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Relating Sense of Humor to the Five Factor Theory Personality Domains and Facets

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ABSTRACT

The present study examined the relationships between the broad, multidimensional view of humor using the factors of the Multidimensional Sense of Humor Scale (MSHS) and all of the Five Factor Theory (FFT) personality domains and specific facets. Results indicated a number of significant personality facets related to the Humor Production and Social Use factor. The strongest were Assertiveness, Activity-level, Cheerfulness, Modesty (negative), Self-Efficacy and Intellect. Cheerfulness was also related to Humor Appreciation, and Excitement Seeking to Humor Attitude. Humor Production related to a number of different personality traits consistent with previous research on styles of humor. These results provide a broad view of sense of humor and its relation to the specific facets of the FFT. Future directions of study are encouraged using the specific facets of the FFT and more precise study of humor outside humor production or humor style.

INTRODUCTION

Over the years, researchers have studied the relationship between sense of humor and personality in a number of ways. However, the many different dimensions of humor, or sense of humor, have lead researchers to investigate humor with a variety of differing conceptions. Sense of humor has been studied as a cognitive ability to produce humorous material, an aesthetic

response, a habitual behavior, a temperament trait, an attitude and a coping strategy (Martin, Puhlik-Doris, Larsen, Gray, & Weir, 2003). Humor has been studied in its relation to stress and coping strategies (Abel, 2002) and hope (Vilaythong, Arnau, Rosen, & Mascaro, 2003). The multifaceted nature of the concept of humor makes it more complicated to research in a general sense. Much of previous research with humor has investigated humor as of construct of humor preference or what an individual finds funny, taking advantage of the Humor Styles Questionnaire (HSQ) or similar measures (Martin et al., 2003). The HSQ measures ways in which humor is typically expressed both positively and negatively in social interactions. It measures four specific types of methods in which humor is used, two positive and two negative: Self-enhancing, humor to enhance the self; Affiliative, humor to enhance one's relationship with others; Aggressive, humor to enhance the self at the expense of others; and Self-defeating, humor to enhance one's relationship with others at the expense of self (Martin et al., 2003).

Researchers have used this conceptualization of humor use type to investigate various psychological variables. Positive humor styles have been shown to relate to higher levels of social competence, including personal disclosure and initiating relationships. Self-enhancing humor also has mild positive relation to emotional management, an element of emotional intelligence. Conversely, Aggressive humor has a negative relationship with specific areas of social competence like emotional support and conflict management, and emotional perception, an element of emotional intelligence. Self-defeating humor also has negative relationship with negative assertion from social competence and emotional perception from emotional intelligence (Yip & Martin, 2006). These results highlight the different functions of different types of humor on social relationships and emotions. Positive humor can help enhance positive experiences and interactions, whereas negative humor such as aggressive teasing and sarcasm may have a negative influence (Yip & Martin, 2006).

Other studies have shown that positive humor styles are associated with greater self-esteem, lower depression and anxiety levels, higher positive affect, lower negative affect, and more positive self-judgments on social competency. In contrast, Self-defeating humor has been associated with higher levels of depression and anxiety and lower levels of self-esteem. Aggressive humor was found to be unrelated to well-being (Kuiper, Grimshaw, Leite, & Kirsh, 2004; Saroglou & Scariot, 2002). These results show that the use of humor can be both adaptive and maladaptive depending on the style, and confirms the multidimensional nature of humor style. The relationship of humor styles to specific personality traits has also been investigated. Using a short measure of the Big Five components of personality based on 25 bipolar adjectives, the four humor styles were found to be fairly unique in their relation to personality. Self-enhancing and Affiliative humor were both positive associated with Extraversion, Agreeableness and Openness. Aggressive humor was negatively associated with Extraversion, Agreeableness and Conscientiousness. Self-defeating humor was negatively associated with Conscientiousness and Neuroticism (Saroglou & Scariot, 2002). In a separate study these results were replicated using a short Big Five inventory using a 5-point Likert-type scale. Positive humor styles were positively associated with Extraversion, Agreeableness and Openness. However, this study also showed a positive association between positive humor styles and Neuroticism, which is inconsistent with previous literature. Aggressive humor was negatively related to Agreeableness and Conscientiousness, and Self-defeating humor was associated with higher Neuroticism and lower Conscientiousness. Additionally, this study showed that emotional intelligence and humor

style mediates the relationship between the Big Five personality traits and general health. (Greven, Chamorro-Premuzic, Arceche, & Furnham, 2008). Separate from humor style research, other researchers have investigated differing humor preferences and their association with personality traits. Several studies have shown that the appreciation of different types of humor content and humor structure relates to different personality traits such as sensation-seeking (Arnett, 1994) and Extraversion (Buchanan, 2001). Also, those higher in Neuroticism dislike nonsense humor more compared to incongruity resolved humor (Galloway & Chirico, 2008).

As the studies above show, researchers have extensively investigated the effects of different styles of humor use. However, the concept “sense of humor” relates to more than the method in which one expresses humor, or the type of humor one prefers. Yip and Martin, (2006) along with their HSQ conceptualized and measured humor from a temperament based approach. Using the State-Trait Cheerfulness Inventory (STCI) (Ruch, Köhler, & van Thriel, 1997), humor is approached as a temperament based trait, measured by two dichotomous, continuous traits, high cheerfulness (low trait bad mood) and high trait playfulness (low trait seriousness). This conceptualization of humor showed that high cheerfulness strongly associate with several areas of social competence and emotional management. Conversely, low trait bad mood was negatively associated strongly with both social competence and emotional intelligence (Yip & Martin, 2006). The inherent complexity of the concept of humor makes it difficult to measure from a multidimensional perspective. Previous researchers have generally performed humor research by using one or more measures that each separately only capture one aspect of humor at a time. Thorson and Powell (1993) have developed a measure called Multidimensional Sense of Humor Scale (MSHS) to fill the need of a measure in humor research that allows the study of humor from a broad multidimensional perspective. This approach conceptualizes “sense of humor” in an overall sense how one looks at the world. It differentiates between the elements of “sense of humor” and “elements of humor” (Thorson & Powell, 1993). The following elements of sense of humor were used as the initial factors to develop this measure: (1) recognition of oneself as humorous person, (2) recognition of others’ humor, (3) appreciation of humor, (4) laughing, (5) general perspective to find humorous stimuli, and (6) use of humor as a coping response. After a series of factor analysis examinations, four factors were extracted to make up the MSHS questionnaire: (1) Humor Production and Social Use (Humor Production), (2) Coping and Adaptive Humor (Coping Humor), (3) Humor Appreciation, and (4) Attitude towards Humor (Humor Attitude) (Thorson & Powell, 1993).

The present research is focused on addressing the complexity within humor research that indicates a need for the development of a broad, multi-dimensional conception of humor and an understanding of how humor relates to a larger context of overall personality. To accomplish this, this study takes advantage of the MSHS questionnaire and development of the Five Factor Theory (FFT) as a dominant paradigm for studying personality (Costa & McCrae, 1995; Digman, 1996). This study was designed to map the multiple factors of humor against all of the FFT personality domains and specific related facets in order to gain a broader and deeper understanding of the specific individual differences and relationship between humor and personality. Previous research has shown that the use of specific personality facets increases the accuracy of predicting behaviors and accounts for variance in variables that are unaccounted for it just the broad domains are used (Paunonen & Ashton, 2001).

METHOD

Participants and Procedure

Participants (N=31) were a convenience sample of 8 male and 23 female (mean age = 21.53) graduate and undergraduate students at a southeastern public university. They signed an informed consent form before completing the questionnaires which informed them that their responses would be anonymous, confidential and they could withdrawal from the study at point, for any reason. Most of the undergraduate participants received course credit for participating. The participants completed the questionnaires in counterbalanced order in a classroom setting in groups of 3-10.

Instruments

Personality. The M5 Questionnaire (McCord, 2002) is a 336-item public-domain instrument based on Goldberg's (1999) IPIP item set, producing scores on the five major domains of the Five Factor Theory as well as six more specific facets under each domain as described by Costa and McCrae (1995). The five major domains are Extraversion, Agreeableness, Conscientiousness, Neuroticism and Openness. Participants are asked to rate how accurately each statement describes them using a five-point Likert-type scale ranging from 1 (very inaccurate) to 5 (very accurate). Previous research has shown that the M5 questionnaire has good internal reliability for measuring both the five major domains and specific personality facets.

Sense of humor. The Multidimensional Sense of Humor Scale (MSHS) was developed using factor analysis techniques by Thorson and Powell (1993). This scale uses 24 self-report items to assess multiple elements of the personal construct of sense of humor. The four factors measured are: (1) Humor Production and Social Use (items = 11, alpha = .90), (2) Coping and Adaptive Humor (items = 6, alpha = .87), (3) Humor Appreciation (items = 2, alpha = .63), and (4) Attitude towards Humor (items = 5, alpha = .75). Participants are asked to indicate the degree to which each statement applies to them using a Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree). Scores for each factor were calculated by averaging the responses on all of the items that make up each factor.

RESULTS

Humor Inter-correlations

Inter-correlations between the humor factors are presented in Table 1. Coping humor and Humor attitude were significantly related at the $p < .01$ level. Humor production was significantly related to both Coping humor ($p < .05$) and Humor appreciation ($p < .05$). All four factors were significant related to the total humor score ($p < .01$).

Personality and Humor Factors

Pearson product correlations were run between the four humor factors and the FFT broad domains and related facets. These results are presented in Table 2. The Humor Production and social use factor was positively correlated with the following personality facets at the $p < .01$

level: Assertiveness, Activity Level, Self-Efficacy and Intellect. Humor Production was negatively correlated with Modesty ($p < .01$). Humor Production was positively correlated with the facets Achievement Striving and Emotionality as well as the broad domain Extraversion at the $p < .05$ level. Humor Appreciation was positively correlated with the facet Cheerfulness at the $p < .05$ level. Humor Attitude was positively correlated with the facet Excitement Seeking at the $p < .05$ level. Coping Humor was not correlated with any personality facets.

Table 1.

Inter-correlations of Humor Factors

Humor	1	2	3	4	5
1. Production and social use		0.450	0.383	0.202	<u>0.851</u>
2. Coping and adaptive			0.263	<u>0.489</u>	<u>0.780</u>
3. Appreciation				0.294	<u>0.490</u>
4. Attitude					<u>0.606</u>
5. Total humor score					

Bold = $p < .05$, **Bold** = $p < .01$

DISCUSSION

The Humor Production factor had a significant number of correlations with personality facets, many more than any other humor factor. Within the broad personality domains, only Humor Production and Extraversion were significantly related. There were no other significant relationships between broad domains and any other humor factors. These results seem consistent with previous research on humor styles. Previous research has shown that different styles of humor relate differently to positive and negative emotions and personality traits (Kuiper, Grimshaw, Leite & Kirsh, 2004; Saroglou & Scariot, 2002). The Humor Production factor does not differentiate between types of humor as in the HSQ. Although it is much more difficult to ascribe meaning to non-significant results, it is logical that undifferentiated humor production would have neither positive nor negative relationships with broad personality domains associated with positive or negative emotions, such as Neuroticism or Agreeableness. The undifferentiated Humor Production factor only relates to Extraversion, which is characterized by the tendency to seek out social stimulation and engage with the social world. The Humor Production factor is defined by an individual's self perception of their own ability to say funny things or make others laugh in social situations. It is likely that those high on Extraversion would use humor production as a method for positive social engagement with others.

More specifically, the Extraversion domain also contained the most significantly related personality facets. The facets Assertiveness, Activity Level and Cheerfulness were all strongly related to Humor Production. Other facets that were strongly related to Humor Production are Modesty from Agreeableness, Self-efficacy from Conscientiousness, and Intellect from Openness. The inclusion of the specific personality facets allow for a number of possible connections to be drawn between personality and Humor Production. The strong relationship between the facets Self-Efficacy and Assertiveness and Humor Production shows that those

Table 2. *Personality Facets and Humor Factors Pearson Correlations*

FFT Domains/Facets	Humor Production	Humor Coping	Humor Appreciation	Humor Attitude	Humor Total
Extraversion	0.438	0.140	0.270	0.191	0.391
E1 Friendliness	0.199	0.037	0.296	0.056	0.174
E2 Gregariousness	0.259	-0.033	0.088	-0.108	0.121
E3 Assertiveness	0.521	0.074	0.167	0.133	0.394
E4 ActivityLevel	0.546	0.104	0.236	0.245	0.458
E5 Excitement seeking	0.050	0.251	0.131	0.399	0.243
E6 Cheerfulness	0.542	0.330	0.392	0.275	0.554
Agreeableness	-0.217	-0.117	0.119	-0.011	-0.165
A1 Trust	-0.122	-0.160	0.152	0.073	-0.095
A2 Morality	-0.010	-0.155	0.206	0.107	-0.011
A3 Altruism	0.190	0.140	0.263	0.003	0.185
A4 Cooperation	-0.266	-0.021	-0.037	-0.165	-0.220
A5 Modesty	-0.462	-0.272	-0.006	-0.030	-0.382
A6 Sympathy	-0.127	0.002	-0.021	0.006	-0.076
Conscientiousness	0.278	-0.102	0.167	0.083	0.172
C1 Self efficacy	0.517	-0.097	0.163	0.022	0.300
C2 Orderliness	0.089	-0.081	0.004	0.004	0.028
C3 Dutifulness	0.188	-0.111	0.226	0.206	0.155
C4 Achievement striving	0.383	-0.015	0.181	0.202	0.301
C5 Self discipline	0.337	-0.004	0.328	0.125	0.267
C6 Cautiousness	-0.224	-0.155	-0.172	-0.156	-0.248
Neuroticism	-0.056	0.020	-0.043	-0.170	-0.080
N1 Anxiety	0.187	0.075	0.073	-0.019	0.139
N2 Anger	0.166	-0.263	0.115	-0.135	-0.019
N3 Depression	-0.260	-0.079	-0.170	-0.279	-0.280
N4 Selfconsciousness	-0.256	0.128	-0.293	-0.155	-0.181
N5 Immoderation	0.109	0.282	0.277	0.144	0.227
N6 Vulnerability	-0.116	-0.049	-0.087	-0.196	-0.152
Openness	0.290	0.119	0.185	0.105	0.263
O1 Imagination	0.104	0.212	0.022	-0.022	0.131
O2 Artistic Interests	0.233	-0.129	0.205	-0.083	0.089
O3 Emotionality	0.447	0.199	0.040	-0.035	0.332
O4 Adventurousness	-0.037	0.015	0.120	0.125	0.029
O5 Intellect	0.568	0.347	0.306	0.226	0.554
O6 Liberalism	-0.390	-0.262	-0.116	0.129	-0.298

Bold = $p < .05$

Bold = $p < .01$

individuals who believe they produce humor also have personality traits related to the ability or confidence to exercise their will in general life/social situations. Similarly, Modesty was strongly negatively related to Humor Production. It is a possible that the risk of trying to funny in a social situation and failing is enough to keep those without stronger Assertiveness or Self-Efficacy from attempting or succeeding from producing as much humor in social situations. Also, Assertiveness and Self-Efficacy were highly correlated with each other in the current sample at the $p < .01$ level. Modesty was negatively related to Assertiveness at the $p < .01$ level.

Additional significant facets within Extraversion related to Humor Production were Activity Level and Cheerfulness. The higher energy and pace of life within the personality trait Activity Level may also be a significant component to producing humor within social situations. Cheerfulness as a trait is at least partially defined as the incorporation of humor and laughter into everyday life, so it is consistent that cheerful individuals produce humor more often. Another interesting result is Intellect from the Openness domain. The ability to create and produce humorous jokes and scenarios may be similar to or use the same the ability and interest in understanding complex abstract ideas, issues and situation. The production of humor itself in many cases may involve the manipulation of abstract situations and ideas into more humorous forms. This result between personality and humor shows there might be an interesting interplay between cognitive/intellectual interest and humor production.

Humor total results were very similar to humor production and social use. This is likely because 11 of the 24 items of the MSHS are humor production and social use items, and that factor statistically dominated the other 3 factors which only had two other significant correlations between the three of them. The few other significant relationships between humor and personality were Humor appreciation and Cheerfulness, and Humor attitude and Excitement seeking (both $p < .05$). Humor Appreciation, separate from Humor Production, assesses the appreciation of humor and those who create it. This appreciation of humor in a general sense as was stated earlier is a large portion of the definition of Cheerfulness. Somewhat more intriguing is the relationship between Humor Attitude and Excitement seeking. The Humor Attitude factor measures attitude (or even amount of dislike) towards those who tell jokes and enjoyment of humor in social situations. That Excitement Seeking was the only facet significantly related to Humor Attitude (and not Cheerfulness) shows there may be significant differences between differing factors of humor. The absence of significant correlations between any personality domains or facets and Coping Humor also supports differing relationships between the humor factors Coping Humor, Humor Appreciation and Humor Attitude. These particular areas of humor are less thoroughly researched but this study provides at least an initial, broad look at the possible relationships between these areas and personality. Overall, Humor Production shows a strong relationship with multiple areas of personality while other humor factors' relationship with personality is less well defined.

Strengths and Limitations

Most obviously, the low number of responses and limited sample limits generalizability of results, especially when generalizing to different types of personality. However conversely, the low number of participants shows the strength of significant correlations in statistical analysis. Also, on the MSHS, the number of items for each factor was not evenly distributed. Only two items were dedicated to Humor Appreciation, while 11 items made up Humor

Production. Some of the statistical impact of this can be seen in reliability coefficients for each factor. The MSHS measures the Humor Production and Coping Humor factors well, but the coefficients are lower for Humor Attitude and especially Humor Appreciation. These characteristics of the MSHS should be taken into account when interpreting the results.

Future Directions

The limitations of this study are evident but the results provide enough intriguing data to inspire ideas for future directions of this research. Most obviously, the simple replication or expansion of this study with more participants to increase the power of statistical analyses may yield more fruitful results.

Measuring humor from a broad perspective using the MSHS provided a comprehensive view of the relationship between the factors of humor and the domains and facets of personality but ultimately yielded few significant results outside of Humor Production. Though humor style is a heavily studied area, no studies were found in the literature review that used the specific facets of the FFT when examining different humor styles. In fact, very few humor studies at all have taken advantage of the both the broad domains and specific facets. Part of this may be due to methodological difficulties because the full M5 (336 items) that measures all 30 facets takes longer amount of time to complete, especially when combined with other measures. However, a priori decisions about using only certain domains and facets could cut down on questionnaire length and completion time. As it was found with this study, using the specific facets provides more accurate relationships between personality and humor factors, and allows for more specific and tangible analyses than if only the broad domains are used.

The MSHS questionnaire while broad and comprehensive does not provide very many items or differentiation in the Coping Humor, Humor Appreciation and Humor Attitude factors. The inclusion of the State-Trait Cheerfulness Inventory (STCI) or situational response humor questionnaires may provide more detailed views into other perspectives on humor but there might be a need for the development of more specific humor questionnaires that assess more precisely the factors of humor appreciation, coping humor and attitude towards humor. The results of this study showed that these humor factors related differently to personality facets which may indicate distinctions between the different humor factors. A less thoroughly studied area of humor, additional studies that more precisely investigate sense of humor outside of humor production or humor style may yield fruitful results, especially relating to personality.

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