

Can We Chat Privately?

How information seeking anxiety increases
privacy concerns with live chat

[#CanWeChatPrivately](#)

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What's the problem?

WE'D PREDICT THAT...

Information seeking anxiety (ISA) should **increase** a student's intent to use live chat because it's remote and more anonymous

but

WE FOUND THAT...

Students with ISA felt like using live chat was riskier for their privacy (Sanders et al. 2023)

and

WE'D PREDICT THAT...

Perceiving more risk should **decrease** a student's intent to use live chat, according to *communication privacy management* theory

Our predictions are at odds, so which is more correct?

Why does this study matter?



Practice

We may need to rethink policies and practices if we want live chat to continue to serve as a solution for students with info seeking anxiety.



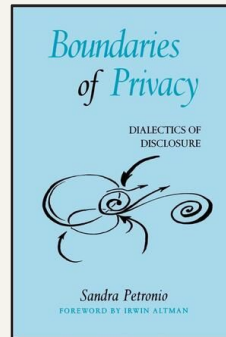
Research

Our study focuses on user behavior rather than technical or ethical dimensions of privacy that are often covered in library discourse.

What is CPM?

A quick primer on Communication Privacy Management

A theory about the social negotiation to control the rules that govern private info between individuals.



Petronio, Sandra. *Boundaries of Privacy: Dialectics of Disclosure*. Albany: State University of New York Press, 2002.

<https://muse.jhu.edu/book/4588>.

Privacy boundaries



Rules Formation

- Our private info exists inside a “boundary”
- We form rules about how private info is allowed to exit that boundary
- Some boundaries may be more *permeable* than others



Boundary Coordination

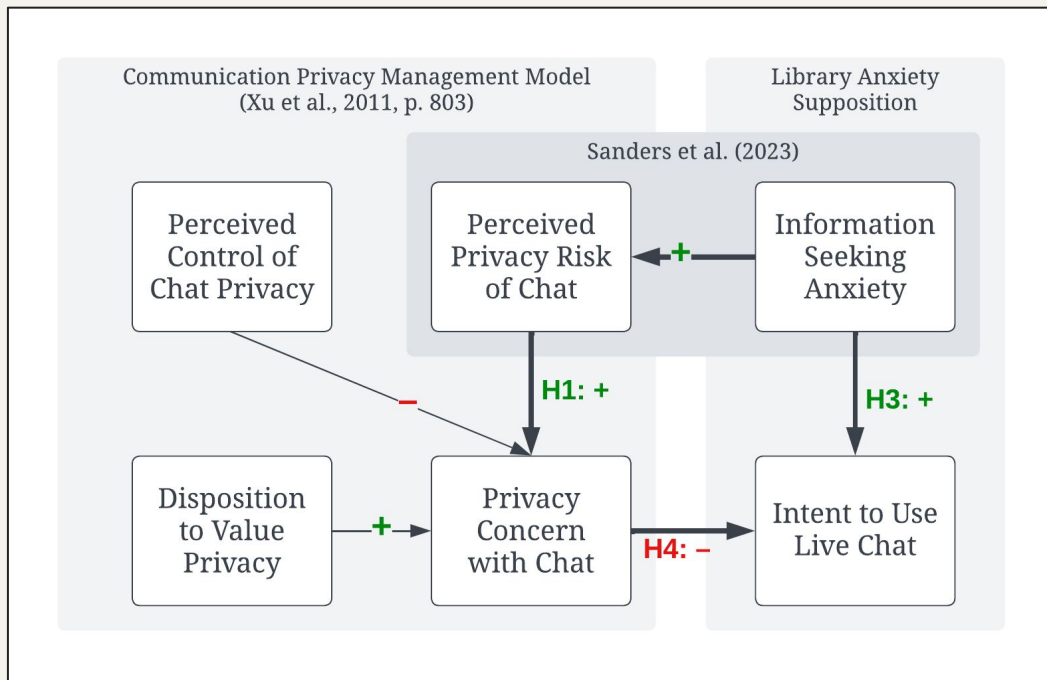
- By disclosing private info, we create a shared boundary
- Through social cues, we negotiate the new rules for the shared boundary
- Who owns what part? How permeable it will be? What's at risk if the boundary fails?



Boundary Turbulence

- We might fail to agree on how private information should be handled
- Following unexpected rules about shared private info causes social friction, and sometimes corrective action

Our hypotheses



H1. Higher perceived privacy risk increases a student's information privacy concerns with live chat.

H2. Information Seeking Anxiety has no direct effect on a student's information privacy concern with live chat (only through its increase to perceived risk).

H3. Higher information seeking anxiety increases a student's intent to use live chat.

H4. Higher information privacy concerns with live chat decreases a student's intent to use live chat.

A mediating relationship between info seeking anxiety, risk, concern, and intent to use live chat.

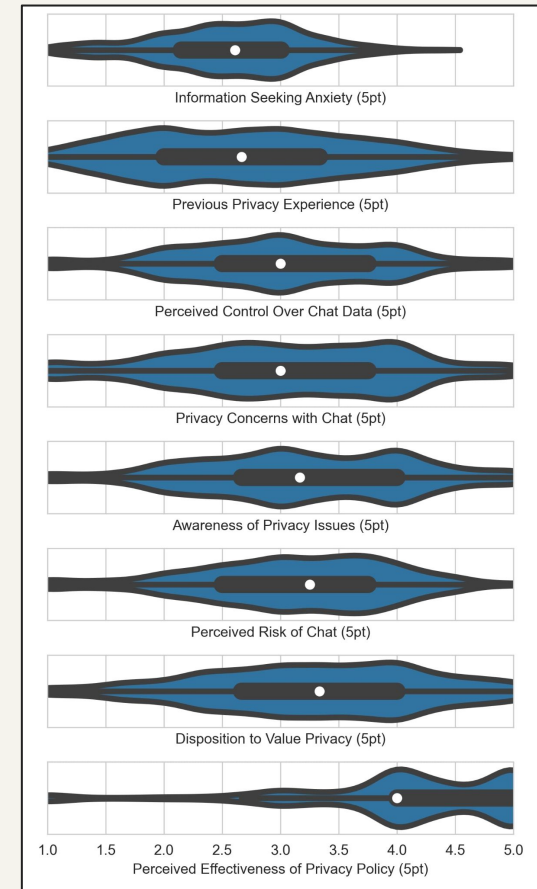
Our methods

In a survey of 532 students at UNC Charlotte, we used psychometric questionnaires to measure:

- Information seeking anxiety (Erfanmanesh et al. 2012)
- Previous privacy experiences (Xu et al. 2011)
- Perceived control over chat data (adapted from Xu et al.)
- Information privacy concerns with chat (adapted from Xu et al.)
- Awareness of privacy issues (Xu et al.)
- Perceived privacy risk from using chat (adapted from Xu et al.)
- Disposition to value privacy (Xu et al.)
- Perceived effectiveness of privacy policy (Xu et al.)

We also asked students to rate their intent to use live chat as a method to contact the library and provide basic demographics.

For more info, see Sanders et al. 2023



Reproduced from Sanders et al. (2023)

Our analysis

Table 2. The effect of risk perception and information seeking anxiety on information privacy concerns (linear regression)

Regressors	Unstandardized		Standardized			Collinearity Statistics	
	B	Std. Error	β	t	Sig.	Tolerance	VIF
(Constant)	-.320	.219		-1.460	.145		
ISAS	.183	.041	.120	4.450	.000	.876	1.141
RISK	.711	.037	.608	19.162	.000	.635	1.574
CTRL	-.032	.030	-.029	-1.064	.288	.867	1.153
VALU	.256	.034	.252	7.611	.000	.584	1.711
POLI	-.011	.028	-.011	-.389	.697	.869	1.151
AWAR	-.009	.032	-.009	-.293	.769	.693	1.443
PEXP	-.010	.029	-.010	-.346	.730	.819	1.220
Race-Asian	.056	.063	.024	.899	.369	.893	1.119
Race-Black	-.309	.079	-.101	-3.905	.000	.956	1.046
Gender-Man	.083	.055	.040	1.509	.132	.913	1.095
Class-Grad	.094	.060	.042	1.552	.121	.891	1.122

For every 1 point increase in a stat. sig. regressor ($p < .05$), we observed an increase in information privacy concerns by a point value equal to B.

Rows highlighted in yellow are those which Xu et al. (2011) predicts to have a direct or indirect effect on information privacy concerns.

Values highlighted in green are those relevant to our hypotheses.

Our analysis

Table 3. The effect of information seeking anxiety and information privacy concerns on the intent to use live chat (ordered logistic regression, log odds)

Threshold	Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Chat Intent 1 2	-0.763	0.460	2.752	1	0.097	-1.665	0.139
Chat Intent 2 3	0.536	0.459	1.362	1	0.243	-0.364	1.436
Chat Intent 3 4	1.140	0.461	6.105	1	0.013	0.236	2.044
Chat Intent 4 5	2.873	0.479	35.925	1	0.000	1.934	3.813
Regressors							
ISAS	0.413	0.134	9.563	1	0.002	0.151	0.675
CONC	-0.342	0.088	14.947	1	0.000	-0.515	-0.168
AWAR	0.073	0.093	0.616	1	0.433	-0.109	0.256
PEXP	0.063	0.092	0.470	1	0.493	-0.117	0.242
Race-Asian	-0.009	0.199	0.002	1	0.963	-0.398	0.380
Race-Black	-0.190	0.250	0.577	1	0.448	-0.680	0.300
Gender-Man	-0.352	0.174	4.097	1	0.043	-0.693	-0.011
Class-Graduate	0.736	0.193	14.496	1	0.000	0.357	1.114

For every 1 point increase in a stat. sig. regressor ($p < .05$), we observed that the odds of responding to chat intent with a higher rating changed by a value equal to e^{Estimate}

Values highlighted in green are those relevant to our hypotheses.

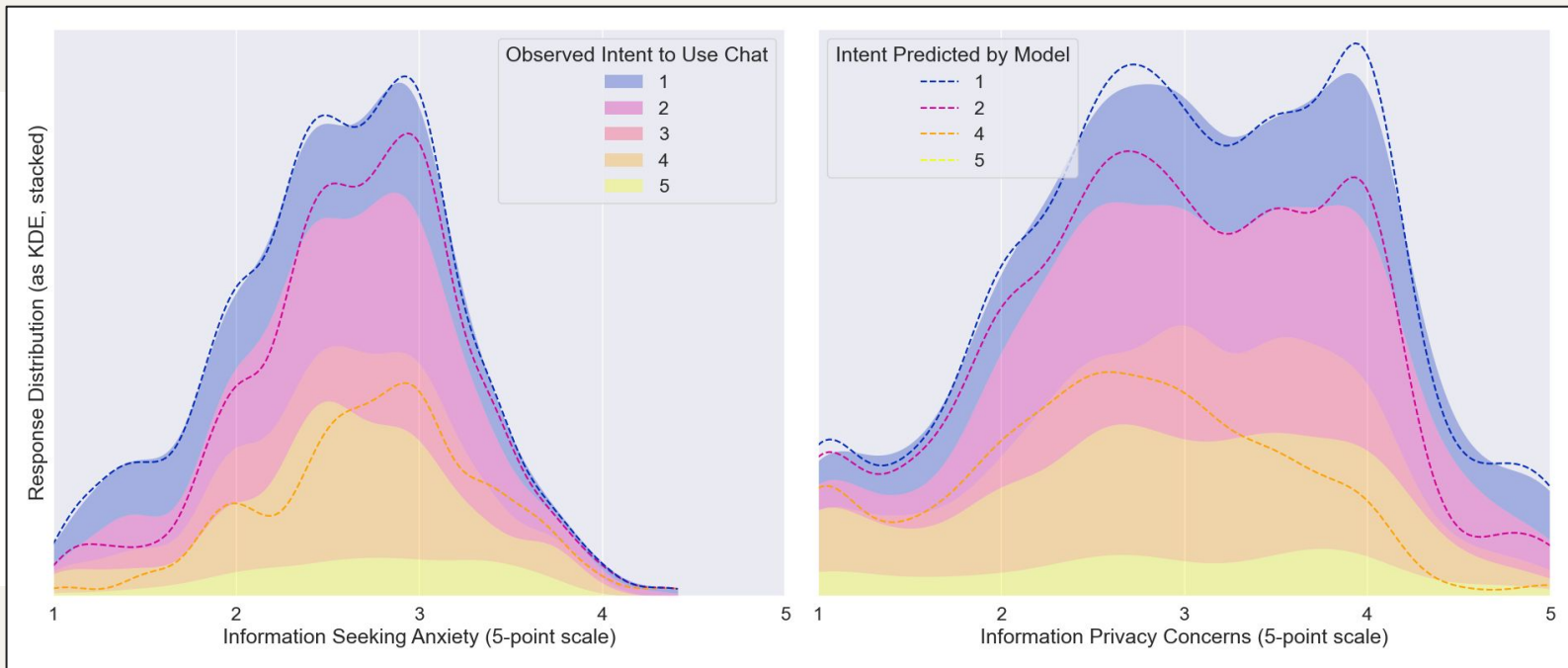
ISAS: $e^{0.413} = 1.511$
Odds of rating chat intent higher **increased by 51.1%**

CONC: $e^{-0.342} = .710$
Odds of rating chat intent higher **decreased by 29.0%**

Our analysis

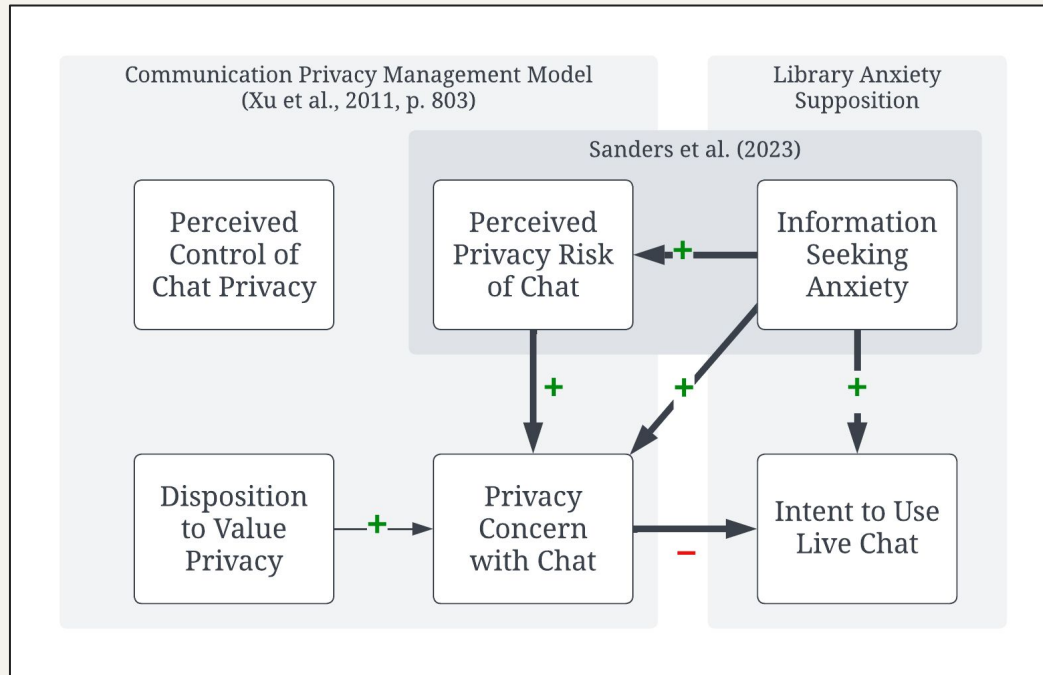
Our model correctly predicts **31.2%** of observed values.

Predictions are within 1.19 points of the observed value on average.



Our results

In summary...



Supported

H1. Higher perceived privacy risk increases a student's information privacy concerns with live chat.

H3. Higher information seeking anxiety increases a student's intent to use live chat.

H4. Higher information privacy concerns with live chat decreases a student's intent to use live chat.

Rejected

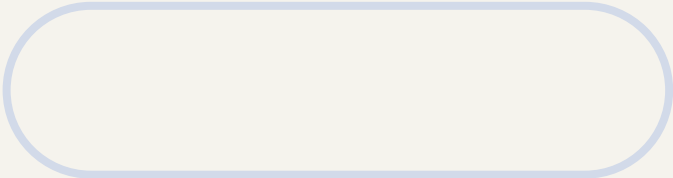
H2₀. Information Seeking Anxiety has no direct effect on a student's information privacy concern with live chat (only through its increase to perceived risk).



Key finding

We observed that information seeking anxiety did make students more likely to use live chat, but it also made them more sensitive to privacy risks and concerns about it.

While they were more likely than the typical student to want to use live chat, they were simultaneously more likely to have information privacy concerns that pushed them to reject it.



Implications for practice

To help students with info seeking anxiety, communication privacy management theory offers ideas about how to reduce a perception of risk.

1

Understand the context

2

Make policies explicit

3

Chat mindfully

- Violations of privacy are common in the digital landscape
- Students develop privacy rules to protect themselves from those bad actors
- Students bring those rules with them when interacting with your digital services

(Related to *rules formation*)

Implications for practice

To help students with info seeking anxiety, communication privacy management theory offers ideas about how to reduce a perception of risk.

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Understand the context

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Make policies explicit

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Chat mindfully

- Don't make students guess how your privacy practices differ from the norm
- Address time parameters (e.g., how long will you keep their info?)
- Address how your institution will hold itself accountable to the policy

(Related to *boundary coordination*)

Implications for practice

To help students with info seeking anxiety, communication privacy management theory offers ideas about how to reduce a perception of risk.

1

Understand the context

2

Make policies explicit

3

Chat mindfully

- Getting help from a peer feels less risky than from a “higher status” person
- Revealing your own personal info could disrupt the feeling of anonymity
- Consider giving students more control (e.g., whether their transcript is preserved)

(Related to *boundary turbulence*)



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Questions?

Thanks for coming!

#CanWeChatPrivately

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