

Bowling with our imaginary friends

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Abstract

Putnam [J. Democracy 6 (1995). *Bowling Alone: The Collapse and Revival of American Community* (2000). New York: Simon & Schuster.] claims that Americans are socially and civically disengaged because they watch too much TV. I contend that, because evolved psychological mechanisms have difficulty comprehending entities that did not exist in the environment of evolutionary adaptedness (EEA), humans should fail to distinguish between real friends and the imaginary ones they see on TV. Consistent with my contention, the analysis of the US General Social Survey (GSS) data indicates that people who watch certain types of TV are more satisfied with their friendships as if they had more friends and socialized with them more often. © 2002 Elsevier Science Inc. All rights reserved.

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In his highly influential work, *Bowling Alone*, Putnam (1995, 2000) argues that social capital and community in the United States have declined in the past half century. Americans no longer participate in voluntary associations (such as churches, labor unions, and neighborhood bowling leagues) as much as they used to. Putnam (1995, p. 75) attributes at least part of this decline in social capital to TV viewing. “Television has made our communities (or, rather, what we experience as our communities) wider and shallower.” Americans now are socially and civically disengaged because they spend too much time watching TV.

Evolutionary psychology, however, provides an alternative perspective on the simultaneous decline in civic engagement and rise in TV viewing in the United States. A

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fundamental premise of evolutionary psychology is that the human brain and its psychological mechanisms are adapted to the environment of evolutionary adaptedness (EEA), in which they evolved and for which they were designed, and they are not necessarily adaptive in the current environment (Tooby & Cosmides, 1990). The human brain and its psychological mechanisms should therefore be strongly biased to view and respond to the environment as if it were still the EEA, and they should have difficulty comprehending and dealing with entities and situations that did not exist in the EEA.

Perhaps the best example of the unconscious difficulty the human brain has in dealing with entities and situations that did not exist in the EEA is the effect of pornography on men and women. The only biological function of an erection is to allow men to have intercourse with women. Yet today men have erections when they look at naked women in photographs and videos, even though it is absolutely impossible for the men to copulate with these women. This is probably because there were no photographs and videos in the EEA, where every image of a sexually responsive woman was a live woman, with whom there was some possibility of copulation. It therefore paid in reproductive terms for the ancestral men to have erections to be ready for copulation every time they saw images of sexually responsive naked women. Men unconsciously act as if they could copulate with the women they see in pornographic photographs and videos because these entities did not exist in the EEA.

An overwhelming majority of consumers of pornography throughout the world are men. Because promiscuous and casual sex carries far greater biological and reproductive costs for women than it does for men, it makes perfect sense for women to avoid promiscuous sex with a large number of partners in real life. However, it is absolutely impossible for women to conceive by watching naked men in sexual situations in photographs and videos. There is thus no reason for women to avoid exposure to pornography; the consumption of pornography carries no potential reproductive costs to women. Women nonetheless do not consume pornography nearly as much as men do because their brain and its psychological mechanisms also have difficulty comprehending the images of naked men in photographs and videos for what they are and act as if exposure to such men might carry some reproductive costs, as it would have in the EEA.

The sexually dimorphic response to pornography suggests that the human brain and its psychological mechanisms have unconscious difficulty comprehending entities and situations that did not exist in the EEA. If this observation is true, then it may generalize to other artificial images of humans. Neither television nor movies existed in the EEA, where all realistic images of people with whom you encountered repeatedly were your friends and family. If you knew someone in the EEA, they also knew you; there was no “one-way” acquaintance, as there is today with celebrities, where we know them but they do not know us. If men and women unconsciously respond as if naked people in pornographic photographs and videos were their potential sexual partners, then they may respond as if the people they see on television were their friends.

I would therefore predict that people who watch more TV should feel like they have more friends. Furthermore, there should be some sex differences in this pattern. Past research on personal networks in the United States demonstrates that women are more likely to have

their kin among their close friends, whereas men are more likely to have coworkers among theirs (Campbell, 1988; Fischer & Olicker, 1983; Marsden, 1987), and Kanazawa (2001) explains these sex differences in terms of evolved psychological mechanisms of men and women. Then, women who watch TV shows about people in families should feel like they have more friends, while men who watch TV shows about people at work should feel like they have more friends. In contrast, Putnam's analysis would appear to predict that men and women who watch more TV of any type are less satisfied with their friends because they are socially disengaged.

The US General Social Survey (GSS) allows an empirical test of these predictions. The National Opinion Research Center at the University of Chicago has administered the GSS either annually or biennially since 1972. Personal interviews are conducted with a nationally representative sample of noninstitutionalized adults in the US. The sample size is about 1500 for each annual survey, and about 3000 for each biennial one. The exact questions asked in the survey vary by the year.

The GSS routinely asks its respondents how satisfied they are in different areas of their lives (1 = none, 2 = a little, 3 = some, 4 = a fair amount, 5 = quite a bit, 6 = a great deal, 7 = a very great deal), and one of these areas is their friendships. Note that this question measures the respondents' *subjective* assessment of their satisfaction with friendships. Table 1 shows that, controlling for age, race, education, and marital status in multiple regression equations, women and men who have more friends and who socialize more with them (measured on a 7-point scale from 1 = never to 7 = almost every day) are subjectively more satisfied with their friendships.

Table 1
The effects of real friends on satisfaction with friendships, GSS, 1986

	Women	Men
<i>Real friends</i>		
Number of friends	0.0192 (0.0044)****	0.0179 (0.0040)****
Socializing with friends	0.1421 (0.0268)****	0.1400 (0.0343)***
<i>Control variables</i>		
Age	0.0105 (0.0026)***	8.8501 ⁻⁴ (0.0032)
Race (Black = 1)	- 0.6463 (0.1201)****	- 0.4030 (0.1624)*
Education	0.0531 (0.0161)**	0.0163 (0.0148)
Marital status (married = 1)	0.2872 (0.0842)***	0.1220 (0.1034)
R ²	.1360	.0875
Number of cases	832	606

Main entries are unstandardized regression coefficients.

Numbers in parentheses are standard errors.

* $P < .05$.

** $P < .01$.

*** $P < .001$.

**** $P < .0001$.

† $P < .10$.

Table 2
The effects of TV friends on satisfaction with friendships, GSS, 1993

	Women		Men			
<i>TV friends</i>						
Dramas and sitcoms	0.0843 (0.0428)*			– 0.0306 (0.0554)		
TV news		0.0500 (0.0486)			0.1423 (0.0749)†	
PBS shows			– 0.0372 (0.0407)			0.1631 (0.0525)**
<i>Control variables</i>						
Age	0.0040 (0.0030)	0.0022 (0.0031)	0.0034 (0.0030)	– 0.0058 (0.0039)	– 0.0066 (0.0039)†	– 0.0060 (0.0038)
Race (Black = 1)	– 0.5789 (0.1595)***	– 0.6007 (0.1596)***	– 0.5967 (0.1598)***	– 0.1925 (0.2124)	– 0.2272 (0.2113)	– 0.2583 (0.2099)
Education	0.0509 (0.0192)**	0.0482 (0.0194)*	0.0548 (0.0197)**	– 0.0343 (0.0202)†	– 0.0370 (0.0200)†	– 0.0499 (0.0203)*
Marital status (married = 1)	0.1535 (0.0998)	0.1424 (0.1005)	0.1676 (0.1007)†	0.2872 (0.1323)*	0.2754 (0.1313)*	0.3021 (0.1303)*
TV hours per day	– 0.0188 (0.0255)	– 0.0082 (0.0248)	0.0027 (0.0250)	– 0.1081 (0.0335)**	– 0.1231 (0.0324)***	– 0.1322 (0.0323)***
R^2	.0550	.0506	.0503	.0487	.0570	.0711
Number of cases	613	613	611	426	427	426

Main entries are unstandardized regression coefficients.

Numbers in parentheses are standard errors.

* $P < .05$.

** $P < .01$.

*** $P < .001$.

**** $P < .0001$.

† $P < .10$.

Table 2 demonstrates that watching certain types of TV shows increases the respondents' satisfaction with friendships in exactly the same way. (Remember that the dependent variable does not measure a general level of happiness or satisfaction with life in general, but their satisfaction *specifically with their friendships*.) The GSS in 1993 asked its respondents how often they watched different kinds of television shows (1 = never, 2 = rarely, 3 = several times a month, 4 = several times a week, 5 = every day). Controlling for the same demographic variables and the total number of hours they spend watching TV, women who watched relatively more prime time dramas and situation comedies ("sitcoms") (a large proportion of which depict people in families and other primary groups) were significantly ($P < .05$) more satisfied with their friendships. At the same time, watching TV news or Public Broadcasting Service (PBS) programs (which, relative to prime time dramas and sitcoms, depict fewer families and more people at work) does not increase women's subjective satisfaction with friendships. The pattern is opposite for men. While watching prime time dramas and sitcoms does not increase

their subjective satisfaction with friendships, watching TV news ($P < .06$) and PBS shows ($P < .01$) does.

The analysis of the GSS data therefore demonstrates that watching certain types of TV shows has the same effect on subjective satisfaction with friendships as having more friends and socializing with them more often. This is consistent with my contention that the human brain has difficulty distinguishing real friends and people they see on TV, because TV did not exist in the EEA, where every realistic image of someone you repeatedly and routinely saw was your real friend. The data are contrary to Putnam's contention that TV viewing is indicative of social disengagement. While the evidence presented here is merely suggestive and far from conclusive, I cannot think of any other reason why women should feel as if they have more friends and socialize with them more if they watch more prime time dramas and sitcoms, and men should respond similarly if they watch more TV news and PBS shows. My contention and the supportive evidence presented here suggest that, contrary to Putnam, there is nothing shallow about the community we experience by watching TV, or so our brain thinks. Watching TV *is* our form of participating in civic groups because we do not really know that we are not participating in them.

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