## Quality of Social Networking Relationships in Late Adolescence & Links to Well-Being

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Pairfam Interdisciplinary International Conference: "Partnership Relations in Context" September 21-23, 2011 in Munich, Germany Technological advances have brought increased opportunities for social networking via the internet and cell phones

Over 70% of youth and young adults who use the Internet use social networking sites (Lenhart, Purcell, et al., 2010)





1 in 3 teens send more than 100 texts/day

Over 70% of 17 year olds text daily (Lenhart, Ling, et al., 2010)



This has raised questions about the potential consequences of these activities

• Can internet use, and social networking in particular, make young people depressed?

• Is there such a thing as "Facebook depression"?

#### Does this...



#### ... lead to this?



#### Prior research

- Focus on general internet use
  - e.g., Kraut et al. (1998; 2002) studies
    - Internet use predicted increased depressive symptoms 1 year later, but not at longer follow-up
- Recognition of importance of the social context
  - IMing predicted increased depressive symptoms (van den Eijnden et al., 2008)
  - Internet use predicted increased depressive symptoms only among youth with poor friendship quality (Selfhout et al., 2009)
  - Online harassment associated with depressive symptoms (Ybarra, 2004)

Social networking as a context for depressogenic experiences

• Is it frequency of use?

- Is it the quality of social networking interactions?
  - e.g., Valkenberg et al. (2006)
    - Although self-esteem was not associated with frequency of social networking or the number of online relationships, youth who received more negative reactions from others about their online proflies reported lower self-esteem

## **Primary Research Questions**

- Is the frequency of social networking use associated with depressive symptoms?
  - Prediction: NO
- Is the quality of social networking interactions associated with depressive symptoms?
  - Prediction: YES
- Temporal associations?
- Individual differences?
- Problematic use?

## **Overview of Methods**

- **STUDY 1**
- Survey study
- 384 college age youth
- *M* age = 20.22 (*SD* = 2.9)
- 68% female
- Ethnically diverse (44% Caucasian)
- Completed questionnaires as volunteers or for research credit

#### • **STUDY 2**

- Initial survey with a 3-week follow-up survey
- 301 college age youth
- *M* age = 19.44 (*SD* = 2.1)
- 62% female
- Ethnically diverse (41% Caucasian)
- Completed questionnaires as volunteers or for research credit

## Social Networking Survey

- Facebook/MySpace, IMing, text messaging
- Amount of time engaging in SN activities
  - e.g., total minutes per day
- Quality of their interactions
  - Thinking about all your interactions (on FB/MS, when IMing, when texting), how (positive/negative) are your interactions with people... (on FB/MS, when IMing, when texting])?
- How they felt after their interactions
  - How often do you feel down or depressed after you interact with people (on FB/MS, when IMing, when texting)?
  - Study 1 people in general
  - Study 2 close friends, romantic partners, people in general

#### Depressive symptoms

- Study 1
  - Beck Depression Inventory Second Edition (BDI-II; Beck, Steer, & Brown, 1996

- Study 2
  - Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977)
  - Depression, Anxiety, and Stress Scale short
    version (DASS; Lovibond & Lovibond, 1995)



Is the frequency of social networking use associated with depressive symptoms?

	Study 1 Depressive Symptoms	Study 2 Depressive Symptoms
Total Minutes/Day Interacting FB	.01	.08
Total Minutes/Day	.00	02
Total Minutes/Day Texting	.04	.02



Is the quality of social networking interactions associated with depressive symptoms?

	Study 1 Depressive Symptoms	Study 2 Depressive Symptoms
Level of Positivity – People in General Interactions	12	17**
Level of Positivity of Friend Interactions	_	23***
Level of Positivity of Romantic Interactions	_	28***
Level of Negativity – People in General Interactions	.15**	.22***
Level of Negativity of Friend Interactions	_	.24***
Level of Negativity of Romantic Interactions	_	.21***
$**p \le .01$ . $***p \le .001$ (two-tailed).		

 $p^* p \le .01, *** p \le .001$  (two-tailed).



Does greater time spent engaging in social networking predict increases in depressive symptoms?

NO – None of the usage variables (time spent interacting on FB/MS, time spent IMing, time spent texting) were significant predictors of T2 depressive symptoms



Does the quality of social networking interactions predict changes in depressive symptoms?

Outcome = T2 depressive symptoms	beta
Level of Positivity – People in General Interactions	20***
Level of Positivity of Friend Interactions	22***
Level of Positivity of Romantic Interactions	22***
Level of Negativity – People in General Interactions	.16***
Level of Negativity of Friend Interactions	.17***
Level of Negativity of Romantic Interactions	.15**

All analyses controlled for T1 depressive symptoms, which was a significant predictor in each analysis.

 $p \le .01, p \le .001$  (two-tailed)



Do depressive symptoms predict greater time spent engaging in social networking?

NO – Depressive symptoms did not predict changes in any of the usage variables (time spent interacting on FB/MS, time spent IMing, time spent texting)



Do depressive symptoms predict the quality of social networking interactions?

Predictor = T1 depressive symptoms	beta
T2 Level of Positivity – People in General Interactions	12+
T2 Level of Positivity of Close Other Interactions	13**
T2 Level of Negativity – People in General Interactions	.19***
T2 Level of Negativity of Close Other Interactions	.17***

All analyses controlled for the T1 social networking variable, which was a significant predictor in each analysis.

 $+ p < .05^{**}p \le .01, *^{**}p \le .001$  (two-tailed)



Do depressive symptoms predict reports of feeling down/depressed immediately after social networking interactions?

Predictor = T1 depressive symptoms	beta
T2 Down/depressed after People in General Interactions	.30***
T2 Down/depressed after Close Other Interactions	.22***

Predictor = T1 depressive symptoms	beta
T2 anxious after People in General Interactions	.23***
T2 anxious after Close Other Interactions	.22***

All analyses controlled for the T1 affect variable, which was a significant predictor in each analysis.

 $p \le .01$ , \*\*\* $p \le .001$  (two-tailed)

## Summary

- No evidence that engaging in more frequent social networking is associated with depressive symptoms
- Consistent evidence for a bi-directional association between poor quality social networking experiences and depressive symptoms
  - Poor quality experiences predict increases in depressive symptoms
  - Depressive symptoms predict increases in poor quality interactions
  - Depressive symptoms are associated with reports of feeling depressed and anxious immediately following social networking interactions

## Conclusion

• Social networking may serve as a salient venue in which youth...

 Experience the depressogenic effects of poor quality relationships

Experience the negative interpersonal effects of depressed mood

#### Depressive rumination

- Passively focusing on symptoms of distress and their possible causes and consequences, leading to fixation on problems and negative feelings (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008)
  - Rumination is associated with interpersonal problems (including a dependent, clingy, and aggressive interpersonal style) and low social support, and functions both to maintain and increase risk for future depression at all ages (for a review see Nolen-Hoeksema et al., 2008)
- Therefore, ruminators may be:
  - More likely to use social networking
  - Have negative experiences
  - Experience more negative affect following social networking experiences

### **Co-rumination**

- Excessive discussion of problems within friendships, including repeated conversations, conjecture about causes, and heightened focus on negative emotions (Rose, 2002).
- Social networking activities may provide opportunities for co-rumination
- Therefore, co-ruminators might be:
  - More likely to use social networking
  - Experience more negative affect following social networking experiences



# Is the frequency of social networking use associated with depressive or co-rumination?

	Study 1 Depressive Rumination	Study 1 Co- rumination	Study 2 Depressive Rumination	Study 2 Co- rumination
Total Minutes/Day Interacting FB	.07	.18***	02	.17***
Total Minutes/Day IMing	02	.03	.04	.20***
Total Minutes/Day Texting	.02	.16**	10	.11

 $**p \le .01$ ,  $***p \le .001$  (two-tailed).



Is the quality of social networking interactions associated with depressive rumination?

	Study 1 Depressive rumination	Study 2 Depressive rumination
Level of Positivity – People in General Interactions	23***	17**
Level of Positivity of Friend Interactions	_	18***
Level of Positivity of Romantic Interactions	_	28***
Level of Negativity – People in General Interactions	.20***	.21***
Level of Negativity of Friend Interactions	_	.21***
Level of Negativity of Romantic Interactions	_	.28***

 $**p \le .01$ ,  $***p \le .001$  (two-tailed).



Is the quality of social networking interactions associated with co-rumination?

	Study 1 Co- rumination	Study 2 Co- rumination
Level of Positivity – People in General Interactions	02	.06
Level of Positivity of Friend Interactions	_	.11
Level of Positivity of Romantic Interactions	_	.01
Level of Negativity – People in General Interactions	.18***	01
Level of Negativity of Friend Interactions	_	03
Level of Negativity of Romantic Interactions	_	.00

 $**p \le .01$ ,  $***p \le .001$  (two-tailed).



Is depressive or co-rumination associated with feeling down/depressed immediately after social networking interactions?

Depressive rumination	Study 1	Study 2
T2 Down/depressed after People in General Interactions	.35***	.34***
T2 Down/depressed after Friend Interactions		.31***
T2 Down/depressed after Romantic Interactions		.38***
Co- rumination	Study 1	Churcher 2
	Study 1	Study 2
T2 Down/depressed after People in General Interactions	.19***	.05

 $p \le .01$ , \*\*\* $p \le .001$  (two-tailed)

## Summary

- Greater co-rumination is associated with engaging more frequently in social networking activities
- Greater depressive rumination is associated with poorer quality interactions while social networking and with feeling down/depressed after interacting with people while social networking

## Conclusions

- The tendency to ruminate, either alone or with friends, gets played out in the context of social interactions that do not involve face-toface or even verbal interaction, and it can affect the quality of those interactions and one's mood
- Depressive ruminators are an important risk group on which to focus

## "Problematic" use

- E.g., ...
  - A behavioral impulse to use the Internet (Ha et al., 2007; Morrison & Gore, 2010; Young & Rogers, 1998)
  - Symptoms when not using the Internet (Whang et al., 2003)
  - Impairment in daily functioning due to Internet use (Fortson et al., 2007)
  - Offline interpersonal consequences of Internet use (Whang et al., 2003).



## "Problematic" use

- Online and Cell Phone Addiction Tendencies (Ehrenberg, Juckes, White, & Walsh, 2008)
  - IMing and cell phone
  - We added Facebook/MySpace
  - The first thing I do each morning is check my...
  - I find it hard to control my \_\_\_\_\_use.
  - I feel lost without my...

# "Problematic" use



- Index of Problematic Online Experiences (I-POE; Mitchell, Sabina, Finkelhor, &Wells, 2009)
  - Overuse
    - Have you felt that you use the Internet a lot more than most other people?
  - Problems with friends and family
    - Has your Internet use created problems between you and any of your friends or family?
  - Problems with daily obligations
    - Have you neglected your obligations, such as your family or work, for 2 or more days in a row because of your Internet use?
  - Problems with people online
    - Have you lost money or other personal property to someone you met on the Internet?
  - Upset/concern about own Internet use
    - Have you felt guilty about your Internet use?



Is problematic internet use associated with depressive symptoms?

#### Τ1

#### **T2**

Depressive Sx Depressive Sx Overuse Overuse Problems friends/family Problems friends/family Problems daily obligations Problems daily obligations Problems people online Problems people online Upset/concern about use Upset/concern about use Addiction behaviors Addition behaviors

## Summary

- No evidence that technology addiction behaviors are associated with depressive symptoms
- Problems in relationships and daily living due to Internet use predict increases in depressive symptoms
- Depressive symptoms predict increases in concerns about internet use, self-perceived overuse, and problems in relationships and daily living

### Conclusions

 Dysphoric young people report experiencing problems of all sorts, both online and offline, in relation to their Internet and social networking use, and those problems can also increase their depressed mood.

## Take Home Message

- What types of social networking experiences should we be concerned about?
  - Not frequency of use
  - Definitely quality of interactions
  - Definitely impairments that result from use
- Who is most at-risk?
  - Not entirely clear (need more research)
  - Probably ruminators
  - Definitely young people who are already dysphoric
- Is there anything unique about social networking in relation to depressive symptoms?
  - Maybe not (but more research is needed)

## Limitations and Future Directions

- Need objective indicators
- Need longer-term follow-ups
- More research on individual differences to identify risk
- Need research on mechanisms of associations
  - If there is anything specific about social networking, what is it?
    - Social comparison processes?
    - Feeling left out?

## Thank You!

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