

Is Keeping Up with the Kardashians Keeping You Down?

Reality Television and its Effects on Mental Health

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Introduction

Over the past several decades mental health researchers have amassed an impressive body of empirical data that characterizes narcissism and explores its consequences. In contrast, empirical data on the origins and causes of narcissism remain limited. Clinical mental health professionals have long contemplated narcissism's origins, often implicating family of origin dynamics. However, increasing attention is being paid to environmental influences other than parents in the genesis of narcissism.

Television has become an increasingly popular form of entertainment, with 96.7% of average American households owning at least one TV set (Nielsen Company, 2011). Reality television as it is currently understood can be linked to several television shows that began in the late 1980s and saw an explosion of global popularity starting in the summer of 2000.

Reality TV is a genre of programming that presents purportedly unscripted melodramatic or comedic situations, documents actual events, and ostensibly features ordinary people instead of professional actors. Reality shows portray a modified and highly influenced form of day-to-day life, employing sensationalism to attract viewership and increase advertising revenue. Participants are placed in exotic locales or abnormal situations, and are persuaded to act in specific scripted ways by off-screen editors and producers with actual events and dialog manipulated and contrived to create an illusion of reality through extensive direction and post-production editing. Viewers are led to believe that what they are watching is "reality" and that the often outrageous behavior of the actors is within normal limits of every day human behavior.

Researchers Mark Young and Drew Pinsky found that celebrities scored higher on the Narcissistic Personality Inventory (NPI) than non-celebrity controls with Reality TV celebrities displaying the highest NPI scores, overall (Journal of Research in Personality, 2006).

As noted, Reality TV is very popular, and it is supposed to portray "real life" to viewers; however, in many ways it simply serves as a showcase for narcissism. America's youth - the main consumers of Reality shows - are still in the process of forming their world view. The author postulates that high Reality TV viewership, particularly at a young age, can lead to a phenomenon in which narcissism begins to seem like "normal" behavior.

This study employed a novel data collection method, social networking (which presents its own unique twist on "reality"), to examine the impact of Reality TV upon the American psyche.

Methods

Subjects

Subjects were invited to click on a link posted on the author's Facebook page. >400 Facebook friends were asked to take a set of three surveys. Of note, the author is a 32 year old female. The aforementioned link was also posted to the author's 22 year old sister's Facebook page and the author's 33 year old male cousin's Facebook page, asking their > 500 and > 600 Facebook friends, respectively, to take the surveys. Inclusion criterion for analysis included the following: 1) Active Facebook account, 2) Age range 18-60, and 3) History of Reality TV viewership.

Materials

Three web based surveys: 1) Narcissistic Personality Inventory (NPI), 2) Rosenberg Self-Esteem Scale (RSE), and 3) A demographics and reality television viewership questionnaire were administered to each subject. The demographics and reality television viewership questionnaire was created by the author, as research found no existence of a similar questionnaire that fit the needs of the study. The aforementioned questionnaire simply assessed the quantity and types of reality TV shows viewed by each subject. In addition, basic distinguishing information was obtained about each subject, such as age, gender, educational level, etc.

Procedure

Each survey taker was encouraged to share the survey link with their Facebook friends, thus creating a viral spread of the survey throughout the Facebook website. Clicking on the survey link redirected subjects to Survey Monkey, where the three surveys were housed. Survey Monkey is a private US-based company that enables users to create their own Web-based surveys. Using Survey Monkey allowed the survey takers to remain anonymous to the researchers, as Survey Monkey does not share the user's IP address.

Data

Data Analysis

First NPI was correlated with the total number of reality TV shows watched for each individual subject. Then, both variables (NPI and Reality TV shows) were broken down into subcategories based on factor analyses and theoretical groupings obtained from the author's Reality TV questionnaire (reality shows were categorized into "Purely Voyeuristic", "Skill/Challenge/Competition", and "Educational"). In addition, the relationship between subscales of both the reality TV shows and the NPI were examined with regression analyses. Finally, associations between the RSE Scale and subcategories of Reality TV shows were examined for significant associations.

Data Cleaning and Re-coding

There were 4 subjects removed due to missing values in main outcomes and predictors. Variables were re-coded for linear regression analysis. Specifically, the RSE Scale scores were obtained by summing RSE question # 15 to question # 24, given that scores between 4 to 1 were assigned as a scale to answers that most strongly to least strongly associated with high self-esteem, respectively. For example, for question # 15, answers were scored as 4 (strongly agree), 3 (agree), 2 (disagree), and 1 (strongly disagree). The NPI scores were obtained in similar fashion by scoring question # 25 to question # 64 giving 1 point to Narcissism traits in each question and summing all questions to provide the final NPI score for each subject.

The reality TV shows were re-categorized into variables of “Pure” (Purely Voyeuristic), “Skill” (Skill/Challenge/Competition), and “Educational” (Educational). These new variables represent the total number of shows belonging to each of these categories viewed by subjects.

Results

Table 1

Demographics

		Female		Male		Total	
Demographics		Frequency	Valid Percent	Frequency	Valid Percent	Frequency	Valid Percent
Valid	under 18	0	0	1	0.6	1	0.6
	18-39	84	53.5	36	22.9	120	76.4
	40-60	17	10.8	13	8.3	30	19.1
	over 60	5	3.2	1	0.6	6	3.8
	Total	106	67.5	51	32.5	157	100
Missing	System					2	
Total						159	

Table 1

RSE Scores Show a Strong Upward Skew

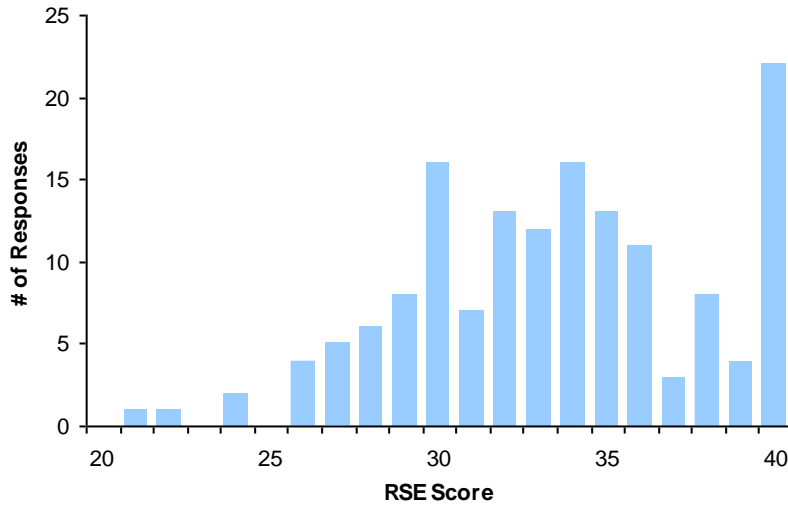
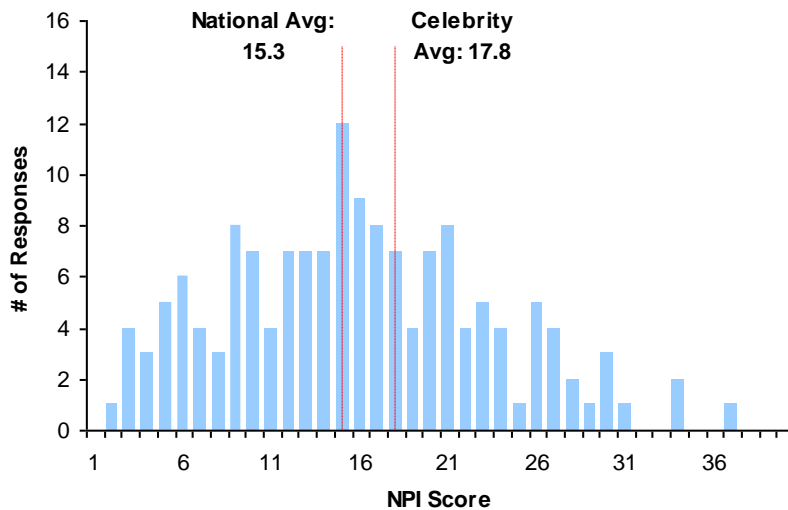


Table 1

NPI Scores Relatively Consistent With National Norms, But With a Wide Skew



Data Analysis

NPI and RSE scores were treated as continuous variables and linear regression models were used to assess the association between the number of different types of shows and NPI or RSE scores. Model selection process was used to identify other variables that may have been predictive of the outcome. Variables included in the initial model were number of Reality shows viewed per week, age, gender, education, total hours of TV viewed per day, ethnicity, and income. Out of a highest possible score of 40, the distribution of RSE was 33.40 ± 4.02 (Mean \pm SD), and the

distribution of NPI was 15.82 ± 7.04 (Mean \pm SD). The positive skew in RSE is likely a result of the younger bias in the sample, as age and RSE showed a negative correlation.

Rosenberg Self Esteem Scale

Among the categories of Reality TV shows viewed (Purely Voyeuristic, Skill/Challenge/Competition, and, Educational), there is a significant positive association between the number of Purely Voyeuristic shows and the RSE score ($p=0.0002$) \rightarrow results are shown in table #2 and Figure #1 below. There is also a positive association between income and RSE score ($p=0.007$). There were no significant interactions among variables.

Figure 1

Association between Number of Purely Voyeuristic Shows Viewed and Rosenberg Self-Esteem Score

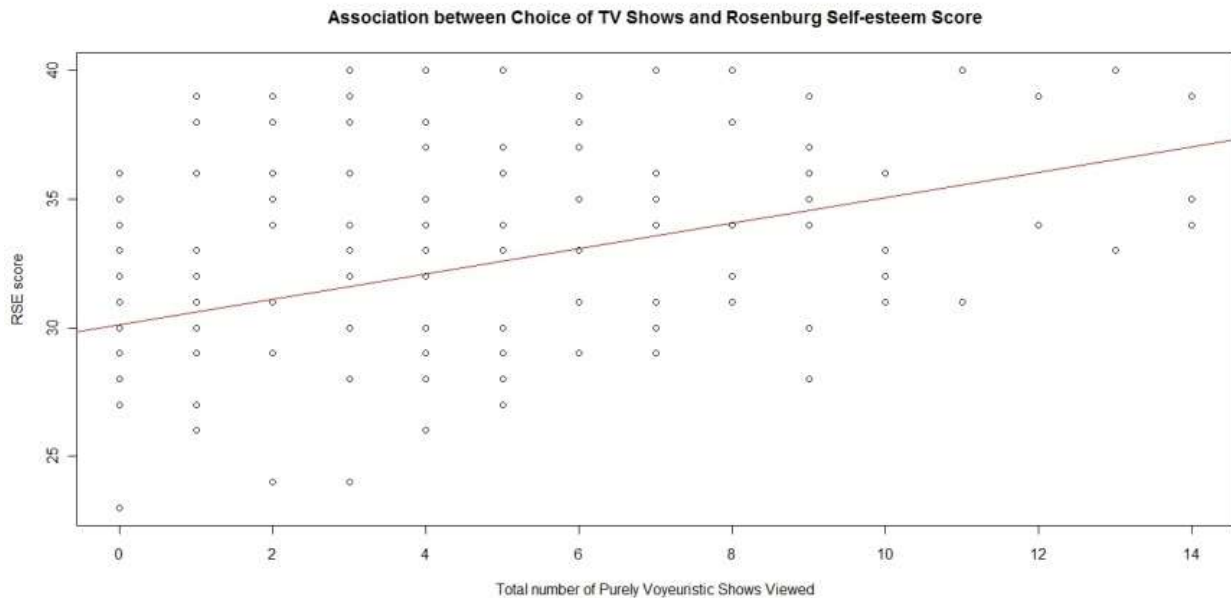


Table 2

Association between Choice of TV Shows and Rosenberg Self-Esteem Score

<i>Regression Statistics</i>		<i>Residuals</i>		<i>ANOVA</i>	<i>df</i>	<i>F</i>	<i>Significance F</i>
Multiple R	0.3592	Min	-8.6758	Regression	4	5.552	0.0003397
R Square	0.129	1Q	-2.8888	Residual	146		
Adjusted R Square	0.1057	Median	0.1451	Total	150		
Standard Error	3.8	3Q	2.8627				
Observations	151	Max	7.2437				

<i>Factor</i>	<i>Coefficients</i>	<i>Standard</i>		<i>P-value</i>	<i>Signif.</i>
		<i>Error</i>	<i>t Stat</i>		
Intercept	30.1204	0.97982	30.741	< 2e-16	***
Pure	0.49248	0.12694	3.879	0.000156	***
Skill	-0.07456	0.08645	-0.863	0.389769	
Educational	-0.15494	0.15594	-0.994	0.32202	
Income	0.41779	0.15286	2.733	0.007027	**

Statistical significance codes: *** = 0.001, ** = 0.01, * = 0.05, = 0.1

NPI

There is no significant evidence to suggest that the types of Reality TV shows viewed is predictive of the NPI score. Moreover, none of the other variables were shown to be significant in predicting NPI, possibly due to our small sample size. However, the trends and direction(s) of the changes noted were interesting. For example, NPI score seems to decrease with age and increase with lower education level. These changes were not statistically significant.

Table 3

Association of Types of Reality TV Show with NPI Score

Regression Statistics		Residuals		ANOVA	df	F	Significance F
Multiple R	0.4044	Min	-14.8683	Regression	28	0.8304	0.7087
R Square	0.1635	1Q	-4.2187	Residual	119		
Adjusted R Square	-0.03338	Median	-0.5714	Total	147		
Standard Error	7.073	3Q	3.9843				
Observations	148	Max	19.699				

Factor	Coefficients	Standard			
		Error	t Stat	P-value	Signif.
Intercept	16.68152	8.49895	1.963	0.052	
Pure	0.40271	0.28094	1.433	0.154	
Skill	0.25747	0.18394	1.4	0.164	
Educational	-0.23019	0.34368	-0.67	0.504	
Gender: Male	1.71512	1.48755	1.153	0.251	
Reality TV shows/week: 1 - 3	-0.86144	1.53752	-0.56	0.576	
Reality TV shows/week: 4 - 7	-3.38723	2.24879	-1.506	0.135	
Reality TV shows/week: 8 - 11	-1.38428	5.02956	-0.275	0.784	
Ethnicity: Hispanic	-0.29972	2.1449	-0.14	0.889	
Ethnicity: Black	-4.53261	3.35289	-1.352	0.179	
Ethnicity: Asian	-4.88075	3.2202	-1.516	0.132	
Ethnicity: Native American	-3.14006	5.78344	-0.543	0.588	
Ethnicity: Other	-2.66246	3.83058	-0.695	0.488	
Ethnicity: No	-2.65243	3.21236	-0.826	0.411	
Income: \$15,000 - \$29,999	-4.792	3.35255	-1.429	0.156	
Income: \$30,000 - \$44,999	-0.91626	3.09911	-0.296	0.768	
Income: \$45,000 - \$59,999	-3.30239	3.26618	-1.011	0.314	
Income: \$60,000 - \$74,999	-0.96929	3.05713	-0.317	0.752	
Income: \$75,000 - \$89,999	-0.08989	3.61086	-0.025	0.98	
Income: above \$90,000	0.04732	3.04618	0.016	0.988	
Income: Prefer not to answer	-2.66616	3.34131	-0.798	0.426	
Age: 18-39	-2.0113	7.69546	-0.261	0.794	
Age: 40-60	-3.70713	7.65491	-0.484	0.629	
Age: over 60	-3.68425	8.48193	-0.434	0.665	
Total Hrs TV/Day	0.25346	0.95353	0.266	0.791	
Completed Post-graduate Stud	0.2924	1.74576	0.167	0.867	
High School Diploma	2.66008	4.63761	0.574	0.567	
Some college	1.55736	1.95461	0.797	0.427	
Some High School	NA	NA	NA	NA	
Some Post-graduate Studies	0.67318	2.35525	0.286	0.776	

Note: 7 observations deleted due to missingness. Coefficients: (1 not defined because of singularities)
Statistical significance codes: *** = 0.001, ** = 0.01, * = 0.05, = 0.1

NPI Odds Ratios and Reality TV Viewership

Table 4 shows the association between the NPI score (above 22.8) and the Reality TV show type assuming that these two variables are dichotomous. These findings were interpreted such that the

odds of a Narcissistic individual viewing Purely Voyeuristic shows was 2.88 times higher than the odds of Normative individual viewing that specific type of Reality TV show. However, the Fisher’s Exact Test indicates that this odds ratio is not statistically significant (95% CI= 0.64-12.99, p-value=0.25). The sample size limited the ability to detect significance.

Similarly, the interpretation for the Skill category is such that the odds of a Narcissistic individual viewing Skill/Competition type reality TV shows is 1.82 times higher than the odds of Normative individual viewing Skill/Competition reality TV shows. The odds of Narcissistic individual viewing Educational type Reality TV shows is 1.55 times higher than the odds of Normative individual viewing Educational type Reality TV shows. Again, neither was found to be statistically significant, but the strength of association is still indicative.

One limitation with this type of analysis is that we cannot see the association between the NPI score and the number of shows in each category. If an individual watched at least 1 show within a specific category of shows, they were considered a viewer in our analysis, so this result doesn’t reflect the “dosage” effect if you consider the number of shows as doses of exposure. However, the previous regression analyses should provide this information.

Table 4

A closer look at the NPI scores

<i>Reality TV Show Type</i>	<i>Odds Ratios (OR)</i>	<i>95% Confidence Interval</i>	<i>p-value (Fisher's Exact Test)</i>
Purely Voyeuristic	2.88	0.64 - 12.99	0.25
Skill/Competition	1.82	0.22 - 15.14	1
Educational	1.55	0.49 - 4.85	0.6

Note: Subject is classified as narcissistic if he/she has NPI score 1 standard deviation above the mean of the study population. The population mean was 15.82 ± 7.04 (SD). The classification for reality TV show type was "yes" for subjects viewing at least one show in that category, and "no" for subjects that did not view any of the shows in the specific category.

NPI sub-factors

In the previous analysis, we did not see statistical significance with overall total NPI score. Based upon *The Narcissistic Personality Inventory: factor structure in a non-clinical sample* (T. Kubarych et al), the NPI is a multifaceted measurement tool comprised of several different factors. The approach suggested by this reference includes 3-factors within the NPI score, specifically “power”, “exhibitionism” and “special person”.

Using Table 1 from the Kubarych et al. article we were able to create new variables summarizing the total score for each factor. Linear regression was applied to the three new variables -“power”, “exhibit”, and “special” in a similar manner to that previously noted in order to screen for

association between variables of interest and the newly created scores. Because the factors are correlated, the decision was made to evaluate them in separate models.

The “Power” Factor

The “power” scores represent the sum of the number of questions answered affirmatively by respondents. A higher power score indicates that respondents agreed with a greater number of statements in this category. From the data output, after controlling for age and income, there are significant changes with gender, number of “pure” shows watched, and categories of ethnicities.

Males scored higher than females. The interpretation is such that men appeared to agree with 1.77 more statements in this category than women ($p=0.0194$, please refer to yellow highlighted region in Table #5). Watching more “pure” shows also slightly increased agreement to “power” statements ($p=0.0343$). Asian subjects, on average, agreed with 3.44 fewer statements in this category compared to Caucasian subjects ($p=0.0449$). In other words, Caucasians appear to agree more with the “power” statements than Asians. There is also a similar slight trend ($p=0.08$) in African American respondents.

The TV show group “skill” was not included in the analysis because it was found to be highly correlated with the “pure” show group - including both would have undermined their effects individually on the outcome and violated the assumptions of the model.

Table 5

“Power” Analysis

Regression Statistics		Residuals		ANOVA	df	F	Significance F
Multiple R	0.3545	Min	-7.6662	Regression	11	1.87	0.0480300
R Square	0.1257	1Q	-2.8342	Residual	132		
Adjusted R Square	0.05849	Median	0.2722	Total	143		
Standard Error	3.917	3Q	2.6318				
Observations	144	Max	9.0084				

Factor	Standard		t Stat	P-value	Signif.
	Coefficients	Error			
Intercept	3.83694	1.77933	2.156	0.0327	*
Pure	0.26357	0.12336	2.137	0.0343	*
Educational	-0.03202	0.16633	-0.193	0.8476	.
Gender: Male	1.77065	0.74872	2.365	0.0194	*
Ethnicity: Hispanic	0.45631	1.0806	0.422	0.6735	.
Ethnicity: Black	-2.86923	1.65741	-1.731	0.0856	.
Ethnicity: Asian	-3.43397	1.69704	-2.024	0.0449	*
Ethnicity: Native American	-4.0622	2.92076	-1.391	0.1664	.
Ethnicity: Other	-1.85897	2.02899	-0.916	0.3611	.
Ethnicity: No	0.07776	1.54111	0.05	0.9598	.
Income	0.28453	0.1652	1.722	0.0872	.
Age	0.53343	0.6695	0.797	0.4269	.

Statistical significance codes: *** = 0.001, ** = 0.01, * = 0.05, = 0.1

The “Exhibitionism” Factor

After controlling for the number of “educational” shows watched, age, and gender, there are significant changes with income and number of v “skill” shows watched, for the exhibitionism factor. Keep in mind that the number of “skill” shows is highly correlated with number of “pure” shows watched (Pearson correlation coefficient= 0.63, or 63% correlation); thus the association between “pure” shows watched and “exhibitionism” is similar to the positive association seen here between number of “skill” shows watched and “exhibitionism.” Income was found to be negatively associated with how many statements the respondents agreed with in the “exhibitionism” category.

Table 6

“Exhibitionism” Analysis

<i>Regression Statistics</i>		<i>Residuals</i>		<i>ANOVA</i>	<i>df</i>	<i>F</i>	<i>Significance F</i>
Multiple R	0.27830	Min	-3.6696	Regression	5	2.502	0.03303
R Square	0.07745	1Q	-1.6033	Residual	144		
Adjusted R Square	0.04649	Median	-0.2945	Total	149		
Standard Error	2.092	3Q	1.2191				
Observations	150	Max	5.3029				

<i>Factor</i>	<i>Coefficients</i>	<i>Standard</i>		<i>P-value</i>	<i>Signif.</i>
		<i>Error</i>	<i>t Stat</i>		
Intercept	3.2127	0.88363	3.636	0.000381	***
Skill	0.11191	0.04155	2.693	0.007884	**
Educational	-0.10444	0.07773	-1.344	0.181106	
Gender: Male	0.44701	0.3677	1.216	0.226024	
Income	-0.17677	0.08513	-2.076	0.039575	*
Age	0.02903	0.34082	0.085	0.932225	

Statistical significance codes: *** = 0.001, ** = 0.01, * = 0.05, = 0.1

The “Special Person” Factor

For the “special person” factor, most of the variables were not significant predictors. Interestingly, the only significant predictor for this factor was age ($p=0.0096$). Age was found to be negatively associated with the “special person” factor. There was a slight trend of increase in score with number of “skill” shows or “pure” shows watched, but not statistically significant. Again, similar associations are seen for both “skill” and “pure” shows because of their correlation. The magnitude of change, however, may not have clinical implications. For example, to increase the number of statements agreed with by respondents in this category by one, twenty additional “skill” shows would need to be watched.

Table 7

“Special Person” – Skill Analysis

Regression Statistics		Residuals		ANOVA	df	F	Significance F
Multiple R	0.26574	Min	-3.8343	Regression	3	3.824	0.01122
R Square	0.07062	1Q	-1.2242	Residual	148		
Adjusted R Square	0.05215	Median	0.0851	Total	151		
Standard Error	1.713	3Q	1.111				
Observations	152	Max	4.3588				

Factor	Coefficients	Standard		P-value	Signif.
		Error	t Stat		
Intercept	4.87079	0.6846	7.115	4.25E-11	***
Skill	0.05473	0.03018	1.813	0.07176	.
Gender: Male	0.08064	0.29576	0.273	0.78549	
Age	-0.70984	0.27066	-2.623	0.00962	**

Statistical significance codes: *** = 0.001, ** = 0.01, * = 0.05, = 0.1

Table 8

“Special Person” – Pure Analysis

Regression Statistics		Residuals		ANOVA	df	F	Significance F
Multiple R	0.25948	Min	-3.6826	Regression	3	3.634	0.01436
R Square	0.06733	1Q	-1.1491	Residual	148		
Adjusted R Square	0.0488	Median	0.0986	Total	151		
Standard Error	1.716	3Q	1.1357				
Observations	152	Max	4.305				

Factor	Coefficients	Standard		P-value	Signif.
		Error	t Stat		
Intercept	4.75381	0.73154	6.498	1.11E-09	***
Pure	0.07018	0.04236	1.657	0.0997	.
Gender: Male	0.15274	0.30632	0.499	0.6188	
Age	-0.64086	0.28	-2.289	0.0235	*

Statistical significance codes: *** = 0.001, ** = 0.01, * = 0.05, = 0.1

Conclusion

As previously noted, there is a lack of data regarding the genesis of Narcissism. At a minimum, the study seems to support the notion that narcissism is the result of a number of complex factors, many of which are not yet fully understood. Although a number of important indicators for narcissism were uncovered, the study reaffirmed that one single factor such as age, income,

or television viewership alone is insufficient to predict the development or existence of narcissistic traits.

While the author was unable to show a statistically significant relationship between NPI score and Reality television viewership, a number of other important trends were uncovered, some of which were statistically significant.

For example, social and demographic factors seem to be important variables to consider when assessing narcissistic tendencies and therefore, warrant additional study. Moreover, the study did not dismiss Reality television viewership as a potential environmental factor or indicator for narcissistic traits. Indeed, specific types of Reality television seem to be associated with various sub-factors of narcissism. If social and environmental factors are important indicators for narcissism, as proposed, then further study of our rapidly shifting environment and behaviors - whether it is television viewership or the rise of social media - is warranted.

Social and Demographic Factors

Social and demographic factors seem to play a noteworthy role in determining both the overall NPI score, as well as various sub-factors such as “power”, “exhibitionism” and “special person.” The purpose of this study was to determine the effects of Reality television viewership on narcissism, adjusting for broad social and demographic variables. However, the heavy influence of these variables suggests future studies may be needed to account for additional social factors that can influence NPI score. At a minimum, this study indicates that geographic and cultural issues may need to be included in any future studies on the genesis of narcissism.

On the demographic front, higher incomes tend to be associated with lower exhibitionism scores, but also result in higher self-esteem (as indicated by RSE scale scores) and power scores.

Gender and ethnicity were statistically significant factors for power scores, even when adjusting for age and income. Males tend to show greater feelings of power than women, which are likely attributable to a number of known social factors. Income, while not quite statistically significant, also showed a strong trend with feelings of power and may be devalued in the analysis by its modest correlation with gender. Ethnicity proved to be a statistically significant factor in power scores, but our sample was likely too small and skewed towards Caucasian respondents to draw any definitive conclusions. However, the mere presence of a relationship suggests cultural and ethnic influences are worthy of further study.

Age appears to play a role in special person scores with older subjects tending to agree with fewer special person factors from the NPI. While some may argue this is simply a product of maturity, the result is notable and may be indicative of social and demographic shifts or an emerging generational issue. The study’s sample size, scope and skew towards younger adults make a definitive conclusion difficult, but changes in the youth experience, from digitized communication and social media to smaller nuclear families, are important trends for clinicians

and researchers to consider. These structural changes were part of the genesis of this study and may play a role in the higher self-esteem and sense of feeling “special” among younger adults within our study.

Reality Television Viewership

Reality TV viewership by itself may not be a significant driving force in the development of narcissism. However, given the results of our study and the likely multi-factorial origins of narcissism, Reality television viewership appears to have relevance as part of a larger construct of environmental factors. The intent of the study was to understand the ways in which rapidly changing social and environmental factors may be influencing behavior broadly. If anything, our study may have been too small in scope by focusing solely on Reality television and narcissism.

The media landscape is constantly evolving, and the study may not be capturing the full scope of Reality television options. The focus of traditional sitcoms and journalism, programs with higher viewership than reality TV in the sample, has also evolved in recent years. More digital media is absorbed outside of television than ever before, primarily through the internet and mobile applications. The study did not capture these trends, which may influence NPI scores as well.

Lastly, Reality television is still a relatively new form of media with a surge in viewership over the past decade. The long-term implications of this new form of media are not yet understood. Admittedly, correlation does imply causation, but this study shows that specific types of Reality television viewership are associated with certain narcissistic traits, even when adjusted for other social and demographic factors like age, income, gender and ethnicity. Increased viewership of purely voyeuristic shows is associated with greater feelings of power, while viewing skill-based shows is associated with increased agreement with statements within the exhibitionism category. Less significant, but still statistically relevant, viewing both skill and purely voyeuristic Reality shows is associated with higher “special person” scores. Therefore, even if Reality television viewership is a symptom rather than a cause of narcissism, understanding an individual’s television viewing patterns could be an important behavioral indicator. As a result, further research into both narcissism and Reality TV would likely be useful for a variety of clinical and non-clinical applications.

Methods

The author’s use of social media to procure subjects for this study represents a novel and modern approach to research and warrants further consideration as a tool for data collection in the future. That said, there may have been unintended consequences for the study. The rise of social media follows the rise of Reality TV. Users of Facebook may inherently exhibit specific personality traits that mask the significance of Reality television viewership. Indeed, some recent studies suggest higher numbers of Facebook “friends” are associated with greater narcissistic tendencies. Moreover, the natural clustering of people with similar beliefs, behaviors and demographic traits may have influenced the sample.

Suggestions for Future Studies

A larger and more balanced sample that more closely represents the overall population is needed to better assess the significance of relationships between narcissism and Reality TV viewership. Stratified analysis across various demographic groups may yield stronger and more conclusive relationships - the limited sample size and skews within the data limited such analysis in this study. The sample was heavily skewed towards educated, young females. Geographically, the population was biased towards the Northeast and Midwest given the nature of Facebook networks and relationships. The number of moderate and heavy reality TV viewers (as well as overall TV viewership) was also smaller than the author had hoped for, making statistically significant samples more difficult to come by.

Furthermore, given the significance of social and demographic factors, not accounting for other behavioral and social factors that may influence NPI scores (childhood experiences with the family of origin, cultural and geographical influences, etc) may reduce the efficacy of this study. Future studies should also seek to quantify the ongoing intake of various sub-categories of Reality television rather than simple viewership.

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