

They want us to succeed, but they do not know how to help us.

-Colorado high school student, on Latino parents

All we are doing is trying to protect them.

-Latino father

Information constitutes a resource for human capital, providing a foundation for the interconnected aspirations of educational achievement, economic security, and civic engagement. Information is practical knowledge that is generalized—such as how government works—as well as specific: How does one register to vote or apply to college? Because information is interpersonally constructed within cultural boundaries, the ways in which people make sense of information, acquire it, and use it, are potentially problematic for immigrants when segregated and alienated from the mainstream (Chatman, 1996; Hersberger, 2002; Spink & Cole, 2001). Latino families in immigrant communities are often disconnected from credible sources, thereby impaired as settings for comprehending the significance of information for quality of life (Zaff, Youniss, & Gibson, 2009). Apart from access barriers, information is not always trusted in Latino families, as when parents guard a family's cultural identity, even as their children soak up influence from media and schools (Austin & Nelson, 1993).

Constructs such as the “digital divide” in sociology (Hess & Leal, 2001), the “civic opportunity gap” in education (Kahne & Middaugh, 2008), and “voice” in political science (Staeheli et al., 2002), portray information deficits in immigrant and low-income strata. In this exploratory study, we approach civic disparities at a more intimate level, as a function of how immigrant families operate as microcosms of information exchange. We will show how leadership of Latino parents is undermined when they fail to keep up with children in navigating information technology. There is, in such families, a micro digital divide that erodes the capacity of parents to act effectively as agents of civic socialization. The problem addressed here is the need to promote interpersonal construction of knowledge while preserving family cohesion and parent authority in immigrant communities.

We begin by considering implications of Latino adolescents acting as *information leaders* in helping immigrant families to cope in a new culture. The *opinion leader* construct was originally applied to explain the interplay of media and personal influence in early voting studies (Lazarsfeld, Berelson, & Gaudet, 1948). Opinion leaders gain information advantages through media exposure, acquiring or enhancing social power used to influence voting decisions of others. The term *information leader* encompasses influence at a broader level, including politics but extending outward to life-enhancing information. We highlight the heuristic value of thinking about the family as a venue for exchanges of

information that, in turn, promote civic dispositions in areas such as political interest and knowledge of community resources (Wilkin, Katz, & Ball-Rokeach, 2009). Our conceptual framework is refined by insights drawn from a Latino immigrant community in northern Colorado. Findings from a survey of high school students, in turn, guided focus groups in which youth and parents conveyed how they experience information flow in family interaction. We conclude with recommendations for civic campaigns that incorporate media, schools, and immigrant families in the sharing of information.

Coming of Age in a Digital Ecosystem

While most Latino adolescents in the United States are not immigrants, about two-thirds (68%) of their parents come from Mexico (Pew Research Center, 2009). Youth in this demographic “navigate the intricate, often porous borders between the two cultures they inhabit—American and Latin American” (p. 1). Access to information, and competent use of media, are critical at this phase of life, when youth straddle “two worlds as they adapt to the new homeland” (p. 3). To the extent that Latino youth possess accurate information about career options and further education, they are better equipped to talk with parents about life choices. When youth feel comfortable about expressing political identities at home, they are better able to reflect on the moral purpose of their lives (McDevitt & Ostrowski, 2009).

We propose that Latino youth can act as information leaders in ways that foster civic socialization—for themselves, their siblings, and their parents—by altering the structure of communication in immigrant families. Compared with parents, youth more readily embrace mobile technology and participate in social media (Rideout, Foehr, & Roberts, 2010). In Latino communities, a digital divide is particularly apparent when comparing Internet and cell phone use of foreign-born adults and native-born youth (Livingston, 2010). And while many young Latinos listen to music in Spanish and English, television viewing tends to be in English only. More generally speaking, young Latinos are often exposed to information ecologies beyond the access and comprehension of immigrant parents. For our purposes, information ecology refers to patterns of media use in conjunction with networks in which people exchange ideas, knowledge, and perspectives (Knight Commission on the Information Needs of Communities in a Democracy, 2009). When youth enrich the family as a setting for information exchange, they essentially expand overlap between their information ecologies and those of parents.

This dynamic is readily seen in language brokering, when youth mediate interactions across linguistic boundaries (Dorner, Orellana, & Jiménez, 2008; Dorner, Orellana, & Li-Grining, 2007). Parents typically support children in

translation tasks in the negotiation of meaning: “Translating and interpreting are not solitary activities; they are social and relational events in which families engage together and in relation to society” (Dorner et al., 2008, p. 538).

The civic agency of youth as information leaders is also evident in students’ bridging of classrooms with living rooms (McDevitt & Ostrowski, 2009; Vercellotti & Matto, 2010). Evaluations of Kids Voting USA (KVUSA) illustrate how school discussion spills over into the family, triggering a sequence of “trickle-up influence” in Latino families (McDevitt & Caton-Rosser, 2009). Students in the K-12 program participate in peer-centered activities such as debates about ballot propositions. In an initial field experiment, low-income adolescents in San Jose, California gained the most from peer discussion, as measured by increases in news media attention and initiating conversations with parents (McDevitt & Chaffee, 1998). Most relevant to Latino families, the curricula closed gaps in civic engagement tied to ethnicity and socioeconomic status (SES). A similar dynamic emerged in El Paso County, Colorado (Colorado Springs) during the fall of 2002, when Latino youth grew alarmed by a proposition to enforce English-only instruction. Latino parents, for their part, were more likely than Anglo parents to pay attention to news in response to children broaching campaign topics (McDevitt & Kiouisis, 2006b).

KVUSA research resonates with a recent study in Southern California, where scholars took notice of Latino children and parents marching together on March 25, 2006, to protest HR4437, the Sensenbrenner bill (Wilkin et al., 2009). The legislation called for raising penalties for illegal immigration and for harboring undocumented workers.

Hundreds of school children walked out of school to protest the day before the march, having heard about the Sensenbrenner bill through their social networks, and the Internet, specifically through announcements made on Myspace.com. Others heard about the rally at church and through other community organizations. (p. 388)

Wilkin et al. describe the immigrant family as “a site of community construction” that can overcome “linguistic isolation” and low SES (p. 402). Individual members of Latino families come into contact with different community resources and flows of information. At school, youth are exposed to a plethora of cultural influences, while mothers interact with health-care and child-care facilities. Latino men are more likely exposed to a wide range of Spanish media. Consequently, the family becomes a confluence from which tributaries of information flow.

Deliberation in Immigrant Families

Much of the impetus for family civic engagement resides with Latino youth. The undocumented status of many parents makes them vulnerable to societal rejection and marginalization. Compared to native-born parents, immigrant parents are less likely to model for children civic competencies such as volunteering, media literacy, and electoral activism (Perez, Espinoza, Ramos, Coronado, & Cortes, 2010). When youth act as information leaders, the structure of the family changes, with gender equality increasing and children acquiring greater authority. Latino men, however, often experience a crisis of patriarchy. Thus, while sharing of resources helps the immigrant family to adapt and to cope, life-enhancing information can come at the price of heightened tension. Austin and Nelson (1993) note that conflicts between Latino and Anglo culture become salient in family discussions. Values often associated with Latino culture—family ties, paternalism, and respect for authority—are juxtaposed against Anglo-American values that emphasize achievement, change, progress, and individual striving.

We might surmise, then, that willingness to share information—rather than access—represents the most fundamental obstacle to the kind of family communication that promotes civic socialization. At issue is the immigrant family's capacity to accommodate the *deliberative* dispositions that foster information exchange.

Deliberative democracy in normative theory constitutes a longstanding paradigm for evaluating the vitality of public fora (Fishkin, 1996), and in recent decades empirical research has documented a matrix of interconnections among media use, interpersonal communication, and civic dispositions such as trust and efficacy (e.g., Dutwin, 2003). Only recently, however, have scholars pursued deliberative learning as a heuristic for explaining civic development (McDevitt & Kiouisis, 2006a). The current study represents the first attempt to model interaction in immigrant, Latino families as a manifestation of deliberative development.

Deliberative learning refers to a process in which interpersonal communication—enriched by habitual use of information technology—functions as a medium from which civic dispositions crystallize (McDevitt & Kiouisis, 2006a). We asked youth respondents to estimate how often they disagree openly, listen to opponents, and initiate conversations about politics. In mapping the information ecology of families, we also hope to trace antecedents and consequences of deliberative dispositions. With regard to precursors, we deployed measures of school climate and family climate for communication—i.e., the extent to which these settings encourage opinion expression on topical issues (McDevitt & Caton-Rosser, 2009). Open climates foster interpersonal skills that,

in turn, coin confidence applicable to civic engagement (Vercellotti & Matto, 2010). Media represent another source of cognitive fuel for energizing information flow. We assessed active reflection on news, which captures efforts to comprehend the relevance of political events. Compared to mere exposure to media, active reflection more reliably predicts political cognition (Eveland, 2001). As for outcomes of discussion, students estimated their interest in politics and desire to participate in politics. Finally, we measured two orientations conducive to civic engagement: efficacy (“I believe I can make a difference in my community”) and interpersonal trust (Kenski & Stroud, 2006).

Data Collection and Methods

We set out to document the information ecologies of families in Lafayette, a suburb northwest of Denver. We chose this community for survey and focus-group recruitment, in part, because of its substantial population of immigrant parents with adolescent children. As researchers at the Boulder campus of the University of Colorado (CU), we benefitted from collaboration between Centaurus High School and Public Achievement, a service-learning program in which CU undergraduates act as “coaches” in mentoring Latino students at Centaurus. During spring 2010, coaches worked with small groups of youth from the “I Have A Dream” Foundation to discuss community issues and to develop media strategies for promoting awareness. The demographic profile at Centaurus is 65% Anglo, 29% Latino/Hispanic, 4% Asian, 1% African American, and 1% Native American; 25% are free-lunch eligible (National Center for Education Statistics, 2008-2009).

Notwithstanding our CU connections, youth and parents in immigrant communities represent a difficult-to-reach population as respondents (Berk, Schur, Chavez, & Frankel, 2000). Language barriers coupled with populist backlash against illegal immigration in the Southwest make data collection a formidable challenge. For data analysis purposes, ideally we could have asked youth and parents about citizenship status, but we opted to forego that question to facilitate recruitment. (According to the Pew Hispanic Center [2008], 28% of Colorado Latinos are foreign born.) We tapped individuals in positions of trust to distribute questionnaires and to recruit for focus groups. Coaches enlisted Centaurus students, who distributed questionnaires to other students. Three students also agreed to write personal reflections about where they get information, and what information sources they trust most. Twelve students completed diaries over a 48-hour period to document amount of time spent with media. Adding ethos to the project was our focus-group facilitator, a Latina, bilingual immigrant and graduate of Centaurus.

In seeking to document political contagion, we took advantage of

community activism in promotion of the DREAM Act. During the spring semester, Centaurus students organized an eight-mile march to celebrate César Chavez and to promote the Development, Relief and Education for Alien Minors Act. The act would create a path for youth to acquire legal status by attending college or serving in the military. At a regional level, Colorado is one of the few states with substantial immigration that has not passed a “dream” act (Flores & Chapa, 2009). Consequently, college access provided a salient topic for discussion in Centaurus families.

Student Survey

CU coaches administered paper and pencil questionnaires to 74 Centaurus students over a two-week period, in February 2010. We provided questionnaires and student consent forms in English, but gave parents the option of Spanish or English consent forms.

Demographics. A sizeable majority of the sample self-identified as Latino/Hispanic (73%); the remaining respondents identified as white/Anglo (18.9%), Native American (4.1%), African American (2.7%), and Asian (1.4%). The age breakdown is: 14 years old, 8.6%; 15 years old, 37.2%; 16 years old, 31.4%; and 17 and older, 22.9%. When asked about parents’ education, students most frequently indicated that parents completed “some high school” (43.7%). Low levels of parent education are not surprising for this sample, but neither is the ambitious outlook for students when asked about plans for further education (Pew Research Center, 2009). Only 19.2% chose “finish high school” as a response option. The remainder chose one of the following: “technical/vocational school,” “attend college/two-year college,” “attend college/bachelor’s degree,” or “graduate or professional school.”

Media use. Deliberative development presumes access to—and regular use of—information technology. We asked how much time students spend with traditional media (radio, newspapers, magazines, television), and with new media (Internet, iPod/MP3 player, texting, cell phones). We measured time devoted to computer activities that function as social media (e.g., email) and as entertainment media (e.g., playing games), but also time for activities that offer life-enhancing information, such as online news media and schoolwork. The appendix provides item wording, response options, and coding for all measures.

Focus Groups

Focus groups, to some extent, allowed us to overcome limitations of the survey, including the modest number of participants, reliance on standardized responses, and the lack of data on information ecology experienced by parents. We conducted four focus groups in April and May of 2010, involving 53

participants recruited to one of the following: a session with Latino adolescents, college-age adults, and parents; a discussion with parents and coaches; and two sessions with Centaurus students. A Latina undergraduate led the discussions, which were generally conducted in English. She switched to Spanish as needed to encourage parents. We recorded audio and video for each session, and transcribed the audio for analysis. The sessions ran from 1:35:36 for the first discussion to 41:44 for the third group.

Focus groups are often conducted prior to surveys to refine measurement instruments, but in the present study we recognized the potential for group interaction to reveal felt experiences hinted at—but not explicitly conveyed—in questionnaire data. Group interaction also afforded a chance to map where the information ecologies of parents and youth overlap. We began each session by explaining our goal of identifying ways “to reach you about issues you care about.” An issue “could be something like the need for a new movie theater in town, or something more serious, like the Dream Act.” The discussion leader asked about places and situations, such as churches and soccer games. Other questions addressed strategies for promoting awareness, such as posters at Walmart or school flyers. Participants also considered the usefulness and credibility of media, such as English and Spanish radio, newspapers, and Myspace.

Analyses

Beginning with survey data, we looked for connections between media/computer use and deliberation, family and school climate, and the five civic dispositions (anticipated participation, political interest, active reflection, trust, and efficacy). We were limited to correlational analysis due to sample size and absence of panel data. From a theoretical perspective, however, we presumed that information technology provides cognition as raw material for crystallization of deliberative and civic dispositions. We then documented the extent to which schools and families engender deliberative and civic orientations.

While these indicators should mark civic development, prior research has not explored implications of the information leader role for immigrant family interaction. We anticipated at least some parent pushback against perceived threats to ethnic identity. Focus groups allowed us to explore how parents and adolescents experience information flow when negotiating youth autonomy, family cohesion, and cultural assimilation.

Results

Student Survey

We considered first the time Centaurus students spend with media. TV

viewing, not surprisingly, consumed the most amount of time. The mean is 2.36 on the following scale: less than one hour per day = 1, 1-2 hours = 2, 3-5 hours = 3, 6-8 hours = 4, more than 8 hours = 5. While a typical respondent devoted more than two hours to television, traditional media otherwise lagged behind time with new media. All four of the new-media activities (Internet, iPod/MP3 player, texting, and cell phone) generated means higher than the four types of traditional media (radio in car and home, reading newspapers and magazines). These indicators deployed a 1-to-4 response scale: none = 1, 5 minutes to less than 30 minutes = 2, 30 minutes to less than 1 hour = 3, more than 1 hour = 4. Means for new-media use ranged from 3.22 for texting to 2.92 for cell phone use. The range for traditional media was 2.73 for listening to a car radio to 1.68 for reading a newspaper. Teenage affinity for mobile media is hardly surprising; more noteworthy is prevalent use in a low-SES demographic. Latino and non-Latino students were quite similar in habitual media use (Appendix Table 1), as no significant differences emerged.

Using the 1-4 response scale, students estimated their time with computer activities: doing schoolwork, playing games, instant messaging, emailing, reading magazines or newspapers online, visiting social networking sites such as Myspace or Facebook, and watching or uploading videos. Social networking captured the greatest amount of time ($M = 2.80$), followed closely by schoolwork ($M = 2.69$). Social media could portend political mobilization during ideologically charged episodes, as seen in the Wilkin et al. study.

We again compared Latino to non-Latino students and found patterns of computer use quite similar. Non-Latinos spent more time playing games ($p < .01$), but otherwise no significant differences were detected. Playing games, in fact, stood out as the only ethnicity gap across all indicators for time with media/computers, deliberative dispositions, expression climate, and civic dispositions (Appendix Table 1). We consider next the structure of empirical linkages between media/computer use and adolescent civic engagement.

In deliberative learning, media/computer experiences should promote confidence in discussion and inclinations to participate in the political realm (McDevitt & Kioussis, 2006a). Table 1 reports correlation coefficients for relationships between time with media/computer activities and the three deliberative dispositions. Internet time correlated with willingness to disagree ($r = .26$, $p < .05$); the same can be said for the following computer activities: schoolwork ($r = .37$, $p < .01$), playing games ($r = .24$, $p < .05$), and reading magazines or newspapers online ($r = .45$, $p < .001$). One might question whether conflict seeking represents a positive outcome given concerns about incivility in politics (Hibbing & Theiss-Morse, 2002). In our sample, however, time with media/computers appeared to promote civility, as evident in correlates of listening to opponents: reading (print) magazines ($r = .24$, $p < .05$) and online schoolwork

($r = .33, p < .01$). Inculcation of confidence in political communication was apparent in the relationship between reading magazines/newspapers online and willingness to initiate conversations ($r = .35, p < .01$).

Table 1. Time with Media/Computer Activities as Correlates of Deliberation, Expression Climate, and Civic Dispositions

	<i>Deliberative Dispositions</i>			<i>Expression Climate</i>		<i>Civic Dispositions</i>				
	Disagree	Listen	Initiate	Family	School	Participate	Interest	Reflect	Trust	Efficacy
<i>Media Time</i>										
Watching TV	.00	-.08	.15	.19	.21	.11	.10	.21	-.17	.18
Cell phone	.04	.09	.07	.07	.18	.14	.13	.00	.09	.15
Texting	-.17	-.03	-.14	-.09	.16	-.14	-.14	-.22	.13	-.06
Magazines	.22	.24*	.20	-.01	-.17	.33**	.20	.16	.05	.04
Newspapers	.19	.14	.21	.06	-.10	.36**	.13	.17	.12	.06
iPod/MP3	.22	.12	-.08	.17	.33**	.09	.02	.22	-.03	.28*
Internet	.26*	.01	.01	.26*	.32**	.17	-.11	.15	-.13	.41***
Radio: home	.00	.04	.04	.06	.15	.03	.00	.03	.20	.26*
Radio: car	.10	.03	.09	.13	.06	-.08	.04	.06	.10	.27*
<i>Computer Time</i>										
Schoolwork	.37**	.33**	.13	.27*	.15	.30*	.12	.27*	.07	.29*
Games	.24*	.05	.29	.09	.07	-.03	.04	.04	.15	.01
Messaging	.14	-.11	.02	-.02	.26*	.11	.01	.10	.08	.28*
Email	.27*	.09	.10	.08	.23	.18	.04	.27*	-.08	.28*
Reading	.45***	.22	.35**	.14	.09	.48***	.24*	.33**	.04	.13
Video	.11	.04	.06	.10	.32**	.16	.06	.18	-.02	.41***
Social network	.07	-.02	.09	.00	.37**	.12	-.04	.18	-.07	.36**

* $p < .05$, ** $p < .01$, *** $p < .001$

We also anticipated associations between media/computer use and climate for expression in families (Table 1). Only two of the 16 indicators generated significant coefficients: time on Internet ($r = .26, p < .05$) and schoolwork online ($r = .27, p < .05$). Open school climate was a more reliable predictor, as it correlated with using an iPod/MP3 player ($r = .33, p < .01$), Internet time ($r = .32, p < .01$), instant messaging ($r = .26, p < .05$), watching/uploading videos ($r = .32, p < .01$), and social networking ($r = .37, p < .01$).

Claims about causality would be suspect with one wave of data. Still, the results might reflect a symbiotic relationship between school climate and time with media/computers. Peer-centered interaction prevails in both contexts, face-to-face or mediated. Supportive classroom climates should elevate the social utility of information gleaned from media, while time with information technology could engender confidence backed up by knowledge. This confidence, in turn, might contribute to perception of friendly environments at school for expressing opinions.

In light of research showing contributions of media to civic development, we looked for associations between media/computer time and the five civic dispositions. Efficacy stood out as the strongest correlate (Table 1). Significant coefficients emerged for iPod/MP3 ($r = .28, p < .05$), Internet ($r = .41, p < .001$), radio at home ($r = .26, p < .05$), radio in car ($r = .27, p < .05$), schoolwork online ($r = .29, p < .05$); instant messaging ($r = .28, p < .05$), email ($r = .28, p < .05$); watching/uploading video ($r = .41, p < .001$), and social network ($r = .36, p < .01$).

In the final analysis, we assessed the extent to which schools and families—as venues for opinion expression—predicted deliberative and civic dispositions (Table 2). We note first that school and family climate correlated with each other ($r = .36, p < .01$), suggesting the possibility of reciprocal influence, such that families prepare youth to speak up at school, just as classroom interaction motivates students to bring up politics at home (McDevitt & Caton-Rosser, 2009). Family climate was the more consistent predictor of deliberative and civic engagement, netting significant coefficients for every indicator except listening to opponents. A somewhat surprising finding was the negative correlation for family climate and trust. For immigrant families, wariness is perhaps a natural byproduct of coping. Notwithstanding the family's apparent induction of distrust, a clear pattern emerged in comparing Table 2 to Table 1. School climate was more reliably associated with youth-centered media and computer activities, while family climate more consistently predicted deliberative and civic engagement.

Table 2. Matrix of Students' Deliberative and Civic Development (Correlation Coefficients)

	School climate	Family climate	Disagree openly	Listen to opponents	Initiate talk	Anticipate participation	Interest in politics	Active reflection	Interpersonal trust	Civic efficacy
School climate										
Family climate	.36**									
Disagree openly	.13	.35**								
Listen to opponents	-.07	.17	.44***							
Initiate talk	.09	.27*	.31**	.19						
Anticipate participation	.07	.32**	.55***	.41***	.54***					
Interest in politics	.00	.26*	.33**	.39**	.56***	.54***				
Active reflection	.37**	.47***	.56***	.52***	.48***	.56***	.65***			
Interpersonal trust	-.05	-.26*	-.26*	-.15	-.03	-.08	-.12	-.27*		
Civic efficacy	.61***	.43***	.43***	.11	.29*	.37**	.29*	.56***	-.01	

* $p < .05$, ** $p < .01$, *** $p < .001$

Focus Groups

The first focus group brought together three mothers, two fathers, four adolescent girls, and two college-age women at the Lafayette Public Library. All participants were Latino except one Anglo mother. We believe this group generated the most useful insights about information access and media use in Latino families, probably because both parents and children participated. Consequently, we devote more attention to this first session. The discussion leader initially asked participants to identify reliable and accessible sources of information, and two fathers spoke up immediately, preferring to express themselves in Spanish. One stated:

I believe that it is hard for Latinos to get information because, first of all, we are in a country where we do not know the language and because we are afraid of who can you speak to or who can you trust.

The second father emphasized the grueling work of immigrant parents:

We often wake up really early, and we do not have time to do anything. In my opinion, one of the problems that we face is modern slavery.

Along with a language barrier, distrust, and the demands of work, parents expressed a sense of not feeling rooted, and therefore not able to appreciate the relevance of information from media, schools, and other institutions. Speaking of Colorado and Mexico, one father explained:

I am nowhere really—not here, nor there!

Parents conveyed skepticism of English-language news media. Gossip and celebrity tabloids were named as the most common form of print media consumed. They credited local TV as a regular source of information, with a caveat that Spanish-language radio is considered more dominant. While discussants emphasized interpersonal relationships, rather than media, as trustworthy, they voiced ambivalence about adults relying on children. One girl observed:

There is a doctor telling you about medicine and the doses and you are trying to translate to your parents. It could get way off. That is dangerous, when you have no Spanish-speaking doctors, and you have a nine-year-old translating to the mother, who has diabetes.

On a more upbeat note, organizations with solid reputations are crucial in transmitting information. Parents identified churches, mercados, schools, and medical clinics as hubs of information, places where they can rely on trusted adults, and where the occasional flier catches their attention. Said one father about church: no one would be “trying to trick you.”¹

When it comes to technology, however, youth made it clear that there is

little overlap between their media worlds and those of parents. Teenagers present were all girls, proficient with smart phones and technologically savvy. Have their parents ventured online? They laughed at the question. One playfully mocked her mother trying to text—portraying her with open mouth and twisted thumbs. Parents responded with shrugs and sheepish smiles.

A recurrent theme was the advantages that youth possess over parents in language acuity, comprehension of American culture, comfort with social media, and enthusiasm for mobile media. We began to sense a crisis of parenting, or perhaps a near crisis. Said one father:

When I was young, I would always say that my dad had no idea of what he was talking about, and now our children are thinking the same. All we are doing is trying to protect them.

The discussion turned poignant when the adolescent girls, and two women in their early 20s, talked about leaving home for college. One of the women observed:

In our family, you leave the house when you are getting married or you are 30.... When my brother decided to go to CU he moved here by himself when he was 17, but then the whole family followed a year later. I think that the whole education and leaving the nest is really hard for Hispanic families.

The other woman explained that she is beginning medical school. When she obtains a medical license, around the age of 30, her parents will expect her to move back home. She smiled at the notion, but also appeared sympathetic to her parents' desire to maintain family unity.

The second focus group was held at Angevine Middle School in Lafayette, and included two mothers, one father, one adolescent girl, and 10 undergraduate coaches from CU (five women, five men). Participants were Anglo with the exception of a Native American mother. We were unable to recruit Latinos, but all of the coaches mentored Latino students. This time, with only one teenager present, we solicited from adults a certain degree of vulnerability in their roles as parents. They appeared intrigued—mesmerized in some cases—in talking about the media prowess of children. One mother was typical in conveying a mixture of pride and bewilderment:

My 6-year-old uses my cell phone more than I do. She knows how to videotape people; she can take your picture; she can call her grandma. My daughter! I'm amazed—I tell her to show me how to do it. I ask her how she figures it out. It's amazing how their brains are just wired to more technical programming. And they are not afraid of it. I am always worried that I am going to accidentally delete something.

A second mother noted:

They can text fast. My daughter can text without even looking at it. We will be

sitting at the (dinner) table and she still texts.

Parents doubted their abilities to keep up with what youth were saying and doing online:

I try to Twitter, so I know a little about that, but I honestly don't know anything about Facebook. I can't even lurk because I am not on Facebook.

As parents cling to conventional phones, family members can get testy with each other:

I have a 13-year-old who has a phone and texts all the time. So, if I call her she's all, "Uhh ... what Mom?"

The focus group seemed to describe multiple information ecologies, one for parents, another for daughters, and sometimes a third for sons.² According to one coach:

The majority of my students are sophomores and juniors ... All the girls have Facebook and I think a lot of the guys still use Myspace.

Parents grant that cell phones allow them to keep in contact with teenagers, but struggle to comprehend the pragmatic and social uses of new technology:

Parent: I also tell her that when she is walking to a friend's house at night, she has to stay on the phone with me until she gets there, which bugs her, but at least I know she is OK.

Coach: We have actually heard that that is more dangerous because it distracts them.

Disconnect between adults and youth emerges in the temporal dynamics of how and why devices are used. Youth texting occurs spontaneously, even impulsively. If adolescents fail to communicate in the moment, information evaporates into thin air. One coach explained:

Sometimes I ask the kids to text their parents right then. That way they won't forget.

Parents initiate phone calls at designated times, typically for practical reasons, such as confirming where a child should be picked up after soccer practice.

The third and fourth focus groups assembled Centaurus students at school. In total, the groups consisted of 28 students—17 girls (12 Latina) and 11 boys (10 Latino). Discussion in Group 3—the first without parents or coaches—took on a critical edge. Students wanted to talk about Arizona's immigration law, which requires police to stop and question people if officers have reason to suspect those persons are in the country illegally. Students recalled receiving email, Facebook messages, and especially text messages about the law. One student added:

There is even jokes going around about it ... "Dora has been busted. The Arizona

law is for real. Keep running Diego!” There is a picture of Dora the Explorer beat up.³ Also, there is a taco in a box, saying that is how they are planning on catching the Mexicans.

Students complained, however, that while social studies teachers were talking about the oil spill in the Gulf of Mexico, they would not touch immigration. Youth also criticized local news media—including *Univision* and *Telemundo*—for superficial coverage of immigration. This, in turn, led to a critique of how English-language news stations represent Latinos.

Yeah, when you hear about a shooting, you hear about Latinos or blacks. But you never hear about a white-person shooting. Like if a white person gets shot, then it makes big news. But if one of us—a person of color—gets shot, then you never hear about it.

With schools and TV downgraded, students acknowledged that they could do more to stay current on immigration. Youth uniformly acknowledged that they rarely read newspapers. Neither do they blog. They watch some local TV news, in both English and Spanish, while parents rely on Spanish TV for news.

In the final group, students echoed concerns about teachers unwilling to bring up the Arizona law. Students were all ears when the discussion leader explained that Boulder officials decided to ban city employee travel to Arizona. A state senator from Colorado Springs subsequently called for a boycott of Boulder. Intrigued, students wanted to hear more about regional differences in climate of opinion about immigrant enforcement, but the topic ultimately fueled frustration about having to learn about the Colorado tit for tat from the focus group instead of teachers.

As in the previous session, youth discussed receiving text messages featuring *Dora the Explorer*. They found the image of Dora (with a black eye) both funny and insulting. By a show of hands, all students who received messages forwarded them to friends. Infrequent use of social media by parents, however, precluded viral messaging from engaging families in discussion. In a patronizing dismissal, one student responded to a question about parents’ computer skills.

Discussion leader: Do they all know how to use the computer?

Student: I don’t let them.

Discussion and Recommendations

From the perspective of human development, information with life-enhancing value must flow through the family for it to be meaningfully shared, evaluated, and acted upon. The vetting process is thwarted when parents and youth live in separate information ecologies, or when parents perceive information as a challenge to their authority. In the latter scenario, the family

cohesion so characteristic of Latino communities might constrain information flow. Focus group discussants, for example, expressed deep ambivalence about teenagers leaving families for college. In broader terms, civic socialization breaks down when parents are not willing to negotiate with youth over the significance of information. Consequently, we conclude with recommendations for initiatives that enhance families as settings for shared information.

Schools and Families Function Synergistically in Information Exchange

We start with the premise that students—as captive audiences in school—are more easily reached than immigrant parents. This has been the case for generations of American families. “Coping with waves of immigrant families between 1880 and the First World War, schools took on the additional task of reforming parents” (McDevitt & Caton-Rosser, 2009, p. 3). In a contemporary context, research on Kids Voting USA shows that classroom discussion prompts Latino and low-SES students to engage parents in political conversations.

Figure 1 integrates results from the survey, allowing us to trace flows of influence between schools and families, and within families. Paths linking school climate with family climate—and these climates with civic and deliberative dispositions—represent the significant correlations reported in Table 2. Conceptually, Figure 1 illustrates a matrix of civic development for Latino youth. Family climate is shown as if exerting a stronger gravitational pull, although both family climate and school climate predict civic efficacy and active reflection on news.

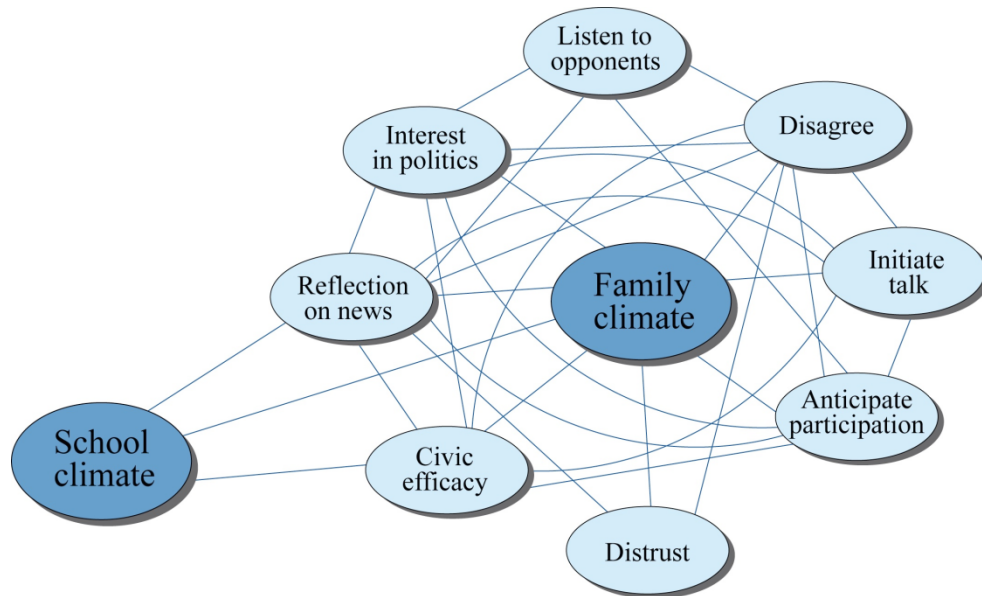


Figure 1. School-Family Matrix of Civic Development for Latino Youth

The basic structure of the school-family matrix makes sense intuitively. Political scientists traditionally portray the family as the most important agent of socialization, although schools and media also impart influence (Jennings & Niemi, 1974). Evident in Figure 1, the family constitutes a proximal setting for cultivation of deliberative and civic inclinations. The school, however, offers opportunities for information exchange and media access not otherwise available in low-income, immigrant communities. The matrix suggests that the nature and structure of family interaction becomes more conducive to civic development in response to the richer ecology of information generated at school. We recognize that this interpretation is speculative pending replication in other immigrant communities, preferably using panel data and interviews of both Latino youth and parents in the same families. Results here, however, enhance the construct validity of theorizing summarized by the school-family matrix. The survey results imply at least some tension in family interaction when youth act as information leaders. As expected, focus groups revealed parent confusion about the media prowess of children, and angst about information that might threaten family unity.

Civic Initiatives Should Promote Overlap in Information Ecologies

The centrality of the family in Latino communities constitutes a resource for civic engagement. However, in setting out to map information ecologies, we found mostly borders between parents and youth, not an expanse of shared

territory. Media preferences reflect (if not amplify) a generational divide in immigrant families. Focus groups revealed distinct information environments, although there are some areas of common experience, such as Spanish radio. We recommend that information initiatives promote increased coordination of media use. This could enliven the home as a *domestic sphere*, where media use becomes a shared experience, and where family members convey information in specific areas of access and expertise. From prior empirical assessment, we know that family exchanges of information engender cultural assimilation (Wilkin et al., 2009) and political participation (Austin & Nelson, 1993).

Civic Efficacy Crystallizes in Social Media

Social media foster efficacy when youth realize the mobilizing potential of online networking (Valenzuela, Park, & Kee, 2009). Viral messaging triggered by *Dora the Explorer* imagery offers an example of how Colorado youth became aware of an Arizona law. Symbols that resonate in youth culture are ripe for political application in social media.

We noted earlier that civic efficacy correlates with multiple indicators of time with computers. Significant coefficients are generated for schoolwork, instant messaging, email, video, and social media. Efficacy appears to crystallize in computer use oriented around youth culture. As teenagers become skilled in the currency of information transaction, social-media prowess is apparently transferable to the civic arena.

Survey and focus group results also suggest that youth who participate in social media can act as information brokers in immigrant families. Media and educational campaigns should promote youth awareness of their vital role in information diffusion. Not unlike a “Friends Don’t Let Friends Drive Drunk” campaign, this approach calls on youth to take responsibility for others in persuasive use of information.

Conclusion

Immigrant families potentially operate as microcosms of shared information, allowing children and parents to assimilate in ways that preserve cultural identity while nurturing dispositions applicable to civic engagement. In the present study, however, findings suggest a parenting crisis in the digital era. If crisis is too strong, we certainly see evidence of Latino parents straining to preserve authority in the provision of information. School and media campaigns should take advantage of the formidable influence of youth as information leaders, but they should also enlist parents (McDevitt & Ostrowski, 2009; Vercellotti & Matto, 2010). Otherwise, well-intentioned initiatives could backfire. At stake is a

narrowing or widening of the civic divide between engaged and disengaged families.

Notes

¹ Latino students who authored personal reflections also emphasized language and literacy constraints, and suggested face-to-face interaction as the best channel of communication. One girl explained: “You can offer a community awareness class that can be held before or after church.” Information obtained at the local parish appears to be the gold standard.

² Latino youth who completed media-use diaries averaged about two hours per day watching TV, a habit potentially shared with parents, but we were struck by the amount of time devoted to texting, a youth-centered preoccupation. Four diarists averaged more than three hours per day; students text first thing in the morning, during school hours, and late into the evening.

³ The animated TV series has been carried on *Telemundo* and then *Univision* since 2006.

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Appendix

Demographics & Educational Aspiration

Gender. “What is your gender?”

Age. “What is your age?”

Ethnicity. “What is your ethnic background?” Hispanic/Latino, white/Anglo, black/African-American, Asian, Native American

Parent education. “What is the highest level of school that your mother, father or guardian completed?” some high school = 1, completed high school = 2, some college = 3, graduated from college = 4, attended graduate school = 5 ($M = 2.30$ $SD = 1.35$).

Education plan. “How much further in school do you plan to go?” finish high school = 1, technical/vocational school = 2, attend college/2-year degree = 3, attend college/bachelor’s degree = 4, graduate or professional school = 5 ($M = 3.29$ $SD = 1.42$).

Time with Media

As described above, students used a 1-to-5 scale to estimate hours devoted to *Watching TV*, and a 1-to-4 scale for minutes/hours spent with other media on a typical day: *On a cell phone; Sending text messages; Using an iPod or MP3 player; On the Internet; Reading magazines; Reading a newspaper; Listening to radio at home; and Listening to radio in a car.*

Time with Computer

“Also on a typical day, how much time do you spend using a computer for the following activities?” *Doing schoolwork; Playing games; Instant messaging; Emailing; Reading magazines or newspapers online; Going to websites to watch or upload videos to YouTube or Google Video; and Going to social networking sites such as Myspace or Facebook.*

Expression Climate and Deliberative Dispositions

School climate. A summed, two-item index measured the extent to which students perceive school as supportive of expression. They used a 1-to-5, *strongly disagree-to-strongly agree* scale in responding to the following: “At my school, students have a voice in what happens” and “Students are encouraged to express opinions ($\alpha = .80$).

Family climate. A summed, seven-item index measured the extent to which students perceive a family as supportive of expression. For the first three items, respondents assessed how well statements described them. They used a 1-to-5 scale, with 1 meaning *not like me* and 5 *very much like me*. “Suppose your teachers and friends at school were talking about gang violence and what to do about it. How likely would you be to talk with your parents/guardians about gang violence?” “In the same scenario, how likely would you be to talk to your parents/guardians about scholarships to make college more affordable?” “How likely would you be to talk to your parents/guardians about a proposed law that would make English the official language of Colorado?” For the remaining questions, respondents used a 1-to-5 scale with 1 meaning *never* and 5 *often*. “How often does a parent encourage you to say what you think about politics, even if the two of you disagree?” “How often does your family sit down and talk together?” “How often does your family discuss work-related issues?” “How often does your family discuss things that are happening in the neighborhood?” ($\alpha = .77$).

Willingness to disagree. “How often do you openly disagree with people about politics?”

Listening to opponents. Students estimated how well the following statement described them, using the *not like me/very much like me* scale: “I listen to people talk about politics even when I know that I already disagree with them.”

Initiating conversations. “Sometimes people get caught up in various conversations—but how often do you INITIATE conversations about politics?” Students used the *never/often* scale.

Civic Dispositions

Participation. A summed, four-item index assessed anticipation of political participation. “When you think about your life after high school, how likely is it that you would do each of the following?” Respondents used a 1-to-5 scale, with 1 meaning *not likely at all* and 5 *very likely*. “Vote on a regular basis”; “Volunteer for a political party”; “Participate in a boycott against a company”; “Refuse to buy clothes made in sweatshops” ($\alpha = .66$).

Interest in politics. “In general, how much interest do you have in politics?” Respondents used a 1-to-5 scale, with 1 meaning *none* and 5 *a great deal*.

Active reflection. Three items were summed to create an index measuring cognitive effort in comprehending the significance of news. Students assessed how well two statements described them, using the *not like me/very much like me* scale. “When I see or read a news story about an issue, I try to figure out if they’re just telling one side of the story.” “When I hear news about politics, I try to figure out what is REALLY going on.” Respondents used the *none/a great deal* scale for the final item: “How much attention do you pay to news about politics from media?” ($\alpha = .78$).

Trust. A summed, two-item index measured interpersonal trust. Most people “will try to take advantage of you if they get the chance” and “only look out for themselves.” We reversed values for the *strongly disagree/strongly agree* scale ($\alpha = .75$).

Civic efficacy. “I believe I can make a difference in my community” (same response scale).

Appendix Table 1. Time with Media/Computer, Deliberation, Expression Climate, and Civic Dispositions for Latino and Non-Latino Youth

	Range	Latino <i>M</i>	Non-Latino <i>M</i>	Total <i>M</i>	<i>SD</i>
<i>Time with Media</i>					
Watching TV	1-5	2.37	2.35	2.36	1.08
On a cell phone	1-4	3.04	2.60	2.92	1.23
Sending text messages	1-4	3.30	3.00	3.22	1.23
Reading magazines	1-4	2.00	2.20	2.05	1.08
Reading a newspaper	1-4	1.70	1.60	1.68	1.08
Using an iPod/MP3 Player	1-4	3.09	2.65	2.97	1.08
On the Internet	1-4	3.22	3.05	3.18	1.00
Listening to a radio at home	1-4	2.37	2.45	2.39	1.16
Listening to a radio in a car	1-4	2.59	3.05+	2.73	1.04
<i>Time with Computer Activities</i>					
Doing schoolwork	1-4	2.69	2.70	2.69	1.13
Playing games	1-4	1.98	2.85**	2.22	1.11
Instant messaging	1-4	2.28	1.95	2.19	1.17
Emailing	1-4	2.00	1.95	1.99	1.04
Reading magazines or newspapers	1-4	1.46	1.50	1.47	.85
Watching or uploading videos	1-4	2.52	2.40	2.49	1.14
Social networking sites	1-4	2.93	2.45	2.80	1.18
<i>Deliberative Dispositions</i>					
Willing to disagree	1-5	2.56	2.70	2.60	1.33
Listening to opponents	1-5	2.68	2.80	2.71	1.33
Initiating conversations	1-5	2.00	1.75	1.93	1.08
<i>Expression Climate</i>					
School	2-10	6.25	6.65	6.36	2.18
Family	7-35	20.65	21.40	20.87	6.20
<i>Civic Dispositions</i>					
Political participation	4-20	9.71	8.65	9.42	3.29
Interest in politics	1-5	2.24	2.15	2.22	1.09
Active reflection on news	3-15	7.42	7.60	7.47	3.04
Interpersonal trust	2-10	4.94	4.90	4.93	2.21
Civic efficacy	1-5	3.44	3.40	3.43	1.07

+*p* < .10, ***p* < .01

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