

HOW SOCIAL SUPPORT AND DEPRESSIVE SYMPTOMS RELATE TO CONNECTIONS MADE AMONG ONLINE GAMERS

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Background

- 65% of Americans report playing some kind of video game daily
 - Public health professionals are concerned with the effects including depression and reduced social involvement
 - However, many games provide features to 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
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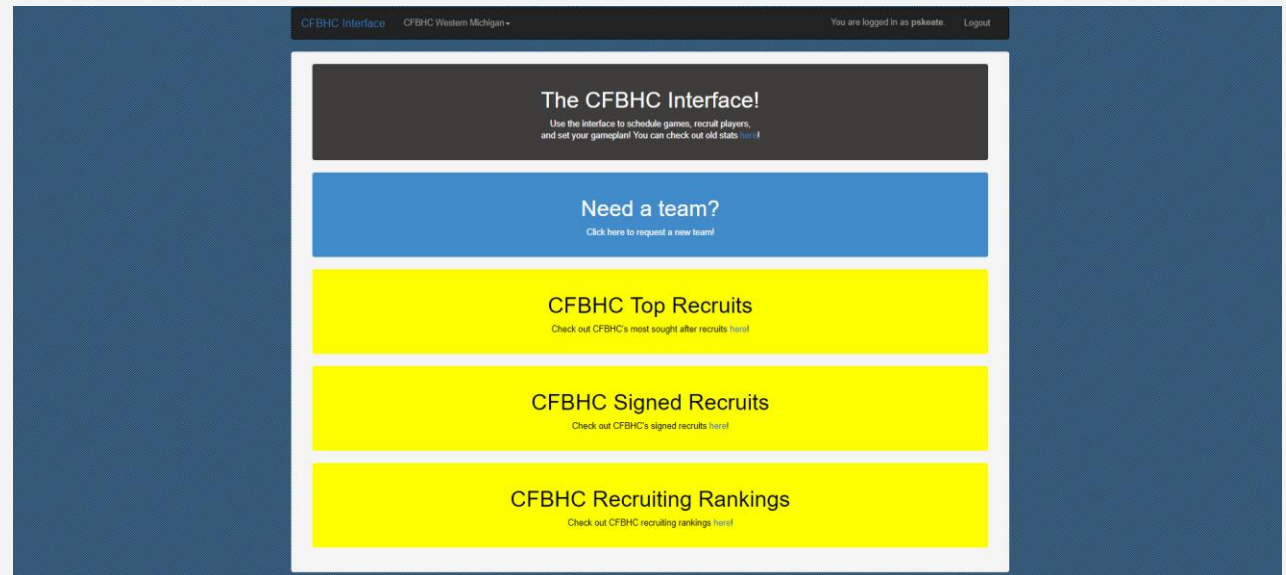
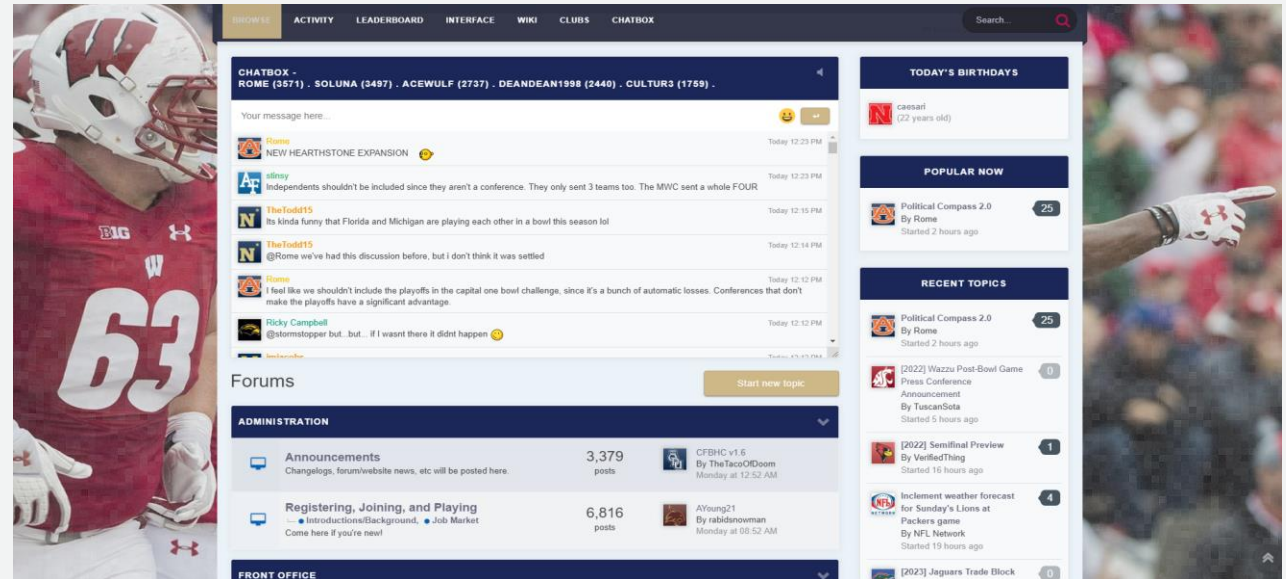
Objective

Use social network analysis to investigate the relationship between social connections and mental health among a network of online gamers.



Site Details

- User run and operated
- Text based simulation of College Football
- Forums and Chat Functions
- Roughly 100 members



Methods



Setting

Online football
simulation game
Participants (n=37)



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



Data Analysis

Exponential Random
Graph Modeling
Network Autocorrelation
Models

n=37; Mean age = 24.76 years old (SD=6.55)

All respondents were male.

85% identified as White

65% were employed and 35% identified as students.

Members spent, on average, 12.57 hours (SD=8.60) on the site per week.

Results



Results

- Average PHQ score was 6.92 (SD=5.86) indicating members felt depressive symptoms “not at all” to “several days” over the past two weeks.
- Only five members (13.5%) of the network reported a score greater than the cut point for identifying the possibility of severe clinical depression.

Results



- On average, respondents reported they spoke with 6.11 (SD=5.74) other members of the site regarding important life matters.
 - Additionally, when given the option to report on IRL connections, members listed on average 4.38 people (SD=1.11).
 - Respondents in this sample reported significantly more support from their IRL network (M=3.49; SD=0.57), when compared to the support they reported from their online network (M=2.81; SD=0.84; $t(36)=4.53$, $p<.001$).
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Depressive Symptoms Network Autocorrelation Model

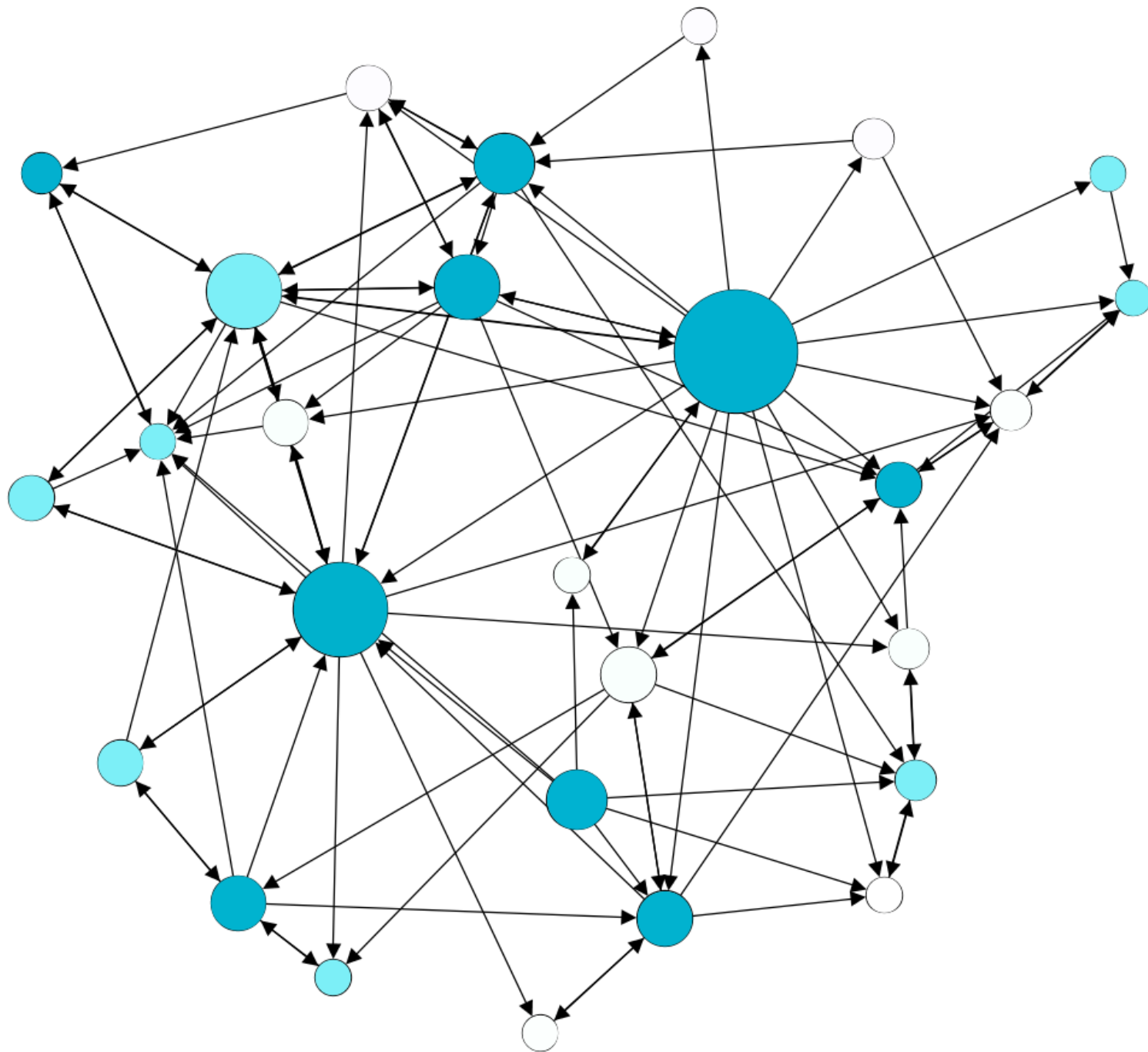
	Estimate	SE	p-val
IRL Support	-2.66	1.06	0.01
IRL Connections	1.81	0.67	0.01
Online Gaming Site Support	2.40	0.99	0.02
Network Effects	0.06	0.03	0.04

Depressive Symptoms

Low  High

Nominations Sent

Few  Many



Exponential Random Graph Modeling

	Estimate	SE	Interpretation
Reciprocity	2.22*	0.37	Social connections were significantly more likely to be reciprocated in this network
Transitivity	0.42*	0.13	Social connections in this network were significantly more likely to be among groups of three.
Site Hours	0.03*	0.01	Members were significantly more likely to speak to others if they spent more time on the site.
PHQ	0.08*	0.02	Members were significantly more likely to speak to others if they reported more depressive symptoms.
“In-real-life” Support	-0.68*	0.24	Members were significantly more likely to speak to others if they reported less support “in-real-life”.

* Indicates a significant effect

Members were significantly more likely to speak to others online if they reported more depressive symptoms and less IRL support.

Members depressive symptoms were significantly associated with the depressive symptoms of those with whom they communicated.

Members may be filling an IRL social support deficit with friends they have met online. Gamers who reported more depressive symptoms may be seeking help from informal online connections through online gaming.

Conclusions

STORIES > SPREADSHEETS



Next Steps



MIXED METHODS
APPROACH



LONGITUDINAL
ANALYSIS



LARGER
SAMPLES



MULTIPLE GAME
GENRES

Questions

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