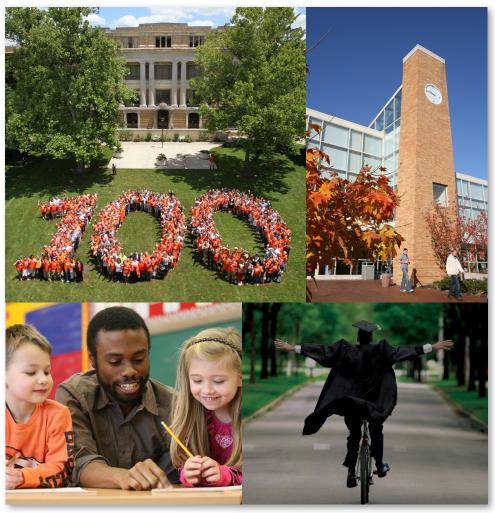
MID-WESTERN EDUCATIONAL RESEARCHER

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Bowling Green State University, 1910-2010 Bowling Green, Ohio

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On the Cover

Bowling Green State University (BGSU) has been noted for the quality of its teacher preparation programs since it was founded in 1910. From the early graduates who taught in one-room schools to more recent alumni who are fully prepared to utilize the most modern instructional technologies, BGSU has a distinguished tradition of preparing professional educators who are passionate abut what they do.

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Dean Brad Colwell



Brad Colwell is the new Dean of the College of Education and Human Development at Bowling Green State University. For the previous 14 years, he was a professor of education law as well as Associate Dean of the College of Education and Human Services. He earned both his Ph.D. (1996) and a J.D. (1993) from the University of Illinois at Urbana-Champaign. Colwell is active in scholarly research and public service to elementary and secondary schools, including over 140 publications, primarily addressing legal and school administration issues. Colwell is co-editor of the School Law Reporter, the primary journal

for the Education Law Association (ELA), serving also as the Association's national president. Professor Colwell is a member of numerous national and state organizations and has made over 200 presentations to state, regional and local organizations and school districts.

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Jennifer L. Milam, Ph.D.
Assistant Professor
Department of Curricular & Instructional Studies
321 Zook Hall
University of Akron
Akron, OH 44325
Office: 330.972.8538
mwer@uakron.edu

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POSTMASTER: Send address change to: Sharon McNeely, Ph.D., P. O. Box 34421, Chicago, IL 60634-0421

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MWER Publication Address

Julia Matuga Bowling Green State University 444 Education Bowling Green, OH 43403 Phone: 419-372-7317

e-mail: mer@bgsu.edu

MWER Subscription & MWERA Membership Information

Sharon McNeely, Ph.D. P. O. Box 34421 Chicago, IL 60634-0421 Phone: 773-442-5518 Fax: 773-736-7033 e-mail: mwera ed@yahoo.com

Three Perspectives on Standards: Positivism, Panopticism, and Intersubjectivism

Cheu-jey Lee Indiana University-Purdue University Fort Wayne

Abstract

Perhaps no other words occur more frequently than standards in today's discourse on educational reform. There is much debate about standards. Instead of taking sides on the debate, this paper argues that the problem with standards does not lie so much in standards themselves as in how they are viewed by those who make them and those who are held accountable by them. Specifically, what we believe about standards has a tremendous impact on the role standards play in our practices. This paper examines standards critically from the perspectives of positivism, panopticism, and intersubjectivism. Depending on the perspective taken, standards are shown to be interpreted quite differently.

Introduction

The past few decades have witnessed the proliferation of standards in the United States. For example, national standards that hold institutions responsible for preparing quality teachers include the National Council for Accreditation of Teacher Education Standards, the Interstate New Teacher Assessment and Support Consortium Standards, and the National Board for Professional Teaching Standards. States have also developed their own licensure standards that are in line, to various degrees, with the national standards. Additionally, there are subject-field standards such as those promulgated by the National Council of the Social Studies, the National Council of Teachers of Mathematics, the National Council of Teachers of English, the International Reading Association, and the National Science Teachers Association to name a few (Baines & Stanley, 2006). The standards movement reached a pinnacle when the No Child Left Behind Act of 2001 (NCLB) was signed into law as a reauthorization of the Elementary and Secondary Education Act. Under NCLB, "states are required to set clear and high standards for what students in each grade should know in core academic subjects, and they are required to measure each student's progress toward those standards" (Leckrone & Griffith, 2006, p. 53). Students are required to take standardized tests, and students, teachers, schools, and school districts are held accountable for the test results.

Like other reform movements, the standards movement has generated much debate. On the one hand, among those who hold a positive view on standards, some expect standards to bring about reform in teacher education programs (Darling-Hammond, 1994; Wise & Leibbrand, 2001). Others regard standards as an ideal benchmark for assessment and are interested in exploring the degree to which test items match standard statements (Porter, 2002; Porter, Smithson, Blank, & Zeidner, 2007; Webb, 2007). Still others see the benefits of aligning curriculum with standards (Luft, Brown, & Sutherin, 2007; Perna & Davis, 2007; Zagranski, Whigham, & Dardenne, 2008). On the other hand, standards are criticized for propagating a fixed curriculum, focusing

solely on measurable outcomes, creating an expensive and expansive bureaucracy (Baines & Stanley, 2006), deemphasizing individual differences (Baines & Stanley, 2006; Rossell, 2005), and encouraging schools to spend more time and resources in evading high-stakes sanctions or consequences than educating students (Lemke, Hoerandner, & McMahon, 2006; Stephenson, 2006).

While the research discussed above explores the pros and cons of standards, it is lacking in the view on how educational accountability can be addressed differently. Educational accountability, according to Nevo (2002), is linked to the notion of the external control of education in both centralized and decentralized educational systems. Although educational accountability can be defined in a number of ways, it often serves an audit function. Using standards as criteria for auditing individuals and organizations is only one way of holding them accountable. Educational accountability can be attained in other ways. For example, drawing on Stein (2001) and House (2004), Ryan (2005) proposes democratic accountability where stakeholders within the local school and/or district context are engaged in a democratic conversation. A democratic conversation consists of "three principles from deliberative democratic evaluation: inclusion, dialogue, and deliberation" (Ryan, 2005, p. 537). Specifically, all interests are "included" and "deliberated" reflectively on through a "dialogical" approach. Ryan's proposition provides an alternative view on the current hierarchical audit culture. Instead of limiting our discussion to the pros and cons of standards, she suggests that standards be examined from the broader spectrum of educational accountability. Ryan argues that the content of standards is not as important as the way they are formulated. In other words, standards agreed upon in a democratic way are more realistic and effective in meeting stakeholders' interests and needs than standards imposed upon stakeholders through a hierarchical, top-down approach.

In parallel, Moss and Lee (see Moss, 2008; Moss & Lee, 2008, in press) have found that it is one's philosophy and not standards that determine how he/she teaches. We also critique the Interstate New Teacher Assessment and Support Consortium Standards with pre-service teachers in

a way for them to grow in understanding that teachers do not simply draw from different philosophies of education (i.e., essentialism, perennialism, progressivism, and critical theory) as though able to change from one lens to another for self-preservation. Our goal is for pre-service teachers to consider critical theory as a philosophical stance that can guide them in decision making concerning curriculum and instruction even if state and national legislation such as NCLB takes an essentialist stance.

Expanding on our initial work, this paper argues that the problem with standards does not lie so much in standards themselves as in how they are viewed by those who make them (henceforth, standards makers) as well as those who have to implement them (henceforth, standards implementers). Specifically, what we believe about standards has a tremendous impact on the role standards play in our practices. For example, if standards are regarded as faultless, authoritative criteria, then blame for poor student achievement will rest on standards implementers. In contrast, if standards are viewed as something subject to change and revision, a deviation from standards can be an indication of their inability to capture the entire picture of educational processes. Hence, the very same standards can be perceived differently from distinct perspectives which, in turn, have an impact on our practices. In what follows, I will examine standards critically from the perspectives of positivism, panopticism, and intersubjectivism. Depending on the perspective taken, standards are shown to be interpreted differently. These perspectives are chosen for discussion because they, especially positivism and panopticism, are often adopted, knowingly or not, in thinking about standards. I will argue that the intersubjectivist perspective, among the three, provides the most promising framework where an ongoing learning process is open to all stakeholders of standards.

The Positivist Perspective

The term "positivism" can be traced to Auguste Comte's six-volume work, *Cours de philosophie positive (Course of positive philosophy*), which appeared between 1830 and 1842. He had chosen the word "positive" due to its "overtones of reality, utility, certainty, precision, and other qualities that Comte held in esteem" (Hacking, 1983, p. 42). Yet when we refer to positivism nowadays, we usually do not mean Comte's initial idea about it. In fact, positivism is not in itself a univocal concept. As many as twelve varieties of positivism (e.g., logical positivism and post-positivism) have been distinguished (Crotty, 2003). It is far from my intent to draw clear-cut boundaries among those varieties as that will require an essay of its own. For the purpose of this paper, I will simply explain what I mean by positivism and then discuss what standards look like from this perspective.

According to Hacking (1983), positivism can be identified by what he calls six positivist instincts: an emphasis on verification, pro-observation, anti-cause, downplaying explanations, anti-theoretical entities, and anti-metaphysics.

In other words, "untestable propositions, unobservable entities, causes, deep explanation – these, says the positivist, are the stuff of metaphysics and must be put behind us" (Hacking, 1983, p. 42). Hacking's definition of positivism, among others, places an emphasis on observation, which is consistent with the positivism that Crotty (2003) believes prevails today, "For many adherents of positive science ('positivists,' therefore), what is posited or given in direct experience is what is observed, the observation in question being scientific observation carried out by way of the scientific method" (p. 20). In parallel, Hollis (1994) also agrees that positivism "rests on observation as the moment of truth when hypotheses are tested against the facts of the world" (p. 42). Therefore, rather than branching off into all aspects of positivism without having a focus, I would like to concentrate on the "pro-observation" trait of positivism and examine what standards look like from this angle. By proobservation, Hacking (1983) means "[w]hat we can see, feel, touch, and the like, provides the best content or foundation for all the rest of our non-mathematical knowledge" (p. 41). Hence, what is considered scientific knowledge by positivism is based on what can be observed, i.e., sense data. Anything that cannot be observed does not exist. For example, electrons cannot be believed in because they cannot be seen. Then how does this pro-observation trait of positivism impact what we believe about standards? In what follows, I will use NCLB as example to address this question.

Under NCLB, schools, school districts, and states are held accountable through auditable performance standards. States are required to adopt standards aligned with state assessments. They also have to develop target achievement goals each year that define Adequate Yearly Progress (AYP), a set of standards that are established through state-specified academic proficiency plans (Conley, 2008). This legislation essentially institutionalizes a reliance on performance indicators as a mechanism for improving student achievement. And standardized high-stakes test scores are used as the key educational outcome to assess student achievement (Heubert & Hauer, 1999). In sum, whether standards and AYP are met depends primarily on test scores. But why do test scores play such a decisive role? They are, of course, not perfect at all. In fact, they are under attack (e.g., see Lin, 2002; Sloane & Kelly, 2003). I argue that it is the positivist view that is dominant in viewing what standards and AYP should be. Again, positivists believe that scientific knowledge is obtained through observation. Since test scores are measurable and easy to observe and compare, they seem to fall naturally into the category of "scientific knowledge." Therefore, from this positivist slant, whether student achievement is aligned with academic standards or whether it makes AYP is determined by what is observable, i.e., test scores. What cannot be measured by test scores is thus relativized and becomes irrelevant.

The Panopticist Perspective

Another way of looking at standards is from the perspective of panopticism. Panopticism is derived from the term

"panopticon." Michel Foucault's critique of the modernist thought in his theory of power is metaphorically and paradigmatically captured by the panopticon, an architecture (prison) proposed by Jeremy Bentham (1995) for internment. The panopticon is vividly described by Foucault (1975/1979) in his *Discipline and Punish: The Birth of Prison* as follows:

[A]t the periphery, an annular building; at the centre, a tower; this tower is pierced with wide windows that open onto the inner side of the ring; the peripheric building is divided into cells, each of which extends the whole width of the building; they have two windows, one on the inside, corresponding to the windows of the tower; the other, on the outside, allows the light to cross the cell from one end to the other. (p. 200)

The panopticon is designed deliberately to make surveillance effective and economical for the guard in the central tower, who is invisible to the inmates in the cells. Though the inmates cannot see the guard, they suppose that the guard is always gazing at them. They are seen, but they do not see. Hence, the main effect of the panoptic gaze is to induce an interiorized state of surveillance. Each inmate ultimately becomes his own overseer and exercises surveillance over and against himself (Foucault, 1980).

Viewed from the panoptic perspective, standards play the role of the guard whose power is felt by standards implementers. The power of standards comes into being through two stages: fear of punishment and interiorized surveillance. The fear of punishment at the first stage is needed to ensure compliance from standards implementers. For example, under NCLB, the disciplinary consequences for schools that fail to make AYP contain "a series of state-driven reforms that include state takeovers, state intervention in poorly performing schools, options for families in schools not making adequate yearly progress to transfer to another school, and the implementation of supplemental educational services" (Wong & Sunderman, 2007, p. 338). Likewise, institutions which offer teacher certification programs are held responsible for preparing student teachers to meet the standards of the accrediting agencies. Failure to meet the standards will lead ultimately to discontinuation of accreditation renewal.

After this initial stage is accomplished; that is, after the fear of being punished is deeply rooted, it recedes to the background. Then the second stage kicks in. As the guard is always supposed to be in the central tower gazing at the inmates, standards become taken-for-granted and interiorized as a device of self-surveillance. As a teacher educator, I have seen standards play the role of surveillance to the extent that the pre-service teachers become overseers of themselves. For example, in the language arts methods class I teach, I have been pushing for an alternative way of designing an instructional unit called an invitation (Lewison, Leland, & Harste, 2008; Van Sluys, 2005). It differs from a traditional lesson plan in at least three aspects – it starts off of students' interests, provides choices, and helps students reason critically in a socio-political context. Despite the fact that I emphasize

repeatedly the importance of these aspects, there are always pre-service teachers each semester who begin the invitation by discussing how it meets certain standards. They tend to believe that a good invitation or instructional unit has to meet standards first. It is arguable that the panoptic power of standards is so pervasive that it has been interiorized by these pre-service teachers even though they may not be aware of it.

The Intersubjectivist Perspective

The term intersubjectivism is used to denote loosely, for the purpose of this paper, the key ideas of Habermas's (1981/1984, 1981/1987) theory of communicative action. It features a scene where speaking and acting subjects engage in communicative action orientated toward reaching understanding. In what follows, I will discuss intersubjectivism first before the intersubjectivist view on standards is presented.

One of the most salient features of intersubjectivism is that there is more than one subject involved. The subject assumes a performative role in communicative action oriented toward understanding (Habermas, 1981/1984). The subject is not a sovereign, authoritative figure, but an actor who communicates with other subjects and whose being, as an actor, requires other subjects and the internalization of other subject positions. The subjects also regard each other as equal peers. Therefore, intersubjectivism is a dialogical paradigm.

Another important concept of intersubjectivism is validity claims. Habermas uses the term "validity" to emphasize that claims made in communicative action should be contested and validated communicatively by the subjects involved. Hence, a claim made in communicative action is a claim to validity and thus called a validity claim. Habermas argues that every meaningful act carries validity claims. A validity claim is an assertion made by a speaker that his or her utterance is of "truth, truthfulness, and rightness" (Habermas, 1998, p. 24). A validity claim is fallible and should be contested in the ideal speech situation where power relations are equalized.

In addition, "form" has to be distinguished from "content" to understand intersubjectivism. The contrast between form and content is related to Habermas's (1981/1984, p. 74) "procedural concept of communicative rationality" in his formulation of an emancipated society. The idea is that the existence of an emancipated society calls for certain formal conditions to be in place. The conditions refer mainly to an environment where people's validity claims made in a dialogical communicative process are subject to validation in the ideal speech situation. Habermas's procedural concept is that the formal conditions provide an infrastructure in which all members may play a part, ideally an equal part, in determining what a good way of life is for the collectivity. However, though necessary for us to decide what is good for ourselves, the formal conditions cannot prescribe the good life for us. Consequently, the formal conditions (or form) rather than what they prescribe (or content) is the key to a good society.

From the intersubjectivist perspective, standards are regarded as a validity claim. They are claimed to be a

benchmark for which school districts, schools, educators, students are held accountable. It is a claim made by standards makers to standards implementers. Whether the claim is valid is subject to contestation between both parties with the ideal speech situation presupposed. Since validity claims are fallible, standards as a validity claim should not be taken for granted but questioned and supported with reasons. For example, if teachers believe that a certain standard no longer meets students' needs, there should be a channel through which their voice can ultimately reach standards makers. In other words, when a certain standard is not met, the problem may lie in the teachers or the standard itself. Standards makers and standards implementers should deem each other as equal peers. The former do not play the role of an absolute authority while the latter should not be threatened by highstakes punitive consequences.

Standards should be considered "content" which may change from time to time due to new findings. They are not the unalterable truth that is prescribed by standards makers. Standards should not be, but (unfortunately) usually are, mistaken for "form" which is presupposed. The form should be the ideal speech situation or the two-way channel through which dialogues occur frequently between standards makers and standards implementers. As a result, whether standards themselves are reasonable is perhaps not as important as whether we leave this decision to be made democratically by all stakeholders.

To better understand what the intersubjectivist view on standards may look like in practice, I would like to use a preliminary case created by Ryan (2004, 2005) as an example. Ryan's democratic accountability is consistent with the intersubjectivist view in the sense that they agree that both standards makers and standards implementers should be held accountable for student achievement. They also argue that communication between standards makers and standards implementers should be conducted in a democratic way or in what Habermas calls the ideal speech situation where power relations are equalized. Ryan implemented democratic accountability within the context of a school improvement plan. It was a high school in Illinois, which experienced a substantial drop in test scores among all student groups. To address the issue, the high school convened a school improvement committee (SIC) composed of school administrators, teachers, students, parents, interested citizens, and businesspeople. The high school, with guidance from the SIC, engaged in dialogue and discussion with its surrounding communities. The aim was to develop a self-reflective community focused on improving student achievement. Evaluators were involved in helping ameliorate the negative consequences of the audit culture that relies so heavily on performance indicators such as test scores. Evaluators could work with legislations or the legislative evaluation offices to revise NCLB or draft new legislation. According to Ryan, this self-reflective process helped the school identify particular issues and ways to improve teaching and learning. In addition, systemic issues could be revealed and reported to policy makers and thus hold them also accountable.

Conclusion

This paper presents the positivist, panopticist, and intersubjectivist perspectives on standards. It shows that standards can be viewed very differently dependent on the lens they are seen through. The intersubjectivist view on standards is argued to be the most promising among the three perspectives. Unlike the positivist view which reduces standards to observable test scores, the intersubjectivist view regards them simply as a validity claim that is fallible. In fact, fallibility is a positive characteristic embedded in standards that allows for further improvement. Nor does the intersubjectivist view subjugate standards implementers to a panoptic gaze where punishment and surveillance are used to force compliance. Instead, it involves both standards makers and standards implementers in the process of revising and improving standards. Hence, standards implementers are no longer passive abiders but active participants who have a say in a dialogical learning process. Actually, "collaborators" is a more suitable term than "makers and implementers" to reflect the dialogical relationship between them. Through this two-way communication, standards, which are not considered perfect but fallible, are refined continuously.

The three perspectives discussed in this paper are not intended to be inclusive. They are used simply as examples to show that our beliefs play an important role in determining how standards are perceived and practiced. Yet we seldom examine our beliefs critically but usually take them for granted. By redirecting our attention from the debate about standards to our underlying beliefs about them, this paper hopes to provide an alternative view on the standards movement that carries significant weight in education.

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- Cheu-jey Lee is an Assistant Professor of Education at Indiana University-Purdue University Fort Wayne. His research interests include literacy education, philosophy of educational research, and educational inquiry methodology. E-mail: leecg@ipfw.edu.

Factors Influencing Language-Learning Strategy Use of English Learners in an ESL Context

Ngan Nguyen Francis Godwyll Ohio University

Abstract

This study employed the Strategy Inventory for Language Learning (SILL), version 7.0 (ESL/EFL) developed by Oxford (1990) to examine differences in language-learning strategy use. It focused on how learner factors such as gender, age, nationality, and proficiency level influence the choice of language-learning strategies. The participants were 75 international students at Ohio University. The results showed that participants used social and metacognitive strategies at a high frequency level; meanwhile, affective and memory strategies were selected the least. Statistic significance was found in the choice of several strategies across the factors examined. Pedagogical implications were also discussed.

Introduction

Many studies in the field of second language acquisition have focused on the question of why some language learners succeed, but some do not, and have tried to explore strategies that successful learners use in their learning (Ehrman & Oxford, 1995; Griffiths, 2007; Liu, 2006; Teicher, 2006). It has been established that there are strategies that help language learners achieve their goals, good language learners sometimes use different strategies than poorer language learners (Gass & Selinker, 2001; Liu, 2006), and successful and experienced language learners use language-learning strategies more frequently and more effectively than poorer language learners (Ehrman & Oxford, 1989). Studies have also indicated that the choice of strategies is subject to learners' levels of proficiency, their age, and their gender; and learners might use strategies at different frequency levels or prefer certain strategies to the others, depending on their individual personalities and learning environment (Green & Oxford, 1995; Hong-Nam & Leavell, 2006; Schmais, 2003).

Definitions

Over the past decades, researchers have viewed language-learning strategies in association with behaviors and thoughts (Weinstein & Mayer, 1986); techniques, approaches, or deliberate actions (O'Malley & Chamot, 1990); or behaviors or actions (Oxford, 1990). Green and Oxford (1995) suggested that language-learning strategies are specific actions or techniques that students use, often intentionally, to improve their target language skills. Ellis (1994) defined language-learning strategies as attempts to develop linguistic and sociolinguistic competence in the target language. Cohen (1998) defined learning strategies as processes which learners use consciously in enhancing the storage, retention, recall, and application of knowledge about the language that they are learning. In Cohen and Dornyei (2002) language-learning strategies were defined as

the "conscious and semi-conscious thoughts and behaviors" (p. 46) used by learners with the explicit goal of improving their knowledge and understanding of a target language.

Language-learning strategies have been approached mainly from two aspects: skills and processes. Skill areas include listening, reading, speaking, writing, vocabulary, and translation (Cohen, 1990). Processes, on the other hand, are usually grouped into four domains: cognitive, metacognitive, and social or affective strategies (O'Malley & Chamot, 1990). Cognitive strategies are those that deal with identification, grouping, retention, and storage of language materials. Metacognitive strategies are processes which learners use consciously in order to manage their language learning. These strategies allow learners to control their cognition by planning, checking, and evaluating what they learn. Affective strategies involve emotions, motivation, and attitudes which learners can employ to reduce anxiety, self-encourage, and so forth, to promote learning positively. Social strategies include actions which language learners use to interact with other learners or with native speakers.

Research into language-learning strategies has indicated great interest in identifying the use of learning strategies by ESL/EFL learners (Green & Oxford, 1995; Hong-Nam & Leavell, 2006; Schmais, 2003). Nevertheless, there are few studies dedicated specifically to the characteristics that influence English learners on the choice of learning strategies in a particular ESL context (Hong-Nam & Leavell, 2006). An ESL context is one in which students learn English in an English-speaking country such as the United States, the United Kingdom, or Australia.

Literature Review

Whereas learning strategies had been studied very early, this topic began to draw attention from researchers in the field of second language acquisition around the late 1970s. Whereas O'Malley and Chamot (1990) and O'Malley, Cham-

ot, Stewner-Manzanares, Russo, and Kupper (1985) had a more theoretical focus on this issue; Oxford (1990, 1994), Green and Oxford (1995), Oxford and Ehrman (1995), and Oxford and Nyikos (1989) were more interested in how different learners apply strategies and what processes influence their choices. More research had been inspired by the latter focus. For example, studies have examined varied factors such as proficiency levels, age, gender (Green & Oxford, 1995; Hong-Nam & Leavell, 2006; Shmais, 2003), ethnicity (Grainger, 1997), nationality (Hong-Nam & Leavell, 2006), career choices and psychological type (Ehrman & Oxford, 1989), disciplines (Peacock & Ho, 2003), among others. Findings from these studies have revealed that there is not a unique strategy that every learner should apply in order to be successful in learning the target language. Rather, choice of strategy is dependent upon a person's cultural and psychological background and the learning context.

The SILL

Oxford (1990) devised an instrument for assessing the frequency of use of language strategies called Strategy Inventory for Language Learning, known in brief as "the SILL." The strategies are grouped into six categories: memory, cognitive, compensation, metacognitive, affective, and social. The SILL has been used by various studies focusing on language-learning strategies.

Specifically, Green & Oxford (1995) examined strategy use at the individual item level by students in three different proficiency levels (pre-basic, basic, and intermediate), and by gender factor (male versus female) in Puerto Rico. The research found that learning strategies were used more frequently among more successful language learners; and female learners used more strategies than male counterparts did. It was determined that there were more complex patterns of use than previous studies had revealed. For both factors, the target language (L2) proficiency level and gender, only some items showed significant variation; and significant variation by proficiency level did not invariably mean more frequent strategy use by more successful students.

Shmais (2003) reported on the current English languagelearning strategies used by Arabic-speaking English majors in Palestine, which is an EFL context. It was found that the most preferred strategies are metacognitive strategies, and the least favored are compensation strategies. The study concluded that gender and proficiency had no significant effect on the use of strategies.

Hong-Nam and Levell (2006) examined the overall language-learning strategy use of English learners enrolled in a college Intensive English Program (IEP), which is an intensive ESL learning environment. The study revealed that students in the intermediate level reported more use of learning strategies than beginning and advanced levels. More strategic language learners advance along the proficiency continuum faster than less strategic ones. It was also found that the students preferred to use metacognitive strategies most, whereas they showed the least use of affective and

memory strategies. Females tended to use affective and social strategies more frequently than males.

To sum up, studies have attempted to address the question of how language learners use learning strategies in terms of proficiency levels and gender. Common findings indicate that language learners, disregarding the gender factor, favored metacognitive strategies. Meanwhile, compensation strategies were in the medium range of use in an ESL context (the United States), but they were not favored in the EFL (Palestine) or hybrid ESL/EFL environment (Puerto Rico). Nevertheless, there are still areas where research has not come up with consistent findings such as why certain strategies are preferred by a group of learners and others are not. Also, as Ehrman and Oxford (1989) suggested, career choice and psychological type, among other factors, could also influence the choice of language-learning strategies among language learners.

This study is not just an attempt to replicate previous studies; this is, to find out more evidence on how factors such as proficiency level, gender, and nationality influence learning strategy use by SILL categories of learners of English in an ESL context. We also wish to examine if age, academic major, and L2 learning experience have any effect. We therefore focus on the following questions:

- 1. What are the common patterns of the use of language-learning strategies of learners in an ESL context?
- 2. Do factors such as proficiency level, age, gender, nationality, academic major, and L2 learning experience influence the learners' choices of strategies?

Methodology

This study was conducted at Ohio University in the United States, using the SILL developed by Oxford (1990) and a demographic questionnaire which took the participants 25 to 30 minutes to fill out (paper-and-pencil). The participants, who were selected by stratified sampling, included 75 international students from three sub-groups (Linguistics, English, and non-English majors) at Ohio University. The linguistic group consisted of mostly graduate students who have considerable background in English learning as well as teaching (most of them are or will become English teachers). The English group included students who were studying English for communication purposes only (not English major students). This group had the most varied proficiency levels (beginner, pre-intermediate, intermediate, advanced). The non-English-major group comprised students from different academic programs other than English or Linguistics. These students needed to take focused courses to improve certain English skills (e.g., listening, speaking, reading, writing). The participants hailed from Asia, Latin America, and Europe (21 different countries). Their ages ranged from 18 to 50. A small number of participants (8%) have just started learning English for less than a year. Others have learned the language for several up to twenty years. Their TOEFL scores ranged from 400 to 643. The participants were asked to self-report their TOEFL scores. It was expected that the information provided in this regard is reliable since there was no identity question in the SILL as well as in the demographic questionnaires. Moreover, the purpose of the study was fully communicated to the participants. Yet, some of the participants did not report their TOEFL scores (they either had not taken the test yet or did not want to report). These participants were treated as a separate group beside the three groups whose proficiency levels were determined by TOEFL scores (see Table 1 for more details).

Data analyses included the computation of descriptive statistics (means, standard deviation, and frequencies) to compile information about demographics of the participants and to calculate overall strategy use. In order to determine any variation in strategy use relative to age, gender, and cultural backgrounds, a one-way analysis of variance (ANOVA) was conducted using these factors as independent variables and

Table 1

Demographic information of participants

	n	
Age:		
(1) from 18 to 25	47	
(2) from 26 to 35	23	
(3) above 35	5	
Gender:		
(1) male	32	
(2) female	43	
Geographic areas		
(1) students from Asian countries	64	
(2) students from African countries	11	
(3) students from Latin American countries	4	
Majors:		
(1) Linguistics	19	
(2) English	20	
(3) Other majors	36	
Proficiency level:		
(1) TOEFL scores below 500,	26	
(2) TOEFL scores from 500 to 549,	10	
(3) TOEFL scores from 550 and above	20	
(4) TOEFL scores not reported.	19	
Self-evaluation of proficiency:		
(1) poor	6	
(2) fair	24	
(3) good	35	
(4) excellent	10	

75

75

75

75

75

75

Table 2

Descriptive Statistics

N Mean Std. Deviation Minimum Maximum

3.10

3.48

3.46

3.58

3.12

3.70

the six categories of strategies as dependent variables. The Cronbach's Alpha for the variables in this study is .899 (or .90) which is in the expected range of the SILL's reliability (Oxford & Ehrman, 1995).

Findings and Discussion

Research question 1: What are the common patterns of the use of language-learning strategies of learners in an ESL context?

Table 2 provides a brief description of the participants' scores on the SILL. Generally, the participants of this study used language learning at medium (within the range from 2.5) to 3.4) or high frequency (within the range from 3.5 to 5.0) as can be seen in Table 2 and Figure 1. Specifically, social strategy ranked top (M = 3.70), followed immediately by metacognitive strategy (M = 3.58). Cognitive and compensation strategies shared the middle position with M = 3.48, and 3.46, respectively. Affective and memory strategies filled up the other end of the scale with M = 3.11, and 3.10, respectively. Individually, the most frequently used strategy was a social strategy: "I ask questions in English" with a mean score of M = 4.09. The least used strategies were memory strategy exemplified in phrases such as "I used flashcards to remember new English words" and affective strategy, reflected in such phrases as "I write down my own feelings in a language-learning diary." Both had M = 2.31.

In sum, there were four groups of strategies used at a high frequency (social, metacognitive, cognitive, and compensation strategies). The two remaining strategies, memory and affective strategies, were used at a lower frequency. Figure 1 represents the frequency of use of strategies by the mean of scores acquired for each group of strategies. It can be seen that there is not much overall difference in the participants' preference for each strategy group.

Results from other studies have also revealed that social strategies and metacognitive strategies are frequently used. However, metacognitive strategies are favored slightly more and actually ranked on top (Hong-Nam & Leavell, 2006; Shmais, 2003). Hong-Nam and Leavell (2006) explained that an intensive English learning environment could have an influence on the learner's choice of strategies, which accounts for the fact that her participants used metacognitive strategies more (metacognitive strategies deal with the control of planning, organizing, focusing, and evaluating learning).

4.78

4.64

5.00

5.00

4.83

5.00

1.11

1.43

1.17

1.22

1.00

1.00

Memory (Mem.) strategies

Cognitive (Cog.) strategies

Affective (Aff.) strategies

Social (Soc.) strategies

Compensation (Com.) strategies

Metacognitive (Met.) Strategies

0.74

0.73

0.82

0.85

0.76

0.86

Nevertheless, the learning environment does not necessarily interfere with the preference of metacognitive strategies since Shmais also found that university English students in a regular academic foreign language-learning environment showed a similar trend in the use of metacognitive strategy.

Furthermore, studies by Wharton (2000) and Griffiths and Parr (2001) correspondingly demonstrated that social strategies were selected most regularly in both ESL and EFL learning environments. Social strategies place an emphasis on cooperative learning and asking questions to facilitate interaction. The participants of this research learn in an academic environment where people around them are mostly native speakers of English or speakers of other languages different than their own. They are therefore compelled to interact in English and ask questions for comprehension. This is especially true for the linguistics and English students because their classmates are mainly international students who might speak non-standard English. This probably explains why strategies such as "I ask questions in English" or "If I do not understand something in English, I ask the person to slow down or say it again" are used routinely by these respondents.

Affective strategies and memory strategies are employed less often. This indicates an outcome consistent with studies by Hong-Nam and Leavell (2006), Shmais (2003), Wharton (2000), and Griffiths and Parr (2001). It is commonly as-

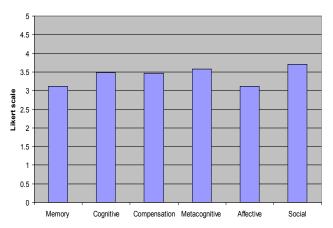


Figure 1. Overall strategy use

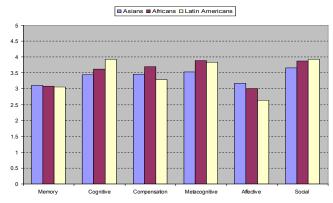


Figure 2. Use of language-learning strategies by nationality.

sumed that Asian students might prefer memory strategies to communication strategies (interpersonal interaction, cooperative learning, for example) because of their traditional approach to or styles of teaching and learning. It seems that Asian students have used more similar language-learning strategies like students in other areas of the world. However, it is interesting to note a slight difference in the use of memory strategy by the Asian group of this study in comparison to that by their fellow students from Africa and Latin America (as displayed in Figure 2).

Research question 2: Do factors such as proficiency level, age, gender, nationality, academic major, and L2 learning experience influence the learners' choices of strategies?

Use of strategies by proficiency level (based on TOEFL scores)

As displayed in Table 3, the results of the one-way ANOVA of strategy use by proficiency level show that the group with TOEFL scores of above 550 (or advanced level) used more strategies than the other groups (M = 3.58). This group also reported the most frequent use of social strategies. This table also shows that memory strategies had the least frequent use at M = 3.01 for the group with TOEFL scores not reported. Cognitive and metacognitive strategies were at high frequency for T1 and T4, but they were at medium frequency for T2 and T3. As observed, there was a statistical significant difference in the use of cognitive strategies (p < .05) in terms of proficiency levels. As for the rest, no statistically significant differences could be found.

Cognitive strategies prescribe that learners learn by linking new information with existing schemata, analyzing and classifying new information, deep processing, forming and revising internal mental models, and receiving and producing messages in the target language (Oxford, 1990, p. 16). Learners with lower proficiency levels may have difficulty handling these strategies. Indeed, this study found a significant difference in the use of cognitive strategy across proficiency levels. The advanced learners reported more frequent use (M = 3.72), whereas people from a lower proficiency level reported a mean score of M = 3.17, which is considerably different.

Overall, results from the one-way ANOVA shows that advanced learners use more strategies than lower proficiency learners do. This conclusion is consistent with findings by Green and Oxford (1995) and Wharton (2000). However, when we examined the use of individual strategy categories, we found more variations. The group with TOEFL scores above 550 topped every other group in the use of cognitive, compensation, metacognitive, and social strategies; yet it was surpassed by the group with TOEFL scores below 450 in regards to memory and affective strategies. This particular group outranked all other groups in the use of these two particular strategies which reflect well their learning experiences and proficiency.

Use of strategies by gender

As can be seen from Figure 3, the male group used learning strategies at a slightly higher frequency than the female group (M=3.43, M=3.38, respectively). Both groups exhibited use of memory, and cognitive and affective strategies at medium frequency, but a high frequency of use for social strategies and metacognitive strategies (M>3.50). Whereas they did not lean much on compensation strategies (the male group likes this strategy category better than the female group), they did so for the affective strategies.

Even though the results did not show a statistically significant difference in the use of learning strategies by gender, by comparison of mean values alone it does reveal a result consistent with previous studies that show females' tendency to use more strategies than males (Green & Oxford, 1995; Hong-Nam & Levell, 2006; and Ehrman & Oxford, 1989). Male learners, however, used more metacognitive strategies than females. This suggests males like organizing, planning, and self-monitoring their learning, whereas females might like building social relationships to support their learning.

Use of strategies by age

Table 4 shows that there was a statistically significant difference in the use of cognitive, metacognitve, and affective strategies (p < .05) between age groups. The A3 group (including participants who were above 35 years old) had a high frequency of use for compensation strategies and a medium frequency of use for the rest of the strategies. This

group also used slightly more memory strategies than the other two groups and had a much lower mean score on the use of affective strategies than those who were younger than 35 (M = 2.5 in comparisons to M = 3.04 and 3.36). Social strategies was used most by the group with ages ranging from 25 to 35 (M = 4.01).

According to these results, age factor seemed to cause some differences in the use of strategies. Specifically, the age group between 25 and 35 showed a statistically significant difference with the other groups in their use of cognitive, metacognitive, and affective strategies (much more frequent in cognitive and metacognitive strategies, and more frequent in affective strategy). The oldest group displays a very low use of affective strategy (M=2.5). This might be because they are more experienced and mature in handling their feelings, learning attitudes, and their motivations than are the younger

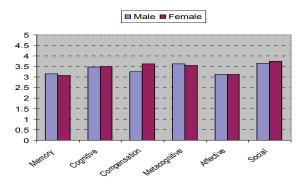


Figure 3. Use of strategies by gender

Table 3

Descriptive statistics for the variables and one-way ANOVA/F-tests for main difference between the six strategy categories in terms of proficiency

	Not reported *		Belo	Below 449*		450-549*		Above 550*		
Variables	М	SD	М	SD	М	SD	М	SD	F	sig.
Mem. strategies	3.01	0.96	3.32	0.40	3.04	0.63	3.19	0.80	.52	.67
Cog. strategies	3.68	0.79	3.48	0.60	3.17	0.82	3.72	0.44	2.98	.04
Com. strategies	3.37	1.00	3.26	0.28	3.40	0.91	3.73	0.63	1.04	.38
Met. Strategies	3.85	0.89	3.31	0.59	3.37	0.93	3.74	0.78	1.75	.16
Aff. strategies	3.03	0.97	3.26	0.87	3.11	0.67	3.16	0.68	.20	.89
Soc. strategies	3.68	1.06	3.78	0.74	3.53	0.96	3.92	0.48	.81	.49

^{*} TOEFL scores

Table 4

Descriptive statistics for the variables and one-way ANOVA/F-tests for main difference between the six strategy categories by age

	A1 (bel	ow 25)	A2 (2	5 - 35)	A3 (ab	ove 35)		
Variables	М	SD	М	SD	М	SD	F	Sig
Mem. strategies	2.94	0.74	3.33	0.73	3.35	0.5	2.74	0.07
Cog. strategies	3.24	0.82	3.88	0.39	3.4	0.5	7.35	0.00
Com. strategies	3.31	0.82	3.71	0.77	3.5	0.92	2.06	0.14
Met. Strategies	3.37	0.9	3.98	0.67	3.29	0.71	5.10	0.01
Aff. strategies	3.04	0.78	3.36	0.66	2.5	0.94	3.44	0.04
Soc. strategies	3.54	0.94	4.01	0.67	3.47	0.77	2.80	0.07

learners. Oxford (1994) also discussed the possibility of differences in language-learning strategy use by age factor; in particular, older learners would tend to employ more strategies (in this study the Means of strategy use for the group under 25 years old and for the group above 25 years old are 3.23 and 3.48, respectively).

Use of strategies by nationality

Descriptive statistics for main differences between the groups by nationality reveals that the African group used strategies at a high frequency whereas its Asian and Latin American partners used strategies at medium frequency (M = 3.53; 3.39; 3.44, respectively; see Table 2). Affective strategies received the lowest attention by the Latin American group (M = 2.63). The three groups had a similar taste for memory strategies (M < 3.50) and social strategies (M > 3.50).

As mentioned before, there was no statistically significant difference among nationality groups in their use of strategies. According to Hong-Nam and Leavell (2006), there might be more differences within groups than between groups. Even so, Figure 2 shows us that people from different areas of the world use strategies differently from each other. As can be seen, Latin Americans seemed to use more cognitive strategies but they do not do so with affective strategies. African learners topped in the use of metacognitive and compensation strategies and occupied the middle position for the rest strategy groups. The Asians only outrank their partners in the use of memory and affective strategies; which is not an unexpected finding as Oxford (1994) pointed out that "[r]ote memorization and other forms of memorization were more prevalent among some Asian students than among students from other cultural backgrounds" (Oxford, 1994).

Conclusions and Implications

The participants of this study preferred social strategies the most and did not often use affective or memory strategies. Such preferences have been noticed in previous studies (Wharton, 2000; Hong-Nam & Leavell, 2006; Oxford & Ehrman, 1995). Even though it was assumed that the inspected factors (proficiency level, age, gender, nationality) would bring about influences on the learner's choice of strategies, this assumption has not always been supported. Some factors might yield a statistically significant difference in the use of certain strategies, but not necessarily in all six categories.

We acknowledge that the SILL has been criticized for a heavy focus on vocabulary memorizing, which might be helpful in the initial stage of learning the target language, but for more advanced learners who have accumulated a considerable amount of vocabulary, might find some strategies in the SILL not very applicable. Nevertheless, some of our findings have confirmed with literature that language learners differ in language-learning strategy use. There is not an implication for "good" strategies that all learners should use to enhance their language learning. Some strategies are

preferred, but that does not necessarily mean they are better than the others.

It is important that both learners and teachers become aware of their preferences for learning strategies in the learning process. In particular, teachers should have a sufficient training in strategy instruction in order to assist students in pinpointing appropriate learning strategies so as to advance. Along with helping students build up a good command of language-learning strategies, teachers should watch for the risk of imposing their own preference for strategy use on the students. Students should be trained to use language-learning strategies through various practices, which are incorporated into teaching plans and regular class activities (Oxford, 1990).

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Ngan Nguyen is a doctoral candidate in Cultural Studies in Education at Ohio University. She is a Fulbright alumna and a recipient of A. Margaret Boyd Overseas Scholarship and the P.E.O. International Peace Scholarship. Nguyen's research interest area is second and foreign language education. Email: ng.ngan@gmail.com.

Francis Godwyll is an Assistant Professor at Ohio University in Athens Ohio. He received his Doctorate degree in education from the University of Education at Heidelberg, Germany. His research interests focus on marginalized populations and the use of education as a tool for empowerment. E-mail: godwyll@ohio.edu.

Teaching Political Analysis: A Framework

Carla Edlefson Ashland University

Abstract

A framework using concepts from systems theory, theories of power, and the garbage can model of decision-making was developed for the purpose of teaching aspiring school administrators to analyze situations using a political lens. The framework is demonstrated in an analysis of the process that led to Ohio's establishing a school facilities funding program. The framework is then used to illustrate an example of a graduate class assignment requiring analysis of a situation a new principal might face.

All leaders need a political frame to help them understand how to deal with many of the situations they will face. The framework outlined here is based on a definition of politics as human behavior under conditions of conflicting values and interests. A course in the politics of education at the graduate level should have as its goal the introduction of several rich concepts and theories from political science. Students should read a good text book and also sample original theory construction and empirical articles. I have found that it helps to have an overall framework on which to place the various theories and concepts that students who will be practicing school administrators may find useful in their leadership roles. Three major perspectives in the politics of education literature influenced my framework: one focuses on political inputs, processing, and outputs, which are addressed by systems theory; a second examines choices among competing processing issues, which is highlighted in the garbage can model; and a third considers the relative power of actors in the system, which is explained by power theories.

Systems Theory

In social science, systems theory makes use of the analogy to an organism living in an environment (e.g., Morgan, 1986; Owens, 2004). Systems theory emphasizes inputs, processes, and outputs. Inputs from the environment into the school's political system include demands, such as curricular changes, accountability requirements, and parent requests. Inputs can also be supports, such as tax revenue. Withinputs are demands and supports that arise from within the system, as subsystems interact with each other and with the environment. Withinputs shape the professional behavior of school administrators and affect the ways in which environmental inputs are processed (Schneider & Hollenczer, 2006; Wirt & Kirst, 2001).

Demands means people want and need things from the system, while support means people accept the system's legitimacy. Political systems need legitimacy to survive. An example of legitimacy is public acceptance of the outcomes of elections. Voter approval of school taxes is a particular example of supports. Like other political systems, schools have processes for acting on demands and producing deci-

sion outputs (Wirt & Kirst, 2001, pp. 55-61). Those outputs generate a new set of inputs that feed back into the system; for example, graduates who are not ready for the labor force.

The Garbage Can Model

The garbage can model of decision-making was first developed in the early 1970s (Cohen, March, & Olsen, 1972; Cohen & March, 1986). More recently, Olsen (2001) wrote that the garbage can ideas were not intended as a formal theory, but that "the spirit has always been to encourage colleagues to play with the basic ideas" (p. 192). Other scholars, such as Kingdon (1984) and Zahariadis (2007), have built on the garbage can ideas.

Cohen et al. (1972) studied universities, which they called *organized anarchies* and developed a mathematical model in which decisions are made in *garbage cans*. Organized anarchies have unclear or conflicting goals, unclear technology, and fluid participation in decision-making. Four garbage streams flow into the garbage can: problems, solutions, participants, and choice opportunities. Cohen and March (1986) describe it thus:

An organization is a collection of choices looking for problems, issues and feelings looking for decision situations in which they might be aired, solutions looking for issues to which they might be the answer, and decision makers looking for work. (p. 81)

Cohen et al. (1972) tested the model with actual university decision data. They found that how a decision was made depended on the mix of garbage in the can. Often choice opportunities did not produce decisions until the problems to be solved attached themselves to other choice opportunities. Therefore, most decisions did not resolve problems.

Power

A good source for theories of power is Fowler (2004). Her definition of power is a broad one, borrowed from Muth (1984): "the ability of an actor to affect the behavior of another actor" (p. 27). She outlines a three-dimensional model of power that uses 14 different mechanisms, from authority

to communication processes. In particular she presents a scheme for analyzing actors in educational settings and the types of power they have. For example, school administrators have legal authority and economic dominance over teachers' careers and working conditions. The amount of power actors have depends on resources, which may include money, information, and organization. Teachers derive power from their control over information about classroom activities, their large numbers, and their union organizations (Fowler, 2004, p. 42).

The Three Perspectives in a Framework for School Leaders

Professional standards for school administrators require that they understand political processes (National Policy Board for Educational Administration, 2002, p. 10). The first perspective, from systems theory, provides a scheme to help building administration students see that demands come from the environment outside the school system, as well as from subsystems within, and that part of the administrator's job is to solicit the supports.

The second perspective, from the garbage can model, emphasizes that decision making is not always rational, and that decisions often do not solve problems. The model is sensitive to the timing of the arrival of problems, solutions, participants, and decision opportunities. The wise administrator pays attention to the allocation of attention—his or her own, and that of others.

The third perspective, power, is important because students are often uncomfortable talking about power. However, they need to consider the kinds of power they will have as administrators and the ethics of using it. As Fowler (2004) noted, "If every person with moral reservations about power refused to exercise it, power would not cease to exist. Rather it would be exercised only by those people who lack moral reservations about it" (p 47).

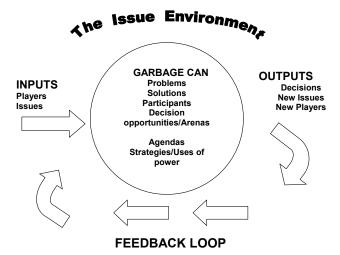


Figure 1. A framework for analyzing political decisions.

Analytic questions

Figure 1 is presented to help students visualize how the various perspectives may contribute to analysis of a problem. Figure 1 illustrates the environment, inputs, processes, outputs, and a feedback loop from systems theory. The circle in Figure 1 represents the garbage can, including problems, solutions, participants, and decision opportunities from the garbage can model. The circle in Figure 1 also contains agendas and strategies and uses of power from power theories. Four analytic questions come from the framework:

- 1) What is the issue environment?
- 2) Who are the players and what is their power?
- 3) What is in the garbage can? and
- 4) What are the outcomes?

The Issue Environment

The issue environment can be thought of as a *primeval soup* because as Kingdon (1984) wrote, "The generation of policy proposals...resembles a process of biological natural selection. Many ideas are possible in principle, and float around in a 'policy primeval soup' in which specialists try out their ideas in a variety of ways..." (p. 21). Part of the issue environment is the political culture. Values and traditions affect the ways that people approach decision situations. The political culture in the state of Ohio has been described as individualistic, valuing "loyalty and strict respect for the system of mutual obligation" (Fowler, 2004, p. 98). In other words, you do something for me; I do something for you.

External factors from the environment place demands on the system. In education it's often a mandate from a higher level of government. For example, the federal No Child Left Behind (2001) legislation put a lot of demands on both state government and local school districts. Many problems and solutions come from the environment. An example of an externally generated problem for schools is the growth in the number of students who are English language learners. Technology might be an example of a solution looking for a problem.

Issue salience may be thought of as what gets an issue out of the soup and into the political process. Several authors have written about this (e.g., Downs, 1972; Kingdon, 1984; Mazzoni, 1991). Events, particularly crises; advocates (sometimes called policy entrepreneurs) who push issues; and the media all play a role in moving issues out of the soup onto the agenda. Kingdon (1984) defined agenda as "the list of subjects or problems to which governmental officials, and people outside of government closely associated with those officials are paying some serious attention at any given time" (p. 3). An issue faces competition to get on the agenda; sometimes it takes a crisis to get it there. There may be some important issues that never get on the agenda. People use their power to get issues on the agenda or to keep them

off. For example, at the end of calendar year 2002, Ohio had a large budget deficit, but Governor Taft refused to publicly release the numbers until after his re-election.

The Players and Their Power

A game or theater analogy is relevant here, because people go on and off the stage or the field of play. They may or may not choose to participate, based on how important the decision is to them and on how much influence they believe they can have (e.g., Schneider & Hollenczer, 2006). People have interests and demands; they believe things and want things from the political system. People have various amounts and kinds of power; for example, (a) position power that goes with their office; (b) personal power, such as persuasiveness, political skills, knowledge, reputation, or respect; and (c) resources, such as money, organization, or data (Fowler, 2004, pp. 31-33).

The Garbage Can

At any given time there is a mix of players, problems and solutions in the garbage can (see Figure 1). The garbage can model views these as separate streams. Players may embrace certain issues. Problems and solutions may couple or decouple (Kingdon, 1984, p. 181).

Arenas or choice opportunities are situations where players have an opportunity to influence a decision. Examples of arenas are the budget-making process or a legislative committee. A leader can create an arena; for example, a committee to study a problem. Mazzoni (1991) described arenas as legitimizing both participants (players) and rules of the game.

Often, one of the rules of the game is a deadline. Deadlines are important because they call for some decision to be made. Appropriation processes have deadlines, because when they expire, money cannot be spent until there is a new appropriation. President Clinton once won a showdown with Congress over appropriation deadlines after the government shut down.

The rules of the arena may include who has the authority to set the agenda; that is to determine which issues will be considered in that arena. Legislative and Congressional committee chairs use that authority effectively. All players use their various power resources to influence both the agenda and the decision alternatives that are considered (Kingdon, 1984; Wirt & Kirst, 2001). Strategies and uses of power may include bargaining and coalition building (Wirt & Kirst, 2001), persuasion, control of information, and effective organization (Fowler, 2004).

Outcomes

Systems theory says that a political system converts at least some input demands into policy outcomes. If a decision is made, and it isn't always possible to make one, the garbage can model predicts that the decision will often not solve a problem. When many problems become attached to a decision opportunity, often some of the problems must be

tabled for another day, in order to make a decision that solves at least some of the other problems.

Decisions that are made create new issues and new stakeholders. Previous problems recycle into the garbage can to look for new decision opportunities. Thus there are feedback loops. The history of school desegregation illustrates this effect.

An Application of the Framework: The Case of the Ohio School Facilities Commission

What follows in an example of the use of this framework and its analytic questions to look at a specific case of education policy making in Ohio. The case includes the period from 1997 to 2000, in which Ohio enacted and implemented a major state program of assistance to school districts for school facility construction and renovation. It is especially interesting because the state was perhaps more responsive to the Ohio Supreme Court's order to fund school facilities in the school finance case (*DeRolph*, 1997) than to any other parts of the order (Edlefson & Barrow, 2001).

O1: What Was The Issue Environment—1997?

The issue of school facilities was in the primeval soup. Three events (inputs) had helped put it on the agenda. First, in 1990 the Ohio Department of Education had released a study showing a need for more than \$10 billion of school facilities. At the time the state had only a very small program of emergency assistance for funding school facilities. A Bill Moyers TV show in 1996 showed the poor condition of Ohio facilities and featured school children questioning legislators about them. The Ohio Equity and Adequacy (E & A) Coalition, the organization of plaintiff districts, made and distributed many video taped copies of the show. The Ohio Supreme Court in *DeRolph* (1997) declared that Ohio's school funding system, including the lack of sufficient state funding for school facilities, was unconstitutional.

Q2: Who Were The Players?

Ohio Department of Education officials had position power to make rules and implement legislation. They had commissioned studies that documented the extent of the facilities problems and the costs of repairing and replacing buildings.

The Ohio Supreme Court had power to require changes in legislation. The Court was watching to make sure that the governor and the legislature acted in response to the *DeRolph* order.

The education lobby groups representing the school boards and the professional teachers and administrators along with the Ohio E&A Coalition presented a united front in pushing for implementation of the Court order in *DeRolph*. The education groups' power came from grassroots organization,

money, and information. Their clear interest was in obtaining more state money for schools. Dr. Bill Phillis, Director of the Equity and Adequacy Coalition, had a great deal of personal power coming from his political skill, his access to the media, and his knowledge and experience of being the former state assistant superintendent.

Governor Voinovich had the power to propose the budget and get media attention, as a result of his position. Voinovich's interest initially was in defying the Court order. Ultimately, he decided he wanted to design a reformed system rather than have the court impose one. The legislature had been controlled by Republicans since 1995. Their interest was a standard Ohio Republican agenda, including tax relief and diminishing the power of unions (e.g., Riffe, 2007).

The builders, architects, and financiers of the construction industry had resource power, i.e., money, which gives access to politicians. Their interest was in the opportunity to build schools and make money. Similarly, the building trade unions had money and organization. Their interest was in generating jobs and protecting the prevailing wage law, which guaranteed a certain wage level even for non-union construction workers.

Q3: What Was in the Garbage Can?

The agenda was mostly set by the Governor through his power to propose initiatives and budgets, and by the Supreme Court in the *DeRolph* decision. Problems in the garbage can included the Ohio Department of Education's lack of staff, which slowed down the spending of the small amount of money that had been appropriated for facilities. Another salient problem was that the Cleveland and Youngstown schools were in deficit and facing state receivership. The news media and public opinion both have influence on political processes (Fowler, 2004; Kingdon, 1984; Wirt & Kirst, 2001). In the Ohio statehouse and in newspaper editorials there was both a sense that urban, majority-minority schools were mismanaged and a reluctance to give them more operating money. These urban and racial problems became coupled with problems raised by the *DeRolph* lawsuit about funding the operation of schools. This coupling prevented decisions about funding school operations from being made (Edlefson & Barrow, 2001).

The players kept racial and urban issues separate from facilities issues during the legislative deliberations. Although issues may enter the Garbage Can from the environment, they may become associated or not during the process in the can. Carr and Fuhrman's (1999) research on states with school finance lawsuits found that if race issues were salient, legislatures had more difficulty in responding to court orders. In Ohio in 1997, one way the players focused the facilities issue spotlight more on rural Appalachian (White) schools, rather than urban (minority) schools, was via the Bill Moyers video.

Solutions looking for problems included school choice, a budget surplus, and the repeal of the prevailing wage requirement for government construction projects. The state house generally has a number of arenas operating at the same time. In 1997, one was the legislative activity around the Governor's budget; another was the Governor's Task Force on School Funding. The legislature created an arena in fall 1997, the Joint Legislative Committee on School Finance. The regular legislative process also created several arenas. The end of the fiscal year, June 30, served as a deadline for completing the state appropriation bill.

Strategies or uses of power included coalitions and quid pro quos. On the issue of facilities, there was a natural coalition. School interests, business interests, the Governor and legislature allied. The building trades unions were out of the coalition, because the legislature was committed to a provision repealing prevailing wage for school construction. Some legislators who wanted tax cuts instead of spending on schools agreed to vote for the bill because the prevailing wage repeal was in it. This trade is an illustration of bargaining or quid pro quo.

Q4: What Were the Decision Outcomes?

The Ohio School Facilities Commission (OSFC) was created in law, and \$1.91 billion was appropriated for fiscal years 1999 and 2000. The new law repealed prevailing wage laws for OSFC projects.

In accordance with systems theory, decisions created new players and new issues, which fed back into the process. Old unresolved issues remained in the garbage can and attached themselves to new choice opportunities. Implementation of the facilities program created new issues. Districts were wait-listed for state funds in ascending order of local fiscal capacity, but some districts far down the list needed to get started building and fixing their facilities before it was their turn. There had been no attention to special urban needs, so the urban districts organized to lobby for a separate urban program. The vocational districts did the same. There was more need than money for the long term, as just \$1.1 billion had been appropriated for \$10 billion of need. However, a tax referendum on a statewide ballot in May 1998 was defeated with an 80% no vote, sending a strong signal against a state tax increase.

From the perspective of power theory, the 1999 players were similar to those in 1997. In February 1999 the trial court judge, on remand in the school finance law suit, created a new problem, by ruling again in favor of the plaintiffs. He ruled that facilities funding was "woefully inadequate." Fortunately, there were some solutions in the garbage can at the same time. Voters had approved new state bonding authority for school building construction. Ohio was also a victorious plaintiff in a national tobacco lawsuit settlement, making \$2.5 billion available for school facilities. In addition, the state general fund budget had a surplus.

The arenas, or decision opportunities, in 1999 were the Governor's January operating budget proposal and his September school facilities proposal. The state capital improvements budget was introduced in spring 2000.

Senate Bill 272 was enacted and signed by Gov. Taft in spring 2000. The legislation resolved a number of the problems with the facilities program (Edlefson & Barrow, 2001). These outcomes produced new issues, including school district challenges of OSFC concerning renovation versus replacement and the required uniform state architectural design. By the time the planning was done, projecting enrollment became very difficult, especially in cities, given students' increasing use of choice schools. At the same time some districts' enrollments were increasing. Unsolved problems for the long term included what would be the sources of funding when temporary sources ran out, and the requirement of passing local bond issues in order to qualify for state assistance. These issues would all feed back into the policy system.

Student Assignment: Application to School-Level Decision Making

After students have read about and understood the theories and concepts contained in the framework and seen them applied to specific decision situations, they will be ready to apply these ideas to situations in schools. What follows is an example of an assignment requiring the application of the framework to a case of a new middle school principal. The case is adapted from Hart (1993, pp. 165-174).

Kate Howard had just finished her doctorate when Dr. Bill Johnson, superintendent, hired her to be the principal of Eagleton Junior High, although she had no previous administrative experience. Dr. Johnson was a good friend of Dr. Louise Prince, who had been Dr. Howard's dissertation advisor. Lakeview was located in a university town, and the school board president was a professor, as were many of the parents in the district. Dr. Johnson, who came to the superintendency from another part of the country, had introduced a number of innovations. Prior to hiring Dr. Howard, he had already hired three principals, only one of whom was an internal candidate. Dr. Howard was the only female administrator in the district. Superintendent Johnson made it clear that he expected Dr. Howard to bring student achievement up to a level that the parents and community would find acceptable, by using her university connections and the expertise she had developed while doing her research.

Before Dr. Howard's predecessor, Mr. Light, retired, he filled all the teacher vacancies and practically promised his assistant principal Mr. Cooper, that Cooper would be the new principal. There were other educators in the district who also believed they should have been in line for the principal's job.

Reaction to Dr. Howard's appointment was not warm. A board member asked her how she was going to handle women who don't like to work for women, and whether her husband approved of her accepting the principal's position. Dr. Howard learned later that the other administrators had opposed her hiring, and that they had discussed it at their regular Saturday morning golf outings.

At the first meeting with the faculty, unhappiness among the parents in the community and with Dr. Johnson's innovations surfaced. A group of parents expressed concerns about student behavior, including vulgar language, premature sex, drug use, and a low priority on academics. It seemed clear that they expected Dr. Howard to make many changes at the school. In further conversations with teachers, Dr. Howard found that the perception of her was that she was an academic who probably couldn't handle the day to day running of a school with demanding parents, unruly students, and unhappy teachers. The teachers, secretaries, and custodians all suspected that she had been hired to clean house, and they feared losing their jobs. As school began, there was no teachers' contract in place, and the appointment of outside administrators was an issue at the bargaining table, because teachers complained that their careers had been blocked. Superintendent Johnson made it clear that a "work-to-rule" labor slowdown was a possibility and that administrators must do whatever they could to help avoid it.

Dr. Howard resolved to make this first principalship a success. She wanted the superintendent to be proud of her, the other administrators to accept and respect her, the students to achieve, and the community to be supportive.

Answer these questions:

- 1. Who are the players and what are their interests?
- 2. Who has power and what are the sources of that power? Rank the players according to how much power you think they have.
- 3. What are the issues? What issues are likely to convert passive observers into active players?
- 4. What were the processes that led to this situation?
- 5. What processes could be used to resolve this situation? For example, what garbage cans or arenas could be created, and who could be encouraged to participate? Should Dr. Howard try to enhance her own power, and if so, how?
- 6. What decision choices are now available to Kate Howard and what might result (feed back), if she chose them?
- 7. Based on your analysis, what would you advise Dr. Howard to do at this time? Explain why.

Note: There is no one right answer to each of these questions. There are many possible good answers. An A paper will demonstrate thoughtful (as opposed to superficial) analysis using concepts from the readings and class discussions, and well-stated arguments based on the analysis.

Possible Answers

A student may decide that the most important issue in the garbage can is Dr. Howard's credibility with people who have power over her job: the Superintendent and Board of Education. She could build her expert power by drawing on her own research and that of her friends in the university to help solve problems of student behavior and achievement. She might think in terms of natural coalitions whose interests would include better student outcomes; for example, parents and the Chamber of Commerce. She could create garbage cans or arenas to encourage participation by coalition members. She could use her authority to set the agenda for these arenas and to decouple issues from decisions, if needed, by setting the rules. Another student may decide that Dr. Howard should focus her attention on the school staff, who might be seen as having the power to sabotage Dr. Howard's initiatives.

Benefits to Students of Educational Administration

The case may be used as an in-class activity, a takehome assignment, or as a final examination. As a learning experience, the case works better if students discuss it among themselves and then write their own responses. Students quickly see that their standard answer, "what is best for kids," is not obvious in this case. They debate various interpretations of the case information, and they often come up with some strategies that the instructor has not anticipated. The fact that the case is not very detailed evokes a number of different scenarios, including ways that the principal could obtain more information.

Evaluation of their work includes assessing their understanding of the concepts and assessing their ability to present an argument and support it. If this kind of analysis is used throughout a course, students are less uncomfortable with the idea that there is no one right answer.

The colorful images, such as garbage can and primeval soup, help them remember concepts and help them generate ideas. The framework gives students more to go on than simply discussing cases in a best practices mode. Use of the analytic framework provides students with some habits of thinking that will help them in actual situations they will face as administrators.

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Carla Edlefson is Professor of Leadership Studies at Ashland University. Her research interests include the economics and politics of education and women in leadership. E-mail: cedlefso@ashland.edu.

Spotlight on Graduate Research

Urban University Access and Affordability: The Implications of the Relationship between Gas Prices and Suburban Transit Ridership

Jessie Baginski Cleveland State University

Abstract

Many college campuses across the country have implemented U-Pass transit programs to mitigate transportation costs for students. However, urban university U-pass programs fall short for suburban students who cannot get to the urban metro area without connecting public transportation. As urban universities rely on suburbs as feeder communities, this study looked at the relationship between suburban commuter ridership and the price of gas as an indicator of college affordability and accessibility. The findings revealed that ridership on suburban transit into an urban university area was significantly sensitive to the price of gas, thereby substantiating the need for partnerships to be developed and sustained to ensure transportation equity.

Introduction

The economic environment of 2009 provides compelling motivation for institutions of higher education to pay close attention to the need for collaboration with regional transit systems as a primary means for students to access college campuses. Affordable transportation can play a determining role in a student's decision to attend college. The cost of a private automobile is prohibitive for many students, especially following 2008 gas prices in excess of \$4 per gallon—an unprecedented price in the United States. The importance of partnerships between colleges and transit systems in mitigating costs and improving access has made news recently in Cleveland, Ohio as students at Tri-C Metro campus protested to the media about the costs of getting to campus paying standard transit fares (Farkas, 2009). Institutions of higher education, that maximize their relationships with local and suburban transit systems to ensure affordable access for students from diverse socio-economic backgrounds, may find themselves at the forefront of best practices in land management, student attraction and retention, the greening of America and equity in education access.

Literature Review

Sustainability has become a key concept in the United States. Education and public transportation are recognizing their interdependence in this responsibility as campuses across the country are adding transportation demand management (TDM) to their strategic and operational planning. TDM is a coordinated set of policies and operating practices that include both incentives for alternative modes of travel and disincentives for single occupancy vehicle (SOV) use [Transit Cooperative Research Program (TCRP), 2001]. This relationship is especially important for urban colleges and universities where land constraints are forcing choices in land

use (TCRP, 2008). The opportunity cost to use land for parking rather than academic buildings, housing, or recreational or green space is of growing concern for land-locked urban universities (Toor & Havlick, 2004; Brinkman, 2000). These competing demands for prime space underscore the dilemma of providing consistent access to campus (TCRP, 2008). Just over half of college campuses participating in a study by the Transportation Cooperative Research Program (TCRP) limit parking (TCRP, 2008). Many universities have rethought land use, parking and transportation policies and have integrated them with local public transit services (TCRP, 1999). The change in travel behavior patterns needed to realize the benefits of TDM programs is dependent on institutional support and coordinated promotion by the college and transit system (Cain, 2006; Petrone, 2008).

Many college campuses across the country have implemented transit initiatives for one or more of five primary reasons: reduce demand for parking, increase student access to housing and employment, increase the university's ability to attract and retain students, reduce the cost of attending college for students, and increase transportation equity (TCRP, 2001; Toor & Havlick, 2004). An important goal of transit policies is to link the campus to the surrounding community and to provide on-campus articulation for students (TCRP, 2008).

Parking Demand Management

The development and maintenance of parking has grown increasingly costly, spurring administrators to contemplate alternative options. Four themes emerge in alternative considerations: transit funding/fares and community partnerships; sustainability and the focus on environmental issues; parking and parking pricing; and promotion of alternate travel modes such as walking, biking or carpooling (TCRP, 2008).

Partnerships with local transit agencies not only produce a solution to the campus parking dilemma, they also

help contribute to the efficiency of the local transit system by improving ridership along the routes serving campuses (TCRP, 2007). Across the nation, there are more than 50 universities offering transit passes to more than 800,000 students and employees (Toor & Havlick, 2004, p. 6). Access to transit services can replace the need for additional parking spaces and is a lower cost solution to increased pressure for more parking (TCRP, 2001). From a community perspective, these partnerships with transit agencies benefit the entire community in the form of reduced traffic congestion and pollution—so even non-users benefit (TCRP, 2001; Toor & Havlick, 2004).

The reduction of land space needed for parking spaces benefits both the campus and the local transit system. University parking decisions affect the level of impervious surface area, the amount of land available for buildings and the green space options for a campus (Toor & Havlick, 2004). Although parking cost was the most frequently cited reason for universities to enter into transit agreements, these agreements also allowed campuses, transit systems and communities to apply for Congestion Mitigation Air Quality (CMAQ) grants for transit operating costs under the Clean Air Act of 1990 (TCRP, 2001). Commuters into urban areas who choose to use public transportation can spend sixty percent less on their transportation costs than those who choose to drive a personal automobile and save an estimated \$1,400 on gasoline alone [American Public Transportation Association (APTA), 2007]. In communities where options exist for walking, bicycling, or riding transit exist, the percentage of gross domestic product (GDP) spent on transportation is half of what residents in other cities spend (APTA, 2007, p. 3). The National Safety Council concludes that riding mass transit is 25 times safer than traveling by car (APTA, 2008, p. 4). Strategically connected commuter transportation systems offer potential for reduced pollution and traffic congestion, reduced demand on land use for parking, and a boost to the American goal of energy independence (APTA, 2007). Of special importance during this time in American economic history is the role interconnected public transportation systems can play in creating access to education and jobs to help relieve unemployment.

In 2008, APTA sponsored a competition among college campuses to develop a green message and public relations campaign for the transit industry for marketing to that demographic group (APTA Marketing & Communications Committee, 2008). Transit systems are appealing to college students as they are more technically savvy and likely to use transit as a green initiative (TCRP, 2008). To that end, transit systems are engaging in the use of information technology such as real time information at stops that minimize riders' waiting time and automated stop announcements on board the bus or train which increase ease of use and customer satisfaction (TCRP, 2008, p. 29; Toor & Havlick, 2004).

The cost of parking at a university can be viewed through both a political and economic lens (TCRP, 2008). From a political standpoint, limited parking access has resulted in the development of a social pecking order for parking access as universities allocate parking access by rank or need—or create a hierarchy of access based on price one can pay for a spot (TCRP, 2008; Toor & Havlick 2004). It is not uncommon for universities to ban first and second year students from bringing a car to campus (Toor & Havlick, 2004). In a study of students at the University of Illinois at Champagne-Urbana, freshman parking, although not prohibited, was so far from the residence halls that a vehicle was of limited practical utility thereby spurring interest in transit ridership (Clark, 2007).

The economic framework addresses the building and maintenance costs of parking spots. Universities can expect to the capital costs of a net new parking space to range between \$3,000 for a surface lot space and up to \$30,000 for a parking structure space, not including annual maintenance (TCRP, 2008; TCRP, 2001; Toor & Havlick, 2004). For land-locked universities, this may mean the cost to purchase existing buildings and tear them down to get at the underlying land (Toor & Havlick, 2004). An acre of land can yield only 124 surface parking spaces; structures can increase the number of spaces per acre, but lose significant space to access ramps, stairwells and elevators (Toor & Havlick, 2004). These costs and spatial realities force universities to seriously consider best and highest land use options. Additionally, if a university must borrow money to construct a parking lot or structure, it can negatively impact the institution's financial risk through increased debt ratios and higher interest rates (Toor & Havlick, 2004). Maintenance costs should be added to the capital cost of the space—costs such as snow plowing, cleaning and repairs, administration and related employment costs, and parking enforcement costs (Toor & Havlick, 2004). At Cleveland State University, a single parking space will generate \$480 annually if a student pays for a semester pass for fall, spring and summer; the same space can generate \$840 per year in daily parking fees for two 15-week semesters and one 12-week semester. Generally, the cost charged for a parking permit does not offset the cost to maintain the space, thereby requiring the use of general funds or other revenue sources to subsidize parking costs (TCRP, 2008). It is estimated that it cost two and one-half times as much to accommodate an additional person parking on campus than to transition one person from driving to riding public transit (Toor & Havlick, 2004, p. 80). Universities that adopt TDM policies can tie their parking policies to transit use by utilizing parking revenues to fund or offset transit partnership costs thereby effectively providing an incentive to use transit and a disincentive for parking (TCRP, 2001).

Another TDM policy that is tied to the reduction of SOV driving is the provision of incentives for carpooling (TCRP, 2001; Toor & Havlick, 2004). Carpooling implies that there at least two individuals sharing a common vehicle, origin, route and destination—and it tends to be most attractive when the trip is of a distance of at least ten miles or 30 minutes (Toor & Havlick, 2004). Some universities, such as Washington State University, have enhanced their TDM programs with benefits such as free parking for students who carpool (TCRP, 2001).

Student Issues

Three of the five main reasons universities enter into transit agreements focus on student issues – the need for affordable access to jobs and housing, the ability to attract and retain students and the reduction of the cost to attend college.

It is estimated that the demand for housing adjacent to transit lines will double by 2025 (APTA, 2008, p.4). Students often rely on transit to commute to and from campus from areas where housing is most affordable (Avent, 2007). As campuses and transit systems seek to increase the appeal of transit use, they partner on the provision of amenities such as transit shelters and dedicated lighting that enhance transit access on campus and extending into surrounding residential areas (TCRP, 2008).

As students are beginning college, the timing is ideal to encourage public transportation use as they are, by necessity, going through the process of travel behavior change in the transition from secondary to higher education (Rose, 2008, p. 87). Of critical importance to facilitating this behavior change among college freshman is the provision of information about bus routes and free ride tickets to try the service (Cain, 2006; Rose, 2008). Nearly one in four students participating in a TravelSmart initiative in Melbourne Australia reported being influenced to consider alternative modes of travel by the initiative (Rose, 2008).

Administration can begin this marketing process by including transit information in the admissions materials it sends to prospective students and their families (Toor & Havlick, 2004). In a study by the TCRP, 92% of participating universities identified orientation as the most effective time to promote transit services (TCRP, 2008, p. 17). The orientation process provides an environment to present transit information in an interpersonal, unpressured setting (Rose, 2008). The tools most frequently used to promote transit services are brochures and the schools website (TCRP, 2008; Toor & Havlick, 2004). Laketran, the regional transit authority for Lake County, Ohio was included in a study on teenage mobility for promoting transit use to young adults to college and including free rides tickets as incentive in their ads (Cain, 2006). Beyond brochures, ads and website, the most effective strategies to prompt changes in travel behaviors is face-toface contact with dialog aimed at providing the student with information tailored to his/her individual needs (Cain, 2006; Petrone, 2008; Rose, 2008).

Many college campuses across the country have implemented a University Pass, or U-Pass, transit programs to mitigate students' personal transportation costs. Students spend an average of \$10,000 to purchase a car and more than \$8,500 to drive it each year (Avent, 2007). Due to these costs, public transit as a primary mode of travel was identified as having a significant advantage over the automobile, thereby allowing students to use money for other purchases (Cain, 2006). In 2008, the American Public Transportation Association released a report stating that a public transit user

could save more than \$8,000 per year in transportation costs compared to a private vehicle (Miller & Williams, 2008).

Transit partnerships are often established as a result of student referendums (TCRP, 2001). Students who are trying to promote a transit initiative can garner administrative support by documenting the benefits to the university—decreased parking costs and increased options for future housing and academic building expansion (TCRP, 2001). Student support for these referendums is also critical. Otherwise, the imposition of a transit fee may be perceived as the equivalent of a tuition increase (TCRP, 2001). Most often, these referendums result in the creation of a U-Pass that allows students unlimited access on the local transit system (TCRP, 2001; Toor & Havlick 2004). Fees for a U-Pass vary based on location of the university and the length of the pass, and range from \$8 to more than \$50 per semester (TCRP, 2001). For example, at the University of North Carolina at Chapel Hill, a transit pass is \$92.25 per year, and at the University of Washington it is \$44 per quarter (TCRP, 2008, p. 21). At Cleveland State University, the cost is \$25 per semester (Farkas, 2009).

Transportation Equity

A May 2008 Gallup Poll of 1,017 adults with a +3% margin of error, revealed that 71 % of respondents said that rising gas costs have cause financial hardship (USA Today/Gallup Poll, 2008). Although student financial aid may assist in tuition and housing costs, the cost of transportation remains a barrier to education and sustains the reality that individuals from low-income families remain less likely to participate in higher education (Brinkman, 2000, p. 7).

Transit benefits promote equity as they accrue to the entire community, not only directly to those who use them (Toor & Havlick, 2004). Similar to health insurance, the rates for campuses with a U-pass program are lower for the entire population to participate than smaller numbers of individuals (Toor & Havlick, 2004). This risk mitigation is at the heart of the Tri-C student controversy—RTA will not allow only the Metro campus to participate without the peripheral campuses (Farkas, 2009). Although the program would be welcome and benefit the Metro campus students, the RTA would receive such a reduced rate per trip that it could not sustain the service (Toor & Havlick, 2004). Since students who use transit are likely to have lower incomes than those who drive, they are also likely to tolerate only small price elasticity if transit fares increase on a regular basis (Toor & Havlick, 2004). One possible solution for Tri-C is to implement TDM policies that charge for parking and invest the new revenue in alternative modes, thereby improving transportation equity (TCRP, 2008; Toor & Havlick, 2004).

Statement of the Problem

The student body of the Cleveland State University largely resides within the same county as the campus. However, seven percent of student body resides in Lake County, an adjacent suburban county that offers commuter express service to the urban business district (Cleveland State University, 2009). Laketran, the regional transit system for Lake County, offers service which originates from five different communities within the suburban county, with one-way commuting distances varying between 18 and 52 miles. Of Laketran's 20 daily departures to the urban business district, 11 departures have direct stops at Cleveland State University campus, thereby potentially playing an important role in enhancing transportation access to higher education. For the spring 2009 semester at Cleveland State University, there were 557 undergraduate and 290 graduate students enrolled who reside in the Lake County communities directly served by a Park-n-Ride lot with express service to Cleveland (Chen, personal communication, March 12, 2009).

For students who reside outside of Cuyahoga County, the Cleveland State University U-Pass program falls short as it is applicable only to the partnership between the university and the local urban transit system, Greater Cleveland RTA. Partnerships for transit benefits are uncommon beyond the service area of urban systems, thereby leaving suburban students burdened with paying full costs of transit fares or car ownership—or having to forego attending college due to lack of affordable access (Fraser & Baginski, 2005). To mitigate this expense, Laketran offers an 11-Ride student ticket to CSU students with a current RTA sticker for \$12.50—a price that is approximately a 58 % discount off the regular 11-ride ticket rate of \$30. Within the six primary zip codes assigned to Lake County, Ohio the percentage of families living with income below the poverty level in 2007 ranges from 3.8 to 9.8 % (City-data.com, 2008). Within those same zip codes, the median household income for 2007 ranged from \$49,600 in Eastlake to \$53,300 in Painesville to \$63,400 in Mentor (City-data.com, 2008). In the current economy, unemployment, home foreclosures and financial hardship are at record levels, thereby increasing the potential that these numbers of families in poverty may increase and median income may decrease. Partnerships between transit and education will be important to those in need of education and employment.

The purpose of this study was to examine the relationship between the price of gas and suburban transit commuter ridership into the urban center and consider the implications the potential relationship may have on student attraction, access, retention and campus operations and policies.

Hypothesis/Aims

- Null Hypothesis 1: There is no relationship between suburban ridership by community and the price of gas.
- Null Hypothesis 2: There is no relationship between the suburban county ridership as a whole and the price of gas.
- Alternative Hypothesis 1: There is a relationship between suburban ridership by community and the price of gas.
- Alternative Hypothesis 2: There is a relationship between the suburban county ridership as a whole and the price of gas.

Aim 1: Based on the acceptance or rejection of the above hypotheses, what are the implications for urban universities in attracting and retaining suburban students?

Method

This study first employed a correlational design to determine if a relationship exists between ridership and the price of gas. Following the bivariate correlation, a one-way ANOVA was employed to test the differences in the mean number of riders in each community and in the county as a whole based upon gas prices falling above or below \$2 per gallon.

For the bivariate correlation, the independent variable was the daily price of gas and the dependent variable was daily ridership count for each of the five communities where park-n-ride lots are located and the county as a whole. Both were continuous variables.

Data for the suburban transit ridership was based on a convenience sampling of ridership gathered from ridership reports by route from Laketran for August 1, 2008 to January 31, 2009. August 1 was selected as the start date as it was the first date for which retail gas prices could be tracked back to on a daily basis. Gas pricing was gathered from a single gas station in the suburban area for consistency in pricing structure.

The data were entered into SPSS. A bivariate correlation, which is used to test the strength of a relationship between two variables, was conducted between ridership at each commuter express transit service location and for the suburban county as a whole in relationship to gas prices. The resulting Pearson's r values range between -1 and +1, and tells us the strength of the relationship. Using a critical r table at a significance level of 0.01 we can determine if the correlation is an important one in that a significance level of p < .01 means that we are 99 % confident that a relationship does exist.

To take the study one step further, the r^2 value, the coefficient of determination value, was also calculated. Calculating the r^2 value can explain what amount of variation in one variable is shared by another variable—in this study, what amount of variation in ridership at each location can be explained by the variance in the price of gas.

Following the bivariate correlation analysis, the gas prices were categorized into two price groups—when gas prices were above \$2 per gallon, and when gas prices dropped below \$2 per gallon. A one-way analysis of variance (ANOVA) was conducted for each community location and for the suburban county as a whole to measure if ridership had changed in relation to gas prices.

The ANOVA allowed for comparison of the ridership means of each location with gas prices categorized by two price points—above or below \$2 per gallon. The study included 65 days with gas prices above \$2 per gallon and 62 days with gas prices below \$2 per gallon. The ANOVA was used instead of a *t*-test as the study compared more than two groups. Utilizing multiple t-tests could compound

the probability of Type I error, rejecting a null hypothesis when it should be accepted—in this study, a Type 1 error would be to reject the statement that there is no relationship between ridership and the price of gas, if there was in fact a relationship between these two variables. Significant F-values indicate the extent to which the independent variable, gas prices, affected the variance in the model compared to the individual error of the data. An F value that is above the Critical F value for a given study indicates a robust and accurate model. Eta squared (η^2) was calculated to measure the effect size and provide us with a measure of the proportion of the variance in our ridership (DV) that can be explained by the price of gas (IV).

Results

The correlation between ridership and gas prices was found to be significant in four of the five communities and for Lake County as a whole. Table A1 shows the Pearson's r value, observed significance level (p) and coefficient of determination (r^2) for each location and the county as a whole for the 127 days of tracking gas prices and ridership in this study.

Referring to a Critical r Value table for Pearson's Product Moment Correlation Coefficient, the critical r value for a two-tailed test with df = 125 and p = .01 is r = .254. As the r values in all communities and Lake County as a whole, except for Willoughby Hills are greater than .254, the null hypotheses can be rejected and the alternative hypotheses accepted for Madison, Mentor, Wickliffe, Eastlake and Lake County. However, as r = .081 for Willoughby Hills, we would accept the null hypothesis that there is no relationship between ridership and the price of gas for this location only.

Although the Person's r values for several groups ranged between .3 and .6, which is considered a moderate strength of correlation, the r^2 value can describe what proportion of the variance within the data can be explained by the relationship between the two variables—ridership and the price of gas. For ease of interpretation, we convert this value into a percentage (multiply by 100), then we can say in Madison 10.6 % of the variation in ridership can be explained by the variability in the price of gas. For Eastlake, Mentor, Wickliffe and Lake County, the variance in ridership that can be explained by variances in gas prices range from 10.2% to 12.5%. Consistent with the finding that the relationship between the price of gas and ridership in Willoughby Hills is not very strong, the variance in ridership variability at that location that can be explained the variance in gas prices is only 0.06%. Therefore, this also tells us that more than 87.5% of variation at each location is not accounted for by the price of gas.

The ANOVA results indicated significant changes in mean ridership at four locations and for the county as a whole (p < .01). Table 2 allows us to see the changes in mean ridership at each location and to identify Willoughby Hills as the only location where there is no significant change in mean levels of ridership in relation to gas being above or below \$2 per gallon based on a critical F(2, 125) = 4.79,

p=.01. Therefore, we reject the null hypotheses that there is no significant difference between ridership and gas prices at Madison, Mentor, Wickliffe, Eastlake and Lake County as a whole and we can accept the alternative hypotheses for these same locations. We accept the null hypothesis that there is no significant difference between ridership and gas prices at Willoughby Hills.

Eta squared (η^2) provides a measure of the proportion of the variance in ridership (DV) at each location that can be attributed to the price of gas (IV). Similar in treatment for interpretation to the r^2 value found in the correlation, the η^2 value can be multiplied by 100 to express the effect size of the ANOVA—the proportion of the variance in ridership explained by changes in gas prices. These range from a low of 1.8% in Willoughby Hills to a high of 12% in Wickliffe.

These statistical results suggest that transit riders in Lake County respond to fluctuations in gas prices when making transportation decisions. The implications for colleges will be further discussed relative to the cost of attending college, the parking demands for the college and equity in college access.

Discussion

The bivariate correlation revealed moderate strength in the relationship between ridership and the price of gas at most commuter express location and the county as a whole. The coefficients of determination allow us to explain a range of 0.06% up to 12.5% of the variation in ridership by the variability in gas prices. Conversely, this allows us to interpret the study result to indicate that the remaining variance in ridership at each location, which ranges from 87.5% to 99.04% of variance in ridership, is explainable by factors other than gas prices.

Employing an ANOVA allowed us to consider some practical considerations relative to the relationship between ridership and the price of gas by considering the mean ridership levels for each location with gas prices categorized as above or below \$2 per gallon. The tests indicate a drop in ridership in relationship to the drop in gas prices. In particular, when gas prices dropped below \$2 per gallon, mean daily ridership at Mentor and Wickliffe, the two busiest commuter express service locations in the study, dropped by 31 and 22 riders, respectively. As most buses used for commuter express service seat 48 passengers, these numbers have practical significance as they represent almost or greater than 50% of capacity on a single bus. When ridership falls below 50% on any given departure, that run is watched for further declines and evaluated for elimination. Should this occur, this could affect the number of opportunities student have to access campus by transit. In turn this could require owning an automobile or foregoing college attendance. Whether more students begin to drive by choice or necessity, the demand for parking spaces will increase and CSU parking capacity is already strained on many days.

To promote suburban transit use and potentially sustain a route, CSU could allow suburban systems to participate in

orientation days on campus. This would not replace the RTA U-Pass but complement it—if you cannot get to Cuyahoga County, the U-pass is of no value. Once in Cuyahoga County, a student's RTA U-Pass would get him around campus and to local destinations. Additionally, the admissions and recruiting offices could provide suburban transit information to new and prospective students with materials sent out or at college fairs.

To sustain the existing U-pass program, CSU students and administration could promote the fact that all students benefit even if they do not use it in terms of reduced parking demand. A larger student body similarly distributes all of the costs of education, thereby making college more affordable for everyone, so access for more students affects everyone. For those students who cannot be served by transit, CSU could offer premium parking spaces for those who carpool, again promoting education equity in the shared costs of transportation.

Student advocates and administration should speak out and write to legislators regarding the importance of public transit in accessing higher education. Individual stories are often more compelling than numbers and charts.

Limitations

The study was subject to several limitations. Gas prices were gathered from a single gas station for consistency in pricing structure. However, it may not have represented the lowest available local price. The CSU Trends report provides information about the county of residence, but then it does not break down by college, level, hour studied, or times of classes within the county heading. The CSU Office of Institutional Research and Analysis could provide information on the number of students by zip code and status, but not about course times to assist in understanding travel patterns. This makes it difficult to determine the potential for new ridership in any given county.

Laketran data and fares are collected manually by drivers each day so the count of students versus working adults is subject to error. The ridership numbers in this study also include the time span from mid-December to mid-January, a time period when colleges are closed for several weeks and many business riders take off for the holidays. January of 2009 was one of the snowiest on record and the severe weather may have impacted the number of riders who chose simply not to go to work or who had to remain home with children due to school closings. Ridership numbers may also reflect a number of corporate layoffs occurring during the current economic downturn.

Future Studies

The fluctuations in ridership warrant continued monitoring as gas prices begin to rise again and as transit efficiencies will be mandated by budget constraints. A survey of suburban systems could provide best practices in "feeder" campus partnerships as these were not found in existing studies.

Future studies should segment student behaviors in terms of number of credit hours being taken and the times of classes to better understand potential parking demand and access needs. Studies should also include consideration of carpooling in return for better parking access. Although both the r^2 and η^2 values indicate percentages in variance in ridership of up to 12.5% based on the price of gas, these values remind us that a much larger percentage of variation in ridership can be attributed to reasons outside of gas prices. Weather patterns, employment levels, service satisfaction levels and holiday dates should be included in future data studies as they may affect the ridership levels independent of the price of gas.

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Jessie Guidry Baginski is a doctoral student in Urban Education at Cleveland State University and Director of Communications at Laketran. Her research interests include civic engagement in young adults, crisis volunteerism, social foundations and leadership development. E-mail: j.baginski11@csuohio.edu.

Appendix

Table 1
Correlation of Gas Prices to Daily Ridership and Coefficients of Determination

Area	r	р	r²	
Madison	.326	0.00*	.106	
Mentor	.354	0.00*	.125	
Wickliffe	.352	0.00*	.123	
Eastlake	.319	0.00*	.102	
Willoughby Hills	.081	.365	.006	
Lake County	.353	0.00*	.124	

^{*}p < .01

Table 2
Mean Ridership and Effect Size

_		Above \$2			Below \$2					
Area	М	SD	n	М	SD	n	F	p	η^2	
Madison	55.95	8.48	65	47.50	14.20	62	16.77	.000*	.118	
Mentor	237.88	37.21	65	206.48	54.63	62	14.437	.000*	.104	
Eastlake	52.66	9.56	65	46.10	14.50	62	9.166	.003*	.068	
Wickliffe	161.22	19.16	65	139.39	37.79	62	17.090	.000*	.120	
Willoughby Hills	31.71	11.84	65	28.34	13.00	62	2.335	.129	.018	
Lake County	539.42	63.09	65	467.81	128.11	62	16.195	.000*	.115	

Spotlight on Graduate Research

Faculty Reward Systems and Academic Capitalism: Business Faculty Income Inside and Outside the Institution

Shan Lin Queen's University

Abstract

Market forces have driven American higher education from a public good regime to an academic capitalist regime. To examine how this regime shift influences the quality of business education in the US, we use field of specialty, institutional characteristics, demographics, and personal achievements to predict faculty income from inside and outside the institution of employment. We find that inside and outside incomes conflict with each other in that variables measuring faculty quality are positively related to inside income, but negatively related to outside income. This implies that the regime shift brings potential damage to the quality of American business education as outside income creates competing incentives with inside income.

Introduction

Faculty salary touches one of the core issues in higher education at both individual and institutional levels. At the individual level, it has financial and personal ramifications (Stewart, Dalton, Dino, & Wilkinson, 1996) and, at the institutional level, it affects mission implementation and quality enhancement (Sutton & Bergerson, 2001). The importance of the matter can also be observed in the annual report of American Association of University Professors, which demonstrates the devaluation of higher education by comparing faculty salary raises with the annual inflation rate (AAUP, 2008).

Faculty salary is also associated with the direction in which American Higher Education is moving. Slaughter and Rhoades (2004) recently argued that market forces have driven higher education from a public good regime to an academic capitalist regime in an increasingly globalized economy. Market-like behaviors, according to them, refer to institutional and individual competition for money, including grants, contracts, fees from industry partners, and endowment funds. In this connection, faculty income, especially that from outside the institution, is closely related to and contributes to the regime shift. This paper uses different faculty income sources to examine whether the different sources of income reward talent consistently in American business education as far as the quality of faculty and institutions are concerned. In other words, we want to investigate how an academic capitalist regime influences the quality of faculty as well as that of institutions.

Individual faculty income can be decomposed into two parts: that from inside the institution where the faculty is employed and that from outside the institution. The intuition behind examining the two sources of income separately stems from two main factors that facilitate postsecondary faculty's participation in out-of-school employment: they have a 9- or 10- month employment period during a calendar year; and they have expertise that is valuable outside of school (Lin-

nell, 1982). In this study, total income from the institution includes basic salary for the 2003 calendar year and other income from this institution. Total outside income, in contrast, represents all income from sources outside the sampled institutions for the 2003 calendar year, including employment at another academic institution, consulting income, income from non-consulting employment, etc. (National Center for Education Statistics, 2005). Based on the mentioned income definitions, this study assumes that faculty income outside the institution is mainly from research contract and/or consulting work based on field expertise and professional ability. Therefore, faculty income from outside the institution can serve as a valid proxy for the regime change according to the theory of academic capitalism (Slaughter & Rhoades, 2004).

This research explores factors that influence faculty income, and how these factors influence income from inside and outside the institution differently. The predictors of income include variables addressing four dimensions: field of specialty, institutional characteristics, demographics, and personal achievements. More specifically, the paper addresses the following four research questions for business faculty: First, what proportion of the variance can the four dimensions explain in terms of income from inside the institution? Second, what proportion of the variance can the four dimensions explain in terms of income from outside the institution? Third, do inside and outside incomes form conflicting reward systems in American business education? And, fourth, what are the policy implications of this research for business education?

The study solely explores business faculty income because business professors occupy a special niche in the postsecondary education system. For instance, unlike faculty in liberal arts, business faculty members often have ties with the business world, where opportunities in the industry not only drive their competitive salary edge higher but also bring in money from outside the institution. This is why business professors are generally one of the top earners in academe

(Schneider, 1999). Hence, the business field is perhaps the most appropriate area to examine the theory of academic capitalism.

Data from the 2004 National Study of Postsecondary Faculty (NSOPF:04) are used to construct the linear regression models in this study. Since any effective faculty reward system should be a part of an institution's strategic planning process and should reflect the institution's culture (Stewart et al., 1996), examining the consistency of incomes from inside and outside the institution as two faculty reward systems has significant theoretical as well as practical implications.

Relevant Literature

Faculty income variations take different forms. Four of the most common dimensions: field of specialty; institutional characteristics; demographics; and personal achievements, are broadly available in the current literature (Lee, 2002; Stewart et al., 1996; Toutkoushian & Bellas, 2003; Webster, 1995). Conceptually, demographics and personal achievements are often combined to form the personal traits variables. Therefore, the research design treats field of specialty in business as the main predictor and uses institutional characteristics and individual traits as controls.

Field of specialty has a strong impact on faculty salaries. For example, professional schools pay better than anywhere else in academe (Lee, 2002; Schneider, 1999). Income variations also occur within each business school. Finance professors, for instance, command the best salaries because of finance PhD shortages compounded by the competition for talent from the industry (Hobbs, Weeks, & Finch, 2005). Nevertheless, studies have yet to assess how field of specialty in business influences income within and outside the institution differently. The lack of information in this regard sets up a starting point for this investigation.

Besides field of specialty, institutional characteristics, mostly classified by the Carnegie Foundation for the Advancement of Teaching, often have a significant impact on faculty salaries. For example, doctoral institutions, especially research intensive universities, often do not give much weight to outside connections, such as participation in professional organizations and consulting, in the tenure and promotion process (Maskooki & Raghunandan, 1998). It also seems counterintuitive that most business faculty members working for public institutions are paid better than those working in private institutions, with the exception of finance professors, according to Schneider (1999). This finding is directly contradictory to the claim that the pay gap between public and private universities is widening (McCormack, 2005; Smallwood, 2001). Again, it is still not entirely clear how these institutional characteristics are tied to inside and outside incomes of business faculty.

Three of the most cited demographic variables are considered in this study: gender, ethnicity and age. In exploring gender differences, Nettles, Perna, Bradburn, and Zimbler (2000) find that female faculty are more likely to be pri-

marily responsible for teaching, to have lower salaries than male faculty, and are less likely to be tenured or to be full professors. However, Omundson and Mann (1994) do not find a significant gender difference in terms of salaries among accounting professors when assessing their scholarly productivities. In examining the "quality of life" in the academic workplace for white and black faculty in predominantly white institutions of social work, Davis (1985) finds that black faculty perceived barriers in the academic workplace that prevented them from receiving respect. In a study of Latino faculty members' attitudes towards the workplace, Aguirre, Martinez, and Hernandez (1993) find that Latino faculty perceive few opportunities in the academic workplace for assuming leadership roles or positions with the potential for leadership. In contrast, white faculty members perceive the academic workplace as open to anyone interested in pursuing leadership roles or positions. The findings overwhelmingly suggest that female and minority faculty have a long way to go before reaching equity (Luna, 2006). The issues will be re-examined using the NSOPF:04 data in terms of inside and outside income for business faculty members.

In addition to looking at the demographic breakdown, it is important to examine how personal achievement variables are related to business faculty incomes. Six personal achievement variables are considered in this study: full/part -time employment, rank, tenure, number of refereed journal articles in one's career, educational attainment, and institution from which the person graduated. Rajagopal and Lin (1996) find that part-time faculty have lower status in terms of teaching, research, and decision making. They are paid much lower than full-time faculty members are, even when pay is expressed on a per hour basis (Toutkoushian & Bellas, 2003). This study further examines whether part-timers' relatively lower pay is compensated through outside employment. Rank is a milestone of academic achievement directly related to salaries (Nettles et al., 2000), while tenure in academia means academic freedom guarded by job security. Once tenure is granted by the employer, a faculty member can only be fired for cause. Recent studies have found that scholarly productivity is the central criterion in the tenure and promotion decision (Fairweather, 2002; Gibbs & Locke, 1989; Green, 1998). A variety of indicators for publishing productivity are used to assess faculty scholarship (Green, Bellin, & Baskind, 2002), but the number of articles published in peer-reviewed journals has emerged as the single most frequently used measure of faculty scholarship (Bloom & Klein, 1995; Green, 1998; Park, 1996; Seipel, 2003).

In brief, the literature informs us that the four dimensions discussed earlier do have varying degrees of impact on faculty salaries, but the impact of these dimensions on inside and outside incomes of business faculty, and the magnitudes and directions of these influences have yet to be assessed.

Data and Methodology

Data used in this research are from NSOPF:04, which was designed to provide nationally representative data on

faculty and staff at two- and four-year degree-granting institutions in the United States. The survey included questions on the activities and instructional duties of postsecondary faculty and instructional staff during the fall term in 2003. Faculty and instructional staff participating in the survey were asked a series of questions regarding their teaching, research, and life, including income figures from inside and outside the institution. Because this study explores business faculty only, the variable "faculty status" is used to select faculty members. The size of the selected sample, after applying normalized weighs, is n = 1,728 across 920 institutions in the United States, while the original weighted sample size of n = 80,196, represents the entire business faculty members in the United States. Four linear regression models are developed to answer the four related research questions brought up earlier.

Results

The first part of the results displays the descriptive statistics. Table 1 shows the total income for business faculty in eight different fields, separately reporting incomes from inside and outside the institution. In 2003, the average business faculty made \$84,760, not controlling for their field of specialty, institutional characteristics, and individual traits. Sorting by field of specialty, the total income of faculty in Finance topped the list (\$101,341), followed by Marketing (\$94,372), Accounting (\$86,676), and Management Information System (\$85,989). The income of faculty in Business Operations and Supports is at the bottom (\$61,616), with

Other Business Related Areas (\$74,673), Human Resources (\$80,483) and Business Administration (\$82,894) in between. The result supports Schneider's (1999) claim that faculty in Finance make the highest income when total income is considered. However, faculty members in Marketing make the highest income inside the institution while faculty members in Finance make the highest income outside the institution in terms of average dollars.

Table 1 also illustrates that almost half (43%) of all business faculty income comes from outside the institution, with Other Business Related Fields showing the highest percentage (49%) of outside income and Business Operations and Supports representing the lowest percentage of (28%) of outside income. The large proportion of outside income makes us curious about how income from the institution differs from income from outside the institution and how institutional characteristics and individual traits affect inside and outside incomes differently.

To answer the research questions raised earlier, we take two steps. First, we re-code categorical variables as dummy variables and run descriptive analysis over all our predictor variables. Second, we conduct eight linear regressions based on inside and outside income variables.

Table 2 displays the results from descriptive statistics for independent variables where detailed recoding is contained in the parentheses. While it does not make sense to run descriptive analysis on categorical variables, when coded as dummy variables the variables can be interpreted as a percentage of the category coded as 1. For example, the largest field in the school of business is Business Administration (22%), followed by Accounting and Other Business Related Fields (20% respectively), Finance and Marketing (11% each), and Management Information System and Human Resources (7% respectively). Business Operations and Supports is the smallest field and makes up 3% of the total business faculty.

Table 1
Incomes Inside and Outside the Institution by Field of Teaching in Business

	Total Income*				e inside stitution	Income outside the Institution		
Field of Specialty	n	Mean	%**	Mean	SD	Mean	SD	
Finance	188	101,341	46	54,541	51,882	46,800	58,425	
Marketing	190	94,372	36	60,463	51,324	33,909	45,674	
Accounting	344	86,676	44	48,756	49,595	37,919	49,099	
Management info sys	119	85,989	31	59,119	44,750	26,871	36,647	
Business Admin	373	82,894	44	46,332	45,576	36,562	47,199	
Human resources	121	80,483	46	43,852	47,935	36,632	38,437	
Other Business related ^a	348	74,673	49	38,076	42,089	36,597	48,583	
Business op supports	44	61,616	28	44,173	37,605	17,442	30,153	
Total	1,728	84,760	43	48,251	47,505	36,509	47,724	

Source: The 2004 National Study of Postsecondary Faculty (NSOPF:04)

¹ Some non-faculty participated in the NSOPF:04 survey and therefore were included in the dataset. In order to explore business faculty only, we excluded those who had no faculty status in the survey.

² Normalizing the weights is a technique used to make statistic models more robust when national weighted sample is used. Specifically, normalizing the weights decreases the probability of finding significant results simply as a consequence of a larger sample size.

^{*} Total income = income inside the institution + income outside the institution. These are average total income for professors by field.

^{**} This figure represents outside income as a percentage of total income.

^a Other business includes business, management, and marketing related business.

Table 2
Descriptive Statistics of Independent Variables

Model	Variable	Mean	SD
Teaching Fields	Finance (finance = 1 and else = 0)	0.11	0.31
	Marketing (marketing = 1 and else = 0)	0.11	0.31
	Accounting (accounting = 1 and else = 0)	0.20	0.40
	Management info sys (info sys = 1 and else = 0)	0.07	0.25
	Business Admin (admin = 1 and else = 0)	0.22	0.41
	Human resources (HR = 1 and else = 0)	0.07	0.26
	Business operation & supports (OP = 1 and else = 0)	0.03	0.16
	Other Business related (Other =1 and else = 0)	0.20	0.40
Institutional	Number of faculty	997	1,190
Characteristics	Undergraduate enrollment	9,463	8,369
	Graduate enrollment	2,429	3,385
	Core expenses on instruction (in thousands of dollars)	\$91,810	\$161,135
	Core expenses on research (in thousands of dollars)	\$39,927	\$100,874
	Four Year Institution (four year institution=1 and else=0)	0.74	0.44
	Institution control (public institution=1 and else=0)	0.61	0.49
	Institutional strata (2000 Carnegie code, 5 categories: other=1, associate=2, baccalaureate=3, master=4, doctoral=5)	3.46	1.36
	Degree of urbanicity (rural = 1, small town = 2, large town = 3, urban fringe of middle size city = 4, urban fringe of large size city = 5, midsize city = 6, large city = 7)	5.33	1.73
Demographics	Gender (female=1 and else=0)	0.30	0.46
	Minority (minority=1, else=0)	0.13	0.34
	Age	51.03	10.43
Personal	Employment status (employed full-time = 1 and else = 0)	0.52	0.50
Achievements	Rank (no rank = 1, lecturer = 2, instructor = 3, assistant professor = 4, associate professor = 5, professor = 6)	3.38	1.84
	Tenured (tenured = 1 and else = 0)	0.28	0.45
	Number of Refereed Journal Articles	7.36	18.08
	Educational attainment (PhD = 1 and else = 0)	0.39	0.49
	Institution graduated(research intensive institution = 1, else = 0)	0.54	0.50

Source: The 2004 National Study of Postsecondary Faculty (NSOPF:04)

Number of Faculty = 1526 Number of Institutions = 583

On average, each institution employs 997 faculty members, and enrolls 9,463 undergraduate and 2,429 graduate students. The average institution spends \$91,810,000 on instruction, and \$39,927,000 on research. The majority of the institutions are four-year (74%) and public (61%) colleges. The average degree granted is above a Bachelor's degree and slightly shy of a Master's degree (mean = 3.46), and most institutions are located in urban areas (mean = 5.33).

In terms of the demographics, we observe that three in ten business faculty members are female, 13% are minority, and a typical business professor is around 51 years old. In terms of personal achievement, slightly over half (52%) of the faculty are employed full-time and the average professor is ranked slightly above assistant professor. Almost three in ten business faculty members are tenured (28%), and on average, a business professor in her/his career publishes 7.36 refereed journal articles. Almost four in ten of the business faculty members hold PhD degrees (39%) and over half of them graduated from doctoral research intensive institutions (54%).

Table 3 presents the four regression models³ that are used to answer research questions 1 and 2 described in the methods section. Each model has two sub-models depending on income from the institution (I sub-model) or income not from the institution (O sub-model).

Model 1

Model 1 serves as a base model where only field of specialty is entered into the regression. Other Business serves as the reference group, measuring against Finance, Marketing, Accounting, Management Information System, Business Administration, Human Resources, and Business Operation. Overall, the field of specialty variable hardly explains the variations in business faculty salaries inside and outside the institution at all. R^2 values of 2.3% and 1.2%

³ This research assumes that the variations in faculty income can be partially explained by the quality of faculty and their work through regression analysis. If highly qualified faculty members focus largely on outside income, then the quality of business education inside the institution may suffer.

indicate that only 2.3% of the variance is explained for inside income while only 1.2% of the variance is explained for outside income. In terms of income from inside the institution, Marketing (14.7%), Management Information System (11.2%), Finance (10.8%), Accounting (9%), and Business Administration (7.2%) all have significantly higher income than Other Business Related Field (percentages are higher than the reference group). Human Resources and Business Operations and Supports, however, have higher, but insignificant income relative to the reference group.

The model gives us some important findings regarding income from outside the institution. Only Finance has significantly higher outside institutional income (6.7%) than the reference group, while Business Operations and Supports, on the other hand, has significant negative income (–6.4%) relative to the reference group. The overall message from the first model is that there exist more income variations for inside income than outside income in spite of income variations occurring across different fields of specialty in business.

Model 2

The first model reveals that inside and outside institution incomes have different features that may be tied to institutional characteristics. Two relevant questions are subsequently raised here: "Do institutional characteristics significantly affect business faculty income?" If so, then "Do institutional characteristics affect inside and outside incomes differently?" In order to address these questions, the introduction of the institutional characteristics in the second model as a control is necessary.

Overall, institutional characteristics dramatically increase the power of the regression. The second model is able to increase variance explanation for incomes inside and outside the institution by 23.9% and 10.2% respectively. Specifically, institutional characteristics have little impact on faculty income from the institution. Two institutional variables, number of faculty (p < .001) and graduate enrollment (p < .05) are negatively significant in influencing faculty income inside the institution. One possible explanation is that institutions with a large number of faculty members tend to be in metropolitan areas where a large number of part-time faculty are employed (Stewart et al., 1996). The same model reveals that almost all institutional characteristics have significant negative impact on faculty's outside income, where the number of graduate enrollment (-20.6%, p < .001) and doctoral institution (-19.4%, p < .001) greatly reduce faculty income from outside the institution. The number of faculty (28.3%, p < .001) and degree of urbanicity (7.6%, p< .01) variables compellingly show positive effects on outside income. Again, a large proportion of part-time faculty and metropolitan locations tend to facilitate earning income outside the institution.

Table 3
Regression Results Of Business Faculty Incomes Inside and Outside the Institution

	Mod	del 1	Mod	el 2	Mode	el 3	Model 4	
Independent Variable	1	0	I	0	1	0	1	0
Finance	0.108***	0.067*	0.048	0.040	0.044	0.034	0.003	0.054*
Marketing	0.147***	-0.018	0.096***	-0.002	0.099***	-0.010	0.030	0.029
Accounting	0.090***	0.011	0.083**	0.026	0.082**	0.029	0.042*	0.058*
Management information system	0.112***	-0.052	0.070**	-0.035	0.068**	-0.029	0.025	0.002
Business administration	0.072*	0.000	0.026	-0.006	0.029	-0.024	-0.002	-0.004
Human resources	0.031	0.000	0.001	0.005	0.001	0.008	0.003	0.002
Business Operations and Supports	0.020	-0.064*	0.057*	-0.057*	0.061**	-0.031	-0.004	0.013
Number of faculty			-0.301***	0.283***	-0.292***	0.266***	-0.122***	0.155**
Undergraduate enrollment			0.140	-0.206***	0.145***	-0.207***	0.057*	-0.155***
Graduate enrollment			-0.010*	0.056	-0.017	0.076	0.030	0.031
Core expenses on instruction (in 1000)			0.175	-0.009**	0.168**	-0.007	0.032	0.098
Core expenses on research (in 1000)			0.262	-0.089*	0.260***	-0.083*	0.212***	-0.057
Four Year college			0.088	0.092*	0.081	0.081*	-0.055*	0.166***
Institution control			0.101	-0.099**	0.091	-0.092**	-0.077***	0.024
Institution strata			0.266	-0.194***	0.266	-0.198***	0.052*	-0.047
Degree of urbanicity			-0.055	0.076**	-0.062	0.083**	0.000	0.031
Gender					-0.023*	-0.181***	-0.020	-0.172***
Ethnicity					0.062	-0.113***	0.005	-0.075***
Age					-0.020*	0.063**	-0.057***	0.062**
Fulltime							0.507***	-0.465***
Rank							0.091***	-0.052
Tenure status							0.083***	0.011
# of refereed journal articles							0.075***	0.017
Educational attainment							0.134***	-0.085**
Institution graduated from							0.046**	-0.007
(Constant)	38.1***	36.6***	-0.33	46.9***	5.94	40.2***	14.1**	42.8***
R^2	.023	.012	.262	.114	.267	.169	.695	.402

Notes: 1) I = Inside income, O = Outside income;

^{2) *}p < .05, **p < .01, ***p < .001;

³⁾ The table is based on Betas.

Model 3

The demographic dimension has been added in Model 3. Overall, this dimension adds only 0.5% to the explanatory power for variance for inside income. However, it increases the explained variance for outside income to 5.5%. The variables Female (-2.3%, p < .05) and Age (-2.0%, p < .5) seem to have slightly negative impacts on inside income. All demographic variables, however, have strong significant impacts on outside income. Females earn 18.1% less outside income than their male counterpart while minorities make 11.3% less outside income than whites. Age also shows a positive impact on outside income. All these may reflect the fact that the business world is still male and white dominated, and a heavily networked profession. Females not only make less money inside institution, but they are also largely excluded from the networks outside the institution, as demonstrated through their outside income numbers.

Model 4

Model 4 is the full model including all four dimensions of the study. Field of specialty is largely insignificant in predicting income from inside the institution, except in Accounting (4.2%, p < .05). In contrast, however, Accounting (5.8%, p < .05) and Finance (5.4%, p < .05) are two fields that can significantly predict outside income. In other words, faculty who specialize in Accounting and Finance make significant income from outside the institution even after controlling for institutional characteristics, demographics, and personal achievements.

In this model, institutional characteristics, when significant, predict inside and outside incomes in opposite directions. For instance, the number of faculty members listed in the institution negatively predicts inside income (-12.2%, p < .001), but positively predicts outside income (15.5%, p < .01). Graduate enrollment has a positive impact on inside income (5.7%, p < .05), but has a strongly negative impact on outside income (-15.5%, p < .001). Core expense on research has a strong positive impact on inside income (21.2%, p < .001), but it has an insignificant and negative impact on outside income. In this model, the four-year college variable's predictive power on inside income shifts from a positive to a negative effect (-5.2%, p < .05). Nevertheless, it has a very significant and positive impact on outside income (16.6%, p <.001). Being from a public institution has a negative impact on faculty inside income (-7.7%, p < .001) in contrast to being from a private institution, while it has an insignificant impact on outside income. Being from a doctoral institution has a significant and positive impact on inside income (5.2%, p < .05), but it has a negative insignificant impact on outside income.

On the demographic dimension, we observe that gender is an insignificant predictor of inside income, but a very significant negative predictor of outside income (-17.2%). Again, minority status has an insignificant impact on inside income, but a very significant and negative impact on out-

side income (-7.5%, p < .001). On the one hand, the finding that gender and ethnicity have little impact on income from inside the university indicates real progress in faculty income inequity in contrast to gender income gaps (Cooke, Boyle, Couch, & Feijten, 2009) and minority income gaps (Rodgers, 2008) observed in the general workforce. On the other hand, the gender and minority variables have a significant negative impact on income from outside the university, meaning the progress made is limited to inside the institution. Age has a significant negative impact on inside income (-5.7%, p < .001), but a significant positive impact on outside income (6.2%, p < .001). Evidently, it appears that income inequality in terms of gender and ethnicity exists more so outside the institution than inside the institution.

Personal achievement is the last dimension introduced into the analysis. Overall, personal achievement is the single most powerful predictor that enhances the power of the model. It explains an additional 42.8% of the variance for inside income and an additional 23.3% for outside income compared to Model 3. Specifically, all attributes of personal achievement have a positive and significant impact on inside income. For instance, full-time faculty members make more than 50% (p < .001) inside income than those part-time faculty members do. Faculty members who hold a PhD degree make 13.4% more than those who do not have a PhD degree. Each rank increase raises inside income by 9.1%. Faculty who are tenured make 8.3% (p < .001) more than those on tenure track or not tenured. Refereed journal article is one of the core indicators of academic achievement which has a significant positive impact on inside income (7.5%, p < .001), but no effect on outside income. As far as inside income is concerned, faculty who graduated from prestigious institutions also make 4.6% more than those who graduated from average institutions, but no similar effect can be observed on outside income.

In contrast to inside income, these personal achievement factors are either insignificant predictors of outside income or even negative predictors, when significant. For instance, being a full-time faculty member has a very strong negative impact on outside income (-46.5%, p < .001). In other words, the lost inside income for part-time faculty members is largely compensated by their income from outside the institution, and the opposite is true for full-time faculty members. As described earlier, the number of refereed journal article has a positive impact on inside income (7.5%, p < .001) but has no statistically significant impact on outside income.

Table 4 summarizes the empirical evidence to answer the third question, do inside and outside incomes form conflicting reward systems in American business education? Overall, among the 18 income predictors, 13 conflictingly impact income by predicting inside and outside incomes in opposite directions. Among these 13 conflicting predictors, 6 are statistically significant. Specifically, among the 9 institutional characteristics, 6 of them are predicting inside and outside incomes in opposite directions. Moreover, all demographic predictors are conflicting, and among the 6 personal achieve-

Table 4
Conflicting Reward Systems

Dimension	Variable	Inside Income	Outside Income	Conflict?	Both Sig?
Institutional Characteristics	Number of faculty	-0.122***	0.155**	Yes	Yes
	Undergraduate enrollment	0.057*	-0.155***	Yes	Yes
	Graduate enrollment	0.030	0.031		
	Core expenses on instruction	0.032	0.098		
	Core expenses on research	0.212***	-0.057	Yes	
	Four Year college	-0.055*	0.166***	Yes	Yes
	Institution control	-0.077***	0.024	Yes	
	Institution strata	0.052*	-0.047	Yes	
	Degree of urbanicity	0.000	0.031		
Demographics	Gender	-0.020	-0.172***	Yes	
	Ethnicity	0.005	-0.075***	Yes	
	Age	-0.057***	0.062**	Yes	Yes
Personal Achievement	Fulltime	0.507***	-0.465***	Yes	Yes
	Rank	0.091***	-0.052	Yes	
	Tenure status	0.083***	0.011		
	# of refereed journal articles	0.075***	0.017		
	Educational attainment	0.134***	-0.085**	Yes	Yes
	Institution graduated from	0.046**	-0.007	Yes	

Notes: 1) *p < .05, **p < .01, ***p < .001;

2) The table is based on Betas.

ment variables, 4 of them are inconsistent. In brief, inside and outside income reward systems for business faculty, to a large extent, do conflict with each other. Higher personal achievement and institutional prestige tend to have a positive impact on inside income and a largely negative impact on outside income.

Conclusion

After examining two distinctive sources of faculty compensation, the research concludes that field of specialty, institutional characteristics, demographics, and personal achievements, to differing degrees, all impact both inside and outside incomes. Specifically, field of specialty in business has the least impact on faculty income among the four dimensions, although it has a stronger effect on outside income than it does for inside income. Institutional characteristics show that institutional prestige has minimal influence on inside income, but significant negative effect on outside income. The demographic dimension demonstrates that income equity among business faculty, to a certain degree, has been achieved within the institution. Nettle et al.'s (2000) assessment about salary inequality of gender and race is not fully supported in this study. The evidence here suggests that gender and ethnicity are insignificant in influencing inside income, but very negatively significant in predicting outside income. This shift of income inequality reveals that institutions have better control over inside rather than outside income, and traditional gender and racial income gaps are expressed through networks outside the institution. Personal achievement variables are all significant in influencing inside income which seems to reflect a meritocratic society. Unfortunately,

these personal achievement variables have a negative impact on outside income for the most part.

The conflicting nature of the two business faculty reward systems invites us to address the last question: what are the policy implications of this research result for business education? Scholars are deeply divided on how business education links to real world corporate practice. For example, Russell and Smith (2003) think that accounting education is partially responsible for the malfeasance of Enron and WorldCom, but Dosch and Wambsganss (2006) argue that the link is illogical and that accounting education is not alone. Income from outside the institution, earned through consulting or contract work, is one of the indicators that link academe to the real business world and should provide insight on this connection. However, the quality of business faculty, largely defined by the very structure of the university rather than the field of business is positively related to inside institutional income but negatively related to outside income. The contradictory results invite us to rethink the complex relationship between business academe and the corporate world. At the same time, the research results imply that the regime shift from public good to academic capitalism may bring potential damage to the quality of business education in the United States as outside income creates competing incentives with inside income. However, further studies over longer time periods are needed to demonstrate whether the trend persists over time.

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- Shan Lin is a PhD student (ABD) at the Queen's School of Business at Queen's University in Canada. Her research interests are in Business Education, Investments and Corporate Finance. E-mail: SLin@business.queensu.ca.

Racial/Ethnic Socialization Messages, Social Support, and Personal Efficacy among Adolescents

Francesca Pernice-Duca Delila Owens Wayne State University

Abstract

Associations between ethnic socialization and a sense of personal efficacy were explored among African-American, Hispanic, and Caucasian adolescents. We found that those who reported greater intimacy with their mothers were more likely to perceive them as sources of race-related socialization messages. Consisting of primarily African-American and Latino youths, members of this group were encouraged by their mothers to demonstrate greater racial and ethnic pride. In contrast, Caucasian youths were more likely to see their mothers as purveyors of tolerance and cooperation between diverse populations. A separate analysis involving the African-American subset revealed that adolescents who received messages imparting strong cultural and racial pride were related to reporting a greater sense of personal efficacy.

Racial/Ethnic Socialization

Research examining attitudes and perceptions about one's ethnic and racial reference group has documented the importance of these attitudes to the socialization process and psychological well-being of adolescents representing racial minority and ethnically diverse reference groups (Gushue, 2006; Murry-McBride, Berkel, Brody, Miller, & Chen, 2009; Phinney & Chavira, 1995; Rotheram-Borus, 1990). Commonly referred to as racial socialization, this process encompasses all race-related, parental communication to children that serves to influence the adoption of persistent race-related attitudes and behaviors into a child or adolescent's self-schema (Bowman & Howard, 1985; Hughes & Johnson, 2001). The term, as utilized in this paper, reflects what Hughes, Rodriguez, Smith, Johnson, Stevenson, & Spicer (2006) deemed an acceptable, integrated construct to capture messages transmitted about cultural customs, traditions, ethnic and racial pride as well as societal challenges for the group. These attitudes and behaviors in turn directly or indirectly affect the ways in which children may cope with the challenges of adult society.

In many racial and ethnic families, parents and other members of the extended family or community are actively involved in the rearing and socialization of children (Harrison, Wilson, Pine, Chan, & Buriel, 1990; McAdoo, 1999). Mothers have been frequently cited as the most significant source of information concerning one's ethnicity or racial reference group (Harrison, Stewart, Myambo, & Teveraishe, 1995, 1997); however, educators become equally important as parental socialization agents by transmitting messages of the culture's standards and expectations for behavior (Hess & Holloway, 1984; Wentzel & Looney, 2007). Thus, educators, like parents, are an important part of a youth's social network embedded in the larger social ecology that supports the development of a youth's identity, socialization skills, and personal efficacy (Harrison et al., 1990). In this context,

educators may also call upon their status as authority figures to stop the perpetuation of negative racial stereotypes as well as provide students with corrective social experiences that support healthy identity constructions and positive racerelations (Beach, Thein, & Parks, 2008). For example, while African-American parents may emphasize messages of spirituality and racial pride, they also try to actively prepare their children for racial bias and racial mistrust in many social arenas, including the school (Caughy, O'Campo, Randolph, & Nickerson, 2002). Educators, in particular, may serve an especially important role in this process as young people see the rules and expectations established at home put into practice in the real world (Howard, & del Rosario, 2000).

Racial/Ethnic Socialization and Personal Efficacy

Sociocultural theory in education emphasizes the role of social interaction and cultural heritage in childhood development. Parents, peers and teachers are all important to reinforcing prescribed ways of thinking about the environment. The way in which children learn to cope and deal effectively with their environment often plays out in important developmental arenas, such as the school setting and with educators. The shared responsibility between parents and educators is often viewed as a joint commitment to helping children become healthy and productive adults. Fostering a strong sense of racial or ethnic identity has been found to be an essential component in the development of social competencies within a youth's given culture (Gushue, 2006; Tiejen, 1989). However, it can be challenging for parents to maintain a healthy sense of cultural pride in their children, who remain immersed within a larger culture that imposes implicit prejudices or discrimination (McAdoo, 1978). In response to this challenge, Ogbu (2002) has identified socialization tactics rooted in a history of racial separatism. Ogbu's work suggests that resistance cultures socialize youths to reject mainstream culture and the associated culture of school, encouraging them to risk school failure simply to avoid becoming part of mainstream American or too "White." Alternatively, in a study conducted nearly two decades ago, Demo and Hughes (1990), found that youths were less likely to have separatist views about their race if they adopted a more individualistic orientation toward their racial group. The current investigation is designed to add to the emergence of studies recognizing the relationship between racial socialization messages and socioemotional functioning (Bannon, McKay, Chacko, Rodriguez, & Cavaleri, 2009), academic achievement, behavioral competencies, and family interactions (Hughes & Chen, 1999). Emerging research has demonstrated that parental reinforcement of higher levels of positive racial identity is associated with greater socioemotional well-being as compared to parents who endorse lower levels of cultural pride messages (Bannon et al., 2009). Bannon et al. (2009) found that strong racial or ethnic socialization messages and practices also served to buffer against risk factors for the development of mental health problems, such as anxiety. Given this previous investigation, it seems warranted to investigate the association between the type of racial socialization message transmitted to adolescents and the relationship to a personal sense of efficacy.

Source and Type of Ethnic Socialization Message

Among various racial and ethnic groups, African-American, Japanese, and Latino families provide more ethnic socialization messages that reinforce cultural pride and knowledge than Caucasian families (Quintana & Vera, 1999; Stevenson, 1994; Umaña-Taylor & Yazedjian, 2006). African-American parents are also more likely to report talking to their children about race and ethnicity as well as strategies to handle prejudice more often than Latino parents. (Phinney & Chavira, 1995). African-American parents are also less likely to convey messages of pride in one's cultural heritage than prepare children for the prejudice and discrimination they will experience (Hughes & Chen, 1997). In contrast, Caucasian parents tend to promote attitudes of tolerance and equality (Hughes, et al., 2008). Hamm (2001) noted that White parents may reinforce the *colorblind* perspective to their children and that minority groups must assimilate to mainstream behaviors (p. 67). The likelihood of parents imparting messages of racial socialization to their children tends to remain stable across demographic variables such as level of income or education (Thornton, Chatters, Taylor, & Allen, 1990). For instance, Phinney and Chavira (1995) found that independent of socioeconomic status, African-American parents emphasize goals of personal achievement and coping strategies to cope with the mainstream culture, whereas Latino and Japanese parents place greater emphasis on cultural pride more than any other group while also stressing achievement. In fact, Gushue (2006) found that positive ethnic identity had a direct and positive influence on career aspirations and personal efficacy among Latino adolescents.

The importance of personal efficacy beliefs in fostering a positive orientation toward education has been consistently

documented in a number of studies (Bandura, 2001; Martin, 2004; Pajares, 2009). Personal efficacy is defined as an individual's subjective beliefs and perceived ability to handle a particular kind of task (Bandura, 1977), which is predictive of both academic aspirations (Bassi, Steca, Fave, & Caprara, 2007) and later adult career choices (Pinquart, Juang, & Silbereisen, 2004). Personal efficacy beliefs are a central tenet of Social Cognitive Theory—Bandura's (1977) grand theory of human behavior. The personal efficacy precept provides a framework for understanding how beliefs about our abilities or capacities influence whether we approach certain tasks optimistically or pessimistically, engage in tasks with high or low motivation, or preserve in the face of difficulty (Bandura, 1986). Individuals may have beliefs about their personal efficacy in a variety of domains ranging from academic ability to a more global sense of personal efficacy which involves the belief that one has the capacity to have an effect or control thier environment (Bandura, 1997, 2001).

During adolescence, youth are experiencing both psychological and physical changes (Freiberg, 2000), and an adolescent's personal efficacy beliefs can be critical to their emotional development and later adult lives (Bacchini & Magliulo, 2004). Yet, studies involving African-American and Latino adolescents with respect to ethnic socialization and its link to personal efficacy and later outcomes have been scattered (see Harrison-Hale, McLoyd, & Smedley, 2004; Huynh & Fuligni, 2008). In a recent study, Kerpelman, Eryigit and Stephens (2008) found that ethnic identity, maternal support, and personal efficacy were predictive of future orientation toward education, particularly for African-American youths. Huynh and Fuligni (2008) demonstrated that adolescents from Mexican, Chinese, and European backgrounds with higher levels of cultural socialization were more motivated toward the attainment of a quality education in their lives. Further, having parents who promoted greater mistrust of other ethnic groups was predictive of lower overall GPA among their children.

Bowman and Howard's (1985) original study provided an initial investigation of race-related socialization messages, personal efficacy and subsequent academic achievement among African-American youth. They examined families across two generational lines (i.e., parents and grandparents), and found positive race-related socialization messages highly correlated to academic achievement, motivation, and personal efficacy among a sample of African-American youths. Bowman and Howard's study also revealed that transgenerational messages; that is, messages transmitted from relatives one generation removed, such as grandparents, emphasized a strong sense of personal development as well as individual and group responsibility. Their study emphasized the importance of familial socialization messages that provide youths with race-relation strategies that made them cognizant of specific social disparities in society. African-American youths who received such messages, either orienting them toward racial equality or racial pride, were more likely to have higher personal efficacy scores than those who did not receive any socialization message. More recently, Hughes, Witherspoon, Rivas-Drake, and West-Bey (2009), found that positive ethnic/racial socialization messages directly influenced students academic efficacy even when controlling for the student's level of self-esteem.

Study Objectives

The interest in ethnic and racial socialization is well documented in the literature, with studies going back as far as 1937 (see Hughes et al., 2006 for review). For the current investigation, Bowman and Howard's (1985) methods utilized in their classic study sets the foundation for the current investigation. Here, questions to assess adolescents' perceptions of their mothers imparting messages of ethnic or cultural socialization were gathered using two open-ended questions from Bowman and Howard (1985) ethnic socialization instrument. The sample study includes students in high school, because they are more likely than younger children to acknowledge and understand ethnic or racial socialization messages (Hughes & Chen, 1997,1999).

We predicted that African-American and Latino youths would report receiving ethnic or race-related socialization messages from their mothers, whereas Caucasian youths would be more likely to report receiving socialization messages of tolerance or "getting along" with other groups. It is expected that African-American and Latino youths who receive race-related socialization messages that reinforce identities to the ethnic reference group will report high personal efficacy scores, whereas youths who do not receive such messages or instead receive messages reinforcing an individual orientation without reference to an ethnic or racial group would have lower personal efficacy scores.

Three groups of adolescents from three separate communities were sampled from a larger study examining personal efficacy. Communities were selected on the basis of majority representation of the racial or ethnic group. This method was employed in order to increase the probability that children would adopt the attitudes and values of the larger community's reference group. In addition, adolescents tend to report being members of ethnically, racially and socially economically homogenous cliques (Ennett & Bauman, 1996).

Methods

Participants

A total of 171 high-school adolescents between the ages of 15 and 17 participated in this study. A total of 69 African-American (33 males, 36 females), 34 Latino (11 males, 21 females), and 68 Caucasian (34 males, 34 females) youths were selected from representative populations of the adolescents' ethnic and racial reference groups. Each sample was obtained from the same state. The sample of Latino youths were selected from a high school with a large Latino population, comprised of the descendents of migrant workers in

a mid-western state. The African-American youths were selected from an inner-city high school made up of 98% African-American students and located in a larger metropolitan area within the Midwest. The Caucasian sample of adolescents was selected from a high school in a predominately Caucasian small town. The majority of the African-American students reported living in one-parent homes as compared to Caucasian and Latino students.

Procedures

Each school was contacted by a member of the research team to assist in setting up procedures and recruiting students. Both parents and students were briefed about the nature of the study, and parents were required to provide informed consent for their son or daughter to participate. Students who were permitted to participate were also asked to give their own consent to participate. A research team member administered the test protocol in the classroom setting in each school. Students who were allowed to participate in the study were asked to individually complete the protocol within the context of a classroom setting. The research team member remained in the room during the time that students completed the measure to ensure that responses were independently completed.

Measures

Social support. The Network of Relationship Inventory (NRI; Furman & Buhrmester, 1992) was utilized to assess the perception of interpersonal support and relations among members of the adolescent's social network. The NRI is composed of a 41-item scale asking the same set of questions for up to six people in the youth's social network (e.g., mother, father, favorite relative, favorite teacher, best friend, and sibling). Adolescents were asked to read each statement and appraise the quality of support and interpersonal relations with each network member using a five-point scale (1 = little to none to 5 = extremely). The measure was analyzed using the five constructs based on Harrison et al. (1997) factor analysis. The subscales were summed and averaged for each member of the network (e.g., mother, father, relative, teacher, best friend, and sibling). Cronbach alphas for each subscale were computed for each member of the network. The range of alphas scores are presented from low to high for each NRI factor across and each network member: Intimacy subscale (3 items), $\alpha = .52$, and .90, Reliable Affection (6 items), $\alpha = .84$ and .94, Self-Enhancing Assistance (7 items), α = .75 and .92, Conflict and Discipline (5 items), α = .52 and .80, and Companionship (3 items), $\alpha = .63$ and .83. The NRI also yielded an aggregate measure of support from each member of the social network.

Given that other studies have demonstrated that mothers typically provide messages of ethnic identity to their children, the *Intimacy* factor of the NRI for mothers was selected for subsequent analyses examining the probability of receiving an ethnic socialization message. Level of intimacy with moth-

ers was characterized as the degree to which one feels he/she can trust their mother with personal information and feels close enough to share personal experiences (Harrison et al., 1997). Cronbach alpha for this subscale for mothers was .86.

Ethnic/racial socialization message. The extent to which students identified with an ethnic/racial reference group and related messages pertaining to that cultural group were measured using an instrument developed by Bowman and Howard (1985). The measure contains two open-ended questions that ask respondents to describe messages about his or her given cultural or ethnic group. Responses were categorized as either "group oriented" or "individual oriented" following Bowman and Howard's coding system. Each response was coded by two independent coders with agreement between them reaching kappa = .88. Question one was designed to assess whether youth consciously acknowledged receiving an overt message [i.e., When you were a child, were there things your mother did or told you to help you know what it is to be an African American/Latino/Caucasian (or White)?]. If youths recall receiving a message, a follow-up question prompted them to describe the type of messages they received (i.e., If yes, what are the most important things she taught you?). Responses to the follow-up questions were coded as either "group-oriented" or "individual-oriented." Responses were coded as group-oriented if youth described themselves as being driven toward achievement, accomplishments and pride in their ethnic group as a "group." Group oriented responses included messages that emphasized cultural history, loyalty and commitment, family history stressing ethnicity, racial barriers for the group and how to overcome them. For example, "to be proud of my culture...my mother told me about where I came from and there are some things I have to do to make it in life as an African American." Other responses coded as group oriented included "all my ancestors are White."

Responses were coded "individual oriented" if the youth was driven toward individual achievement without reference to an ethnic/racial reference group. Messages contained statements for what the youth had to do as an individual that is, emphasizing self-effort without reference to group self-development or achievement. For example, "I had to learn to fight for the things I want," or "...don't let anyone stop you from achieving your dreams."

Table 1 Questions Based on Bowman and Howard, (1985) Ethnic Socialization Construct

Questions:

- When you were a child, were there things your mother did or told you to help you know what it is to be an African-American/Latino/Caucasian (or White)?
 - 1a. If yes, what are the most important things she taught you?
- Are there any other things your mother told you about how to get along with other ethnic or racial groups?
 - 2a. If yes, what are the most important things she taught you?

Question two on Bowman and Howard (1985) questionnaire asked respondents to indicate whether they perceived their mother as imparting a message about "getting along" with other ethnic/ racial groups (i.e., Are there any other things your mother told you about how to get along with other ethnic or racial groups?). If youths indicated receiving such messages, then a follow-up question prompted them to describe these messages (i.e., If yes, what are the most important things she taught you?). Responses to this question were also coded as "group- oriented getting along message "and "individual- oriented getting along message." For this question, group-oriented getting along responses referred to messages instructing youths to relate to others as a reflection of the larger ethnic or racial group or as part of the group. Individual-oriented getting along codes referred to messages instructing youths to relate to others as an "individual" independent from the individuals' ethnic, cultural or racial reference group.

Personal efficacy. A ten-item Personal Efficacy Scale, adapted from Bowman and Howard (1985) and the work of Gurin and Epps (1974), was used to measure a global sense of personal efficacy, typically over their immediate environment, as well as the extent to which the youth feels prepared or capable to handle tasks in the environment. A five-point Likert-type scale assessed the extent of agreement across 10 statements (α = .92; 1 = strongly disagree to 5 = strongly agree), such as "You can do just about anything you really set your mind to; What happens in your life is often beyond your control."

Results

Gender, Ethnicity, and Ethnic/Racial Socialization Message

Data regarding ethnic socialization messages were of the following: (a) yes/no responses to two closed-ended socialization questions, and (b) socialization themes derived from coding the responses from two open-ended race-related questions. Open-ended responses were coded by two independent coders, each assigning one of three mutually exclusive socialization experiences codes derived from patterns within the socialization experiences. For the question inquiring about the type ethnic/racial socialization message received, responses were coded as (1) individual-orientation, (2) group-orientation, and (3) no message transmitted/acknowledged. For the question inquiring about the type of "getting along" with other racial groups message, responses were coded as (1) individual-orientation getting along message, (2) group-orientation getting along message, and (3) no getting along message transmitted/acknowledged. There was no relationship between how race-related socialization responses were coded and how race relation responses were coded across the three ethnic groups.

Gender. First, the probability of receiving a socialization message was examined by the youth's gender. A 2 (gender)

x 2 (message) Chi-Square test indicated that the relationship between gender and the likelihood of receiving a socialization message was not significant, χ^2 (1, N = 171) = 1.53, ns, indicating that both girls and boys were equally likely to acknowledge a race-related message. There were also no significant differences related to family configuration (e.g., one versus two parent families) and the likelihood of receiving a race-related socialization message, χ^2 (1, N = 171) = .14, ns.

Ethnicity. Second, ethnicity was examined in relation to the perceptions of receiving a race-related socialization message. A 2 (message) x 3 (ethnicity) Chi-Square test indicated that the relationship between receiving a message (i.e., yes or no) and ethnicity (e.g., African American, Latino, Caucasian) was significant, $\chi^2(1, N = 171) = 32.40, p < .01$. As expected, the proportion of African-American (57%) and Latino (71%) youths who perceived their mothers imparting a race-related socialization message was greater than those perceived by Caucasian youth (19%). African American and Latino adolescents who perceived greater intimacy with their mother were more likely to perceive their mothers imparting such messages, F(1,102) = 5.22, p < .05. This finding confirms what early studies have found in terms of how the quality of the mother-child relationship can influence whether a socialization message is shared (e.g., Bowman & Howard, 1985; Hughes & Chen, 1997).

Ethnic/Racial Socialization Message and Social Support

Type of message. The type of race-related socialization message imparted by mothers was examined across all three ethnic/racial groups. In response to the first question—When you were a child, were there things your mother did or told you to help you know what it is to be an African American/Latino/Caucasian (or White)? If yes, what are the most important things she taught you?)—African-American youths indicated messages that equally imparted either a group or

individual orientation, whereas Latinos were more likely to receive a message imparting a group orientation toward their ethnic group. Caucasian youths were equally likely to receive race-related messages reinforcing an individual orientation or not acknowledging a message about Caucasians, (77.9%), χ^2 (4, N=171) = 32.80, p < .001, Cramer's phi (Ø) = .31. Again, African-American and Latino youths who appraised greater intimacy with their mothers on the social support network questionnaire were more likely to indicate receiving some type of socialization message, F(2, 101) = 4.96, p < .01.

The second race-related socialization message in the study was based on Bowman and Howard's (1985) measure asking youths to indicate whether they perceived their mother as imparting a message about "getting along" with other groups and to describe the type of getting along message they received. The likelihood of adolescents in this sample acknowledging their mother imparting a race-relations message was not linked to family configuration (e.g., single vs. two parent homes), the level of social support from mothers, or the level of intimacy with their mothers.

A 2 (gender) x 2 (message) Chi-Square indicated that girls and boys were equally likely to perceive their mothers imparting a message of "getting along," with other racial or ethnic groups, χ^2 (1, N=171) = 3.75, p < .05. A 2 (type of getting along message) x 3 (ethnicity) chi-square indicated that all adolescents were more likely to receive a message of getting along than an ethnic/racial socialization message, but Latino (75%) and Caucasian (55%) youths were proportionately more likely to receive a message directing them how to get along with other ethnic/racial groups than African-American youths (42%), χ^2 (1, N=171) 9.63, p < .01. Although Caucasian youths were less likely to receive a message imparting specific ethnic/racial group identity, they were five times more likely to receive messages instructing them how to relate to other ethnic/racial groups (p < .01).

Table 2
Racial and Ethnic Socialization Messages by Ethnicity

	Participants		
	African-American n (%)	Latino n (%)	Caucasian n (%)
Type of Message	Ethnic/racial socialization message		
Nothing transmitted about my group	33 (46.5%)	12 (37.5%)	53 (77.9%)
Racial Pride and commitment to group emphasized (Group Orientation)	19 (26.8%)	4 (12.5%)	12 (17.6%)
Self-development and achievement emphasized (Individual Orientation)	19 (26.8%)	16 (50%)	3 (4.4%)
	Getting along, race-relations messages		
Nothing transmitted about how to get along with other groups	42 (59.2%)	10 (31.2%)	29 (47.4%)
Treat others as belonging to the larger ethnic/racial group (Group Orientation)	13 (18.3%)	7 (21.9%)	35 (20.5%)
Treat others as individuals, independent of ethnic/racial group (Individual Orientation)	16 (22.5%)	15 (46.9%)	55 (32.2%)

Open-ended responses to the question about "getting along" with other ethnic/racial groups were coded for messages describing either a group-orientation or an individualorientation toward getting along with other cultural, racial, and ethnic reference groups. For this question, group- orientation getting along messages referred to messages instructing youths to relate to others as belonging to the larger ethnic/ racial group. That is, characteristics ascribed to an individual were reflective of the group as a whole. Individual-orientation getting along messages referred to messages instructing youths to relate to others as individuals, independent of behaviors or beliefs held about the larger ethnic/racial reference group. Both girls and boys were equally likely to receive messages about getting along with other racial/ethnic groups, χ^2 (2, N = 171) = 4.26, ns. There were also no differences across ethnic groups as to who was more likely to perceive a group versus an individual orientation message, χ^2 (4, N=171) = 8.84, ns. Of those youths who received a "getting" along" message, over half (61%) perceived their mother as instructing them to treat others as individuals, regardless of their reference group identification.

Social support. A MANOVA was performed to examine the type of race-related messages about getting along (individual-orientation, group orientation, and no message) and the degree of social support from each type of social network member (e.g., mother, father, relative, teacher, best friend, and sibling). Youths who indicated relating to other racial groups with an individual orientation varied by level of of social support, Pillai's Trace = .12, F(12, 322)= 1.82, p < .05. Given a significant MANOVA, individual univariate effects between subjects were examined. Although only a small effect was found, the results indicated that the total support from mothers, F(2, 169) = 4.23, p < .05, and teachers F(2, 169) = 5.78, p < .01 were higher for youths who acknowledged receiving ethnic/racial getting along messages to treat others as individuals, compared to youths who acknowledged messages about treating others as part of the ethnic/racial group, or those who did not acknowledge receiving a race-related getting along message at all.

Personal Efficacy

Personal efficacy scores ranged from low to high, with an average of 36.5 and standard deviation of 5.0. The results of a 3(ethnic group) x 2 (gender) MANOVA revealed no main effects for ethnicity F(5, 165) = 1,89, ns and gender F(5, 165) = 1.40, ns on personal efficacy scores. Therefore, we examined the relationship between the type of ethnic socialization message and level of personal efficacy among a subset of the sample in this study most likely to receive ethnic or racial socialization messages.

African-American Adolescent Sub-Sample-Ethnic/Social Socialization Messages, Efficacy, and Social Support

Type of message. According to previous research, African-American youths are more likely to receive or acknowledge a race-related socialization message. Therefore,

the African-American sub-sample was analyzed for variations in social network support and personal efficacy scores across the type of ethnic/racial socialization message (group orientation vs. individual orientation vs. no message). Ethnic/racial socialization messages – *individual-orientation*, *group-orientation*, *and no message groups*- were analyzed by the quality of the social network support with mothers, fathers, relatives, siblings, and teachers. The MANOVA of the NRI factors for mothers was significant, Wilks lambda = .70, F(3, 68) = 2.43, p < .01, $\eta^2 = .29$. A further examination revealed that youths who reported greater levels of intimacy with their mothers were more likely to perceive their mothers imparting an ethnic/racial socialization messages emphasizing an individual orientation, F(2, 69) = 4.04, p < .05.

Type of message and personal efficacy. A one-way ANOVA revealed that youths who acknowledged their mothers imparting a socialization message orienting them toward their African-American reference group (group-orientation) were significantly more likely to have higher personal efficacy scores than those who received an individual-orientation socialization message or no message at all, F(2, 69)= 3.59, p < .05. Similarly, we examined personal efficacy scores and the type of race-related getting along message. A one-way ANOVA revealed no significant differences in personal efficacy scores across the three types of messages (i.e., individual-orientation, group-orientation, and no message), F(2,69) = .42, ns. Youths who received race-related getting along messages had similar personal efficacy scores to those who received messages orienting them toward their racial group.

Type of message and social support. We further examined whether quality of support varied across African-American youth who were oriented to treat others as either part of an ethnic/racial group, as individuals, or who did not, in fact, receive a message at all. MANOVAs were performed to examine the relationship between the quality of support from mothers, fathers, relatives, siblings, and teachers and race-related getting along orientation (Group vs. Individual vs. No message). The multivariate effect for orientation, Wilks lambda = .61, F(5, 67) = 3.44, p < .01, $\eta^2 = 39$, was accompanied by significant univariate effects on the father's self-enhancing assistance, F(2, 69) = 3.4, p = .03, father's companionship, F(2, 69) = 4.97, p < .05, father's conflictdiscipline, F(2,69) = 10.57, p < .01, and father's affection, F(2,69) = 4.15, p < .05. African-American youths who were oriented to treat others as individuals reported their relationships with their fathers as significantly greater in the areas of affection and companionship, with less conflict and greater discipline from fathers. The same patterns emerged for teachers, except the intimacy subscale was excluded from the analysis because students were less likely to have variability on this factor for teachers. A significant multivariate effect for orientation, Wilks' lambda = .76, F(4, 67) = 2.31, p < .05, $\eta^2 = .24$, was accompanied by significant univariate effects on teacher self-enhancing assistance, F(2, 69) = 4.26, p < .01, teacher companionship, F(2, 69) = 3.58, p < .05, teacher conflict-discipline, F(2,69) = 3.94, p < .05, and teacher affection, F(2,69) = 4.70, p < .01. Again, African-American youths oriented to treat others as individuals were much more likely to be the recipients of greater support from teachers in the form of self-enhancing assistance, companionship, affection, less conflict and greater discipline than those who were instructed to treat others as part of the racial/ethnic reference group.

Discussion

We initially hypothesized that greater intimacy between mothers and adolescents would be indicative of communication that allows the parent to nurture self-empowerment and pride in the student's ethnic or racial background. Further, we examined the type of messages adolescents' acknowledged receiving, specifically about their orientation to their own ethnic/racial reference group (e.g., individual-orientation, group-orientation) and messages orienting the student to get along with other ethnic/racial groups (e.g., individual-orientation, group orientation). We also examined whether the quality of the student's relationships with members of their social support network was related to the type of ethnic/racial socialization messages they acknowledged and to a global sense of personal efficacy.

Racial/Ethnic Socialization Messages

The results of the study suggest that ethnic minority adolescents perceived their mothers emphasizing socialization messages in their parenting style and that adolescents acknowledged and understood the type of messages being conveyed, as found in other studies (Hughes & Chen, 1997, 1999). According to the review by Hughes et al. (2006), parents and youths most often mentioned the themes of cultural pride and ethnic pride in open-ended questions regarding ethnic socialization. These findings also add to the body of literature in support of the idea that mothers continue to be an ongoing source of support in evaluating race and ethnicity (Kerpelman et al., 2008). Among African-American and Latino youths, mothers were perceived as stressing pride in the reference group and wished their youngster to feel the same way. Since Caucasian mothers are members of the majority culture, it may be that these mothers felt less inclined to specifically discuss ethnicity or a cultural reference group. Although these Caucasian youths were less likely to receive cultural or ethnic messages, they were overwhelmingly more likely to receive messages promoting attitudes of tolerance and equality toward other groups, which is consistent with other studies (Katz & Kofkin, 1997).

A further investigation of African-American sub-sample of adolescents revealed interesting differences between youths who acknowledged receiving an ethnic socialization message, the type of message received, (i.e., individual orientation, group orientation, or no message), and the social support. Youths who perceived greater intimacy with their mothers were more likely to acknowledge an ethnic/racial

socialization message orienting them toward their individual accomplishments, instead of toward the larger ethnic/racial reference group. Youths who reported greater intimacy with their mothers, may also be more likely to spend greater time discussing more personal aspects of themselves which explains why more adolescents may have acknowledged receiving a message emphasizing individual orientation without reference to the larger ethnic/racial group. Again, a significant limitation of the study is the small number of youths indicating an individual orientation, which is not uncommon in studies examining ethnic socialization (Bowman & Howard, 1985). African-American adolescents who acknowledged their mothers imparting getting along messages that oriented them to treat others as individuals, independent of the ethnic or cultural reference group, was also correlated with higher appraisals of social support, specifically from fathers and teachers. Adolescents rated the quality of support from these sources higher in the domains of self-enhancing assistance, companionship, affection, and low conflict- discipline. It is unclear whether the socialization messages received from mothers about race-relations were most effectively reinforced by the quality of the mother-child relationship or simply reinforced in the youngster's social ecology.

Ethnic/Racial Socialization, Social Support, and Personal Efficacy

The final investigation of this study pertained to the relationship between the type of race-related socialization message, the quality of support from social network members, and personal efficacy among a sub-sample of African-American and Latino youth. The hypothesis that greater personal efficacy would be indicative of youths receiving greater race-related messages socializing them toward the ethnic group was found among the African-American subset but not confirmed among Latino participants. The lack of power associated with the Latino sample size may account for the lack of significant effects. In sum, African-American youths who perceived their mothers as reinforcing a strong orientation toward their ethnic/racial reference group were more likely to have a greater sense of personal efficacy than all other youths in the study, including other African-American youths who acknowledged being oriented toward individual achievement without reference to the greater ethnic/racial group. This suggests that a positive group identity may act to enhance a global sense of personal efficacy, which is consistent with early findings (Harrison et al., 1990; Tiejen, 1989) and more recent studies among rural African-American youths (Murry-McBride et al., 2009). Further, African-American youths who reported a greater degree of intimacy with their mothers were more likely to talk with their mothers about their cultural reference group. The findings among the African-American youths also echo the results of Bowman and Howard's (1985) original investigation between racial socialization and personal efficacy. However, unlike the Bowman and Howard study, the findings for the African-American youths in this study specify the type of message related to efficacy; that is, socialization messages exerting racial pride and commitment were related to higher personal efficacy as opposed to the youths in Bowman and Howard's study who simply acknowledged receiving a race-related message without further investigating the type of message.

Limitations

This study failed to assess the racial or ethnic socialization characteristics among parents of the adolescents, which has been previously linked to the likelihood that children receive a message regarding their ethnicity (LaLonde, Jones, & Stroink, 2008). Family functioning may also play a role in whether or not parents impart messages upon their children about race as well as the nature of the message they pass on (Robbins et al., 2007). However, recent studies have failed to confirm that specific parental characteristics, such as education, actually influence the frequency or type of race-related socialization message (Huynh & Fuligni, 2008). Further, Bowman and Howard's (1985) original approach only focused on messages received from mothers, while failing to consider others involved in the youth's life who also may have provided similar messages (e.g., grandparents, teachers). Although mothers' influence has been most thoroughly investigated (Kerpelman, Ervigit, & Stephens, 2008), further examination is warranted on whether other social network members, such as educators, impart messages that supersede or merely complement those previously received.

It is clear from this study that there are many variables that can influence a general sense of efficacy and external control in the adolescent's life. Further studies should explore other variables that could potentially predict personal efficacy in Latino, African-American and Caucasian adolescents. Moreover, as adolescents begin to grow and develop, it becomes increasingly important to understand factors that hasten or hinder the healthy development of self-efficacy beliefs within the context of ethnic and cultural identity.

Conclusion

Racial identity is critical to the development of a healthy self concept as an adult (Ponterotto & Pederson, 1993) and most educators understand it is critical that students see their ethnic or racial reference group reflected in the school curriculum in order to foster self-efficacy and boost achievement (Gollnick, & Chinn, 2006). Among racial and ethnic adolescents, the development of personal efficacy may, in part, be associated with a greater understanding of their racial and ethnic identity as well as their orientation (collective or individualistic) to their racial or cultural reference group. Interestingly, within the small sample of African-American students, the quality of paternal and teacher support was related to the type of racial socialization messages youths reported, whether it was a positive group-oriented message or a message directing the student toward greater individualism. This variable was an indirect yet sufficiently effective means

of measuring the social ecology that also supports the youth's orientation toward their racial group as well as race relations with other groups. Therefore, as educational professionals and teachers interact with students in a multicultural learning environment, it is important to understand how students may perceive themselves in relation to their racial or ethnic reference group recognizing how this may influence their personal efficacy and the effect they have on their environment. Although the findings of our study suggest that racial socialization for students begins under the influence of the immediate family, educators also play a vital role as this process continues away from the home. Teachers have the opportunity to shape how their students view different racial and ethnic groups. When exposed to accurate information, students are less likely to accept and adopt negative stereotypes (Sue, 2003). The best way for teachers to impart racial awareness and combat negative preconceptions is to provide an environment in which students of various ethnic groups may interact with one another freely and without expectations (McLemore, & Romo, 1998). Being able to communicate with peers from various racial/ethnic backgrounds can heighten students' sense of social responsibility and human interdependence (Orfield, 2001). Due to linkages between a healthy self-concept and academic achievement (Caldwell, Zimmerman, Hilkene, Sellers & Notaro, 2002; Shelton & Sellers, 2000), further research should be conducted to understand how professionals in the education setting, such as educators and counselors, can acknowledge and support positive aspects of racial and ethnic socialization.

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Francesca M. Pernice-Duca, Ph.D. is an Assistant Professor at Wayne State University in the Department of Educational Psychology. Her research interests school and community mental health services research, and social support networks and mental health. She also teaches courses in the foundations of Educational Psychology for Teacher Education. E-mail: perniceduca@wayne.edu.

Delila Owens is an Assistant Professor in the Theoretical and Behavioral Foundations Division at Wayne State University. Her research interests include: urban education, factors that affect school counseling outcomes for African American children, development of girls of African descent and multicultural counseling. E-mail: owens@wayne.edu.

From the Outgoing Editors

The outgoing editorial team wishes to thank the entire MidWestern Education Research Association for its support throughout the three years we have served as editors. It has been a professionally rewarding experience to work with the creative and dedicated individuals who comprise this research community. We are proud to have kept alive the rich and rigorous tradition of scholarship handed to us by Deborah Bainer Jenkins and Adrian Rodgers that comes down from a long line of MWER editors. We are also proud to have guided the editorial process into the 21st century, with the transition to color, and the development of the online components—the article submission process and the tracking of reviews and reviewers, and the development of the journal's web presence. We thank all of those, especially our editorial board members, who have solicited cover sponsorships and other advertising support. We encourage you to continue to support the new editorial team by asking your dean to sponsor a cover, or by finding advertisers for the journal.

We look forward to seeing you all at the next MWRA conference.

Sincerely,

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