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Imaginary imaginary friends? Television viewing and satisfaction with friendships

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Abstract

Kanazawa [Evol. Hum. Behav. 23 (2002) 167] applies evolutionary psychological principles to current debates about social capital by proposing that our evolved minds process information about television characters as though they were real people in our lives. He contends that people thus derive similar satisfaction from "imaginary friends" on television as they do from real friendships, and that men and women should be especially satisfied with their imaginary friends if they watch programs featuring settings similar to where members of their sex tend to form real friendships. Kanazawa claims support for the hypothesis from analyses using the 1993 US General Social Survey (GSS); however, I argue that Kanazawa's tests may be inadequate because his measure of satisfaction with friendships might substantially reflect overall life satisfaction. Using the same data but measuring satisfaction with friendships relative to satisfaction with other areas of life, I find that the associations taken as supporting Kanazawa's hypothesis largely disappear.

Keywords: Robert D. Putnam; Bowling Alone; Social capital; Television

What specific items on large surveys actually measure is often difficult to interpret. Consider an item asking how much satisfaction respondents get from their friendships: Do responses really reflect just satisfaction with friendships, or might they instead substantially reflect how satisfied respondents are with their lives more generally? If respondents were

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also asked about satisfaction in other areas of their lives, we might be especially suspicious of the latter possibility if responses about friendship were substantially correlated with satisfaction in these other domains. In this instance, we might instead consider measuring satisfaction with their friendships *relative to* satisfaction in other domains, particularly if we are testing a hypothesis that concerns satisfaction with friendships specifically and not global life satisfaction.

Kanazawa (2002) proposes that the novelty of television to our evolved minds might cause one to derive the same kind of satisfaction that one derives from real friendships from "imaginary friendships" evoked by viewing characters on television. His article's title is a clever reference to Putnam's (2000) *Bowling Alone*, and his hypothesis is an intriguing attempt to use evolutionary psychology to better understand the declining social capital and civic participation that Putnam blames partly on the isolating consequences of television.

Toward testing this hypothesis, Kanazawa cites research indicating that women are more likely to have kin among their close friends and men are more likely to have coworkers among theirs. He infers from this that the effects of television viewing on satisfaction with friendships should be strongest for women who watch programs that feature relatively more "people in families" and for men who watch programs that feature more "people at work." Prime-time dramas and comedies are claimed to be programs with more "people in families," while news programs and public television shows are claimed to feature more "people at work." Using the 1993 US General Social Survey (GSS), Kanazawa finds a significant association between the viewing of dramas and comedies and satisfaction with friendships for women ($P<.05$), but not for men. Meanwhile, friendship satisfaction is associated with watching both news programs ($P=.06$) and PBS shows ($P<.01$) for men, but not for women. Kanazawa (2002, p. 171) concludes that his analysis "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."

One can raise various questions about Kanazawa's arguments. For example, how well does the distinction between dramas/comedies and news/PBS shows map onto the distinction between programs about "people in families" and "people at work"? Nielsen ratings for the 1992–1993 television season included 8 dramas or comedies among the 10 most watched shows, but only 3 of these were centered on families (*Roseanne*, *Full House*, and *Home Improvement*; the others were *Murphy Brown*, *Coach*, *Murder, She Wrote*, *Cheers*, and *Northern Exposure*).

Instead, however, I focus here only on whether the friendship item might to an important extent measure life satisfaction more generally. Kanazawa's hypothesis very specifically implies effects on television viewing for satisfaction *with friendships*, so the matter is crucial for evaluating his evidence. The 1993 GSS also asked respondents about their satisfaction in four other domains: "the city or place you live in," "you own nonworking activities—hobbies and so on," "your family life," and "your health and physical conditions." The seven response categories ranged from *none* to *a very great deal*. The friendship satisfaction measure correlates most highly with the hobbies item

($r = .47$), but the correlations with the family ($r = .43$), place of residence ($r = .28$), and health ($r = .28$) items are also substantial. Indeed, given typical standards of survey-based analysis, one may be passably justified in treating the sum of the five items as a unidimensional scale of global life satisfaction ($\alpha = .69$; eigenvalues of 1.69 for the first factor and 0.16 for the second).

As already suggested, since Kanazawa's hypothesis is not directly about global life satisfaction, one might consider using a measure of satisfaction with friendships relative to these other domains. If television viewing specifically affects satisfaction with friendships, then Kanazawa's predictions should also be supported for this relative measure. We might even expect the observed effects to become *stronger*, since we reduce the potential contamination of friendship-specific satisfaction by global life satisfaction.

I constructed a relative measure by taking the response to the friendship item and subtracting the mean of the nonmissing responses to the four other items. Although one might wish other aspects of Kanazawa's analyses had been done differently, I otherwise used the same measures and model specifications that he did, to determine the consequences of this single change in measurement. For drama and comedy programs, news programs, and programs on public television, respondents indicated how often they watched them on a five-point scale ranging from *never* to *every day*. The models control for age, education, total hours of television watched per day, whether the respondent is Black, and whether the respondent is married.

Table 1 presents results for the original and relative measures, standardizing the dependent variables so that coefficients can be compared. To see that the different measures can yield quite different results, one can look first at the effects of being married. Marriage is positively related to friendship satisfaction when Kanazawa's original measure is used, but is negatively associated with the relative measure. Married people responded more favorably than others to the satisfaction with friendships item, and yet they responded *even more favorably* to the remaining satisfaction items considered together. This is a reasonable result, but it would give pause if we were evaluating a hypothesis that connected marriage *directly* to increased satisfaction with friendships and *not directly* to other domains.

When we look to the estimates key to Kanazawa's hypothesis, the effects become weaker when the relative measure is used, instead of becoming stronger. For women, the coefficient for watching dramas and sitcoms is no longer significant. For men, watching news programs is no longer even marginally significant, while watching public television programs is significant only at the $P < .10$ level. Having one of six relevant coefficients be significant at this level is not inconsistent with what we might expect by chance.

For purposes of comparison, Kanazawa (2002, p. 169) also examines the 1986 GSS and finds that satisfaction with friendships is associated with both number of real friendships and frequency of socializing with friends. These results (not shown) still remain significant when the relative measure is used (P at least $< .05$ in all instances). In other words, using the relative measure does not alter conclusions about whether real friendships affect satisfaction with friendships, but it does change conclusions about whether television viewing habits do. Thus, while Kanazawa has provided a novel

Table 1
The effects of television watching habits on satisfaction with friendships (General Social Survey, 1993)

	Original measure	Relative measure	Original measure	Relative measure	Original measure	Relative measure
Women						
TV watching variables						
Dramas and sitcoms	.0660 (.0335)*	.0470 (.0356)				
TV news programs			.0390 (.0380)	−.0355 (.0403)		
Public television programs					−.0292 (.0319)	−.0425 (.0338)
Control variables						
Age (in years)	.0031 (.0023)	−.0021 (.0025)	.0017 (.0024)	−.0020 (.0025)	.0027 (.0023)	−.0026 (.0025)
Black	−.4533 (.1248)***	−.4345 (.1326)**	−.4703 (.1250)***	−.4420 (.1325)**	−.4671 (.1251)***	−.4495 (.1325)**
Education (in years)	.0399 (.0150)**	−.0210 (.0159)	.0378 (.0151)*	−.0194 (.0161)	.0429 (.0154)**	−.0177 (.0164)
Married	.1202 (.0782)	−.2527 (.0830)**	.1115 (.0787)	−.2470 (.0834)**	.1312 (.0788)†	−.2412 (.0835)**
TV hours per day	−.0147 (.0200)	.0265 (.0212)	−.0064 (.0194)	.0383 (.0206)†	.0022 (.0196)	.0409 (.0208)*
R^2	.0550	.0390	.0506	.0404	.0503	.0487
n	613	613	613	613	611	611
Men						
TV watching variables						
Dramas and sitcoms	−.0240 (.0434)	−.0075 (.0409)				
TV news programs			.1114 (.0587)†	.0451 (.0555)		
Public television programs					.1277 (.0411)**	.0707 (.0391)†
Control variables						
Age (in years)	−.0046 (.0031)	−.0010 (.0029)	−.0052 (.0030)†	−.0011 (.0029)	−.0047 (.0030)	−.0010 (.0028)
Black	−.1507 (.1663)	.0457 (.1568)	−.1779 (.1654)	.0331 (.1565)	−.2022 (.1643)	.0172 (.1563)
Education (in years)	−.0269 (.0158)†	−.0403 (.0149)**	−.0290 (.0157)†	−.0421 (.0148)**	−.0390 (.0159)*	−.0478 (.0151)**
Married	.2249 (.1036)*	−.2741 (.0976)**	.2156 (.1028)*	−.2759 (.0972)**	.2365 (.1020)*	−.2655 (.0970)**
TV hours per day	−.0846 (.0262)**	−.0332 (.0247)	−.0964 (.0253)***	−.0382 (.0240)	−.1035 (.0253)***	−.0432 (.0240)†
R^2	.0487	.0405	.0570	.0428	.0711	.0490
n	426	426	427	427	426	426

Coefficients are *y*-standardized. Numbers in parentheses are standard errors.

* $P<.05$.

** $P<.01$.

*** $P<.001$ (two-tailed).

† $P<.10$.