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Adolescents and young players of MMORPG games: virtual communities as a form of social group

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Introduction



- MMORPG: Massive Multiplayer Online Role Playing Games
- Tendency to addiction is often mentioned even by researchers, even by players
- Term “heroinware” was created and used by players (Ng & Wiemer-Hastings, 2005)
- Player and his avatar: The relationship to the character is very similar to the relationship which we have to absent persons. The avatar is a “self-created object” and thus can be considered unreal, but it represents the identities of players. (Wolfendale, 2006)

Introduction: Addiction

Factors of the Internet addiction (Griffiths, 2000):

- Salience – becomes most important for an individual's life
- Mood change (euphoria) – subjective experiences influenced by pursued activity
- Tolerance – requires larger and larger activity
- Withdrawal symptoms – negative feelings and emotions
- Conflict – interpersonal or intrapersonal
- Relapse – a tendency to returning

Charlton et al. (2004): behavioral salience, conflicts with players' surroundings and relapse as indicators of addiction

Research goals

- which players could have a greater tendency to addiction (younger or older, men or women, single or with a partner etc.)
- relationship between dreaming and thinking of the virtual world and the concept of addiction
- the problem of the player identifying with his avatar
- whether and how much players' identification is related with an eventual addiction
- explorative research without hypotheses

Method and Sample



- Online questionnaire, filled in by players during December 2006 on a web page
- Respondents were contacted on web forums dedicated to MMORPGs as well as in the game itself via in-game server-wide communication
- Players came from games World of Warcraft: 46.2%, Everquest 1 & 2: 33% and other games 20.8%
- 548 respondents, average age was 25 years, average time spent in game was 27 hours per week, 15.4% woman
- 352 players from Europe, 181 from North America and 14 from other parts of the world (Africa, Asia, Australia)

Method and Sample

Table 1: Sample characteristics

Age Categories	All sample	Male	Female	Estimated play time per week: hours(SD)
Adolescents: 12-19 years	26.9%	96.9%	3.1%	29.7 (19.0)
Young adults: 20-26 years	36.3%	80.1%	19.9%	29.3 (16.7)
Adults (27 and more)	36.8%	79.7%	20.3%	23.4 (12.7)
Total	100.0%	Mean 84.5%	Mean 15.5%	mean 27.3 (16.3)

Measures

- Questionnaire total 64 items, here we present 14 items on addiction and 15 other items (avatar, thinking, dreaming)
- Addiction score (**AS**): 14 questions saturated factors of saliance, tolerance (etc.) (Alpha = 0.85) e.g.

“How often do you find that you stay in-game longer than you intended? How often do others in your real life complain to you about the amount of time you spend in-game?”

- a) low AS: between "rarely" and "occasionally" - 31.1%
- b) average AS: between "occasionally" and "sometimes" 42.4%
- c) high AS: "sometimes" and " frequently “: 21.0%
- d) very high addiction score: "frequently" (4), "often" (5), and "always" (6) - 5.5% of the sample

Measures

Self perceived addiction:

“I consider myself addicted to MMORPGs.”

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	absolutely disagree	98	17.9	20.8	20.8
	Disagree	85	15.5	18.0	38.8
	rather disagree	75	13.7	15.9	54.7
	rather agree	106	19.3	22.5	77.1
	Agree	68	12.4	14.4	91.5
	absolutely agree	40	7.3	8.5	100.0
	Total	472	86.1	100.0	
Missing	0	76	13.9		
Total		548	100.0	45.4	



Orgrimmar Grunt

Results: Addiction

- “27 and older players” score lower than younger categories in AS and also in self perceived addiction
- no significant difference between men and women in any category
- single, with partner or married players: only sig. difference for young adults between single and married -
> no differences between single and with romantic relationship
- High correlation between hours in game and AS ($r=.43$)
- World of Warcraft players score higher in AS
- No difference in AS by player origin

Results: Addiction Score x Self Perceived Adict.

		Addiction Score				Total
		Low AS	Average AS	High AS	Very high AS	
Perceived themselves not addicted	Count	125	105	23	5	258
	% within X31R	48.4%	40.7%	8.9%	1.9%	100.0%
	% of Total	26.5%	22.2%	4.9%	1.1%	54.7%
Perceived themselves as addicted	Count	24	91	78	21	214
	% within X31R	11.2%	42.5%	36.4%	9.8%	100.0%
	% of Total	5.1%	19.3%	16.5%	4.4%	45.3%
Total	Count	149	196	101	26	472
	% within X31R	31.6%	41.5%	21.4%	5.5%	100.0%
	% of Total	31.6%	41.5%	21.4%	5.5%	100.0%

Results: Thinking and Dreaming about the game

	Sometimes I think just about situations from the game while not gaming. (%)	Sometimes I think just about my avatar while not gaming. (%)	I think about my avatar itself rather than about the game situations. (%)
strongly disagree	11.6	27.6	34.8
rather disagree	11.1	23.9	33.6
neither disagree nor agree	15.6	17.1	19.0
somewhat agree	50.5	25.4	10.5
strongly agree	11.3	6.0	2.0
Total	100%	100%	100%

Results: Thinking, Dreaming and Addiction

Persons correlations	Addiction score	x74	x75	x76	x19	x24
Sometimes I think just about my avatar while not gaming.	.294(**)	1				
Sometimes I think just about situations from the game while not gaming.	.321(**)	.519(**)	1			
I think about my avatar itself rather than about the game situations.	.273(**)	.504(**)	.257(**)	1		
How often do you have dreams about the game?	.437(**)	.280(**)	.255(**)	.225(**)	1	
How often do you feel preoccupied with MMORPGS when off-line. or fantasize about being on-line?	.633(**)	.411(**)	.420(**)	.264(**)	.423(**)	1

** Correlation is significant at the 0.01 level (2-tailed).

Thinking and dreaming score (5 items), Alpha = 0.733
 correlation with addiction score: $r(391) = 0.57, p < 0.001$



Reco

Reco
Level 70 Mage
Shattrath City

Reco
Level 70 Druid
Shadowmoon Valley

Recoo
Level 70 Hunter
Zangarmarsh

Shardka
Level 5 Warrior
Orgrimmar

Kuze
Level 1 Shaman
Orgrimmar

Kytka
Level 1 Hunter
Orgrimmar

Kamen
Level 1 Warrior
Orgrimmar

Malex
Level 70 Rogue
Shattrath City

Wave
Level 60 Warrior
Hellfire Peninsula

Kofein
Level 35 Warlock
Orgrimmar

Results: Identification with Avatar



- 26.3% of players agree that their “avatars skills and abilities are like theirs, but somewhat greater.”
- 17.1% of players agree that their “avatar compensates my own skills and abilities.”
- 14.5% of players believe that “Both me and my avatar are the same.”
- 18.4% agree that their player possesses the same skills and abilities as his avatar does
- “identification” score (4 items), Alpha = 0.80 -> correlation with AS: $r(392) = 0.22, p < 0.001$
- younger players identification is higher than for adults

Results: Identification with Avatar



- 65.8% of players agree that they "sometimes feel proud of their avatars" (19.3% disagree)
- 13% agree with being ashamed of their avatar (73.4% disagree)
- Players with a higher tendency towards addiction are usually more proud and ashamed of their virtual character
- Correlation between the AS and pride: $r(398) = 0.24$ and between the AS and shame is $r(399) = 0.30$, $p < 0.001$.

Discussion and Conclusions

- how much players actually understand the term “addiction” and what they mean by this term?
- adolescents and young (emerging) adults are similarly threatened by MMORPG addiction
- no differences in potential addiction between players with and without romantic relationships
- connections between thinking, fantasies and dreaming about the game and addiction are strong
- identification with avatar (and role playing?): not very high correlations with addiction
- negative emotions as stronger predictor than positive emotions?



References

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<http://www.terapie.cz/smahelen>

Thank you for your attention.

