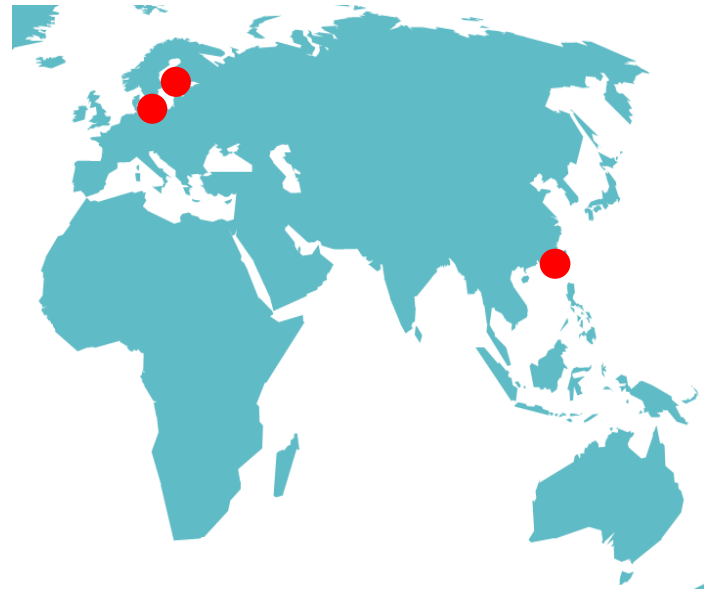


Socioeconomic Patterning of the Internet Use among School-aged Children in Taiwan

Jennifer Chun-Li Wu, Yi-Fan Li, Tung-liang Chiang,
Ming-Yu Wang

Early Childhood and Family Education
National Taipei University of Education, Taiwan

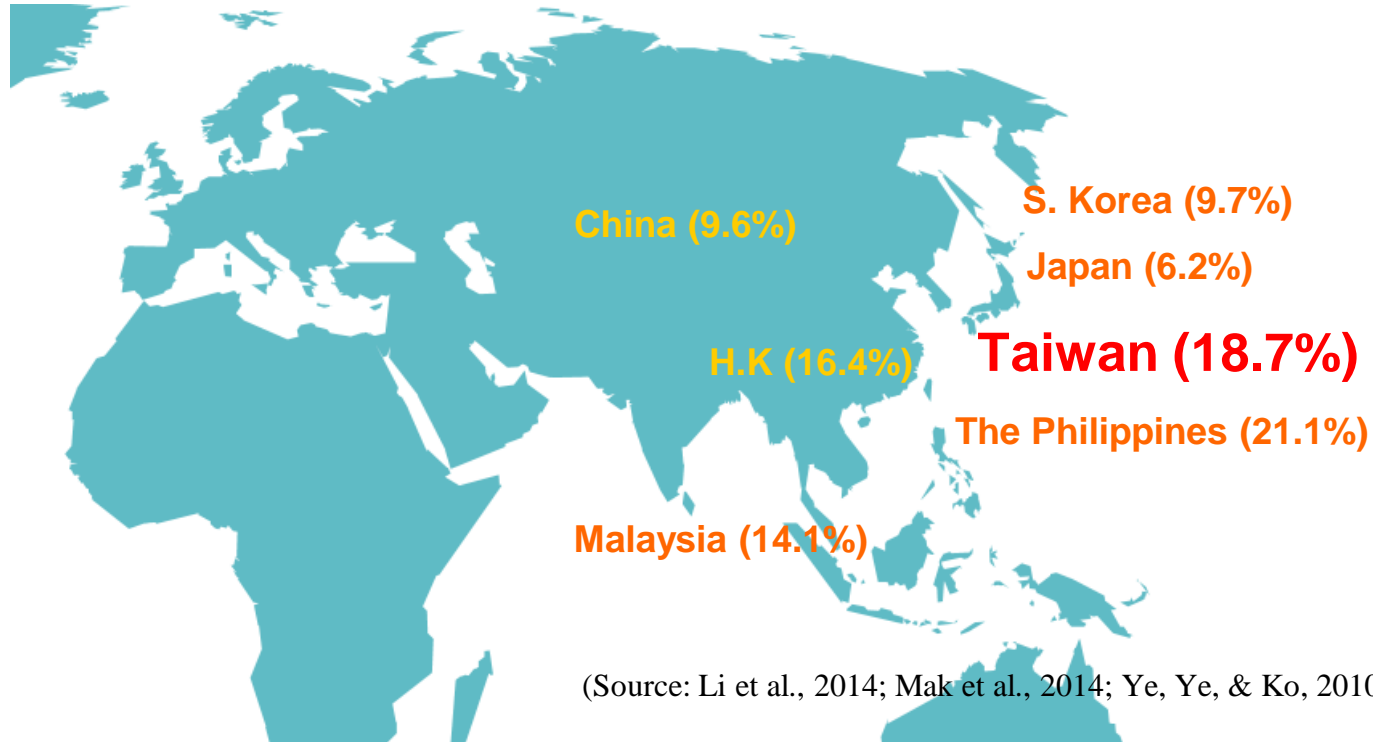
Presented at 2019 European Conference on Developmental Psychology



Background

- ICT environment in Taiwan
 - High penetration rate, easy access
 - Online gaming and SNS the most developed Internet activities in Asia
- National Curriculum Guidelines- ICT as core competence
- Emerging concerns (e.g. Internet addition, cyberbullying..)

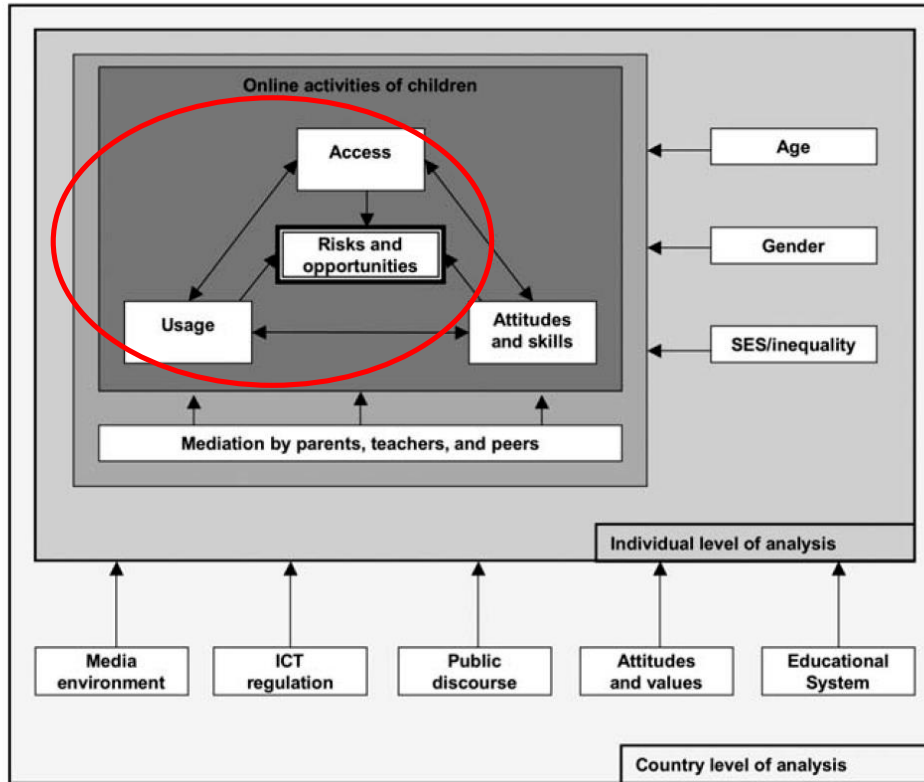
Internet Addiction of Adolescents in Asia (CIAS-R defined)



Reflections and the Rationale

- Social inequalities in child outcomes
- Digital divide theory (*Acharya, 2017; Hargittai & Hinnant, 2008*)
 - Inequalities in:
 - First level- accessibility
 - Second level- use and skills
 - Third level- consequences
 - Sequentiality of digital inequality
- Research gaps
 - Child population: IC technology and educational gaps
 - Internet: the preponderance on adults or adolescents

Conceptual Framework: Children & Media



Source: Hasebrink, Oladsson & Stetka, 2010

Research objectives

- To depict the socioeconomic patterning of Internet **access**, **use/skills** and **consequences** among school-aged children in Taiwan
- To examine the role of parental mediation in explaining the socioeconomic gaps, if any.

Data source

- A Latvia-Lithuania-Taiwan collaborative study of Internet use among school-aged children
 - Short-term longitudinal investigation (2018~2019)
 - Children version (Internet use and skills, social relationship)
Parent version (family sociodemographics, after-school activities, child's Internet use, parental mediation, parenting, child's SDQ)
 - Time 1 survey, cross-sectional design
- Participants
 - 304 dyads of children & their caregivers, from 7 public primary schools in Taipei
 - Children: grade 3th and 4th
 - Respondents: mothers (79.3%), fathers (18.8%)

Measures¹

- Internet access

- Number of IC devices; sole disposal of IC devices (P)
- Physical access at home; access other than at home (P)

- Online activities (C)

- 5-point Likert scale *Never/hardly never; Several times each day*
- Types (*van Deursen & van Dijk, 2014; van Deursen, 2016*)
 - Information* (3): *for school work, find out prices*
 - Social* (5): *check email, visit SNS*
 - Leisure* (4): *play video games, watch video clips*

Measures²

- Internet skills (C)

- 3-point Likert scale (know nothing, some, a lot of that)
- Types (*Van Deursen, Helsper, Eynon & Van Dijk, 2017*)
 - Operational* (7): open downloaded files, find websites visited before
 - Social* (3): change privacy setting, remove people from contact list
 - Creative* (2): create a website, create and post online video

- Consequences of Internet use (C)

- Compulsive Internet Use Scale (CIUS) (*Meerkerk, Van den Eijnden, Vermulst, & Garretsen, 2009*)
- Preoccupation, withdrawal symptoms and loss of control....
- 14 items, 5-point Likert Scale

Measures³

- Sociodemographic status (SES)

- Educational attainment of the caregiver

Low (senior high school or below; ≤ 12 years)

Middle (junior/vocational college; 14~15 years)

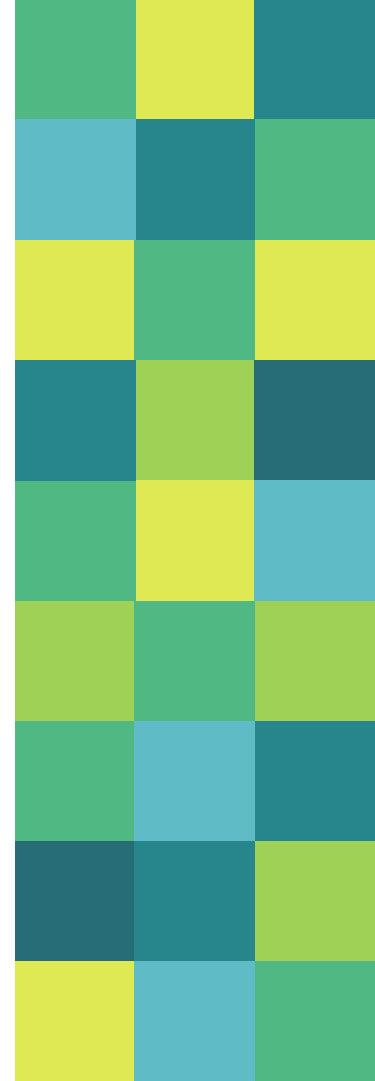
High (university or graduate school; ≥ 16 years)

- Parental mediation strategies

- Proactive: do shared activities, suggest safe ways of use
- Technical control: block advertisement, keep track of content
- Parent-report adherence to rules (y/n)

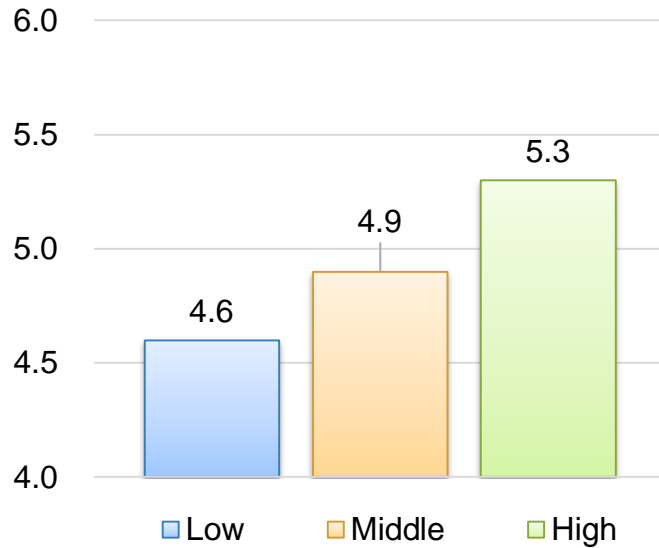
Socio-demographics of participants (n=304)

	n (%)
Boys	164 (53.9)
Age (mean, SD)	9.3 (0.6)
SDQ- hyperactivity scale (mean, SD)	3.5 (2.3)
Caregiver's education (Family SES)	
Senior high school or below	54 (17.8)
Junior/vocational college	48 (15.9)
University/graduate school	201 (66.3)
Parent's marital status	
Married	278 (91.7)
Non-married in a partnership	6 (2.0)
Not in a partnership	19 (6.3)
Family financial status	
Afford all that we'd like to have	10 (3.3)
Fairly well off	169 (56.0)
Get along well enough	102 (33.8)
Have only the very basic necessities	21 (6.9)

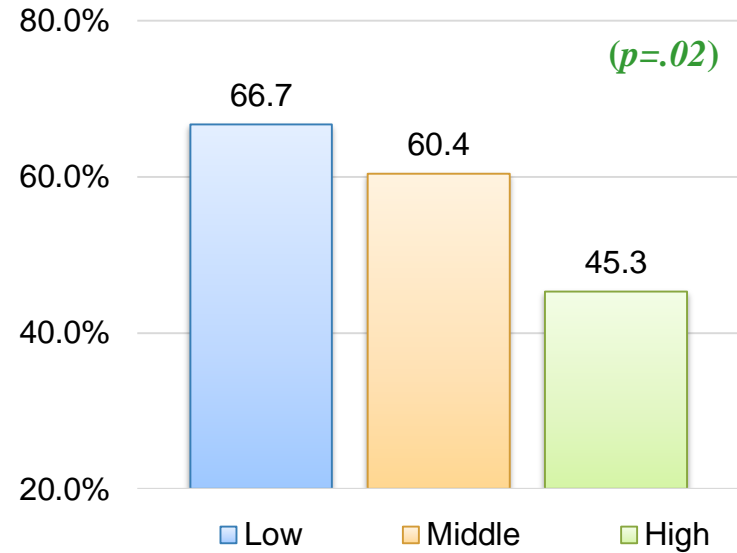


Internet Access¹, by SES

No. of IC devices at home

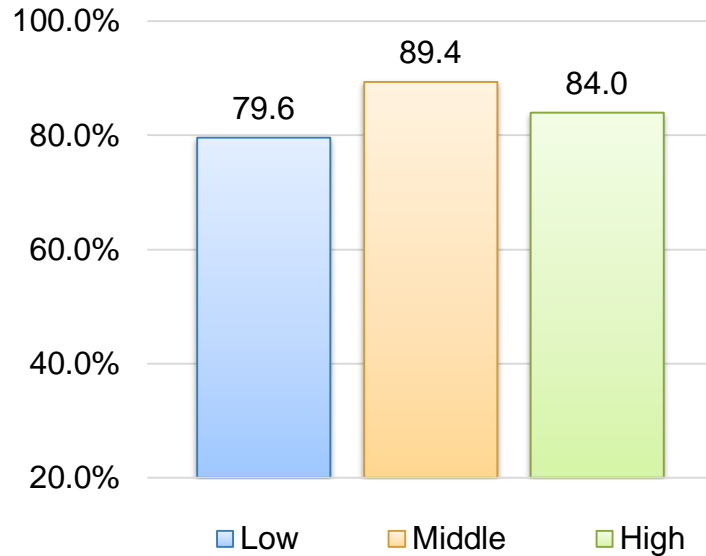


IC devices of sole disposal

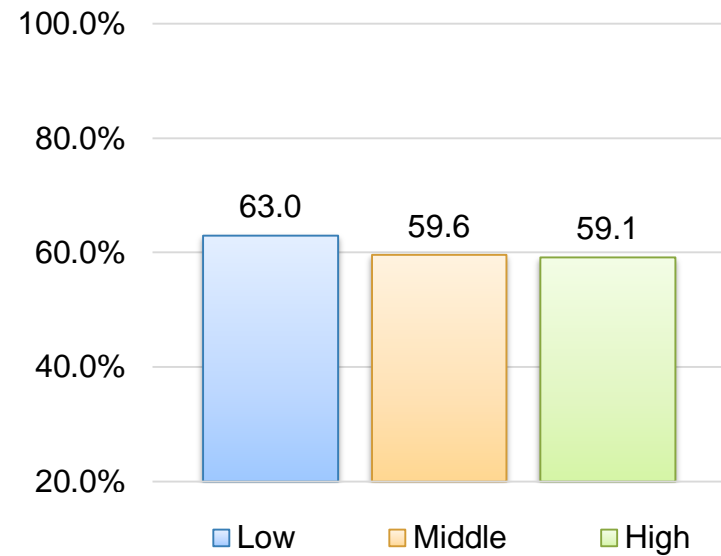


Internet Access², by SES

Access at home

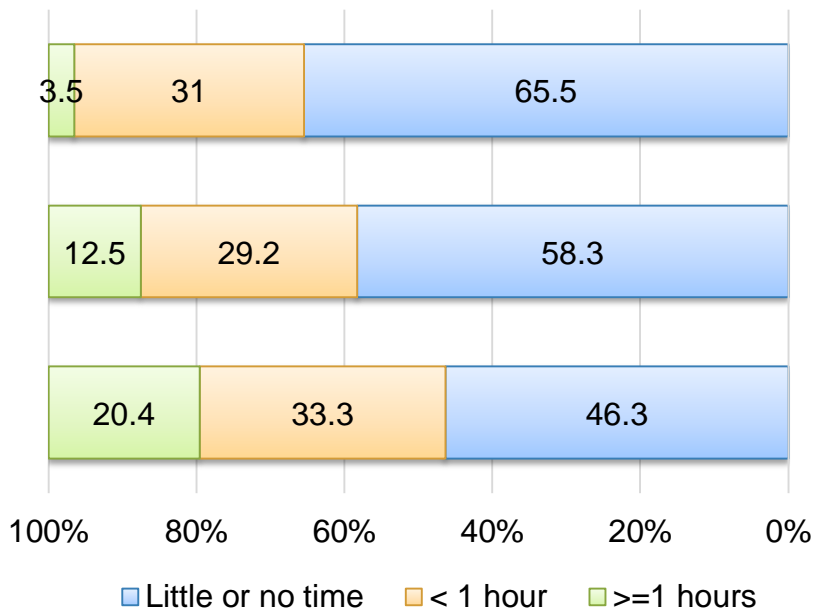


Access other than home

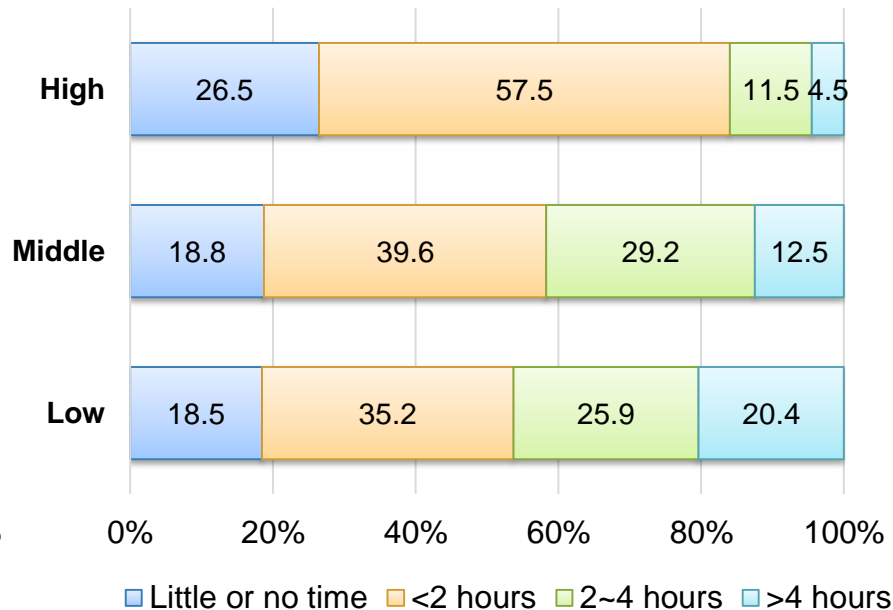


Time of Internet Use, by SES

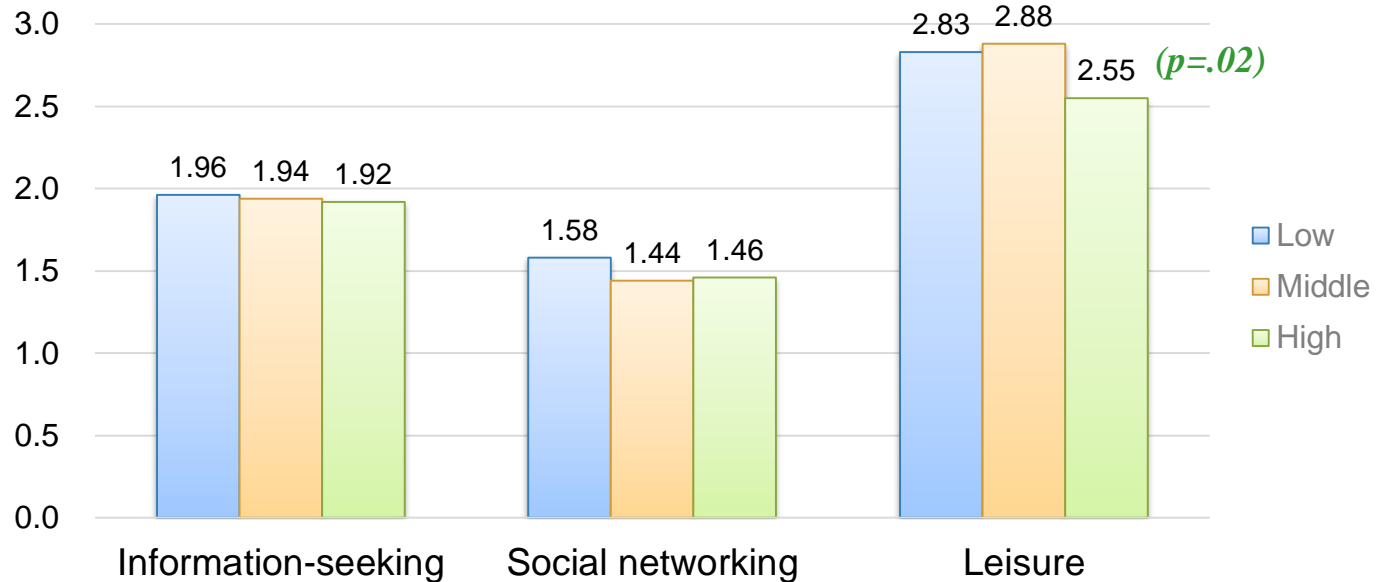
Hours per school day ($p < .001$)



Hours per weekend day ($p < .001$)

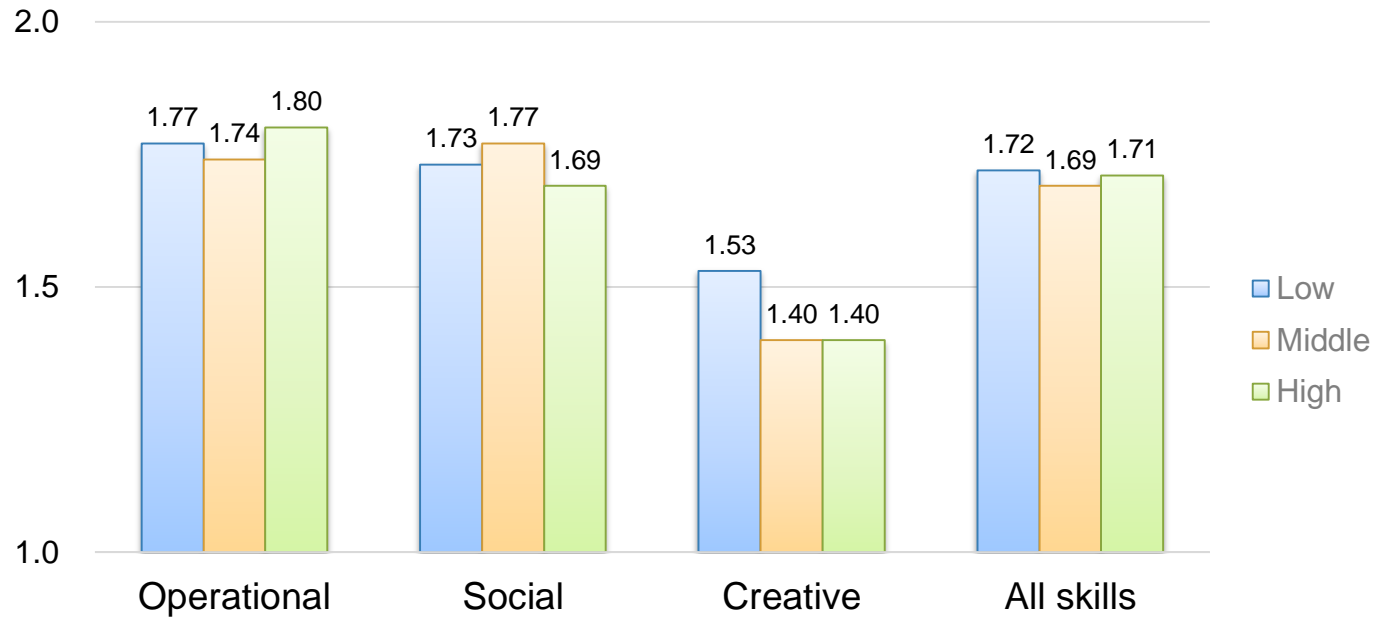


Types of Internet Activities, by SES



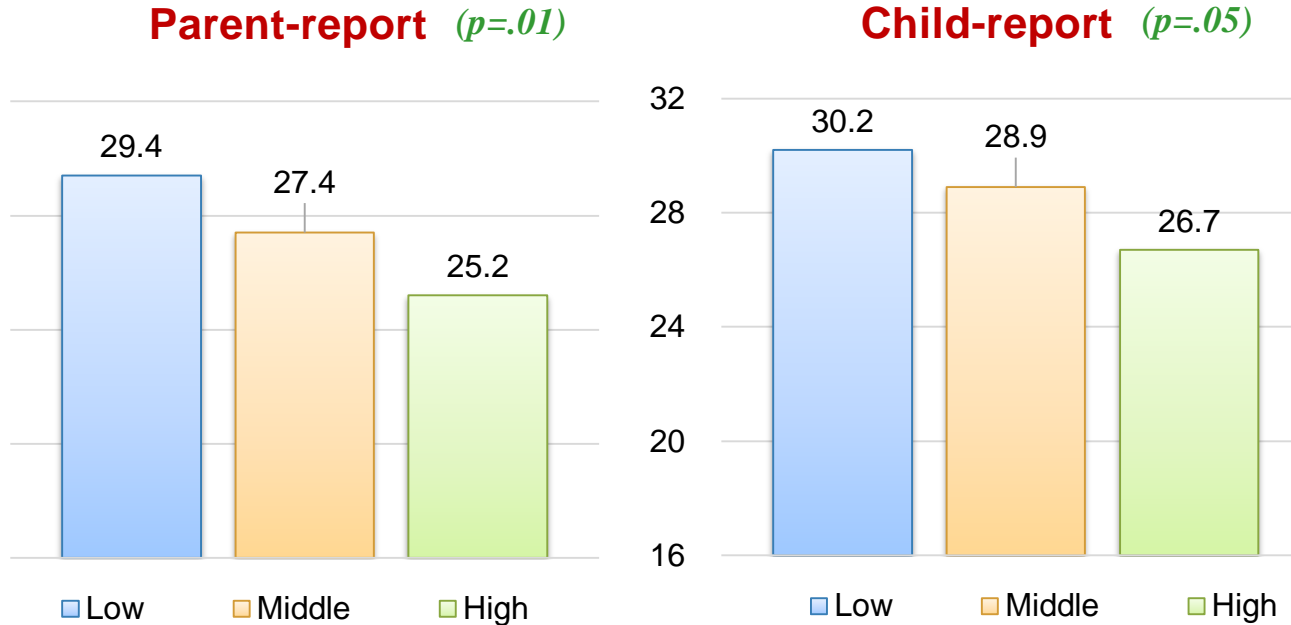
Note: (1) Never or hardly never, (2) Less than once a week, (3) About once or twice a week, (4) Daily or almost daily, (5) Several times each day

Types of Internet skills, by SES



Note: (1) Know nothing of that, (2) Know some of that, (3) Know a lot of that

Compulsive Internet Use, by SES



Note: (1) Never, (2) Seldom, (3) Sometimes, (4) Often (5) Very often

Multiple Linear Regression on CIUS

	Model 1	Model 2	Model 3
	B (SE)	B (SE)	B (SE)
Family SES (ref: Low)			
Middle	-1.52 (1.66)	-1.72 (1.71)	-0.87 (1.63)
High	-3.07 (1.30)*	-2.64 (1.31)*	-1.57 (1.27)
Sex (ref=girls)			
Boys	2.58 (1.01)*	1.05 (1.03)*	2.55 (1.02)*
SDQ- hyperactivity scores	1.55 (0.23)***	1.46 (0.23)***	1.25 (0.23)***
Leisure use score		0.45 (0.14)***	0.34 (0.14)*
Parental mediation			
Proactive			0.01 (0.08)
Control			0.51 (0.22)*
Adherence to rule			-4.91 (1.20)***
Model F	19.58***	18.16***	14.28***
Adj. R ²	0.207	0.233	0.281

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

Conclusions

- Key findings

- No socioeconomic variations found in Internet access and skills among school-aged children
- Socioeconomic divide observed for children with lower SES spending more time on leisure activities and reporting higher level of CIU
- Adherence to family-set rules could account for the divide in CIU

- Implications and next steps

- What children do online matter; clear rules with children's adhered
- Cross-cultural comparison: the interplay of these factors in different sociocultural and policy contexts