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Cyberspace: A Tale of Two Anxieties

Exploring the relationship between online social anxiety and online privacy concern

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The Study

Many researchers have proposed that cyberspace is a virtual safe haven for socially anxious individuals in that the anonymous nature of online social interactions significantly minimizes social anxiety symptoms (Lee & Stapinski, 2012). Yet, people who experience social anxiety may also experience anxiety related to privacy concerns online.

Little is known about the extent to which online social anxiety and online privacy concerns are similar or distinct.

Purpose

To explore the ways in which the anxiety experienced by socially anxious individuals online is [emotionally](#), [cognitively](#), and [behaviourally](#) distinct from online privacy concerns.

Variables

This study examined level of social anxiety and online privacy concern as a function of [five factors](#):

- Online anticipated interaction anxiety
- Control over personal information
- Preference for anonymous communication
- Desire to protect privacy
- Active internet use

Hypotheses

- Higher levels of social anxiety will be associated with greater online anticipated anxiety, preference for anonymous communication, need for control over personal information, and active internet use. It will not be associated with desire to protect privacy.
- Higher levels of online privacy concern will be associated with greater online anticipated anxiety, need for control over personal information, desire to protect privacy, and with decreased active internet use. It will not be associated with preference for anonymous communication.
- No relationship will be found between level of social anxiety and online privacy concern.**

Method

Participants

A total of [374 adults](#) living in the USA completed the study's [online survey](#).

- Participants were recruited through Mechanical Turk
- Age:** 18- 82 years ($M= 36.0$)
- Gender:** 68.2% women, 30.5% men, 1.3% other
- Most participants (69.0%) expressed a low level of social anxiety (SPIN* cut-off score of 30)
- Most participants expressed a high level of online privacy concern (skewness of -1.07, $SE= 0.13$)
- Average active internet use:** 8.7 hours/day

Measures

Demographic Questionnaire

- A brief questionnaire that was used to examine the participants' demographic characteristics (such as age, gender, etc.) and active internet use

*Social Phobia Inventory (SPIN; Connor et al., 2000)

- A 17-item questionnaire that was used to assess participants' level of social anxiety

Online Privacy Concern Questionnaire

- A 4-item questionnaire that was used to assess participants' level of online privacy concern
- Items were derived from Internet Users' Information Privacy Concerns (IUIPC; Malhotra, Kim & Agarwal, 2004)

Online Anticipated Interaction Anxiety Measure (OAIAM)

- A scenario-based question that asked participants how anxious they would expect themselves to feel (on a scale of 0 to 10) when interacting with a stranger online (as opposed to face-to-face)

Technology-Mediated Safety Behaviour Measure

- A 10-item questionnaire
- In this study, participants' degree of 1) need for control over personal information, 2) preference for anonymous communication, and 3) desire to protect their privacy were each assessed by 1 item (3 items from this questionnaire used in total)

Comparing online social anxiety and online privacy concern

	Online social anxiety	Online privacy concern
<i>Description</i>	Characterized by a need to conceal perceived negative self-attributes in order to avoid negative evaluation by others in social situations (Schlenker & Leary, 1983)	Refers to an individual's desire to maintain control over who may access his or her personal information online in order to prevent unauthorized use or distribution of this information by others (Paine et al., 2007)
<i>Emotion</i>	Anxiety	Anxiety
<i>Object of anxiety</i>	<ul style="list-style-type: none"> The individual himself/herself; perceived negative self-attributes (Moscovitch, 2009) 	<ul style="list-style-type: none"> Others/perceived invaders online (Yao, Rice & Wallis, 2007) NOT necessarily the online medium (unrelated to OAIAM)
<i>Cognitions</i>	<ul style="list-style-type: none"> Socially anxious individuals prefer anonymous online communication as it allows them to easily conceal their perceived negative self-attributes from others, thereby reducing their social anxiety symptoms (Lee & Stapinski). 	<ul style="list-style-type: none"> Individuals who are concerned about their privacy online have a strong desire to protect their private information from online predators (Jiang, Heng & Choi, 2013). Strong sense of control over personal information online reduces online privacy concern (Yao, Rice & Wallis, 2007).
<i>Behaviour</i>	Does not necessarily increase or decrease amount of active internet use	Does not necessarily increase or decrease amount of active internet use

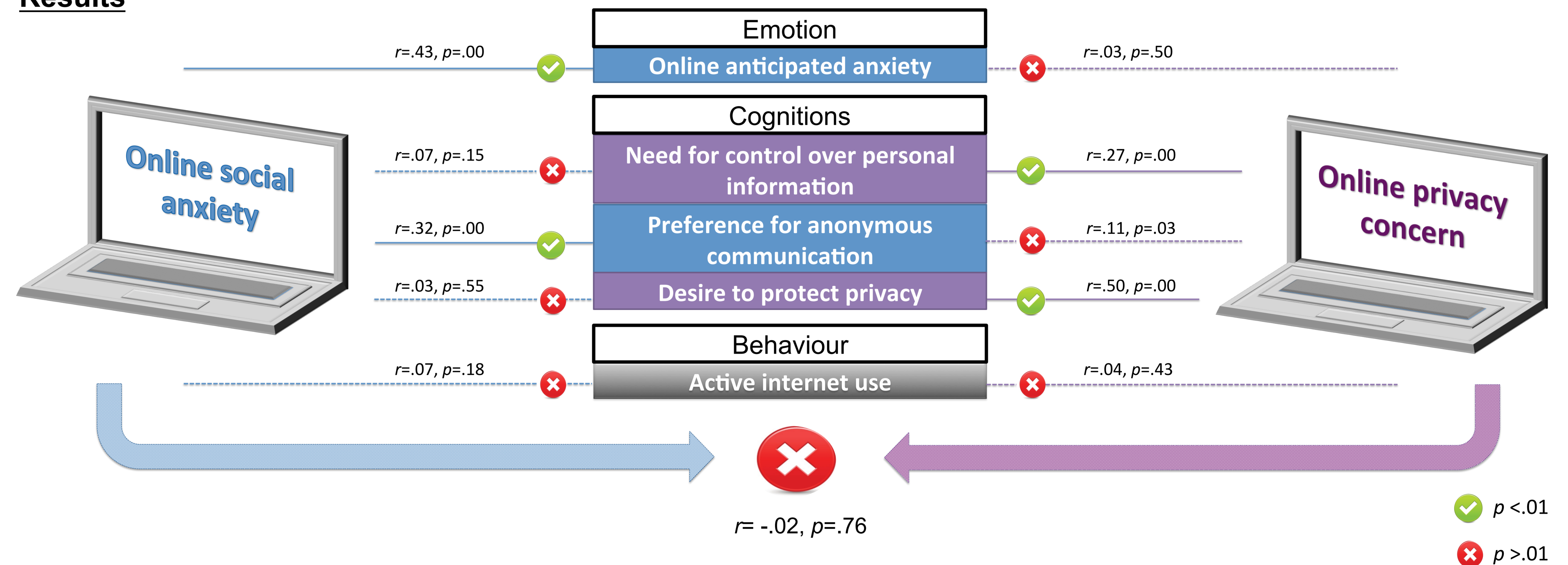
Online Anticipated Interaction Anxiety Measure (OAIAM) Scenario:

"Imagine that you have recently met someone new. You have met this person only once and for a brief period of time. . . Following this initial brief meeting, you are interested in connecting with this person again and getting to know them.

Imagine that you are about to interact with this new person again. In this second interaction, imagine that you will interact with this person online/using the Internet.

Using the scale below ranging from 0-10, . . . how anxious do you imagine you would feel if you were to interact with the person online/using the Internet?"

Results



Discussion

- Online social anxiety and online privacy concern are unrelated.
- Individuals with greater social anxiety reported a stronger preference for anonymous communication and more online anticipated anxiety (relating to the [OAIAM scenario](#)).
- Individuals with greater online privacy concern reported a stronger need for control over their personal information and more desire to protect their privacy online.
- Therefore, although online social anxiety and online privacy concern are both characterized by anxious emotions, the cognitions underlying these two types of anxiety are entirely different.
- Future studies should further examine the impacts that online social anxiety and online privacy concern have on Internet behaviours.

References

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