordingly, Cole (2009) stressed the importance of exploring how the intersection of social group memberships results in both similarities and differences in experiences and meaning.

EVT provides an explanatory motivational framework for decision-making at the level of the individual; however, the theory assigns an important role to socio-cultural factors including cultural stereotypes about gender roles and occupational characteristics and the beliefs of socializers such as parents, teachers, and community members (Wigfield & Eccles, 2000). Individuals who are members of the same racial or ethnic group are likely to share historical, cultural, political, and social experiences that shape their collective identities (Eccles, 2009) and similar interpretation of experiences and perceptions of different careers (Carter & Cook, 1992; Cheatham, 1990; Eccles et al., 1983; Fouad & Byars-Winston, 2005; Smith, 1983; Xie & Goyette, 2003). Over the course of their education, young Latinos in NYC have logged thousands of hours in classrooms and have observed dozens of teachers. These experiences inform an understanding of the value and difficulty of the task of teaching as a Latino in NYC. Therefore, from a cultural psychological perspective (Bergey & Kaplan, 2010; DeCuir-

Gunby & Schutz, 2014), Latino students in teacher training programs who live in a particular social-political context are likely to have similar experiences that result in common meanings of barriers and drawbacks of becoming a teacher.

More broadly, the life experiences Latinos have in their families, schools, communities, and society at large shape how they see themselves as members of social groups—their collective identity. Eccles (2009) defined collective identities as “those personally valued parts of the self that serve to strengthen one’s ties to highly valued social groups and relationships” (p. 78). Young adults of race-ethnic minority groups likely have explored the meaning of their race-ethnicity and have more developed racial collective identities than individuals from the race-ethnic majority group (Garcia, Patrón, Ramirez, & Hudson, 2018; Phinney, 1989; Torres, 1997). Collective identities influence perceived costs and other task values since individuals perceive tasks as providing opportunities to either validate or challenge valued parts of one’s identities. An individual is likely to perceive task features that inhibit the enactment of a valued part of one’s sense of self as costs, because task engagement is inconsistent with a personal or collective identity or because it precludes other actions that are perceived to be more consistent with those identities (Eccles, 2009). For example, teachers tend to view their profession as lacking social status and adequate financial compensation (Watt & Richardson, 2012), and these characteristics may be in tension with one’s notions of an ideal career for a man of color.

Given the focus of EVT on costs and values and the potential relevance of these constructs for Latino preservice teachers’ persistence in the field, the present study adopts a race-reimagined approach situated within this theory. Little extant EVT research has paid deep attention to race in ways that are consistent with DeCuir-Gunby and Schutz (2014) conceptualization. For example, based on a review of the 27 articles identified by DeCuir-Gunby and Schutz as “race focused” or “race reimagined,” only two empirical articles were situated within EVT (see Zusho & Barnett, 2011; Taylor & Graham, 2007). Zusho and Barnett (2011) adopted a race-focused approach to investigate motivational constructs, including expectancy for success and task-value, as predictors of help seeking among a diverse sample of female high school students. Taylor and Graham (2007) used a race-reimagined approach to examine the relations between values and barriers among second, fourth, and seventh grade African American and Latinx students. These two studies provide initial evidence for the relevance and the great need for further studies that adopt such perspectives.

1.5. The current study

Improving the representation of Latinos in the teaching workforce requires supporting Latino teachers throughout their preparation and early career experiences. To do so effectively, it is imperative to understand how Latino preservice teachers’ perceive the challenges to their persistence: the perceived costs, drawbacks, and barriers to continue in the career. Yet, there is little in the literature about how Latino preservice teachers at the start of their professional development conceptualize the costs and barriers of their chosen profession. In the current study, we focus on Latino men’s own meaning-making of such perceived challenges, and how these relate to their race-ethnic and gender identity, and planned persistence in the profession. The current investigation is part of a larger project examining the career motivations of preservice teachers of color. This study focuses on the experiences of Latino preservice teachers and was guided by the following research questions:

Research Question 1. What costs and barriers of a teaching career are salient to Latinos training to become teachers?

Research Question 2. How do these men conceptualize perceived costs of the profession relative to their race-ethnic identity, gender identity, and planned persistence in the profession?

Our study employs both race-reimagined and race-focused approaches (DeCuir-Gunby & Schultz, 2014) to examine how preservice Latino teachers conceptualize costs and barriers of a teaching career. To understand the meaning and salience of Latino men’s perceptions of the costs and barriers of a teaching career, we adopted a concurrent, unequal priority, mixed-method design, with priority given to the quantitative data (QUAN + qual; see Creswell & Clark, 2018; DeCuir-Gunby & Schutz, 2017; Hanson, Creswell, Clark, Petska, & Creswell, 2005). To address research question one, we used qualitative content analysis (Braun & Clarke, 2006) of students’ brief open-ended survey responses to a question about drawbacks and barriers to becoming a teacher in order to identify salient costs and barriers. Analysis of the open-ended responses provide a window into how the men of this particular race-ethnic group from the particular context describe in their own words the costs of becoming a teacher and indicate which costs are most salient to them. In doing so, we identify how Latinos—as opposed to a “view from nowhere” perspective—conceptualize salient costs, including the features of the profession these men consider most demanding, foregone opportunities that are salient, and perceived teacher morale in a large, urban school district. This conceptualization sheds light on the meaning of existing cost-related constructs in EVT and FIT-Choice models, such as task effort cost, opportunity costs, and teacher morale to particular participants in a particular context. At the same time, we explore possible additional costs and barriers that are not captured within current conceptualizations of cost within EVT and FIT-Choice models.

To address our second research question, we use multidimensional scaling (MDS) to provide a sophisticated and nuanced understanding of the participants’ phenomenological meaning of perceived costs, collective identity constructs of race-ethnicity and gender, and planned persistence in the profession. As we describe in greater detail below, MDS maps provide a visualization of how participants conceptualize their collective identities relative to cost-related constructs in EVT and FIT-Choice research. MDS analyses align our study with both a race-reimagined and race-focused approach in that the analyses are a window into how Latinos, as a collective, conceptualize costs by incorporating costs and racial identity as part of a broader phenomenological meaning network that is unique to the particular group of participants. This approach aligns with the original conceptualization of these constructs as based in culturally-construed subjective meaning.

While we assume shared experiences are likely to shape the perceived costs of Latino men, and that this collective meaning would manifest in the group-level MDS, we recognize that race-ethnic groups are never monolithic (DeCuir-Gunby & Schultz, 2014; Sanchez, Bentley-Edwards, Matthews, & Granillo, 2016), and at the outset, we anticipate intragroup differences. The shared meanings of Latinos that stem from similar life circumstances do not exclude unique individual experiences, circumstances, and influences that may manifest in more idiosyncratic aspects of these meanings that are not shared with others in one’s group, or with experiences that might be shared with certain individuals from other cultural groups. To remain sensitive to such potential differences, we examine the extent to which patterns observed at the group level also manifest at the level of the individual—which MDS allows to do. In examining different units of analysis, we hope to highlight potential group-level patterns while remaining sensitive to intra-group variation; both levels informs our research questions, and an exclusive focus on any one level may undermine intervention efforts with Latino preservice teachers.

2. Method

2.1. Participants

Participants were 53 Latino men from teacher training programs in a large, urban, public, multi-campus, and ethnically diverse university in New York City. Sample characteristics are presented in Table 1. The sample was diverse by age, with a mean age of 28 years 1 month ($SD = 7$ years 1 month) and a range from 19 to 49 years. The median level of parental education was a high school degree or GED equivalent. Most participants reported being born in the United States (87%) and most indicated that their parents immigrated: 62% reported both parents were born outside of the United States and 13% reported one parent was foreign born. The most common places of origin of parents born outside the United States or its territories (Puerto Rico: 7 fathers, 5 mothers) were The Dominican Republic (13 fathers, 13 mothers), Mexico (6 fathers, 6 mothers), and Ecuador (6 fathers, 6 mothers). Other countries of origin included Argentina, Brazil, Bolivia, Columbia, Cuba, El Salvador, Honduras, Nicaragua, Peru, Romania, Uruguay, and Venezuela.

Students were enrolled in certification programs in special education (19%), physical education (15%), social studies (13%), bilingual education (11%), art (8%), science (6%), English (6%), math (4%), and a range of other subject areas (9%). The majority of participants were enrolled in undergraduate programs (59%), with the remainder in a masters or post-baccalaureate program.

2.2. Procedure

Given that Latinos are underrepresented in teaching training programs even in highly racially diverse universities like the site of the current research (New York City), we used a variety of recruitment methods across two colleges within the university. We sent recruitment materials in e-mails directly to students. We advertised the study in a

Table 1
Sample characteristics.

	Count	Percentage
<i>Age</i>		
Under 25	22	41.5%
25–29	14	26.4%
30–39	11	20.8%
40–49	5	9.4%
Left blank	1	1.9%
<i>Highest Education of Parent</i>		
Junior high school	9	17.0%
High School Diploma/GED	15	28.3%
Trade school/Community college	7	13.2%
Bachelors degree	10	18.9%
Masters degree	3	5.7%
Doctoral or professional degree	2	3.8%
Not sure/Not applicable	6	11.3%
Left blank	1	1.9%
<i>Family Immigration</i>		
Father born outside US	38	71.7%
Mother born outside US	40	75.5%
<i>First spoken language</i>		
English	25	47.2%
Spanish	25	47.2%
Portuguese	1	1.9%
Left blank	2	3.8%
<i>Program</i>		
Undergraduate	31	58.5%
Graduate/Post-Baccalaureate	22	41.5%
<i>Certification level</i>		
Elementary only	17	32.1%
Secondary only	21	39.6%
Elementary and Secondary	15	28.3%

college newsletter. We posted informational flyers in public areas on campus frequented by preservice teachers. Instructors of teacher preparation courses made in-class announcements and posted information on websites. We advertised the study in an electronic system for students seeking required research credit.

Students who consented were sent a link to an online questionnaire. The questionnaire was separated into blocks based on specific scale requirements (i.e., specific instructions, Likert scale options). We selected the Likert scale options to maintain alignment with the original validated scales. Participants completed the online survey either in partial fulfillment of a research participation requirement as part of their teacher training program or were compensated with a \$10 gift code or \$10 cash.

2.3. Measures

Barriers and drawbacks. Students' perceptions of substantial barriers and drawback of a teaching career in their own voice were assessed with an open written response to the prompt: "Briefly describe the main barriers and drawbacks of becoming a teacher." This open-ended item appeared prior to the Likert-style questions assessing perceived costs.

Perceptions of the teaching profession and planned persistence. Perceptions of the profession were assessed with five scales of the FIT-Choice questionnaire (Watt & Richardson, 2007). The reliability and validity of these scales were established in various populations of in-service and preservice teachers in Australia, Europe, Asia, and the U.S. (Watt & Richardson, 2012). The *high demand* scale assessed the perception that teaching is a demanding career. The *expert career* scale assessed the perception that teaching requires high levels of expertise. The *good salary* scale assessed the perception that teachers receive a good salary. The *social status* scale assessed the perception that the teaching profession has high social status. The *teacher morale* scale assessed the perception that teachers have high morale. In addition, we used the *Planned Persistence* scale (Watt & Richardson, 2007) as a measure of student commitment to persist in the teaching profession. All FIT-Choice measures used a 7-point Likert-style response scale anchored at 1 = *not at all* and 7 = *extremely*. See Table 2 for descriptive statistics, reliability, and scale items.

Perceived costs of teaching. Four types of costs were assessed using scales developed by Flake et al. (2015). Prior research has found costs scales to demonstrate sound psychometric properties with undergraduate populations (Bergey et al., 2018; Flake et al., 2015). Cost scales were developed using a review of literature, expert review, focus group interviews, and a structural validation phase (see Flake et al., 2015). The original scales were designed to be easily modified to assess costs in different contexts. Here we modified item language to refer to a teaching career rather than an academic class. For example, the original item that stated *This class will demand too much of my time* was changed to *Teaching will demand too much of my time*. The *task effort cost* scale assessed the perception that a teaching career required too much time and effort. The *outside effort cost* scale assessed time and effort required by tasks others than teaching that compete with teaching responsibilities. The *loss of valued alternatives* scale assessed what was given up by becoming a teacher. The *emotional costs* scale assessed negative emotions associated with teaching. All cost measures were assessed on a 9-point Likert-style scale with anchors at 1 = *completely disagree* and 9 = *completely agree*. See Table 2 for descriptive statistics, reliability, and scale items.

Racial and gender identity. We used the Identity Centrality scale (Wilson & Leaper, 2016) to assess the extent to which race-ethnic identity and gender identity were each central to students' sense of self. Both identity measures were assessed using a 7-point Likert-style response scale with anchors at 1 = *disagree strongly* and 9 = *agree*

Table 2
Descriptive statistics of scales and items.

Measure	<i>M</i>	<i>SD</i>	Skew	Alpha	Item
Cost Task Effort	5.14	2.20	-0.18	0.94	<ol style="list-style-type: none"> Teaching will demand too much of my time. I will have to put too much energy into teaching. Teaching will take up too much time. Teaching is too much work. Teaching requires too much effort.
Cost Outside Effort	2.58	1.61	0.98	0.96	<ol style="list-style-type: none"> I have so many other commitments that I can't put forth the effort needed to be a teacher. Because of all the other demands on my time, I don't have enough time to be a teacher. I have so many other responsibilities that I am unable to put in the effort that is necessary to be a teacher. Because of other things that I do, I don't have time to be a teacher.
Cost Loss of Valued Alternatives	2.98	1.91	0.79	0.94	<ol style="list-style-type: none"> I have to sacrifice too much to be a teacher. Teaching will require me to give up too many other activities I value. Teaching will cause me to miss out on too many other things I care about. I can't spend as much time doing the other things that I would like because of my teaching responsibilities.
Cost Emotional Costs	4.53	2.00	-0.18	0.93	<ol style="list-style-type: none"> I worry too much about being a teacher. Teaching is too exhausting. Teaching is emotionally draining. Teaching is too frustrating. Teaching is too stressful. Teaching makes me feel too anxious.

Table 2 (Continued)

Measure	<i>M</i>	<i>SD</i>	Skew	Alpha	Item
Good Salary	3.44	1.47	-0.29	0.82	<ol style="list-style-type: none"> Do you think teaching is well paid? Do you think teachers earn a good salary?
High Demand Career	6.10	0.77	-0.80	0.49	<ol style="list-style-type: none"> Do you think teachers have a heavy workload? Do you think teaching is emotionally demanding? Do you think teaching is hard work?
Expert Career	5.42	0.90	-0.27	0.67	<ol style="list-style-type: none"> Do you think teaching requires high levels of expert knowledge? Do you think teachers need high levels of technical knowledge? Do you think teachers need highly specialized knowledge?
Social Status	4.38	1.25	-0.31	0.83	<ol style="list-style-type: none"> Do you believe teachers are perceived as professionals? Do you believe teaching is perceived as a high-status occupation? Do you believe teaching is a well-respected career?
Teacher Morale	4.24	1.23	0.14	0.73	<ol style="list-style-type: none"> Do you think teachers have high morale? Do you think teachers feel valued by society? Do you think teachers feel their occupation has high social status?
Planned Persistence	6.11	0.90	-1.1	0.94	<ol style="list-style-type: none"> How certain are you that you will remain in teaching? How confident are you that you will stick with teaching? How sure are you that you will persist in a teaching career? How sure are you that you will stay in the teaching profession?

Table 2 (Continued)

Measure	<i>M</i>	<i>SD</i>	Skew	Alpha	Item
Ethnic Identity Centrality	4.50	1.58	-0.19	0.71	<ol style="list-style-type: none"> 1. I often think about the fact that I am a member of my race-ethnic group. 2. Overall, being a member of my race-ethnic group has very little to do with how I feel about myself. (R) 3. In general, being a member of my race-ethnic group is an important part of my self-image. 4. The fact that I am a member of my race-ethnic group rarely enters my mind. (R)
Gender Identity Centrality	4.07	1.29	-0.14	0.49	<ol style="list-style-type: none"> 1. I often think about the fact that I am male. 2. Overall, being male has very little to do with how I feel about myself. (R) 3. In general, being male is an important part of my self-image. 4. The fact that I am male rarely enters my mind (R)

Note. R = Reverse coded.

strongly). See Table 2 for descriptive statistics, reliability, and scale items.

2.4. Data analyses

Following our mixed-methods approach to investigate participants' meanings of barriers and costs of teaching we first conducted a qualitative analysis of participants' open-ended responses, and then a quantitative analysis of the self-report scales.

Qualitative Content Analysis. We conducted Qualitative Content Analysis (QCA) to identify types of various barriers and drawbacks of becoming a teacher as generated by the participants. Using combined deductive and inductive coding, we analyzed the type and frequency of reported barriers and costs. We developed a coding scheme using a dataset from the larger research study that included the current sample as well as students who did not identify as Latino and/or male. First, we began with a list of possible codes derived from EVT, FIT-Choice model, and cost and barriers in the literature; the initial codes were demanding career/effort cost, opportunity cost, emotional costs, financial barriers, salary, and social status. In a second step, two members of the research team read a subset (approximately 10%) of open-ended responses with the goal of elaborating and refining existing code definitions and generating new codes, as necessary. We then applied the new set of codes to coding a new subset (another 10%) of the data, and codes were again added and refined as necessary; this step was repeated two additional times until codes were found to be appropriate in capturing all relevant data. At this point, the coding scheme was finalized by creating a code book with code names, definitions, and examples. Then, two coders independently coded all responses using the coding scheme. For the current study, we calculated a Cohen's Kappa statistic for each code for our sample of Latino students. Table 2 pre-

sents the coding scheme with interrater reliability coefficients for each code. Kappas demonstrated good inter-rater agreement, with Kappas for 4 codes > 0.8 indicating near perfect agreement, Kappas for 3 codes > 0.6 indicating substantial agreement, and a Kappa for one code > 0.4, indicating moderate agreement (Landis & Koch, 1977).

Quantitative Non-Metric Multidimensional Scaling (MDS). In order to investigate participants' meanings of costs and barriers, and their relations to identity and planned persistence, we used nonmetric MDS. Non-Metric MDS is an analytic approach that provides a visual representation of the rank-ordered proximities (e.g., correlations) among individual objects (e.g., survey items) (Kruskal & Wish, 1978; Stalans, 1995). The visual representation displays a distribution of the objects on a multidimensional map, with the location of objects reflecting the rank-ordered proximity between any two objects relative to the proximity with all other objects. The analysis also provides fit statistics: The Kruskal Stress coefficient indicates the correspondence between the visual distribution and the data matrix of proximities, with lower values indicating higher fit. Low fit may call for using higher number of dimensions for a more accurate visual representation of the matrix of proximities. Commonly, parsimonious maps with fewer dimensions are preferred, and are easier to interpret. While there are no absolute cut-off points for the statistics, Stress values below 0.20 are considered appropriate fit, and below 0.15 are considered a good fit.

When used with survey items, the MDS map provides a view of the meaning that the participants assigned to the collection of items included in the analysis. The greater the similarity of phenomenological meaning between any two items relative to other items, the higher their relation, or proximity, and the closer their locations would be in the multidimensional space (Schwartz, 2007). Since Non-Metric MDS relies on proximities between items, and not on variance, it is not limited by assumptions of data normality or by sample size. The resulting maps reflect the unit-of-analysis of the participants whose data are included in the analysis, whether a collective or an individual. Interpretation of the map involves seeking the patterns and the conceptual dimensions underlying the visual organization of the items. Similar to factor analysis, the visual map displays groupings of items that are in higher proximity to each other than to other items. However, unlike factor analysis, which is predisposed to create distinct groups of items, MDS allows to view and interpret items that are organized according to spatial dimensions (e.g., vertical, horizontal, circular), and that belong to latent factors that may overlap, thus providing a less restrictive and more nuanced insight into the meaning of individual items and latent factors. Moreover, following Facet Theory (Guttman & Greenbaum, 1998), any vacant point in the visual map reflects a potential item in the overall meaning captured by the items included in the analysis. Accordingly, the size of the visual space in the map that is captured by items from a particular latent factor is interpreted to indicate the breadth of the meaning of this latent factor—larger space captured by the items indicates broader and potentially richer meaning. This also suggests that the meaning of latent factors whose visual space in the map appears within the visual space of other latent factors is subsumed by the meaning of the latter factors (see Kaplan, Lichtinger, & Gorodetzky, 2009; Patrick, Kaplan, & Ryan, 2011).

In the present study, we conducted Non-Metric MDS analyses with the 45 individual items drawn from the 12 scales: task effort cost, outside effort cost, emotional cost, loss of valued alternatives, race-ethnic identity, gender identity, expert career, good salary, highly demanding career, planned persistence, social status, and teacher morale (see Table 2). To aid in interpretation, items belonging to the same latent factor, or construct, are marked by different colors and are connected with lines to highlight the space they capture in the map. The analysis of the arrangement of items and latent factor spaces provides insight into the phenomenological meaning underlying the participants' responses to the items (Guttman & Greenbaum, 1998).

We conducted the MDS analyses at two units of analysis. First, to assess the shared structure of understanding among the group of Latino men respondents, we conducted a group-level analysis. Second, we conducted MDS analyses with each individual participant, resulting in a unique MDS solution for each of the 44 men with complete data (see details about MDS analytic sample in Missing Data section below). The purpose of the individual-level MDS analyses was to explore the idiosyncratic meaning of individual Latino male students, since such meanings are potentially lost in the aggregated collective analyses. Visual inspection of each of the individual-level MDS maps showed a high degree of variability in the relations among constructs. To illustrate the intragroup uniqueness we observed, we purposefully selected the maps of four individuals to serve as examples of the broad range of conceptualizations of the constructs within the group of Latino men. The final selection of the four maps to be presented for this illustration was established through discussion among the authors.

2.5. Preliminary analyses

Missing data. MDS analyses in SPSS use listwise deletion, and therefore individuals with missing data on any of the 45 items included in the MDS analyses were automatically excluded. There was a total of 1.9% missing data across the 45 items, with 9 students having missing data on at least one variable. We conducted *t* tests comparing participants included in the MDS analyses and those excluded for missing data. There were no significant differences between the two groups, except for perceived good salary items for which the MDS analytic sample reported significantly less adequate salary than participants excluded due to missing data. Thus, the MDS analytic sample was generally representative of the full sample, but may hold a slightly more negative view of financial compensation for teachers.

3. Results

3.1. Content analysis of open responses

Latino men identified a range of barriers and drawbacks of becoming a teacher. The analysis of the participants' open-ended responses generated eight general thematic concerns: Demanding job, emotional costs, work conditions, low salary, other financial concerns, demanding preparation, self-attributes, and social status. While most concerns can be characterized as costs or drawbacks of a career in teaching, financial concerns and concerns about demanding preparation tended to indicate barriers. Frequencies of themes are presented in Table 3.

Demanding job. Many participants (26%) characterized a teaching career as demanding, with many mentioning the hard work and substantial time commitment that comes with teaching. Students characterized teaching as "time-consuming" and "a demanding job," and stated that "teachers are overworked." Men highlighted that teachers' work often requires time outside of the classroom, noting that teaching required "hours of lesson planning and grading" and that "it becomes hard not to take your work home with you." Others mentioned a wide

range of teacher responsibilities and experiences, including the learning curve for new teachers, meeting the needs of diverse students, and lesson planning, grading, paperwork, and other repetitive tasks.

Challenging Working Conditions. The most common concerns that Latinos raised (36%) related to challenging workplace conditions and systematic issues that they expected to encounter on the job. Issues ranged from concerns about the underrepresentation of Latino male teachers, lack of teacher autonomy, and working with difficult administrators and colleagues.

Two students directly indicated the systemic underrepresentation of their gender or race as a drawback or barrier to the profession. One student identified "the lack of male teachers out in the field" as a drawback. Another described a stigma that men of color may encounter in choosing to become a teacher: "Color and sex (gender) are the main areas that stigmatizes becoming a teacher. So when you are both a man and a man of color you have generational obstacles that you must overcome to become successful." The phrase "generational obstacles" evokes racial inequalities in education and employment that may keep many Latinos from becoming teachers. The responses also indicate the perception that teaching is perceived to be a female and white profession and joining it as a Latino carries stigma.

Other men raised concerns about teachers' lack of autonomy, particularly with regard to restricted freedom imposed by schools and districts in what and how to teach and pressures to ensure students perform well on standardized tests. For example, one participant expressed concern about "having to deal with a rigid curriculum that doesn't allow for innovative ways to teach." Another was concerned about "different groups (admin, parents, school) telling you how you should do things." Some men also expressed concerns about being "forced to making their students pass [state exams]" and lamented schools' "focus on standardized testing instead of the individual student." These responses suggest a salient concern of perceived limits on and lack of support for creative and progressive approaches to instruction.

Some participants expressed concerns about demanding or "uncooperative parents," unsupportive administrators, negative colleagues. For example, one student commented, "Politics seem really unpleasant. A lot of disgruntled older teachers who don't like students. Administrators who don't understand content but have expectations." One student stated that one of the biggest barriers to become a teacher came from discouraging messages of current teachers warning them against the profession: "The main barrier is other teachers telling you that if you are sure that you want to become a teacher. They discourage you and say that there are better jobs and you can still work with students." Several students also pointed to political and bureaucratic aspects of teaching as serious drawbacks, citing general concerns with lack of funding and resources and unsavory national politics.

Finally, several men pointed to the particular challenge of managing student behavior. Men anticipated teaching in schools with "tough" student populations and where working with "problematic children" would be part of the job. One participant noted that "large class sizes tend to limit attention for every student" and another viewed a primary drawback of the profession that teachers "will not be able to reach every child." Together, responses indicated concern with a wide array of anticipated challenging work conditions and systematic issues, and these concerns were the most commonly mentioned in our sample of Latino preservice teachers.

Low salary and financial concerns. Many participants (21%) noted that teaching salaries were salient drawback of the career. Participants called teacher salaries "low" and characterized them as insufficient in light of the high costs of living in New York City. For example, one student noted "The main drawback I see in becoming a teacher is the pay. Living in New York City and receiving low pay is not good at all, especially for all the hard work a teacher does." In many cases, concerns about the compensation were linked to perceptions of the de-

Table 3
Frequencies of costs and barriers and inter-rater reliabilities.

Cost or barrier	N	% of Sample	Kappa
Work Conditions	19	35.8%	0.88
Demanding Job	14	26.4%	0.82
Low Salary	8	15.1%	0.85
Demanding Preparation	8	15.1%	0.84
Emotional Costs	4	7.5%	0.78
Self-Attributes	4	7.5%	0.65
Social Status	3	5.7%	0.65
Other Financial Costs	3	5.7%	0.54

manding nature of the job. For example, one student noted that “teachers do not get paid enough for the amount of work they do.” Another student described the misalignment he perceived between the value of teachers’ work and their compensation: “My drawback would be the pay. I believe that educators should be paid more because they are the first line to educate children and prepare them for the future. By paying more, the outcome of teaching would be a lot better and you have teachers giving more effort.” Beyond salary concerns, three students noted other financial barriers or concerns. One student described the need to leave employment to student teach and another expressed concern about the anticipated difficulty in securing employment in the district in his certification area; a third participant reported “financial issues” but did not specify their nature.

Social status. Three students (6%) described the low social status of the teaching profession. Students noted that teachers often get blamed and enjoy little or no gratitude from the general public. For example, one student noted that teachers get “a lot of blame and little credit.” Students lamented that despite playing a critical social role teachers were undervalued. One participant stated that “the main issue with becoming a teacher is the lack of respect one gains in the professional world. Teachers aren’t held on high-esteem yet provide such an important role in society.” Another noted that teachers get “little to no respect from much of American society.”

Demanding preparation. Many students (15%) viewed the demanding nature of teacher preparation programs as a significant drawback or barrier to the profession. Responses indicated that the certification process in general, and certification exams in particular, were a barrier to becoming a teacher, and referred to the number of tests and their difficulty as substantial drawbacks or barriers. For example, one student explained, “The certification tests are what is making becoming an educator difficult. Regardless of how many times I look at the content it never gets through, therefore those tests are calculated on how well of a test taker you are rather than how good of a teacher you can be.” Other students reported challenges that came with working while enrolled in a teacher training program. As noted previously, one student explained that he needed to leave his job to complete student teaching. Two men mentioned difficulties managing time for competing responsibilities. For example, one noted that “trying to be a single person while going to college and having a job can make the process of becoming a teacher exhausting.” In addition, students also pointed to challenging requirements of their programs, such as the number of required content-area credits or specific demanding courses as substantial costs and barriers.

Emotional costs and self-attributes. Closely related to the demanding nature of teaching were concerns about emotional costs of the profession, an issue mentioned by four students (8%). Students described negative emotions as a major drawback of the profession, characterizing teaching as “stressful” and “emotionally taxing.” “It is overwhelming at times, especially first year,” noted one student. Concerns about emotions were sometimes tied to concerns about the time and effort required by the career. For example, one student noted that the major drawback of the career was “the stress accompanied with it [the job], the pressure of having to give 100% effort or else the students will not have an ideal learning environment.” Two participants also expressed concern and sadness that they did not expect to be able to reach each student. “As much as you would like to see every child succeed,” noted one man, “It is heartbreaking when you can’t.”

Related to emotional concerns, two men (6%) raised concerns about feeling comfortable and confident as a teacher. Men noted their “natural introversion” or “being comfortable in a classroom” were primary barrier to their chosen profession. One student expressed concerns about “being in your own way and not allowing yourself to have the confidence to teach and reach students.”

Finally, one student explained how his limited English proficiency was a barrier to becoming a teacher. Writing in Spanish, he related a brief anecdote in which he believed he was denied a job due to his ability to express himself in English during a job interview. He explained that he “would already be teaching right now if it weren’t for a telephone interview in which they asked me some questions in English and I could not answer them as I would have liked in my language, for which they disqualified me.” The response demonstrates that tasks such as articulating one’s approach to teaching during an interview, which are challenging and stressful for many new teachers, can be uniquely challenging for non-native English speaking Latino men.

3.2. Quantitative analysis of self-report items

Table 3 presents descriptive statistics of the quantitative measures. Task effort costs had the highest scores, with a mean slightly above the midpoint of the 9-point scale. Following in decreasing magnitude of salience were emotional costs, loss of valued alternatives and outside task effort costs. This pattern suggests that participants viewed task effort and emotional cost to have moderate salience while loss of valued alternatives and outside task effort cost had somewhat lower salience. Task demands variables were greater than task return variables, with strongest endorsement that teaching is a demanding career. All task demand and return variables had scores above the mid-point of the 7-point scale, with the exception of good salary. This pattern suggests that most students viewed the profession as quite demanding and requiring expertise, as having relatively modest levels of social status and teacher morale, while also providing a modest salary.

3.3. Multidimensional scaling analyses

We used non-metric MDS with squared Euclidean distances to assess participants’ shared and distinct phenomenological meaning of perceived costs of teaching at two units-of-analysis: at the group and individual level. All analyses were conducted with the same set of items, which were grouped in the maps according to underlying factors. We selected the appropriate dimensional MDS solution based on a combination of criteria that included the Stress level and the clarity of the visual representation of interpretable dimensions displayed in the maps (Kruskal & Wish, 1978; Stalans, 1995). These criteria and the preference for parsimony suggested that one and two dimensional solutions were appropriate for representing the proximity matrices.

Group-level MDS analysis. The MDS analysis for the preservice Latino men suggested that a two-dimensional solution showed a better and appropriate fit (stress = 0.138) than the one-dimensional solution (stress = 0.342). The results, which are displayed in Fig. 1, suggest that the twelve factors seem to be organized in four distinct regions. In one region, task effort costs and emotional costs of teaching grouped together and overlapped slightly. In another region, loss of valued alternatives and outside effort costs grouped together. Whereas the proximity of the regions generally support the relations previously found between these four different cost factors (e.g., Flake et al., 2015), they also indicate that the current sample of Latino preservice teachers differentiated perceived costs internal to teaching and those related to non-teaching tasks. A third region included factors concerned with identity—both the participant identity factors of gender and race-ethnicity, and perceptions of identity aspects of the teaching profession, including its social status, salary, and teacher morale, which in the FIT-Choice theoretical model are considered task returns (Watt & Richardson, 2007). Within this region, social status and teacher morale overlapped slightly, and gender identity and race-ethnic identity overlapped substantially, reflecting the intersectionality and phenomenological overlap of gender identity and race-ethnic identity (Crenshaw, 1989). The proximity of the participant and professional aspects of

Fig. 1. Group-level MDS map.

identity suggest the phenomenological salience of the relations between these two sets of perceptions for these Latinos who pursue teaching careers. A fourth region included factors related to the demands of the teaching career and participants' planned persistence in the profession. This region provides support for the higher order task demands factor, composed of highly demanding career and expert career components, proposed in the FIT-Choice model (Watt & Richardson, 2007), and their phenomenological association with planned persistence. Not surprisingly, this region and the factors within it were distinct but adjacent and in close proximity to the teaching identity factors of status, salary, and morale, with one teaching status item particularly close to the teaching demands region. The regions captured by the effort and emotional costs of teaching and the participant and teaching identity factors were larger than those captured by the costs associated with non-teaching tasks and the demands of the teaching career. This suggests that participants construed the former two dimensions as broader in meaning than the latter two. In addition, the organization of the regions relative to each other in a circumplex suggested relative similarity among the relations among the four dimensions.

MDS analysis for four individual students. In order to investigate within-group variability of the meanings associated with the different constructs, we generated and visually inspected an MDS map for each individual in the Latino sample. The maps illustrated a high degree of variability across multiple aspects, including the size, proximity, and overlap of constructs, number of regions, and simplex vs. circumplex arrangement. We purposefully selected four individual participants in an attempt to illustrate the broad range of meanings represented in individual maps. The MDS maps of these four individuals are presented in Figs. 2–5 (additional coordinate information for each map is presented in Appendix A). Despite the fact that the fit of the two-dimensional and one-dimensional solutions were similar (difference in Stress levels range from 0.001 to 0.007), we decided to present the two-dimensional solutions for all four participants in order to maintain consistency of presentation and ease of comparison with the other MDS maps.

The first individual's map is displayed in Fig. 2 (stress = 0.009). The main feature in this map was the centrality and breadth of ethnic-racial identity and its substantial overlap with most other constructs. Teaching social status also captured a central and sizable location, but

it was subsumed by racial-ethnic identity. Other features of this map included a relatively large area captured by emotional costs of teaching which overlapped with teaching as a demanding career, teaching as an expert profession, and loss of valued alternatives. Interestingly, teaching as an expert profession was also proximal to planned persistence, which was not subsumed by emotional costs of teaching. This individual's map also manifested a large region captured by effort costs of other tasks, which included perceptions of teachers' good salary. Gender identity spanned across teaching morale and effort costs of other tasks.

In stark contrast, the second individual's map, displayed in Fig. 3 (stress = 0.004) was characterized by the complete marginality of race-ethnic identity, and also of gender identity, and the centrality and breadth of the social status of teaching, which overlapped all other factors, except for planned persistence. Other central and broad areas were captured by emotional costs of teaching, effort costs of teaching, and teaching morale.

In the third individual's map, displayed in Fig. 4 (stress = 0.009), all factors were clearly subsumed under race-ethnic and gender identities, which themselves overlapped considerably. The map did suggest three somewhat separate regions within this overall identity region, with perceptions of teachers' good salary constituting a distinct region from all others, and teachers' morale and social status constituting a separate but more related region to the third area that included all other perceptions and perceived costs.

The map of the fourth individual is displayed in Fig. 5 (stress = 0.002). Overall, the distribution of items in this map pointed to a more simple organization of a main dimension arranged as a simplex of distinct small regions. These included perceptions of teaching as a high demanding career on one pole and loss of valued alternatives and perceptions of teacher morale on the other pole—two factors that were least related for this student. In between, teaching as an expert career and as providing a good salary captured a central region that also included perceived effort costs of teaching, and planned persistence captured another central location that also merged with perceived loss of valued alternatives. Social status of teaching overlapped the two central locations. More substantially, perceived emotional costs of teaching, and race-ethnic identity overlapped the entire dimension,

Fig. 2. MDS map for Individual #1. Note. Labels for items that share the same coordinates are presented side-by-side. Precise coordinate information is presented in Appendix A.

Fig. 3. MDS map for Individual #2. Note. Labels for items that share the same coordinates are presented side-by-side. Precise coordinate information is presented in Appendix A.

and seemed to have framed the overall meaning of the items in the map for this individual.

4. Discussion

Increasing the number of Latino male teachers holds promise for developing schooling environments that support the well-being and achievement of Latinx youth, yet Latino preservice teachers remain vulnerable to leaving the profession. To further understand this phe-

nomenon, we used mixed-methods to examine the salience and conceptualization of costs and barriers of a teaching career for Latino preservice teachers and their relations with race-ethnic identity, gender identity, and planned persistence. As we discuss below, our findings provide a deeper understanding of how Latinos may experience costs and barriers at the start of their professional development. In our discussion, we first discuss the range of salient costs and barriers alongside perceptions of the profession and plans to persist. We follow with a discussion of the meaning of costs relative to planned persistence and race

Fig. 4. MDS map for Individual #3. Note. Labels for items that share the same coordinates are presented side-by-side. Precise coordinate information is presented in Appendix A.

Fig. 5. MDS map for Individual #4. Note. Labels for items that share the same coordinates are presented side-by-side. Precise coordinate information is presented in Appendix A.

and gender identity, and the extent to which individuals' meanings differed within the sample. We end by noting study implications, limitations, and future directions.

4.1. Situating costs and barriers among Latino men in New York City

Many of the salient costs and barriers of a teaching career that surfaced in the study align with familiar critiques of the teaching profession. Concerns about poor working conditions, student misbehavior,

lack of teacher autonomy, poor administrative and parental support, and low compensation are not new complaints. They have been shown to drive teacher dissatisfaction and attrition (Ladd, 2011; Perie & Baker, 1997) and reflect endemic problems in U.S. education that need to be addressed to achieve an adequate, stable, and satisfied teaching workforce, regardless of teacher demographics. Yet research suggests these common critiques may be heightened for racial-ethnic minority teachers (Liu & Meyer, 2005) due to the fact that they are more likely to work in under-resourced schools serving poor communities, where

such problem are often pronounced. A novel aspect of our study is to show that Latino men tended to hold these concerns before they begin to teach.

By documenting the initial concerns of preservice teachers, the study provides a racialized and nuanced understanding of the concerns of becoming a teacher among preservice Latinos in the context of New York City. In doing so, men's comments shed light on and elaborate on the subjective interpretation of established cost constructs in the educational psychology literature. Our study elaborates on the demanding aspects of teaching that are salient to Latinos, many of whom were educated in high-minority New York City public schools and who plan to return to teach in these schools (Ingersoll et al., 2014). Such elaboration is particularly evident regarding the demanding nature of teaching or effort costs of a teaching career. For example, the men in our study expressed concerns about lack of administrative support and lack of teacher autonomy. These concerns are resonant with the frustrations frequently raised by practicing minority teachers in urban schools who have decried the lack of collective voice in educational decisions and lack of professional autonomy in the classroom (Casey et al., 2015). Many teachers of color aspire to enact culturally sustaining or critical approaches to teaching (Lynn & Jennings, 2009; Su, 1996). Our findings suggest that at the start of their career, some Latino male preservice teachers have concerns about the extent to which they will be able to teach in the ways they think are most appropriate. The men's comments also recognized the limits of a single teacher to reach all students and an awareness of how education intersects with deep-rooted social inequities facing many students in urban schools. Rather than entering teaching with idealistic expectations (Liu & Meyer, 2005), students' responses indicate they selected their profession with a realistic understanding of the many challenges they will likely face, including the entrenched social problems common to many urban schools. Despite these perceived costs, the men in our sample expressed resolve to persist in the profession, suggesting a strong initial professional commitment.

Some participants viewed the under-representation of male teachers and/or Latino teachers as stigmatizing and a significant drawback of the career. Further, our results indicate that some Latinos were actively encouraged by practicing teachers not to choose a teaching career. Participants' comments on these issues suggest an anticipation of social isolation and racial discrimination that male teachers of color often experience as teachers in the field (Bristol & Goings, 2018). These findings underscore the importance of understanding how Latino preservice teachers' perceptions of the profession can be shaped by family, friends, and others. A fruitful direction for future research would be to understand how messages from socializers strengthen or erode a commitment to the profession, and how these influences relate to emergent professional and personal identities. It is perhaps noteworthy that race and gender were not commonly mentioned as salient barriers or cost of a teaching career, particularly in light of studies that found race and gender issues as challenges identified by preservice teachers of color in predominantly white education program (Sleeter, Neal, & Kumshiro, 2015) and by in-service male teachers of color (e.g., Bristol & Goings, 2018; Brockenbrough, 2015). The impersonal nature and written response format of the survey method together with question phrasing that did not explicitly ask about race- and gender-related costs may have discouraged students from raising complex race and gender issues. Future research that explicitly asks about race- and gender-related costs and that uses methods such as in-depth interviews that investigate experiences of being a man of color hold promise for further understanding perceived costs and barriers and how these relate to race and gender identities.

Findings also highlight how aspects of teacher training and financial costs can be barriers for Latinos in preservice teaching programs. Consistent with prior research on Black teachers (Madkins, 2011), sev-

eral students in our sample described difficulty and frustration with certification exams, indicating these challenges are salient for some Latinos as well. One student also raised a critique about the validity of standardized certification exams, suggesting that the tests actually assess general test-taking skills rather than teaching skill or content knowledge. Such critique may reflect Latinos' awareness or experience with standardized tests, such as the ACT or SAT, which have been criticized for being culturally biased against race-ethnic minorities (Freedle, 2003). The men also expressed concerns about financial barriers during teacher training, particularly regarding difficulty balancing the need to work with school demands. Such concerns highlight opportunity costs in which coursework obligations may interfere with a need to work. Financial need of minority preservice teachers (e.g., not being able to complete a semester of student teaching without pay) has led to higher percentages of race-ethnic minority teachers enrolling in teacher training programs that follow alternative certification models that provide a salary during training (e.g., teaching fellowships, teacher residencies). Our results underscore economic reasons as contributing to below-average graduation rates among preservice teachers of color (US Department of Education, 2016) and suggest that efforts to sustain Latino students in teacher training programs would be strengthened by ensuring adequate financial support.

The barriers raised by Latino students in our study highlight the need for more theorizing about how barriers ought to be conceptualized within EVT and FIT-Choice models. For example, if a student's financial need to work inhibits or prohibits him from continuing his training as a teacher, how should this be understood within an EVT framework? Would this be conceptualized as an opportunity cost or as an outside task effort cost? Perhaps financial and other external barriers would be better conceptualized as conditions that influence expectancy beliefs regarding whether one believes success is possible? Similarly, does EVT adequately explain the potential stigma that men of color may encounter when deciding to become a teacher? Is this stigma situated within the current EVT as a threat to one's race-ethnic and gender identity and therefore a psychological cost, or perhaps as a cultural stereotype of the occupation that subsequently impacts expectations, values, and costs; and perhaps as both? Given that Latino men and persons of color in teacher education programs are less likely to complete their training—likely due in part to external obstacles such as financial constraints and external responsibilities—there is a need to incorporate barriers and individuals' psychological processes in responding to them into motivational models that examine career choices.

4.2. Meaning of costs, race-ethnic identity, gender identity, and planned persistence

The MDS analyses, which allowed a nuanced perspective on the meanings underlying participants' quantitative responses to items assessing perceived costs, indicated that, as a group, Latinos associated planned persistence closely with the perception that teaching is a highly demanding career that requires expertise. Interestingly, whereas the subscales assessing perceptions of teaching as a highly demanding career includes items that tap the perceived effort and emotional demands of a teaching career (Watt & Richardson, 2007), the analyses suggested that participants perceived these as phenomenologically distinct from perceived task effort and emotional costs (Flake et al., 2015). This pattern suggests that rather than acting as deterrents, Latinos in our sample perceived the challenges of the profession as implicated in their commitment to the profession, and these demanding aspects of the career choice may support, rather than dampen, motivation for a teaching career (e.g., Johnson & Safavian, 2016). Phenomenological distinctions between task demands and effort and emotional cost scales may also reflect different measurement approaches, with

items from former scales assessing the extent of the demand (e.g., how emotionally demanding?) and the latter items assessing the subjective appraisal of the demand (e.g., too emotionally draining).

MDS analyses also suggested that socio-economic consequences of becoming a teacher, such as the salary and status associated with the profession, were closely related to the centrality of race-ethnic and gender identities. The proximity of the constructs in the group MDS map reflects the notion that race and gender are social-cultural constructions that are inherently intertwined with social, political, and economic power (Markus, 2008). From the perspective of EVT, attainment value is shaped by the extent to which a task (e.g., becoming a teacher) allows for the enactment of one's collective identities (Eccles, 2009). The choice of a teaching career and its associated salary, status, and prestige likely raises questions of what this choice means for the participants as Latinos.

Results also suggested that students perceived moderate levels of emotional costs for teaching and that these emotional costs and task effort costs overlapped in the group MDS map. Given that teaching is generally associated with strong emotional experiences and stress (Zembylas & Schultz, 2009), it seems reasonable to assume that gender may interact with race-ethnicity in a range of ways, raising interesting question for future research on how culture, race, and gender relate to teacher emotions. Since culture shapes how individuals express, experience, and interpret emotions (Markus & Kitayama, 1991; Zembylas, 2003), a task for future research is to unpack how cultural beliefs and norms for different groups of male teachers relate to their emotional experiences, career decisions, and emotional transmission to students (see Frenzel, Becker-Kurtz, Pekrun, Goetz, & Ludtke, 2018; Frenzel, Goetz, Stephens, & Jacob, 2009; Klassen et al., 2013). For example, researchers might explore how men of different race-ethnic groups experience, make sense of, and respond to the emotional work of teaching (Zembylas & Schultz, 2009), and how these inform teacher identity, well-being, and persistence in the profession.

4.3. Within group differences in the salience and meaning of costs

While group-level analyses form a composite of the costs and barriers that Latinos face as a collective, we stress the importance of viewing group-level patterns in light of the substantial intra-group diversity we observed in our qualitative and quantitative results. As a group, students in our sample expressed a wide range of drawbacks and barriers, yet the particular barriers or drawbacks that were salient for a given individual in the sample differed substantially, as was the overall meaning that framed these perceived costs. For example, no single concern was salient for the majority of our sample. In addition, the four individual MDS solutions we selected as illustrations exemplify substantial variation of conceptualizations that individual preservice Latinos reported. This represents distinct patterns of relations between factors, which did not correspond with the general MDS solutions for the collective of Latinos in our sample. For example, for individuals 1 and 3, race-ethnic identity constituted a large and central construct that overlapped with many other cost and perception constructs, while these race-ethnic identity items were tightly clustered and were distant from other constructs for individual 2.

These unique individual and group-level patterns caution against assuming monolithic characteristics of Latino preservice teachers (DeCuir-Gunby & Schultz, 2014). While Latinos are likely to share many social and cultural experiences that shape perceived costs and barriers of a teaching career, their racial and gender experiences may differ in critical ways, as will their personal identities, characteristics, and contexts, which also influence career considerations (Eccles, 2009). Individuals have agency in interpreting similar experiences and in choosing experiences and roles that strengthen or subvert particular personal and social identities (Eccles, 2009; Kaplan & Garner, 2017).

Furthermore, the centrality and meaning of one's collective identities (e.g., race-ethnic and gender identities) are themselves emerging through developmental processes and are likely to differ across individuals (Ashmore, Deaux, & McLaughlin-Volpe, 2004; Phinney, 1989, 1990). Without diminishing the importance of examining psychological constructs with attention to race as a collective, we recognize that foregrounding attention to a race-ethnic group minimizes attention to intragroup differences, including how race and ethnicity are interpreted by individuals (Phinney, 1989), and highlights the possible risk of over-generalizing (i.e., stereotyping) a pattern to all individuals in the group. Our results underscore the value of approaching research questions with different methods and units of analysis (e.g., Säljö, 2009; McCrudden, Marchand, & Schutz, 2019).

4.4. Implications

Our findings suggest possible implications for supporting and retaining Latino preservice teachers. The results revealed substantial variability regarding which perceived costs were salient and their phenomenological relationship to race-ethnic identity, gender identity, and planned persistence. This heterogeneity underscores the value of developing person-centered teacher training opportunities for male preservice teachers of color to express particular concerns about the profession and receive personalized information and guidance. Interactions with men of color who are satisfied with their career choice may provide helpful opportunities for Latino preservice teachers to ask questions and seek guidance regarding their concerns. Perceived costs about the teaching profession can also be used as opportunities to support Latinos in exploring how their concerns relate to their emerging professional, collective, and personal identities (Kaplan & Flum, 2012). For example, concerns about poor working conditions could launch a discussion of the types of schools men aspire to teach in or instruction about the ways in which teachers can exert autonomy within the constraints of the educational system. Our findings also underscore the need to pair psycho-social support for Latino preservice teachers with financial supports for those who struggle to cover exam and tuition expenses and test preparation supports to pass certification exams; New York City's NYC Men Teach program is a promising model for providing holistic support to aspiring male teachers of color (NYC Men Teach). While we think these implications generally align with the results of the study, we are wary of overstating recommendations based on a single study (Robinson, Levin, Schraw, Patall, & Hunt, 2013) and emphasize the need for additional research on how best to support Latino preservice teachers.

4.5. Limitations and future research

Results should be considered alongside the following limitations. First, while open-ended responses on a questionnaire made it possible to efficiently collect responses, they tended to be short, only included a few costs or barriers, and did not involve further explanations with follow up prompts. Second, although the majority of factors assessed had satisfactory or better internal consistency, the Cronbach alphas for high demand career and gender identity centrality scales were suboptimal (both $\alpha = 0.49$). Notably, the measures selected for the present study were validated with samples composed predominantly of white, female students (Flake et al., 2015; Watt & Richardson, 2007; Wilson & Leaper, 2016); the scales' low internal consistency among our sample raises the possibility that Latinos interpret scale items differently than other groups. Low internal consistency also suggests items belonging to each scale may capture more than a single underlying construct. This seems particularly likely with regard to the high demand career scale: items reference demand in terms of both time and effort as well as

emotion, and these dimensions have been empirically distinguished in other cost research (e.g., Flake et al., 2015).

An additional limitation relates to the appropriateness of the cost items for preservice teachers. For instance, asking preservice teachers to reflect on costs associated with a future career in teaching may require high cognitive processing which interferes with the accuracy of their self-reports. Consequently, the measures used in the present study, particularly the cost measure, could benefit from cognitive pretesting (Karabenick et al., 2007) among a demographically diverse sample of preservice teachers. Furthermore, for researchers to be able to “gain insights about why certain groups are generally missing from the profession, such as minority ethnic groups” (Watt & Richardson, 2012, p. 804), scales must be validated with the requisite populations. Consequently, as DeCuir-Gunby and Schutz (2014) highlighted, advancing culturally relevant measurement is an important step for race-focused and race-reimagined research to flourish.

In addition, we emphasize that our results reflect the uniquely diverse social and cultural context of this particular sample and recommend subsequent research that investigates how Latino preservice teachers experience costs and barriers in other contexts. Therefore, we caution against generalizing our findings to Latinos in general, given that students within this group come from diverse ethnic backgrounds, have distinct lived experiences, and may face unique challenges associated with pursuing a teaching career. Consequently, we recommend that researchers adopt a fine tuned approach to conceptualizing and measuring race and ethnicity (see DeCuir-Gunby & Schutz, 2014; Sanchez et al., 2016).

A final limitation of the present study is that participants were already enrolled in teacher education programs. This demographic group represented students who have already demonstrated an initial commitment to becoming a teacher, have experienced some level of academic success, and have overcome barriers which may have lead some of their peers to select alternative career paths. To fully understand why Latino men are underrepresented in teaching careers, researchers must investigate the costs and barriers that men of color face throughout the pipeline to becoming an educator.

5. Conclusion

In the current study, qualitative and quantitative methods were used to examine the salience and conceptualization of costs and barriers and the relation with race-ethnic identity, gender identity, and planned persistence for Latino preservice teachers. Our results revealed a wide-range of salient costs and barriers as well as some intriguing differences in how individuals within these groups conceptualize costs relative to racial and gender identity and planned persistence in the profession. The group- and individual-level findings advance a deeper understanding of the salient and unique costs and barriers that Latinos preservice teachers report at different units-of-analysis. As such, the study highlights the complexity of the underrepresentation of men of color in the teaching profession, and calls for research that applies multiple methods, from multiple theoretical perspectives, with diverse social, geographic, and political contexts to pursue a more comprehensive understanding of the phenomenon. The findings also highlight the need for careful consideration of the way educational psychologists integrate race and ethnicity into their research programs (Zusho & Kumar, 2018) and the implications for developing useful theories and effective supports for students from diverse backgrounds.

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Appendix A. Supplementary material

Supplementary data to this article can be found online at <https://doi.org/10.1016/j.cedpsych.2019.101794>.

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