

**OLD DOMINION UNIVERSITY /  
NORFOLK STATE UNIVERSITY**

**M.A. APPLIED SOCIOLOGY**

**SUPPLEMENT TO  
THESIS MANUSCRIPT PREPARATION GUIDE:  
EXAMPLES OF TABLES IN TEXT**

(Text and Tables from: Boone, Mary M. 2004. "The Effect Of Humor On Elderly Well-Being." Old Dominion University M.A. Applied Sociology thesis.)

Revised December 2004

- independent variables: *sense of humor, sense of control, humor coping, humor beliefs, social support (primary and secondary), humor awareness, and subjective stress level.*
- control variables: gender; race; marital status; age group (60-64; 65-69; 70-74; 75-79; 80-84; 85-89; 90-94; 95+); income; education; living arrangements (residing alone or with whom; and, residing in what type of residence—e.g. retirement community).

The composite measures of these variables were made so that higher scores of each scale indicated positive levels of each dimension, except for stress where a higher score indicates less stress. See Table 1.

Table 1. Composite Humor/Well-being Index

Dimension	Low score	High Score	Reliability
Well-being	0	30	.82
Sense of Control	0	30	.88
Social Support	0	10	.81
Sense of Humor <sup>a</sup>	0	30	.91
Humor Coping <sup>a</sup>	6	36	.81
Humor Belief <sup>a</sup>	0	6	---
Humor Awareness <sup>a</sup>	0	6	---
Subjective Stress	0	30	---
Partial Score (total-well-being)	6	148	---
Total Index score	0	178	---

<sup>a</sup> These four variables also make up a subscale of humor lifestyle with the range of 6-78 possible scores.

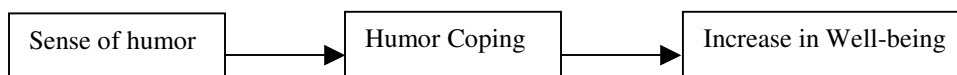
The total index score from the composite humor/well-being index gives a general score, which proved useful for general comparison between cases. A partial score (total index score minus the well-being score) was also utilized in correlations and regressions

- Humor coping is positively related to sense of control.
- Humor coping and sense of control directly influence well-being.
- Traditional social support directly influences psychological well-being.
- Perceived social support directly influences perceived sense of control.
- Sense of well-being directly influences the sense of humor.
- The awareness of physiological benefits of humor directly influences the use of humor coping.

Other factors are presumed to have a bearing on sense of humor and on well-being, such as physical health. This factor was not examined, since it affects both the independent and the dependent variables, and also due to the limited scope and resources of this study.

Figure 1. Hypothetical Humor Model

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#### HUMAN SUBJECT REQUIREMENTS CONSIDERATIONS

In order to comply with privacy issues, I have ensured the participants' confidentiality, explained the purpose of the study, the risks and benefits to the subject, and have answered any questions they had with regard to the study. I informed the participants that they were free to withdraw from the study at any point.

age group. Two participants declined to answer, resulting in the missing data for this variable.

Table 3. Age Group Frequencies by Facility Type

<i>Age Group</i>	<i>Assisted Living</i>	<i>Retirement Community</i>	<i>Recreation Day Care</i>	<i>Internet Community</i>	<i>Total</i>	<i>Total</i>
	#	#	#	#	#	%
60-64	0	0	2	0	2	2.4
65-69	0	0	5	4	9	10.6
70-74	1	0	5	10	16	18.8
75-79	3	7	5	9	24	28.2
80-84	3	10	2	5	20	23.5
85-89	1	7	0	2	10	11.8
90-94	1	3	0	0	4	4.7
Missing data	0	0	2	0	2	2.3
<b>Total</b>	<b>9</b>	<b>27</b>	<b>21</b>	<b>30</b>	<b>87</b>	<b>100.0</b>

There were 33% male and 67% female (See Table 4). There were more women in each group, with the exception of the Internet community, where more men responded than women.

Table 4. Gender Frequencies by Facility Type

<i>Gender Group</i>	<i>Assisted Living</i>	<i>Retirement Community</i>	<i>Recreation Day Care</i>	<i>Internet Community</i>	<i>Total</i>	<i>Total</i>
	#	#	#	#	#	%
Male	1	7	2	19	29	33.3
Female	8	20	19	11	58	66.7
<b>Total</b>	<b>9</b>	<b>27</b>	<b>21</b>	<b>30</b>	<b>87</b>	<b>100.0</b>

The sample consisted of 78% Caucasian, 18.5% Afro-American, and 3.5% Asian respondents. When race is looked at within the different survey sites, a possible

one, their social support score was high (9) and reported an extremely heavy stress load (0) “too much to handle.”

Table 10. Mean Scores of Dimensions by Facility Type

	<i>Assisted Living</i>	<i>Retirement Community</i>	<i>Recreation Day Program</i>	<i>Internet Community</i>
(N)	9	27	21	30
<i>Well-being</i>				
Means	23.220	24.810	21.620	21.300
s.e.	(1.891)	(.880)	(1.147)	(.873)
<i>Sense of humor</i>				
Means	15.560	17.740	18.050	17.500
s.e.	(1.168)	(.508)	(.611)	(.495)
<i>Humor coping</i>				
Means	29.110	32.300	33.290	31.570
s.e.	(2.282)	(.901)	(1.072)	(.935)
<i>Humor awareness</i>				
Means	4.560	5.300	5.000	4.830
s.e.	(.444)	(.183)	(.258)	(.230)
<i>humor beliefs</i>				
Means	4.560	4.930	5.000	4.970
s.e.	(.444)	(.192)	(.239)	(.195)
<i>sense of control</i>				
Means	21.560	22.520	23.380	22.230
s.e.	(1.857)	(.742)	(.869)	(.750)
<i>social support</i>				
Means	7.330	7.370	6.240	5.270
s.e.	(.441)	(.307)	(.430)	(.307)
<i>stress level</i>				
Means	17.780	20.000	19.050	20.000
s.e.	(2.222)	(1.068)	(1.176)	(1.072)
<i>Humor Lifestyle</i>				
Means	53.780	60.260	61.330	58.870
s.e.	(4.082)	(1.669)	(1.960)	(1.680)
<i>Partial Score</i>				
Means	100.440	110.150	110.000	106.370
s.e.	(7.614)	(2.398)	(3.500)	(2.369)
<i>Total Index Score</i>				
Means	123.670	134.960	131.620	127.670
s.e.	(9.031)	(2.744)	(4.407)	(2.991)

The data from a simple correlation matrix suggest that the proposed relationships between the various dimensions studied were all statistically significant (See Table 11).

Table 11. Significant Correlations of Select Dimensions

	Humor Coping	Sense of Humor	Stress Level	Sense of Control	Humor Lifestyle	Well-being
Humor Coping	1.000					
Sense of Humor	.908	1.000				
Stress Level	.236	.303	1.000			
Sense of Control	.472	.395	.298	1.000		
Humor Lifestyle <sup>a,b</sup>	.874	.920	.281	.471	1.000	
Well-being	.227*	.228*	.590	.374	.276	1.000
Total Index Score	.742	.742	.711	.651	.785	.725

\* $p < .05$ , all others significant at  $p < .01$  (1-tailed test)

<sup>a</sup>The Humor Lifestyle Subscale is comprised of sense of humor, humor coping, humor beliefs, and humor awareness. Humor coping was removed from the score for the correlation to humor coping.

<sup>b</sup>Sense of Humor was removed from the score for the correlation to sense of humor.

A significant correlation was found between social support and well-being ( $r = .304$ ) which supports current theory (Thoits 1987; Kahn and Antonucci 1980; Kahn 1994), and between sense of control and well-being ( $r = .374$ ), which also supports theory (Rodin et al. 1985; Lefcourt and Martin 1986; Rodin 1986; Gecas 1989; Abeles 1991; Mirowsky and Ross 1996; Antonucci and Akiyama 1997; Lachman et al. 1994). It is puzzling, though, that the correlation between social support and sense of control was not significant, which runs counter to research that shows that strong social networks have significant interactions with sense of control (Ziff and Lachman 1992; Lachman et al. 1994). This finding may reflect that high social support in institutions reflect the control others have on their lives.

groups (i.e. assisted living facility, independent retirement facility, recreation elderly day care program, and the senior Internet site) and each dimension (i.e. well-being, sense of humor, etc.). Data showed significant differences between groups in the dimensions of social support ( $F=8.33$ , 3 d.f.,  $p<.001$ ) and sense of well-being ( $F=2.83$ , 3 d.f.,  $p<.05$ ).

For social support, out of a possible score of 10, the mean was lowest for the Internet community (mean=5.27, s.e.=.307) and highest for the independent retirement facility (mean=7.37, s.e.=.307) See Table 12. For sense of well-being, out of a possible score of 30, the lowest was found with the Internet community (mean=21.30, s.e.=.873), and the highest was with the independent living retirement community (mean 24.81, s.e.=.880).

Table 12. Means for Significant Differences Between Groups

	<i>Assisted Living</i>	<i>Retirement Community</i>	<i>Recreation Day Program</i>	<i>Internet Community</i>
(N)	(9)	(27)	(21)	(30)
<i>Social Support</i>				
Means	7.330	7.370	6.240	5.270
s.e.	(.441)	(.307)	(.430)	(.307)
<i>Well-being</i>				
Means	23.220	24.810	21.620	21.300
s.e.	(1.891)	(.880)	(1.147)	(.873)

Since one-way ANOVA did not show significant differences between groups for most of the dimensions, a post hoc comparison was carried out comparing the different test sites. Using the least significance difference computation (LSD), a multiple comparisons test shows significant differences between additional dimensions. Humor lifestyle (combination score of sense of humor, humor coping, humor beliefs, and humor awareness) shows a difference between the assisted living group (mean difference=-7.56,

of humor reflects a negative relationship in this model, but, since there is a significant correlation ( $r=.228$ ,  $p<.05$ ), it is possible that this may be due to having an indirect effect on the dependent variable rather than a direct one.

Table 14. Regression of Predictor Variables on Sense of Well-being

	<u>Model 1</u>	<u>Model 2</u>	<u>Model 3</u>	<u>Model 4</u>	<u>Model 5</u>	<u>Model 6</u>
	<u>Beta</u>	<u>Beta</u>	<u>Beta</u>	<u>Beta</u>	<u>Beta</u>	<u>Beta</u>
Humor Coping	.227* (.104)	.113 (.249)	-.115 (.249)	-.090 (.229)	.086 (.203)	.074 (.193)
Sense of Humor		.125 (.455)	.193 (.435)	.158 (.401)	-.091 (.362)	-.316 (.371)
Sense of Control			.352** (.142)	.422*** (.132)	.280** (.121)	.219* (.117)
Social Support				.379*** (.253)	.274** (.228)	.248** (.220)
Stress Score					.465*** (.082)	.475*** (.079)
Humor Awareness						.329** (.502)
Humor Beliefs						.051 (.535)
R <sup>2</sup>	.051	.054	.150	.289	.461	.525

\* $p<.05$  \*\* $p<.01$  \*\*\* $p<.001$  (2-tailed test)

Since there was such a strong relationship between sense of humor and humor coping in the correlation matrix, collinearity was suspected. However, the variance inflation factor (VIF) for sense of humor was two (2) and for humor coping the VIF was close to seven (7), within the range of tolerance, so collinearity was ruled out.

It was proposed in the hypothetical model that sense of humor would lead to humor coping, which would result in an increase in well-being. As noted in the regression model for subjective well-being, humor coping was excluded from having any significant effect, so, based on current theory (Abeles 1991) it was then explored as to

whether sense of control might be a mediating factor between humor coping and increased levels of well-being. Also, if one feels better (increase in well being) through exhibiting a sense of control ( $r=.374$ ) and one's propensity toward humor coping imparts an increase in that sense of control ( $r=.472$ ) and in the sense of well-being ( $r=.227$ ), there could possibly be a self-reinforcing effect. To test this premise further, a regression model including only well-being and humor coping as predictors of sense of control showed a significant effect explaining 30% of the variance. This model suggests that humor coping has a significant effect on sense of control, while sense of well-being also exerts a significant influence on sense of control. The unstandardized coefficient showed that a unit change in control was associated with increased scores in humor and well-being. See Table 15.

Table 15. Regression of Predictor Variables on Sense of Control

Variables	Model 1			Model 2		
	<u>B</u>	<u>s.e.</u>	<u>Beta</u>	<u>B</u>	<u>s.e.</u>	<u>Beta</u>
Constant	6.938	(2.642)		10.411	(2.836)	
Humor Coping	.325	(.075)	.408***	.460	(.172)	.577**
Sense of Well-being	.229	(.076)	.282**	.233	(.101)	.286*
Sense of Humor				-.482	(.345)	-.331
Social Support				-.547	(.206)	-.253**
Stress Level				.073	(.085)	.101
Humor Awareness				.268	(.489)	.076
Humor Beliefs				.261	(.497)	.068
R <sup>2</sup>	.298			.379		

\* $p<.05$  \*\* $p<.01$  \*\*\* $p<.001$  (2-tailed test)

Model 2, entering predictors sense of humor, humor coping, humor beliefs, humor awareness, well-being, social support, and stress level, explained 38% of the variance. This model showed well-being, social support, and humor coping to be significant. then

affects one's tendency to cope with humor. For a summary of the regression results, see Table 19.

Table 19. Summarization of Regression Tables

Regression of Predictor Variables on Sense of Well-being						
	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
	Beta	Beta	Beta	Beta	Beta	Beta
Humor Coping	.227* (.104)	.113 (.249)	-.115 (.249)	-.090 (.229)	.086 (.203)	.074 (.193)
Sense of Humor		.125 (.455)	.193 (.435)	.158 (.401)	-.091 (.362)	-.316 (.371)
Sense of Control			.352** (.142)	.422*** (.132)	.280** (.121)	.219* (.117)
Social Support				.379*** (.253)	.274** (.228)	.248** (.220)
Stress Score					.465*** (.082)	.475*** (.079)
Humor Awareness						.329** (.502)
Humor Beliefs						.051 (.535)
R <sup>2</sup>	.051	.054	.150	.289	.461	.525

\*p<.05 \*\*p<.01 \*\*\*p<.001 (2-tailed test)

Regression of Predictor Variables on Sense of Humor

	Model 1			Model 2		
	B	s.e.	Beta	B	s.e.	Beta
Constant	9.297	(0.995)		7.306	(1.049)	
Humor Awareness	1.646	(0.194)	.677***	1.053	(.234)	.433***
Humor Beliefs				1.005	(.255)	.379***
R <sup>2</sup>	.458			.542		

\*\*\*p<.001 (2-tailed test)

Regression of Predictor Variables on Sense of Control

	Model 1			Model 2		
Variables	B	s.e.	Beta	B	s.e.	Beta
Constant	6.938	(2.642)		10.411	(2.836)	
Humor Coping	.325	(.075)	.408***	.460	(.172)	.577**
Sense of Well-being	.229	(.076)	.282**	.233	(.101)	.286*
Sense of Humor				-.482	(.345)	-.331
Social Support				-.547	(.206)	-.253**
Stress Level				.073	(.085)	.101
Humor Awareness				.268	(.489)	.076
Humor Beliefs				.261	(.497)	.068
R <sup>2</sup>	.298			.379		

\*p<.05 \*\*p<.01 \*\*\*p<.001 (2-tailed test)

Table 19. Continued

Regression of Predictor Variables on Humor Coping			
	Model 1	Model 2	Model 3
	<u>Beta</u>	<u>Beta</u>	<u>Beta</u>
Humor Awareness	.425***	.045	.007
Humor Beliefs	.333***	.000	-.011
Sense of Humor		.878***	.873***
Sense of Well-being			.023
Stress Level			-.084
Sense of Control			.145**
R <sup>2</sup>	.474	.826	.845

\*\*p<.01 \*\*\*p<.001 (2-tailed test)

Regression of Predictor Variables on Lower Stress Levels

	Model 1		<u>Beta</u>	<u>Correlations</u>
	<u>B</u>	<u>s.e.</u>		
Constant	-.564	(3.643)		
Sense of Humor	.885	(.442)	.441*	.303**
Humor Coping	-.364	(.237)	-.331	.236*
Humor Beliefs	.099	(.629)	.019	.300**
Sense of Control	.101	(.144)	.074	.298**
Sense of Well-being	.594	(.106)	.531***	.590***
R <sup>2</sup>	.396			

\*p<.05 \*\*p<.01 \*\*\*p<.001 (2 tailed test)

## ANSWERS TO PROPOSED SUBQUESTIONS

The sub-questions that were anticipated to arise from the central question and are answered here specifically. A number of themes were explored within the questionnaire and interviews.

*Conscious Coping Choice:* This research explored whether using humor as a coping strategy is a conscious choice. As noted previously, sense of humor is strongly correlated to humor coping ( $r=.908$ ,  $p<.001$ ) and in regression model 3 for humor coping, sense of humor ( $\beta=.873$ ,  $p<.001$ ) and sense of control ( $\beta=.145$ ,  $p<.01$ ) were significant predictors explaining 85% of the variance in humor coping. Content analysis of the open-ended questions revealed that many individuals do make a conscious decision to use

Table 20. Conscious Coping Frequencies

	Not true	Hardly true	Moderately true	Exactly true
Tendency to make comical response to tense situation	5 5.7%	23 26.4%	36 41.4%	23 26.4%
Make jokes when nervous or scared	4 4.6%	28 32.2%	36 41.4%	19 21.8%
Find humor in silly or embarrassing events	1 1.1%	6 5.9%	40 46%	40 46%

Table 21. Frequencies of Awareness of Therapeutic Benefits of Humor

Humor Belief:	Not true	Hardly true	Moderately true	Exactly true
psychologically healthy	0	6 6.9%	29 33.3%	52 59.8%
physically healthy	0	7 8.0%	33 37.9%	47 54.0%