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Factor Affecting on Anxiety Level: Case Study of People Living in Rajkot City, India

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Abstract:

Anxiety is serious problem in current generation. Working performance reduced in people due to Anxiety level. Student with higher Anxiety level may cause in their learning process, poor performance in examination and interview. So to study anxiety level of student as well as working people. We collected data from age between 15 to 76. The aim of this paper is to investigate the factors affecting on Anxiety level. The result shows that 55.3 percent respondents have mild anxiety level and none of the respondent has very high anxiety level.

Keywords: Anxiety level, Worry, Fear, Ordinal logistic Regression.

1. Introduction

Anxiety is emotional state consist of feeling, tension, apprehension, and its effects on the nervous system Spielberger's (1995). There are various forms of anxiety which includes excessive worrying, a sense of fear, restlessness, overly emotional responses, and negative thinking. It is excessive or has a big impact on person's life. Ownes et al. (2012) proposed that academic performance is reduced in young people with high levels of anxiety.

Many studies indicate that anxiety is more severe and it is more common among people. The high level of anxiety makes a person's normal life difficult. The study of anxiety is a real phenomenon, the importance of study anxiety is particularly related to the sources of anxiety and how to handle them.

The anxiety also affects on player's performance in any games. Robb, M. (2005) studied the influences of Anxiety on Golf Performance. The symptoms of anxiety among students include feeling nervous before a tutorial class, going blank during a test, feeling helpless while doing assignments, or lack interest in a difficult subject. McCraty et. al. (2000) showed that, anxiety plays significant role in student's learning and academic performance. In this study we want to find the anxiety level among different age groups of people in Rajkot city. This research also provides the factors affecting on anxiety of people.

2. Material and Methods

In this study, we have collected data of 300 people in Rajkot city. Data collection took place from January to February 2016 through questionnaire. The Statistical techniques Ordinal logistic regression is used. "Analysis has been done in SPSS software".

3. Statistical Analysis

3.1. Descriptive Statistics

Anxiety level of people is response variable. We have given twenty questions to respondents to calculate Anxiety level. Each Question of about Anxiety is coded Normal (1), Mild (2), Moderate (3), High (4), Very High (5). We have summarized score of twenty questions about Anxiety. The range of score of anxiety is between 20 to 100. After that we categorized score of anxiety in to five categories, namely, Normal (1), Mild (2), Moderate (3), High (4), Very High (5). Here range for Normal is 20 to 36, for Mild 37 to 52, for Moderate 53 to 68, for High 69 to 84 and Very High 85 to 100.

We have taken 24 independent variables for study. In these 24 independent variables 21 are categorical and 3 are continuous variables. Frequency of each independent variable is given category wise of Anxiety level in given Table 1. For categorical variables gender, out of 300 people 219 are Male and 81 are Female. Out of 219 male respondents, 54(24.7%) male has Normal Anxiety level, 113(51.6%)

male has Mild Anxiety level, 47(21.5%) male has Moderate Anxiety level, 5(2.3%) male has High Anxiety level, 0(0.0%) male has Very High Anxiety level. Out of 81 Female respondents, 11(13.6%) Female has Normal Anxiety level, 53(65.4%) Female has Mild Anxiety level, 17(21%) Female has Moderate Anxiety level, 0(0.0%) Female has High Anxiety level, 0(0.0%) Female has Very High Anxiety level. Score of Anxiety level for other categorical variables is shown in Table 1.

Variable		Anxiety level									
		Normal (65)		Mild (166)		Moderate (64)		High (5)		Very High (0)	
		N	Row %	N	Row %	N	Row %	N	Row %	N	Row %
Gender	Male	54	24.7%	113	51.6%	47	21.5%	5	2.3%	0	0.0%
	Female	11	13.6%	53	65.4%	17	21.0%	0	0.0%	0	0.0%
Occupation	Government Job	5	1.7%	6	2.0%	4	1.3%	0	0.0%	0	0.0%
	Private Job	2	0.7%	9	3.0%	9	3.0%	1	0.3%	0	0.0%
	Business	9	3.0%	10	3.3%	1	0.3%	0	0.0%	0	0.0%
	Housewife	3	1.0%	14	4.7%	3	1.0%	0	0.0%	0	0.0%
	Student	38	12.7%	121	40.3%	47	15.7%	4	1.3%	0	0.0%
	Retired	8	2.7%	6	2.0%	0	0.0%	0	0.0%	0	0.0%
Annual Income	None	27	16.8%	95	59.0%	35	21.7%	4	2.5%	0	0.0%
	Less than 2 Lakh	16	19.5%	46	56.1%	20	24.4%	0	0.0%	0	0.0%
	2.1 to 4 lakh	14	40.0%	17	48.6%	4	11.4%	0	0.0%	0	0.0%
	4.1 to 6 lakh	2	18.2%	6	54.5%	3	27.3%	0	0.0%	0	0.0%
	Above 6 lakhs	6	54.5%	2	18.2%	2	18.2%	1	9.1%	0	0.0%
Family Type	Joint Family	48	24.5%	101	51.5%	44	22.4%	3	1.5%	0	0.0%
	Nuclear	17	16.3%	65	62.5%	20	19.2%	2	1.9%	0	0.0%
Class of Family	Lower Class	2	14.3%	9	64.3%	2	14.3%	1	7.1%	0	0.0%
	Middle Class	53	20.4%	143	55.0%	60	23.1%	4	1.5%	0	0.0%
	Higher Class	10	38.5%	14	53.8%	2	7.7%	0	0.0%	0	0.0%
Marital Status	Married	26	34.2%	36	47.4%	14	18.4%	0	0.0%	0	0.0%
	Unmarried	39	17.4%	130	58.0%	50	22.3%	5	2.2%	0	0.0%
Education Qualification	Primary	2	66.7%	1	33.3%	0	0.0%	0	0.0%	0	0.0%
	Secondary	7	87.5%	1	12.5%	0	0.0%	0	0.0%	0	0.0%
	Higher secondary	8	24.2%	22	66.7%	3	9.1%	0	0.0%	0	0.0%
	Graduate	30	16.1%	110	59.1%	42	22.6%	4	2.2%	0	0.0%
	Post Graduate	18	25.7%	32	45.7%	19	27.1%	1	1.4%	0	0.0%
	PhD	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
Health Status	Bad	0	0.0%	2	50.0%	2	50.0%	0	0.0%	0	0.0%
	Medium	3	10.7%	15	53.6%	8	28.6%	2	7.1%	0	0.0%
	Good	35	20.7%	92	54.4%	41	24.3%	1	0.6%	0	0.0%
	Best	27	27.3%	57	57.6%	13	13.1%	2	2.0%	0	0.0%
How do you feel about yourself	Confident	27	23.5%	66	57.4%	21	18.3%	1	0.9%	0	0.0%
	Friendly	27	19.1%	85	60.3%	27	19.1%	2	1.4%	0	0.0%
	Talkative	11	25.0%	15	34.1%	16	36.4%	2	4.5%	0	0.0%
Habit	Smoking	1	20.0%	4	80.0%	0	0.0%	0	0.0%	0	0.0%
	Alcohol	1	20.0%	2	40.0%	1	20.0%	1	20%	0	0.0%
	Tobacco	12	38.7%	12	38.7%	6	19.4%	1	3.2%	0	0.0%
	None	51	19.7%	148	57.1%	57	22.0%	3	1.2%	0	0.0%
Sleeping Time in Hours	3-5 hrs	7	28.0%	15	60.0%	3	12.0%	0	0.0%	0	0.0%
	6-8 hrs	50	20.6%	133	54.7%	56	23.0%	4	1.6%	0	0.0%
	9-11 hrs	8	25.0%	18	56.2%	5	15.6%	1	3.1%	0	0.0%
Life Style	Busy	13	23.2%	32	57.1%	10	17.9%	1	1.8%	0	0.0%
	Stressful	1	4.3%	7	30.4%	12	52.2%	3	13.0%	0	0.0%
	Happy	37	23.7%	89	57.1%	29	18.6%	1	0.6%	0	0.0%
	Awesome	14	21.5%	38	58.5%	13	20.0%	0	0.0%	0	0.0%
freedom to take decision	Yes	59	22.5%	146	55.7%	53	20.2%	4	1.5%	0	0.0%
	No	6	15.8%	20	52.6%	11	28.9%	1	2.6%	0	0.0%
doing exercise	Yes	44	25.4%	100	57.8%	26	15.0%	3	1.7%	0	0.0%
	No	21	16.5%	66	52.0%	38	29.9%	2	1.6%	0	0.0%
you have any	Yes	9	10.0%	46	51.1%	32	35.6%	3	3.3%	0	0.0%

kind of fear	No	56	26.7%	120	57.1%	32	15.2%	2	1.0%	0	0.0%
you have any diseases	Yes	8	15.1%	30	56.6%	14	26.4%	1	1.9%	0	0.0%
	No	57	23.1%	136	55.1%	50	20.2%	4	1.6%	0	0.0%
adverse effect of depression or anxiety	Yes	5	7.5%	35	52.2%	24	35.8%	3	4.5%	0	0.0%
	No	60	25.8%	131	56.2%	40	17.2%	2	0.9%	0	0.0%
worry about the safety and or well-being of loved ones	Yes	36	16.8%	120	56.1%	54	25.2%	4	1.9%	0	0.0%
	No	29	33.7%	46	53.5%	10	11.6%	1	1.2%	0	0.0%
worry about your finances	Yes	13	10.3%	69	54.8%	40	31.7%	4	3.2%	0	0.0%
	No	52	29.9%	97	55.7%	24	13.8%	1	0.6%	0	0.0%
playing any kind of games	Yes	44	22.2%	111	56.1%	41	20.7%	2	1.0%	0	0.0%
	No	21	20.6%	55	53.9%	23	22.5%	3	2.9%	0	0.0%
creative person in your life	Yes	44	19.7%	129	57.8%	47	21.1%	3	1.3%	0	0.0%
	No	21	27.3%	37	48.1%	17	22.1%	2	2.6%	0	0.0%
doing meditation to remove your anxiety	Yes	21	17.5%	72	60.0%	24	20.0%	3	2.5%	0	0.0%
	No	44	24.4%	94	52.2%	40	22.2%	2	1.1%	0	0.0%

Table 1: Descriptive statistics of categorical variables.

For continuous variable age, in Normal Anxiety level mean age is 36 and S.D is 19, in Mild Anxiety level mean age is 26 and S.D is 11, in Moderate Anxiety level mean age is 7 and S.D is 7, in High Anxiety level mean age is 23 and S.D is 2 and in Very High Anxiety level mean age is 0 and S.D is 0 which is shown in Table 2.

	Anxiety level									
	Normal (65)		Mild (166)		Moderate (64)		High (5)		Very High (0)	
	Mean	S. D	Mean	S. D	Mean	S. D	Mean	S. D	Mean	S. D
Age	36	19	26	11	24	7	23	2	0	0
Height	167	9	165	9	168	10	168	8	0	0
Weight	60	11	57	11	57	10	63	12	0	0

Table 2: Descriptive statistics of continuous variable

3.2. Ordinal Logistic Regression

In our study, Anxiety level is ordinal outcome variable and Age, Gender, Height, Weight, Occupation, Annual Income, Family Type, Class Of Family, Marital Status, Education Qualification, Health Status, How do you feel about yourself, Habit, Sleeping Time in Hours, Life Style, freedom to take decision, doing exercise, you have any kind of fear, you have any diseases, adverse effect of depression or anxiety, worry about the safety and or well-being of loved ones, worry about your finances, playing any kind of games, creative person in your life and doing meditation to remove your anxiety are predictors to use for the location component of the Model.

3.2.1. Link Function

The Link function is a transformation of the cumulative probabilities that allows estimation of the model. Five link functions are available, summarized in Table 3.

Function	Form	Typical application
Logit	$\log(\xi / (1-\xi))$	Evenly distributed categories
Complementary log-log	$\log(-\log(1-\xi))$	Higher categories more probable
Negative log-log	$-\log(-\log(\xi))$	Lower categories more probable
Probit	$\Phi^{-1}(\xi)$	Latent variable is normally distributed
Cauchit (inverse Cauchy)	$\tan(\pi(\xi-0.5))$	Latent variable has many extreme values

Table 3

To identify a link function, examine the distribution of values for the outcome variable Anxiety level by using bar chart. The bar chart (figure 1) shows the distribution for the Anxiety level. The bulk of cases are in the lower categories, especially categories 2 (Mild) and 1 (Normal). The Lower categories are also where most of the “action” is, since the most important distinctions from Anxiety level are

between categories 1,2 and 3. For this reason, you will begin with the Negative log-log link function, since that functions focuses on the lower outcomes categories.

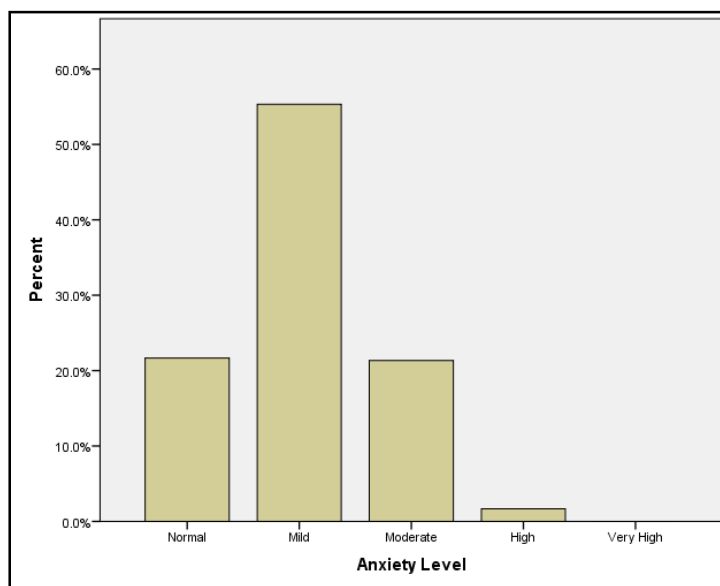


Figure 1

In this study, dependent variable (Anxiety level) contains five categories, namely, Normal, Mild, Moderate, High and Very High. But Table 4 does not show Very High categories, because in this study there is no respondent who Anxiety level is Very High. Out of 300 respondents, Anxiety level of 65 respondents are Normal, Anxiety level of 166 respondents are Mild, Anxiety level of 64 respondents are Moderate and Anxiety level of 5 respondents are High.

		N	Marginal Percentage
Anxiety level	Normal	65	21.7%
	Mild	166	55.3%
	Moderate	64	21.3%
	High	5	1.7%
Gender	Male	219	73.0%
	Female	81	27.0%
Occupation	Government Job	15	5.0%
	Private Job	21	7.0%
	Business	20	6.7%
	Housewife	20	6.7%
	Student	210	70.0%
	Retired	14	4.7%
Annual Income	None	161	53.7%
	Less than 2 Lakh	82	27.3%
	2.1 to 4 lakh	35	11.7%
	4.1 to 6 lakh	11	3.7%
	Above 6 lakh	11	3.7%
Family Type	Joint Family	196	65.3%
	Nuclear	104	34.7%
Class of Family	Lower Class	14	4.7%
	Middle Class	260	86.7%
	Higher Class	26	8.7%
Marital Status	Married	76	25.3%
	Unmarried	224	74.7%
Education Qualification	Primary	3	1.0%
	Secondary	8	2.7%
	Higher secondary	33	11.0%
	Graduate	186	62.0%
	Post Graduate	70	23.3%

Health Status	Bad	4	1.3%
	Medium	28	9.3%
	Good	169	56.3%
	Best	99	33.0%
How do you feel about yourself	Confident	115	38.3%
	Friendly	141	47.0%
	Talkative	44	14.7%
Habit	Smoking	5	1.7%
	Alcohol	5	1.7%
	Tobacco	31	10.3%
	None	259	86.3%
Sleeping Time in Hours	3-5 hrs	25	8.3%
	6-8 hrs	243	81.0%
	9-11 hrs	32	10.7%
Life Style	Busy	56	18.7%
	Stressful	23	7.7%
	Happy	156	52.0%
	Awesome	65	21.7%
Freedom to take decision	Yes	262	87.3%
	No	38	12.7%
Doing exercise	Yes	173	57.7%
	No	127	42.3%
You have any kind of fear	Yes	90	30.0%
	No	210	70.0%
You have any diseases	Yes	53	17.7%
	No	247	82.3%
Adverse effect of depression or anxiety	Yes	67	22.3%
	No	233	77.7%
Worry about the safety and or well-being of loved ones	Yes	214	71.3%
	No	86	28.7%
Worry about your finances	Yes	126	42.0%
	No	174	58.0%
Playing any kind of games	Yes	198	66.0%
	No	102	34.0%
Creative person in your life	Yes	223	74.3%
	No	77	25.7%
Doing meditation to remove your anxiety	Yes	120	40.0%
	No	180	60.0%
Valid		300	100.0%
Missing		0	
Total		300	

Table 4: Case Processing Summary

Before start looking at the individual predictors in the model, we need to find out if the model gives adequate predictions. To answer this question, we examine the model-fitting information table.

Table 5 gives the -2 log-likelihood values for the intercept only (baseline) model and the final model (with the predictors). The chi-square reported in the Table 5 is the difference between -2 times the log-likelihood for the intercept-only model and that for the final model.

In Table 5, the significant chi-square statistic (p -value <0.05) indicates that the model gives a significant improvement over the baseline intercept-only model. This basically tells you that the model gives better predictions than if you just guessed based on the marginal probabilities for the outcome categories.

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	633.988			
Final	461.063	172.925	44	.000

Table 5: Model Fitting Information
Link function: Negative Log-log.

Table 6 shows the Goodness-of-Fit. This table contains Pearson's chi-square statistic for the model and chi-square statistic based on the deviance. These statistics are intended to test whether the observed data are consistent with the fitted model (i. e. Fit is good). The result suggests that, P-value is greater than 0.05 in both Pearson’s and Deviance Chi-Square Test Statistic. Hence we can conclude that the model fit the data well. (i.e. fit is good).

	Chi-Square	df	Sig.
Pearson	628.248	853	1.000
Deviance	461.063	853	1.000

Table 6: Goodness-of-Fit
Link function: Negative Log-log.

In the linear regression model, R^2 is the coefficient of determination. It summarizes the proportion of variance in the dependent variable associated with the predictor (independent) variables. Larger R^2 values indicating that more of the variation is explained by the model. The minimum R^2 value is 0 and maximum is 1. For Ordinal logistic regression models, it is not possible to compute a single R^2 statistic that has all of the characteristics of R^2 in the linear regression model, so these approximations are computed instead. In Table 7, there are three Pseudo R-Square values, namely, Cox and Snell's, Nagelkerke's & McFadden's. Note that Ordinal logistic regression does not have an equivalent to the R- squared that is found in OLS regression.

Cox and Snell	.438
Nagelkerke	.498
McFadden	.273

Table 7: Pseudo R-Square
Link function: Negative Log-log

In Table 8, *Threshold* represents the response variable in the ordinal logistic regression. The threshold estimate for [Anxiety level = 1] is the cut off value between Normal and Mild Anxiety level, threshold estimate for [Anxiety level = 2] is the cut off value between Mild and Moderate Anxiety level and threshold estimate for [Anxiety level = 3] is the cut off value between Moderate and High Anxiety level.

		Estimate	Std. Error	Wald	df	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Threshold	[Anxiety level = 1]	.568	2.260	.063	1	.802	-3.861	4.998
	[Anxiety level = 2]	3.162	2.272	1.937	1	.164	-1.291	7.615
	[Anxiety level = 3]	6.442	2.303	7.825	1	.005	1.929	10.956
	Age	-.040	.015	7.635	1	.006	-.069	-.012
	Height	.012	.012	1.106	1	.293	-.011	.035
	Weight	-.017	.010	2.693	1	.101	-.037	.003
	[Gender=0]	.033	.239	.019	1	.890	-.435	.502
	[Gender=1]	0 ^a	.	.	0	.	.	.
	[Occupation=1]	-1.010	.713	2.007	1	.157	-2.406	.387
	[Occupation=2]	-.100	.773	.017	1	.897	-1.614	1.414
	[Occupation=3]	-1.114	.732	2.314	1	.128	-2.548	.321
	[Occupation=4]	-.999	.826	1.465	1	.226	-2.618	.619
	[Occupation=5]	-1.060	.794	1.783	1	.182	-2.616	.496
	[Occupation=6]	0 ^a	.	.	0	.	.	.
	[Annual Inc=1]	.617	.676	.834	1	.361	-.707	1.942
	[Annual Inc=2]	.710	.665	1.139	1	.286	-.593	2.013
	[Annual Inc=3]	-.137	.641	.045	1	.831	-1.393	1.119
	[Annual Inc=4]	.551	.743	.549	1	.459	-.905	2.007
	[Annual Inc=5]	0 ^a	.	.	0	.	.	.
	[Family Type=0]	.117	.181	.415	1	.519	-.238	.471
	[Family Type=1]	0 ^a	.	.	0	.	.	.
	[Class Family=1]	.451	.525	.737	1	.391	-.578	1.479
	[Class Family=2]	.530	.347	2.330	1	.127	-.150	1.210
	[Class Family=3]	0 ^a	.	.	0	.	.	.
[Marital Status=0]	.533	.420	1.612	1	.204	-.290	1.355	
[Marital Status=1]	0 ^a	.	.	0	.	.	.	

Location	[Education=1]	-.653	1.138	.329	1	.566	-2.883	1.577
	[Education=2]	-3.446	1.073	10.306	1	.001	-5.549	-1.342
	[Education=3]	-.575	.336	2.923	1	.087	-1.233	.084
	[Education=4]	-.179	.230	.608	1	.436	-.629	.271
	[Education=5]	0 ^a	.	.	0	.	.	.
	[Health Status=1]	1.098	.853	1.656	1	.198	-.575	2.771
	[Health Status=2]	.082	.331	.061	1	.805	-.567	.731
	[Health Status=3]	.264	.185	2.046	1	.153	-.098	.626
	[Health Status=4]	0 ^a	.	.	0	.	.	.
	[HF Yourself=1]	-.402	.267	2.261	1	.133	-.926	.122
	[HF Yourself=2]	-.563	.257	4.794	1	.029	-1.067	-.059
	[HF Yourself=3]	0 ^a	.	.	0	.	.	.
	[Habit=1]	-.500	.732	.467	1	.494	-1.935	.934
	[Habit=2]	1.249	.842	2.202	1	.138	-.401	2.899
	[Habit=3]	-.180	.318	.322	1	.570	-.803	.443
	[Habit=4]	0 ^a	.	.	0	.	.	.
	[Sleeping Time=1]	.468	.430	1.183	1	.277	-.375	1.311
	[Sleeping Time=2]	.724	.310	5.462	1	.019	.117	1.331
	[Sleeping Time=3]	0 ^a	.	.	0	.	.	.
	[lifestyle=1]	-.232	.264	.777	1	.378	-.749	.284
	[lifestyle=2]	1.682	.426	15.605	1	.000	.847	2.516
	[lifestyle=3]	-.113	.213	.285	1	.594	-.530	.303
	[lifestyle=4]	0 ^a	.	.	0	.	.	.
	[freedom Decision=0]	-.034	.263	.017	1	.898	-.550	.482
	[freedom Decision=1]	0 ^a	.	.	0	.	.	.
	[Exercise=0]	-.196	.188	1.090	1	.297	-.564	.172
	[Exercise=1]	0 ^a	.	.	0	.	.	.
	[Fear=0]	.467	.197	5.636	1	.018	.082	.853
	[Fear=1]	0 ^a	.	.	0	.	.	.
	[Diseases=0]	.412	.251	2.689	1	.101	-.081	.905
	[Diseases=1]	0 ^a	.	.	0	.	.	.
	[AdvEffDepAnxiety=0]	.930	.217	18.407	1	.000	.505	1.355
	[AdvEffDepAnxiety=1]	0 ^a	.	.	0	.	.	.
	[WorSfLovedOne=0]	.660	.198	11.090	1	.001	.272	1.049
	[WorSfLovedOne=1]	0 ^a	.	.	0	.	.	.
	[Worry Finances=0]	.705	.189	13.850	1	.000	.334	1.076
	[Worry Finances=1]	0 ^a	.	.	0	.	.	.
	[Playing Games=0]	-.311	.199	2.450	1	.118	-.700	.078
	[Playing Games=1]	0 ^a	.	.	0	.	.	.
	[Creative Person Life=0]	.087	.204	.182	1	.670	-.312	.486
	[Creative Person Life=1]	0 ^a	.	.	0	.	.	.
	[MedRemoveAnxiety=0]	.192	.187	1.050	1	.305	-.175	.558
	[MedRemoveAnxiety=1]	0 ^a	.	.	0	.	.	.
Link function: Negative Log-log.								
a. This parameter is set to zero because it is redundant.								

Table 8: Parameter Estimates

The parameter estimates in Table 8 summarizes the effect of each predictor. The signs of the coefficients for covariates and relative values of the coefficients for factor levels can give important insights into the effects of the predictors in the model. Covariates with positive coefficients indicate positive relationships between predictors and outcome and Covariates with negative coefficients indicate inverse relationships between predictors and outcome. An increasing value of a covariate with a positive coefficient corresponds to an increasing probability of being in one of the *higher* cumulative outcome categories. Factor level with a *greater coefficient* indicates a *greater probability* of being in one of the *higher* cumulative outcome categories.

We can make some interpretations based on the Parameter Estimates shown in table 8.

1. The p-value of predictor *Age* is 0.006. It is less than 0.05. Hence we reject the null hypothesis and conclude that the regression coefficient for *Age* has been found statistically different from zero in estimating Anxiety level given remaining predictors are in the model. The coefficient (-0.040) of *Age* is negative, as *Age* in years of the respondent increases, so does the probability of being in one of the lower categories Anxiety level.

2. *Education* seem to contribute to the model, there is one category of *Education* (Secondary) is significant (P-value is less than 0.05). The coefficient (-0.653) of *Education* (Primary) is Negative. Thus, primary Educated Respondent is more likely to be in the lower outcome categories of Anxiety level than Post-graduate respondents. The coefficient (-3.446) of *Education* (Secondary) is Negative. Thus, Secondary Educated Respondent is more likely to be in the lower outcome categories of Anxiety level than Post-graduate respondents. The coefficient (-0.575) of *Education* (Higher Secondary) is Negative. Thus, Higher Secondary Educated Respondent is more likely to be in the lower outcome categories of Anxiety level than Post-graduate respondents. The coefficient (-0.179) of *Education* (Graduate) is Negative. Thus, Graduate Respondent is more likely to be in the lower outcome categories of Anxiety level than Post-graduate respondents.
3. *HF Yourself* seem to contribute to the model, there is one category of *HF Yourself* (Friendly) is significant (P-value is less than 0.05). The coefficient (-0.402) of *HF Yourself* (Confident) is Negative. Thus, Respondent felling Confident is more likely to be in the lower outcome categories of Anxiety level than Respondent Felling Talkative. The coefficient (-0.563) of *HF Yourself* (Friendly) is Negative. Thus, Respondent felling Friendly is more likely to be in the lower outcome categories of Anxiety level than Respondent Felling Talkative.
4. *Sleeping Time* seem to contribute to the model, there is one category of *Sleeping Time* (6 – 8 hours) is significant (P-value is less than 0.05). The coefficient (0.468) of *Sleeping Time* (3 – 5 hours) is Positive. Thus, Respondent having *Sleeping Time* (3 – 5 hours) is more likely to be in the higher outcome categories of Anxiety level than Respondent *Sleeping Time* (9 – 11 hours). The coefficient (0.724) of *Sleeping Time* (6 – 8 hours) is Positive. Thus, Respondent having *Sleeping Time* (6 – 8 hours) is more likely to be in the higher outcome categories of Anxiety level than Respondent *Sleeping Time* (9 – 11 hours).
5. *Lifestyle* seem to contribute to the model, there is one category of *Lifestyle* (Stressful) is significant (P-value is less than 0.05). The coefficient (-0.232) of *Lifestyle* (Busy) is Negative. Thus, Respondent having Busy *Lifestyle* is more likely to be in the lower outcome categories of Anxiety level than Respondent Awesome *Lifestyle*. The coefficient (1.682) of *Lifestyle* (Stressful) is Positive. Thus, Respondent having Stressful *Lifestyle* is more likely to be in the higher outcome categories of Anxiety level than Respondent having Awesome *Lifestyle*. The coefficient (-0.113) of *Lifestyle* (Happy) is Negative. Thus, Respondent having Happy *Lifestyle* is more likely to be in the lower outcome categories of Anxiety level than Respondent having Awesome *Lifestyle*.
6. *Fear* is significant predictor, because p-value is 0.018. It is less than 0.05. The coefficient (0.467) of *fear* is Positive. “Thus, respondent having any kind of Fear is more likely to be in higher outcome categories of Anxiety level than respondent does not having any kind of Fear”.
7. *AdvEffDep Anxiety* is Significant predictor, because p-value is 0.000. It is less than 0.05. The coefficient (0.930) of *AdvEffDep Anxiety* is Positive. Thus, respondent have any adverse effect of depression or Anxiety is more likely to be in higher outcome categories of Anxiety level than respondent does not have any adverse effect of depression or Anxiety.
8. *WorSf Loved One* is significant predictor, because p-value is 0.001. It is less than 0.05. The coefficient (0.660) of *WorSf Loved One* is Positive. Thus, respondent have worry about loved one’s is more likely to be in higher outcome categories of Anxiety level than respondent do not have worry about loved one’s.
9. *Worry Finances* is significant predictor, because p-value is 0.000. It is less than 0.05. The coefficient (0.705) of *Worry Finances* is Positive. Thus, respondent who worry about finances is more likely to be in higher outcome categories of Anxiety level than respondent that do not worry about finances.
10. The p-value of Covariates *height, Weight* is greater than 0.05. Hence *Height and Weight are insignificant Predictors*.
11. The factors *Gender, Occupation, Annual Income, Family Type, Class of Family, Marital Status, Health Status, Habit, freedom Decision, Exercise, Diseases, Playing Games, Creative Person Life and Med Remove Anxiety* are (Insignificant P-value is greater than 0.05) doesn't seem to contribute to the model.

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	461.063			
General	387.509	73.554	88	.865
The null hypothesis states that the location parameters (slope coefficients) are the same across response categories ^a .				
a. Link function: Negative Log-log.				

Table 9: Test of Parallel Lines

In Table 9, Chi-square value is 73.554 with 88 degree of freedom. P-value of Chi-square test is 0.865. P-value is greater than 0.05. Hence we accept the null hypothesis of Chi-square test. Thus we can conclude that there is no difference in the coefficients between models. i.e. We have not violated the proportional odds assumption.

4. Conclusion

This study suggests that age, Education, how feel yourself, Sleeping Time, Lifestyle, Fear, Adverse effect of depression or anxiety, Worry about the safety of loved ones and Worry about your finances are the factors affecting on Anxiety level of people living in Rajkot city.

As the age of respondent increases the Anxiety level decreases. The post Graduate respondents have high Anxiety level as compare to other education category. The respondent felling yourself as talkative have high anxiety level as compared to felling yourself as

confident and friendly. The respondents sleeping 9-11hours have lower anxiety level as compared to respondents sleeping time 3-5 hours and 6-8 hours. Awesome lifestyle respondent has high anxiety level as compare to busy and happy lifestyle respondents whereas stressful lifestyle respondents have high anxiety level as compared to awesome life style. The feared respondents have high anxiety level as compared to non-feared respondent. Adverse effect of depression or Anxiety respondents have higher Anxiety level as compared to respondent does not have any adverse effect of depression or Anxiety. Worry about loved one's respondents have higher Anxiety level as compared to the does not worry about loved one's respondent. Respondent who worried about finances have higher Anxiety level as compared to respondent who do not worried about finances.

5. References

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