

BACKGROUND

65% of Americans report playing video games daily

Health concerns including depression and reduced social involvement

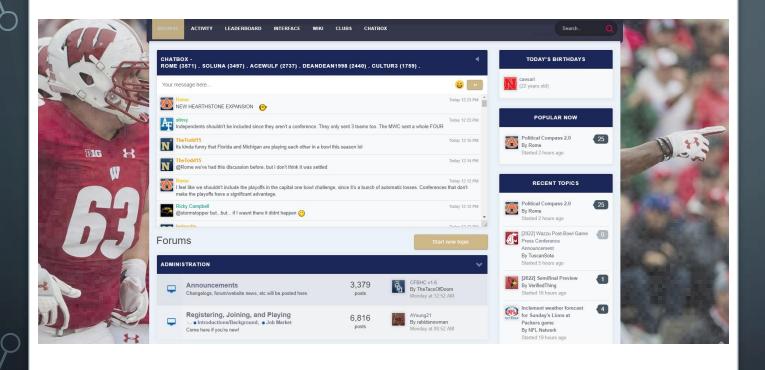
Extend real life relationships and/or make new online friendships

Online sites may be a comfortable "third place" for individuals to share and connect anonymously



OBJECTIVE

- 1. Use longitudinal social network analysis to investigate the social structure of an online gaming site.
- 2. Assess how factors such as online and IRL social support, sense of community, and depressive symptoms are associated with whether members of an online gaming site speak to other members about important life matters.



SITE DETAILS

User run and operated

Text based simulation of college football

Forums and Chat Functions

Roughly 100 members

METHODS

Data Analysis

(IIII)	Setting Online football simulation game Participants (n=40)	
Liki	Measures	Depressive Symptoms – PHQ-9
		Online and "in-real-life" (IRL) Social Support
	Social Network	Nominated other members on the site with whom they spoke to about important life matters
	Time-points	May 2019 – March 2020
		Roughly one "season"

STERGMs

RESULTS

n=40; Mean age = 25.25 years old (SD=6.88)

All respondents were male.

80% identified as White

70% were employed and 30% identified as students.

Members spent, on average, 14.75 hours (SD=12.36) on the site per week.

CHANGE IN NETWORK

Time 1 Change Time 2

101 Connections

66 Maintained
45 Dissolved
128 Formed

FORMATION



Age

Sense of Community





Support

Depressive Symptoms



Parameters	PE (SE)	p-value		
Edges	-5.72 (1.26)	<0.01*		
Reciprocity	0.87 (0.30)	<0.01*		
Transitivity	0.71 (0.12)	<0.01*		
Homophily				
Age	0.07 (0.02)	<0.01*		
Depressive Symptoms	0.04 (0.03)	0.15		
Receiver Covariates				
Age	0.03 (0.01)	0.02*		
Sense of Community	-0.12 (0.19)	0.53		
Site Hours	-0.02 (0.01)	0.06		
IRL Support	-0.01 (0.18)	0.94		
Online Support	0.05 (0.15)	0.72		
Depressive Symptoms	0.01 (0.02)	0.88		
Sender Covariates				
Age	0.04 (0.02)	<0.01*		
Sense of Community	0.38 (0.19)	0.04*		
Site Hours	0.01 (0.01)	0.18		
IRL Support	-0.52 (0.18)	<0.01*		
Online Support	0.44 (0.16)	<0.01*		
Depressive Symptoms	-0.06 (0.02)	0.02*		

MAINTENANCE



Age

Site Hours





Support

Parameters	PE (SE)	p-value		
Edges	6.61 (5.31)	0.21		
Reciprocity	-0.17 (0.74)	0.80		
Transitivity	0.56 (0.27)	0.04*		
Homophily				
Age	0.17 (0.08)	0.03*		
Depressive Symptoms	-0.10 (0.06)	0.14		
Receiver Covariates				
Age	-0.10 (0.07)	0.13		
Sense of Community	0.60 (0.59)	0.30		
Site Hours	0.06 (0.02)	0.02*		
IRL Support	-0.32 (0.50)	0.52		
Online Support	0.49 (0.51)	0.33		
Depressive Symptoms	0.06 (0.07)	0.38		
Sender Covariates				
Age	0.02 (0.06)	0.74		
Sense of Community	0.16 (0.43)	0.71		
Site Hours	0.01 (0.02)	0.42		
IRL Support	-1.19 (0.58)	0.04*		
Online Support	-0.62 (0.37)	0.09		
Depressive Symptoms	-0.02 (0.05)	0.63		

CONCLUSIONS

Age

May indicate users looking for connection after IRL connections fade

Community

Contact = comfort and community

Support

Mixed results

- IRL less need for stable online connections
- Online felt support through connections

DS

Could indicate help seeking behavior through formation of online contacts



NEXT STEPS

LARGER SAMPLE

MULTIPLE GAME GENRES

WORKING WITH DEVELOPERS

IMPLICATIONS FOR ONLINE LEARNING AND TELEHEALTH

QUESTIONS



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