

“Virtual” Parental Involvement: The Role of the Internet in Parent-School Communications



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The Role of Parent-School Communication

■ Parental involvement (PI)

- Multi-faceted construct
- Associated with multiple academic benefits from K-12

■ Parent-school communication

- Positive findings:
 - Grades, test scores, course & school completion (Epstein, 1995; Hill, 2001)
 - Other kinds of parental involvement (Lunts, 2003)
- Negative findings?
 - Communication is precipitated by student problems (Catsambis, 2001)



Parental Involvement in Adolescence

- **Decline in PI in adolescence?**
 - Types & mechanisms, not absolute amount (Eccles & Harold, 1993; Hill & Taylor, 2004)
- **Effective PI in adolescence** (Kreider, Kennedy, & Caspe, in press):
 - Home-school relationships
 - Responsibility for learning outcomes
 - Supportive parenting
- **Adolescents need balance of autonomy & connectedness** (Grotevant & Cooper, 1998)



Parent-School Communication in Adolescence

- **Positively associated with:**
 - Achievement (Hill, 2001)
 - Expectations & aspirations (Henderson & Mapp, 2002)
 - Post-secondary plans & enrollment (Catsambis, 2001)
- **Can also facilitate:**
 - Parent-adolescent discussion re: education
 - Homework involvement



Internet-Based Parent-School Communication

■ Internet-based tools:

- Email
- Websites
- List-servs, discussion boards, etc.

■ Potential benefits:

- Information-sharing (facilitates other PI) (Abdal-Haqq, 2002)
- Reduces scheduling barriers
- Conveys interest & investment in education



Internet-Based Parent-School Communication

■ Potential challenges:

- Lack of non-verbal cues
- Less traditional involvement?

■ The “digital divide”

Families who face greater barriers to involvement are also more likely to lack Internet access:

- Lower SES (income and education)
- Lower occupational status and unemployed
- Ethnic minorities? Not clear



Research Questions

- 1) Are demographic characteristics (e.g. SES and ethnicity) associated with Internet-based parent-school communication?
- 2) Does Internet-based parent-school communication positively predict 12th grade achievement and student educational expectations?
- 3) Are these relationships mediated by parent-child discussion about education and, in the case of achievement, parental homework involvement?
- 4) Do these processes vary by SES, ethnicity, or child gender?



Method: Participants

- **Education Longitudinal Study 2002 (ELS)**
 - Nationally representative
 - 10th – 12th grade
- **Base year (10th gr)**
 - n = 14,387 students
 - parents (87.5%)
 - school administrators (99%)
- **First follow-up (12th gr)**
 - n = 13,214 students (91.85 %)



Method: Instruments

■ Demographics:

- Parents: SES, ethnicity, work status, occupation, native language
- Adolescents: gender

■ Parental Involvement:

- Internet-based communication
 - Any usage (1 item with 3 response options)
 - Frequency of usage (3 items)
- “General” communication (by any method) (20 items)
- Parent-child discussion about education (4 items)
- Homework involvement (2 items)



Method: Instruments (cont.)

- **Achievement and adjustment:**
 - Math and reading test scores (IRT)
 - Educational expectations (1 item)
- **Other controls:**
 - Previous achievement test scores
 - School-level Internet-based communication with parents (3 items)



Prevalence of Internet-Based Parent-School Communication

Percentage who use:

- % who use it: 36.5%
- % who have access/ don't use for this purpose: 52.7%
- % who have no access: 10.8%

Average frequency:

- Once or twice per year



Demographics of Users

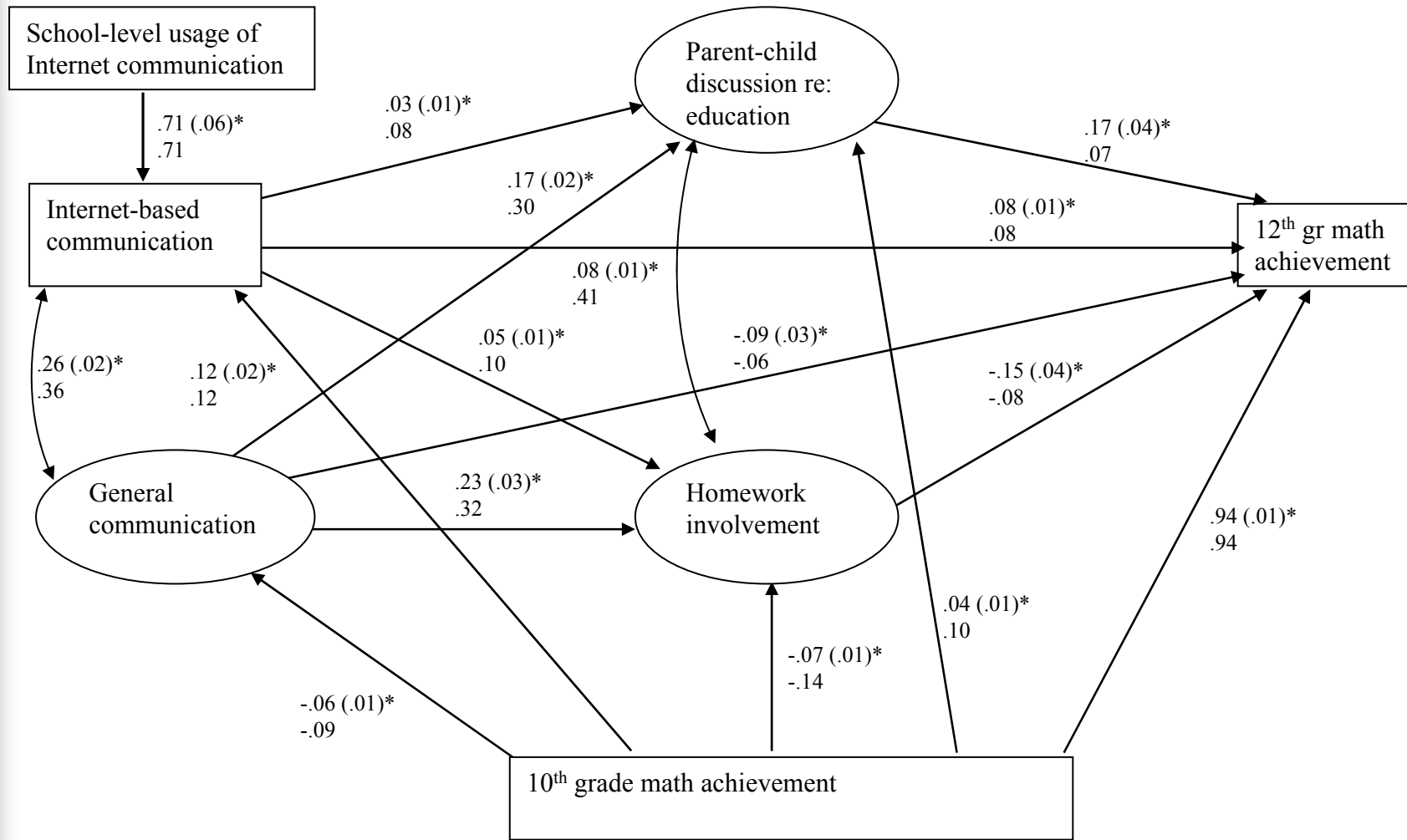
- **Higher income and more education:**
more access and usage (OR = 1.26 and 3.39)
- **Hispanic families:**
less access and usage (OR = .38)
- **Native English speakers:**
more access (OR = 2.31)
- **At least one full-time working parent:**
more access (OR = 1.86)
- **Ethnicity * income interaction:**
income more assoc. with access for African-Americans
(OR = 1.52 versus 1.26)
- **Parents of boys:**
More frequent usage (b = -.11)



Does Internet-Based Communication Predict Achievement?

- Any usage of Internet-based communication is positively related to:
 - 12th gr achievement
 - Parent-child discussion about education
 - Homework involvement
- Any usage of Internet-based communication predicts more homework involvement, which in turn predicts *lower* achievement (Sobel test for mediation = -3.0, $p < .01$)
- Frequency of Internet-based communication is positively related to 12th gr achievement, but not other PI

Figure 1: Any usage of Internet-based communication predicting 12th gr math achievement

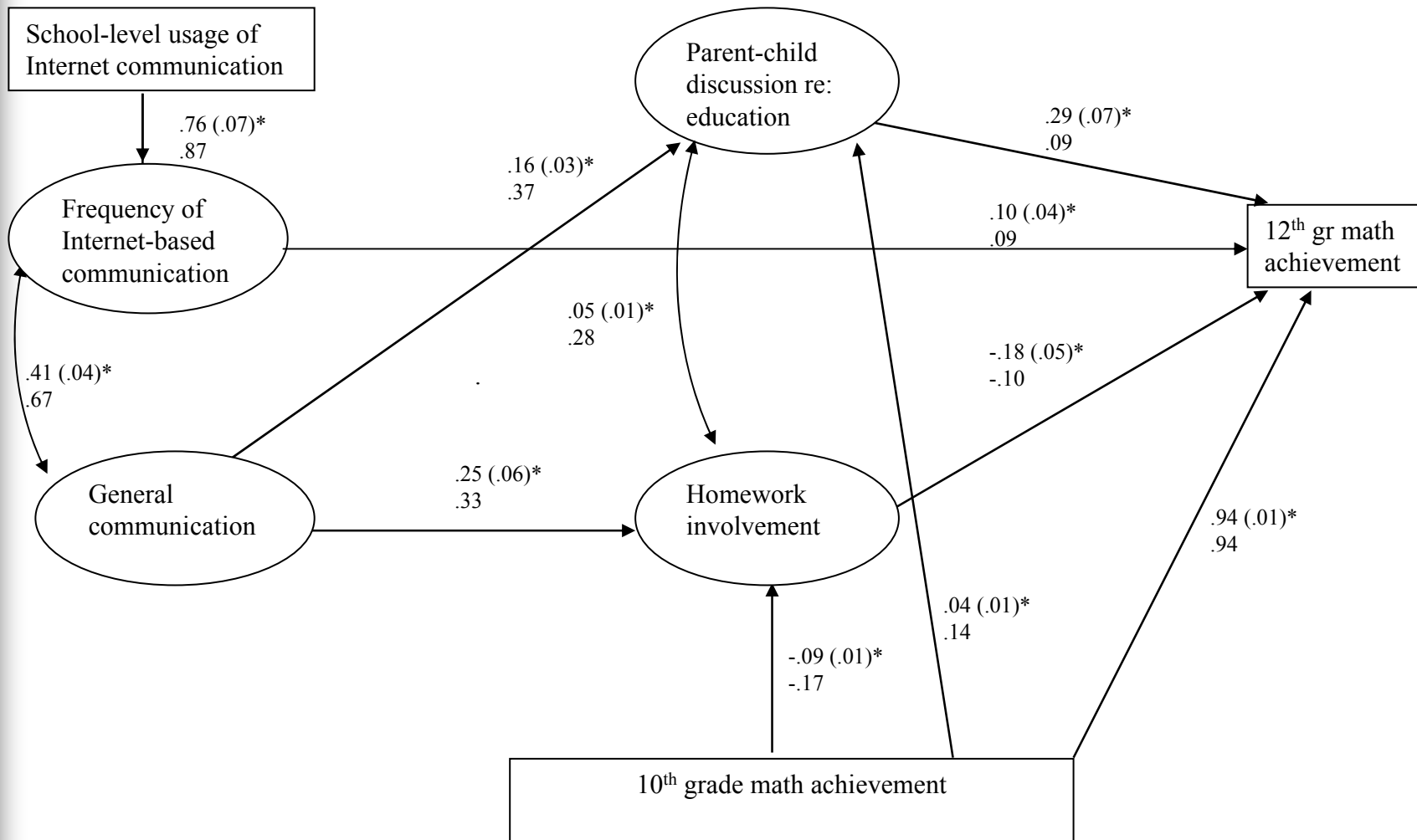


$\chi^2/df = 8.70$; TLI = .98; RMSEA = .03

Top numbers are unstd b and se; bottom numbers are β . Only significant paths are presented

* $p < .01$

Figure 2: Frequency of Internet-based communication predicting 12th gr math achievement



$\chi^2/df = 4.57$; TLI = .96; RMSEA = .04

Top numbers are unstd b and se; bottom numbers are β . Only significant paths are presented

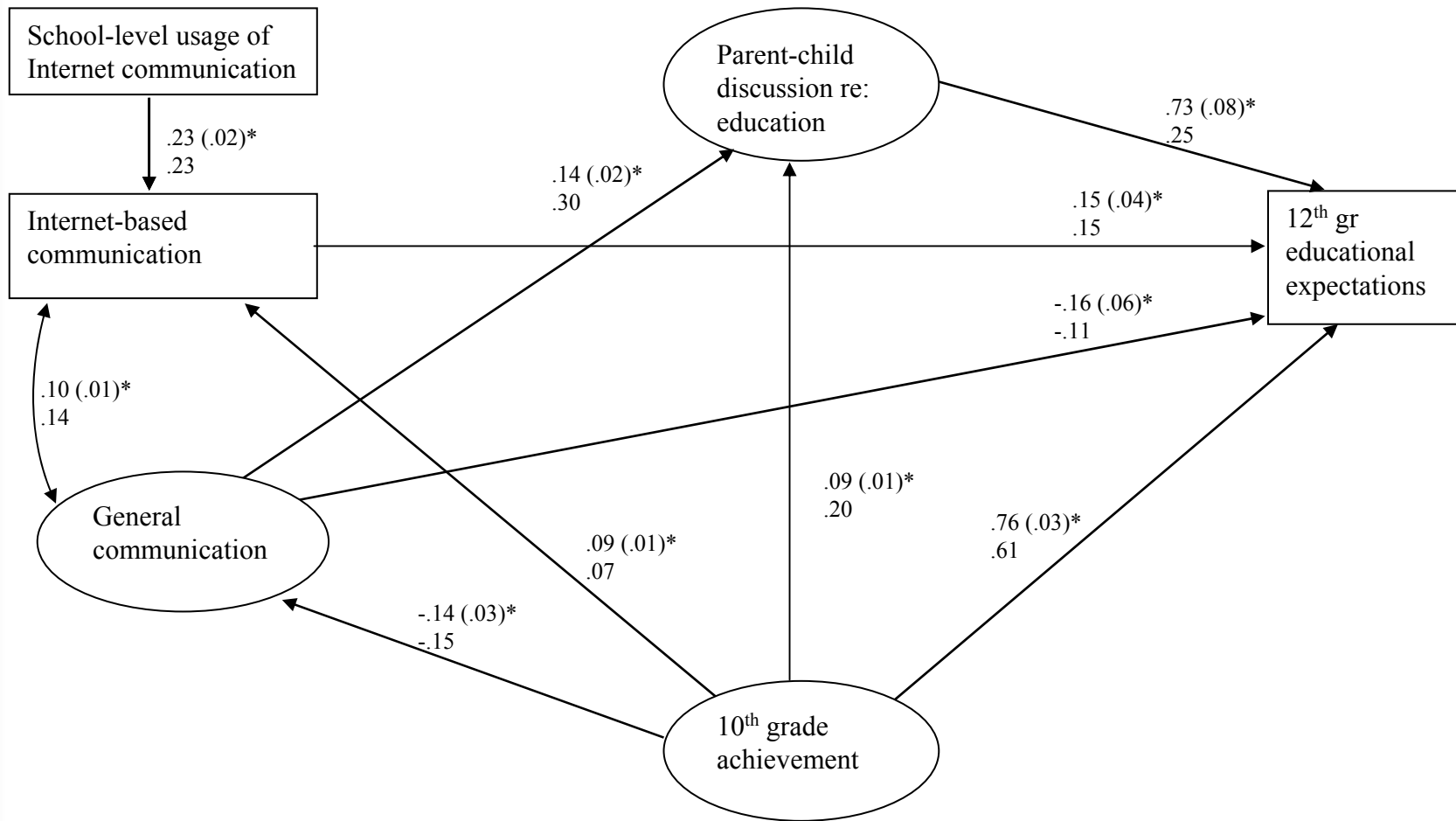
* $p < .01$



Does Internet-based Communication Predict Educational Expectations?

- Any usage of Internet-based communication is positively related to educational expectations
- Frequency of Internet-based communication is not related to educational expectations

Figure 3: Any Internet-based communication predicting educational expectations

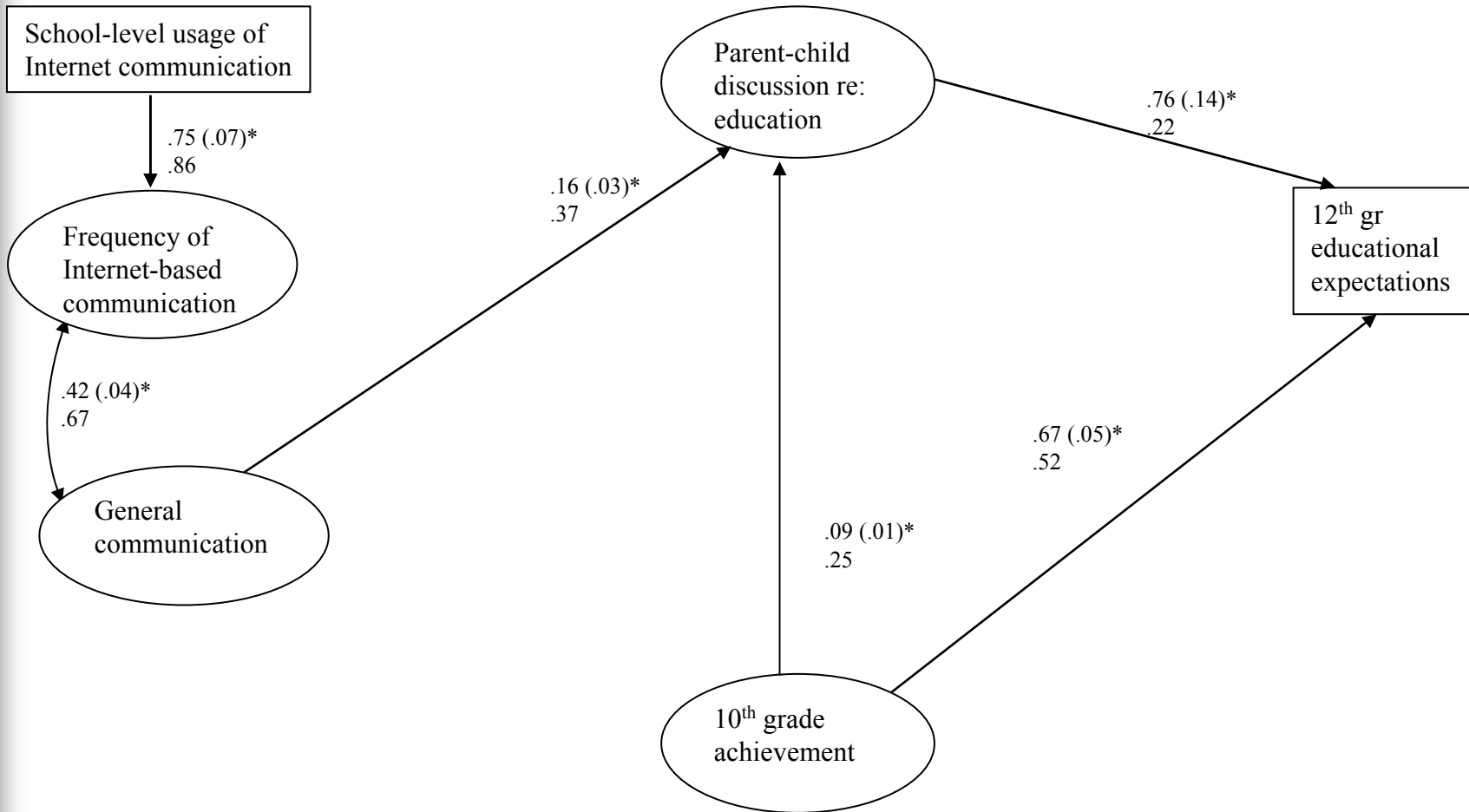


$\chi^2/df = 5.22$, TLI = .98, RMSEA = .02

Top numbers are unstd b and se; bottom numbers are β . Only significant paths are presented

* $p < .01$

Figure 4: Frequency of Internet-based communication predicting educational expectations



$\chi^2/df = 4.64$; TLI = .95; RMSEA = .04

Top numbers are unstd b and se; bottom numbers are β . Only significant paths are presented

* $p < .01$



Additional Findings

- There were no differences according to gender, SES, or ethnicity
- The above relationships controlled for “general” communication, previous achievement, and school-level Internet-based communication
- “General” communication was negatively related to outcomes, while Internet-based communication was positively related
- “General” communication appeared to occur when students had academic problems, whereas Internet-based communication appeared to occur when students were doing well in school



Conclusions

- Internet-based parent-school communication is relatively common, but appears to be an underutilized resource
- The “digital divide” raises serious concerns about access to the technology and possibility of magnifying gaps
- However, it has benefits for students across all demographic categories
- Specifically, it is associated with higher achievement and educational expectations
- Also associated with other types of PI, but indirect relationships were not as hypothesized



Implications & Future Directions

- Randomized intervention studies, especially with low-SES populations
- Qualitative data & implementation studies
- Examine Internet-based communication across developmental stages
- Examine details of Internet-based communication (e.g. content, valence, email vs. website)
- School-level factors