

# **Analysis Report**

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SAMPLE REPORT - Rafael Data Analysis Portfolio

## **Sample Characterization**

This table illustrates a detailed demographic profile of the respondents. The age range is predominantly between 18 and 22 years, indicating a younger demographic. The gender distribution is notably skewed, with females representing a significant majority. In terms of ethnicity, the majority of respondents identify as White, followed by various other ethnicities. The overwhelming majority of participants have never been married, and a large segment aligns with Evangelical Protestantism. The educational background is primarily centered around some college education, and the household income shows a broad range across different segments.

		Count	Column N %
What is your age in years?	18	14	19.4
	19	18	25.0
	20	14	19.4
	21	17	23.6
	22	4	5.6
	25	2	2.8
	28	1	1.4
	32	1	1.4
	33	1	1.4
What is/are your gender(s)?	Female	61	84.7
	Male	11	15.3
	Non-binary / third gender / gender-fluid	0	0.0
	Other	0	0.0
Combined Ethnicities	Asian	11	15.3
	Asian/White	2	2.8
	Black	2	2.8
	Black/White	1	1.4
	White	41	56.9
	Latinx	9	12.5
	Latinx/White	1	1.4
	Other	4	5.6
	Other/White	1	1.4
What is your current relationship status?	Never married	71	98.6
	Married / Remarried	1	1.4
	Separated	0	0.0
	Divorced	0	0.0
	Widowed	0	0.0
With what branch of Christianity do you identify?	Evangelical Protestantism	60	83.3
	Historically Black Protestantism	0	0.0
	Mainline Protestantism	9	12.5
	Catholic Christianity	1	1.4
	Orthodox Christianity	2	2.8
	Do not identify with Christianity	0	0.0
What is your educational background? (Highest level completed)	Completed High School	13	18.1
	Some College	52	72.2
	Undergraduate Degree	6	8.3
	Graduate Degree	1	1.4
	Doctoral Degree	0	0.0
What is your annual household income?	<\$25,000	10	13.9
	\$25,000-\$34,999	3	4.2
	\$35,000- \$49,999	8	11.1
	\$50,000-\$74,999	17	23.6
	\$75,000-\$99,999	14	19.4
	>\$100,000	20	27.8

In this table, the demographic variables have been recoded for regression analysis. Age is categorized into two groups: '18-20' and '21 or older', highlighting a near-equal distribution across these age ranges. Gender and race are presented in binary terms for analytical precision. The table retains the detailed categorizations for relationship status, religious affiliation, education, and income, albeit with some modifications for analytical purposes.

		Count	Column N %
Age	18-20	32	44.4
	21 or older	40	55.6
What is/are your gender(s)?	Female	61	84.7
	Male	11	15.3
	Non-binary / third gender / gender-fluid	0	0.0
	Other	0	0.0
Race	White	41	56.9
	Non-White	31	43.1
What is your current relationship status?	Never married	71	98.6
	Married / Remarried	1	1.4
	Separated	0	0.0
	Divorced	0	0.0
	Widowed	0	0.0
With what branch of Christianity do you identify?	Evangelical Protestantism	60	83.3
	Historically Black Protestantism	0	0.0
	Mainline Protestantism	9	12.5
	Catholic Christianity	1	1.4
	Orthodox Christianity	2	2.8
	Do not identify with Christianity	0	0.0
Educational Level	Completed High School	13	18.1
	Some College or Higher	59	81.9
Household Income	< \$49,999	21	29.2
	\$50,000-\$74,999	17	23.6
	\$75,000-\$99,999	14	19.4
	>\$100,000	20	27.8

## **Descriptive Statistics**

This table offers an insightful view into the psychological and religious dimensions of the participants. The table is organized into various scales. Each scale is analyzed for mean scores, standard errors, standard deviations, and Cronbach's alpha, a measure of internal consistency. Notably, the alpha scores for most scales are well above the acceptable threshold of 0.700, indicating reliable internal consistency in the measures. Two scales showed Alphas between 0.600 and 0.700, which can still be considered acceptable

	Mean	Standard Error of Mean	Standard Deviation	$\alpha$
ED1 Most of the time, I haven't had someone to nurture me, share him/herself with me, or care deeply about everything that happens to me.	2.056	0.138	1.174	
ED2 In general, people have not been there to give me warmth, holding and affection.	2.139	0.132	1.117	
ED3 For much of my life, I haven't felt that I am special to someone.	2.389	0.159	1.349	

	Mean	Standard Error of Mean	Standard Deviation	$\alpha$
ED4 For the most part, I have not had someone who really listens to me, understand me, or is tuned into my true needs and feelings.	2.278	0.142	1.201	
ED5 I have rarely had a strong person to give me sound advice or direction when I'm not sure what to do.	2.056	0.131	1.112	
AB1 I find myself clinging to people I'm close to, because I'm afraid they'll leave me.	2.944	0.152	1.288	
AB2 I need other people so much that I worry about losing them.	2.972	0.154	1.311	
AB3 I worry that people I feel close to will leave me or abandon me.	2.986	0.162	1.379	
AB4 When I feel someone I care for pulling away from me I get desperate.	3.361	0.161	1.367	
AB5 Sometimes I am so worried about people leaving me that I drive them away.	2.458	0.164	1.394	
MA1 I feel that people will take advantage of me.	2.861	0.140	1.190	
MA2 I feel that I cannot let my guard down in the presence of other people, or else they will intentionally hurt me.	2.389	0.150	1.273	
MA3 It is only a matter of time before someone betrays me.	2.292	0.151	1.283	
MA4 I am quite suspicious of other people's motives.	2.833	0.145	1.233	
MA5 I'm usually on the lookout for people's ulterior motives.	2.931	0.151	1.282	
SI1 I don't fit in.	2.681	0.145	1.231	
SI2 I'm fundamentally different from other people.	2.611	0.145	1.228	
SI3 I don't belong; I'm a loner.	2.097	0.130	1.103	
SI4 I feel alienated from other people.	2.583	0.134	1.135	
SI5 I always feel on the outside of groups.	3.141	0.158	1.334	
DS1 No man/woman I desire could love me once he/she saw my defects.	2.486	0.172	1.463	
DS2 No one I desire would want to stay close to me if he/she know the real me.	2.333	0.168	1.424	
DS3 I'm unworthy of the love, attention, and respect of others.	2.125	0.153	1.299	
DS4 I feel that I'm not loveable.	2.394	0.160	1.347	
DS5 I am too unacceptable in the very basic ways to reveal myself to other people.	2.083	0.137	1.160	
<b>DR Disconnection/Rejection domain</b>	<b>2.539</b>	<b>0.094</b>	<b>0.796</b>	<b>0.937</b>
EI1 I am too self-conscious to show positive feelings to others (e.g. affection, showing I care).	2.139	0.140	1.190	
EI2 I find it embarrassing to express my feelings to others.	2.847	0.154	1.307	
EI3 I find it hard to be warm and spontaneous.	2.208	0.114	0.963	
EI4 I control myself so much that people think I am unemotional.	2.569	0.170	1.442	
EI5 People see me as uptight emotionally.	2.514	0.145	1.233	
US1 I must be the best at most of what I do; I can't accept second best.	3.139	0.157	1.335	
US2 I try to do my best; I can't settle for "good enough".	3.833	0.144	1.222	
US3 I must meet all my responsibilities.	4.708	0.132	1.119	
US4 I feel there is constant pressure for me to achieve and get things done.	4.431	0.142	1.208	
US5 I can't let myself off the hook easily or make excuses for my mistakes.	3.528	0.147	1.244	
<b>OI Overvigilance and Inhibition domain</b>	<b>3.192</b>	<b>0.712</b>	<b>0.084</b>	<b>0.776</b>
VC1 I feel fundamentally inadequate, flawed, or defective.	2.806	0.154	1.307	
VC2 I feel lost.	2.847	0.142	1.206	
VC3 I feel desperate.	2.500	0.140	1.187	
VC4 I feel lonely.	3.194	0.116	0.988	
VC5 I feel humiliated.	2.333	0.124	1.048	
VC6 Even if there are people around me, I feel lonely.	3.083	0.115	0.975	
VC7 I often feel alone in the world.	2.861	0.139	1.179	
VC8 I feel weak and helpless.	2.667	0.120	1.021	
VC9 I feel left out or excluded.	3.000	0.120	1.021	
VC10 I feel that nobody loves me.	1.917	0.126	1.071	

	Mean	Standard Error of Mean	Standard Deviation	$\alpha$
<b>VC Vulnerable Child Mode</b>	<b>2.721</b>	<b>0.097</b>	<b>0.825</b>	<b>0.913</b>
DP11 I'm hard on myself.	4.264	0.124	1.048	
DP12 I don't let myself relax or have fun until I've finished everything I'm supposed to do.	3.194	0.138	1.171	
DP13 I'm under constant pressure to achieve and get things done.	4.292	0.154	1.305	
DP14 I'm trying not to make mistakes; otherwise, I'll get down on myself.	3.889	0.145	1.228	
DP15 I sacrifice pleasure, health, or happiness to meet my own standards.	3.111	0.146	1.240	
DP16 I know that there is a "right" and a "wrong" way to do things; I try hard to do things the right way, or else I start criticizing myself.	3.750	0.159	1.351	
DP17 I'm pushing myself to be more responsible than most other people.	4.181	0.142	1.202	
<b>DP Demanding Parent Mode</b>	<b>3.812</b>	<b>0.100</b>	<b>0.849</b>	<b>0.82</b>
PP18 I have impulses to punish myself by hurting myself (e.g. cutting myself).	1.625	0.126	1.067	
PP19 I deny myself pleasure because I don't deserve it.	2.014	0.126	1.068	
PP20 I can't forgive myself	2.833	0.136	1.151	
PP21 It's my fault when something bad happens.	2.972	0.140	1.186	
PP22 I'm a bad person if I get angry at other people.	2.847	0.151	1.285	
PP23 I don't allow myself to do pleasurable things that other people do because I'm bad.	1.750	0.098	0.835	
PP24 I deserve to be punished.	2.250	0.131	1.110	
PP25 I'm angry at myself.	2.819	0.143	1.214	
PP26 I'm a bad person.	2.181	0.127	1.079	
PP27 I don't deserve sympathy when something bad happens to me.	2.222	0.143	1.213	
<b>PP Punitive Parent Mode</b>	<b>2.351</b>	<b>0.093</b>	<b>0.790</b>	<b>0.887</b>
HA28 When there are problems, I try hard to solve them myself.	2.347	0.109	0.922	
HA29 I can solve problems rationally without letting my emotions overwhelm me.	3.083	0.137	1.160	
HA30 I know when to express my emotions and when not to.	2.736	0.130	1.100	
HA31 I assert what I need without going overboard.	3.625	0.126	1.067	
HA32 I'm capable of taking care of myself.	2.139	0.122	1.039	
HA33 I can learn, grow, and change.	2.222	0.107	0.907	
HA34 I can stand up for myself when I feel unfairly criticized, abused, or taken advantage of.	3.528	0.147	1.244	
HA35 I feel that I'm basically a good person.	2.847	0.134	1.134	
HA36 When necessary, I complete boring and routine tasks in order to accomplish things I value.	3.083	0.137	1.160	
HA37 I have a good sense of who I am and what I need to make myself happy.	2.903	0.127	1.077	
<b>HA Healthy Adult Mode</b>	<b>2.851</b>	<b>0.069</b>	<b>0.589</b>	<b>0.732</b>
PHQ1 Little interest or pleasure in doing things	0.611	0.087	0.742	
PHQ2 Feeling down, depressed, or hopeless	0.903	0.082	0.695	
<b>PHQ PHQ</b>	<b>0.757</b>	<b>0.073</b>	<b>0.622</b>	<b>0.666</b>
GAD1 Feeling nervous, anxious or on edge	1.528	0.099	0.839	
GAD2 Not being able to stop or control worrying	1.083	0.104	0.884	
<b>GAD GAD</b>	<b>1.306</b>	<b>0.091</b>	<b>0.776</b>	<b>0.768</b>
RSS1 I felt as though God had abandoned me.	1.708	0.136	1.156	
RSS2 I felt as though God was punishing me.	1.528	0.108	0.919	
RSS3 I felt angry at God.	1.722	0.127	1.078	
RSS4 I worried that the problems I was facing were the work of the devil or evil spirits.	1.861	0.135	1.142	
RSS5 I felt attacked by the devil or by evil spirits.	1.736	0.114	0.964	

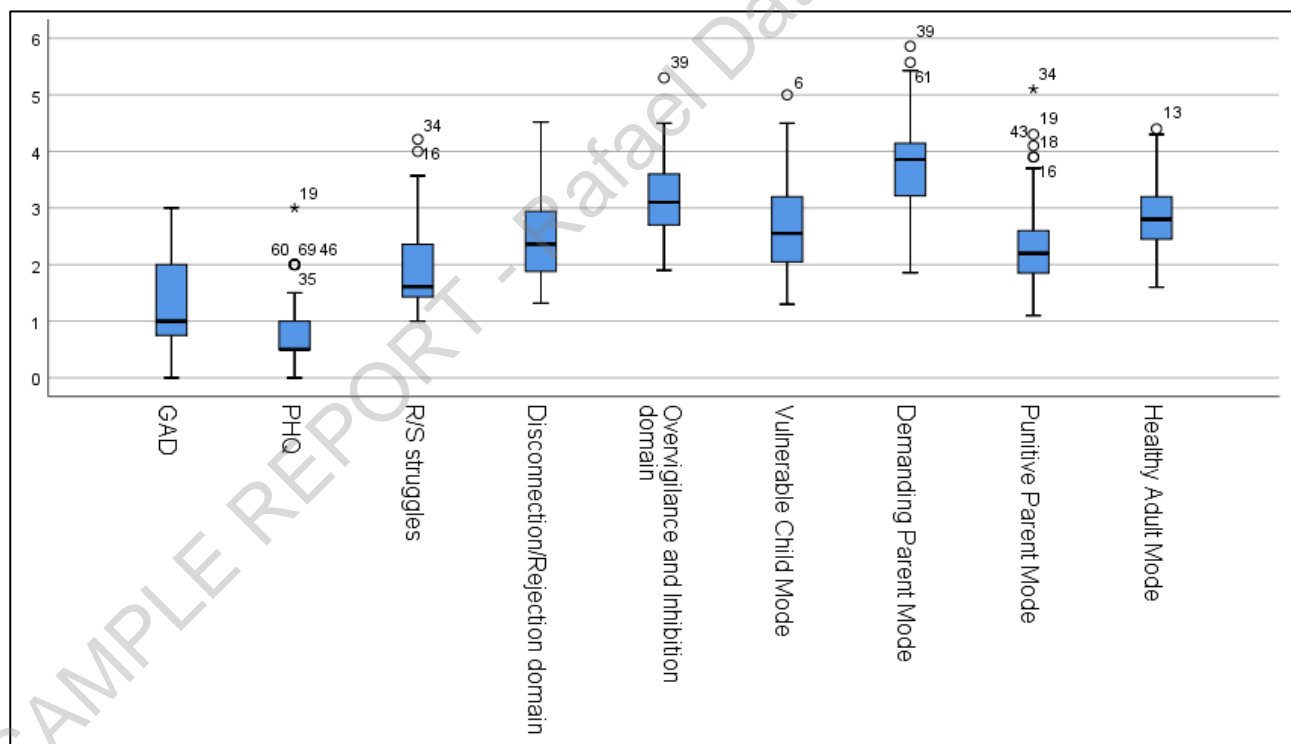
	Mean	Standard Error of Mean	Standard Deviation	$\alpha$
RSS6 I felt hurt, mistreated, or offended by religious/spiritual people.	1.708	0.132	1.119	
RSS7 I had conflicts with other people about religious/spiritual matters.	1.861	0.133	1.130	
RSS8 I felt angry at organized religion.	1.611	0.123	1.042	
RSS9 I wrestled with attempts to follow my moral principles.	2.319	0.125	1.059	
RSS10 I felt guilty for not living up to my moral standards.	2.778	0.139	1.178	
RSS11 I felt troubled by doubts or questions about religion or spirituality.	2.111	0.129	1.095	
RSS12 I felt confused about my religious/spiritual beliefs.	2.042	0.130	1.106	
RSS13 I questioned whether life really matters.	1.903	0.153	1.302	
RSS14 I felt as though my life had no deeper meaning.	1.694	0.132	1.121	
<b>RSS R/S struggles</b>	<b>1.899</b>	<b>0.086</b>	<b>0.730</b>	<b>0.911</b>
QGR1a When I think of God, I experience thankfulness. $x5 = (x6 - 1) * 4/5 + 1$	4.433	0.092	0.776	
QGR2a When I think of God, I experience closeness. $x5 = (x6 - 1) * 4/5 + 1$	3.722	0.126	1.071	
QGR3a When I think of God, I experience security. $x5 = (x6 - 1) * 4/5 + 1$	4.000	0.120	1.020	
<b>Positive Feelings Toward God</b>	<b>4.052</b>	<b>0.100</b>	<b>0.850</b>	<b>0.862</b>
QGR4a When I think of God, I experience fear of being rejected. $x5 = (x6 - 1) * 4/5 + 1$	1.811	0.130	1.103	
QGR5a When I think of God, I experience fear of not being good enough. $x5 = (x6 - 1) * 4/5 + 1$	2.467	0.137	1.163	
QGR6a When I think of God, I experience fear of being punished. $x5 = (x6 - 1) * 4/5 + 1$	1.789	0.119	1.009	
<b>Anxiety Toward God</b>	<b>2.022</b>	<b>0.113</b>	<b>0.956</b>	<b>0.844</b>
QGR7a When I think of God, I experience disappointment. $x5 = (x6 - 1) * 4/5 + 1$	1.611	0.097	0.822	
QGR8a When I think of God, I experience anger. $x5 = (x6 - 1) * 4/5 + 1$	1.578	0.095	0.808	
QGR9a When I think of God, I experience abandonment. $x5 = (x6 - 1) * 4/5 + 1$	1.578	0.098	0.830	
<b>Anger Toward God</b>	<b>1.589</b>	<b>0.086</b>	<b>0.730</b>	<b>0.869</b>
QGR10a God has patience with me. $x5 = (x6 - 1) * 4/5 + 1$	4.589	0.079	0.671	
QGR11a God frees me from my guilt. $x5 = (x6 - 1) * 4/5 + 1$	3.900	0.132	1.119	
QGR12a God guides me. $x5 = (x6 - 1) * 4/5 + 1$	4.178	0.106	0.900	
<b>Supportive Actions</b>	<b>4.222</b>	<b>0.086</b>	<b>0.727</b>	<b>0.728</b>
QGR13a God exerts power. $x5 = (x6 - 1) * 4/5 + 1$	4.089	0.120	1.016	
QGR14a God punishes. $x5 = (x6 - 1) * 4/5 + 1$	2.778	0.144	1.225	
QGR15a God sends people to hell. $x5 = (x6 - 1) * 4/5 + 1$	2.567	0.162	1.372	
<b>Ruling or Punishing Actions</b>	<b>3.144</b>	<b>0.107</b>	<b>0.911</b>	<b>0.614</b>
QGR16a God leaves people to their own devices. $x5 = (x6 - 1) * 4/5 + 1$	2.211	0.114	0.968	
QGR17a God lets everything take its course. $x5 = (x6 - 1) * 4/5 + 1$	2.822	0.146	1.240	
<b>Passivity</b>	<b>2.517</b>	<b>0.113</b>	<b>0.956</b>	<b>0.661</b>

The items that compose each scale were averaged to form the total scale scores. The final table presents the aggregate scores for various psychological and religious scales, including Generalized Anxiety Disorder (GAD), PHQ (depression scale), religious/spiritual struggles, and different psychological domains like Disconnection/Rejection, Overvigilance/Inhibition, and others. It provides key statistical measures such as mean, standard deviation, skewness, and kurtosis. These statistics suggest that most variables exhibit a normal distribution, which is crucial for subsequent statistical analysis.

### Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
GAD	72.000	0.000	3.000	1.306	0.776	0.356	0.283	-0.534	0.559
PHQ	72.000	0.000	3.000	0.757	0.622	1.095	0.283	1.533	0.559
R/S struggles	72.000	1.000	4.214	1.899	0.730	1.208	0.283	1.021	0.559
Disconnection/Rejection domain	72.000	1.320	4.520	2.539	0.796	0.752	0.283	-0.269	0.559
Overvigilance and Inhibition domain	72.000	1.900	5.300	3.192	0.712	0.448	0.283	-0.003	0.559
Vulnerable Child Mode	72.000	1.300	5.000	2.721	0.825	0.564	0.283	-0.167	0.559
Demanding Parent Mode	72.000	1.857	5.857	3.812	0.849	0.112	0.283	0.050	0.559
Punitive Parent Mode	72.000	1.100	5.100	2.351	0.790	1.095	0.283	1.449	0.559
Healthy Adult Mode	72.000	1.600	4.400	2.851	0.589	0.245	0.283	0.178	0.559
Valid N (listwise)	72								

The boxplots below show the distribution of the scores for each scale. No substantial number of outliers are observed, indicating that the variables can be inserted directly in the regression procedure, without treating outliers.



Say that there are no outliers according to boxplots presented for all scales.

### Cluster Analysis

The cluster analysis presented here aims to segment the population into distinct groups based on their responses to various psychological and religious scales.

The clustering process underwent four iterations, with the change in cluster centers decreasing progressively until no change was observed in the fourth iteration. This pattern indicates that a stable solution was reached, signifying the formation of distinct and consistent clusters. The convergence criterion was met, as indicated by the maximum absolute coordinate change for any center being zero, and the minimum distance between initial centers was substantial (6.986), ensuring distinctiveness between clusters.

Iteration History<sup>a</sup>

Iteration	Change in Cluster Centers	
	1	2
1	2.938	3.064
2	0.246	0.101
3	0.130	0.048
4	0.000	0.000

a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is ,000. The current iteration is 4. The minimum distance between initial centers is 6,986.

The ANOVA table shows significant differences between clusters for most of the measures, including Positive Feelings Toward God, Anxiety Toward God, Anger Toward God, and Supportive Actions. These differences are statistically significant between clusters, as indicated by the F values and their corresponding p-values (Sig.). However, for Ruling or Punishing Actions and Passivity, the differences between clusters are not as pronounced, with Passivity showing no significant difference.

ANOVA

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Positive Feelings Toward God	27.610	1	0.339	70	81.494	0.000
Anxiety Toward God	27.202	1	0.538	70	50.574	0.000
Anger Toward God	20.693	1	0.245	70	84.568	0.000
Supportive Actions	20.587	1	0.242	70	85.152	0.000
Ruling or Punishing Actions	2.796	1	0.802	70	3.486	0.066
Passivity	0.296	1	0.923	70	0.320	0.573

The F tests should be used only for descriptive purposes because the clusters have been chosen to maximize the differences among cases in different clusters. The observed significance levels are not corrected for this and thus cannot be interpreted as tests of the hypothesis that the cluster means are equal.

The table below outlines the cluster characteristics in terms of the mean scores, standard errors of the means and standard deviations for the scales involved.

**Cluster 1:** Comprising 20 individuals, this cluster is characterized by lower mean scores in Positive Feelings Toward God and Supportive Actions, and higher mean scores in Anxiety Toward God, Anger Toward God, and Ruling or Punishing Actions compared to Cluster 2. This suggests a more negative or authoritarian religious perspective among individuals in this cluster.

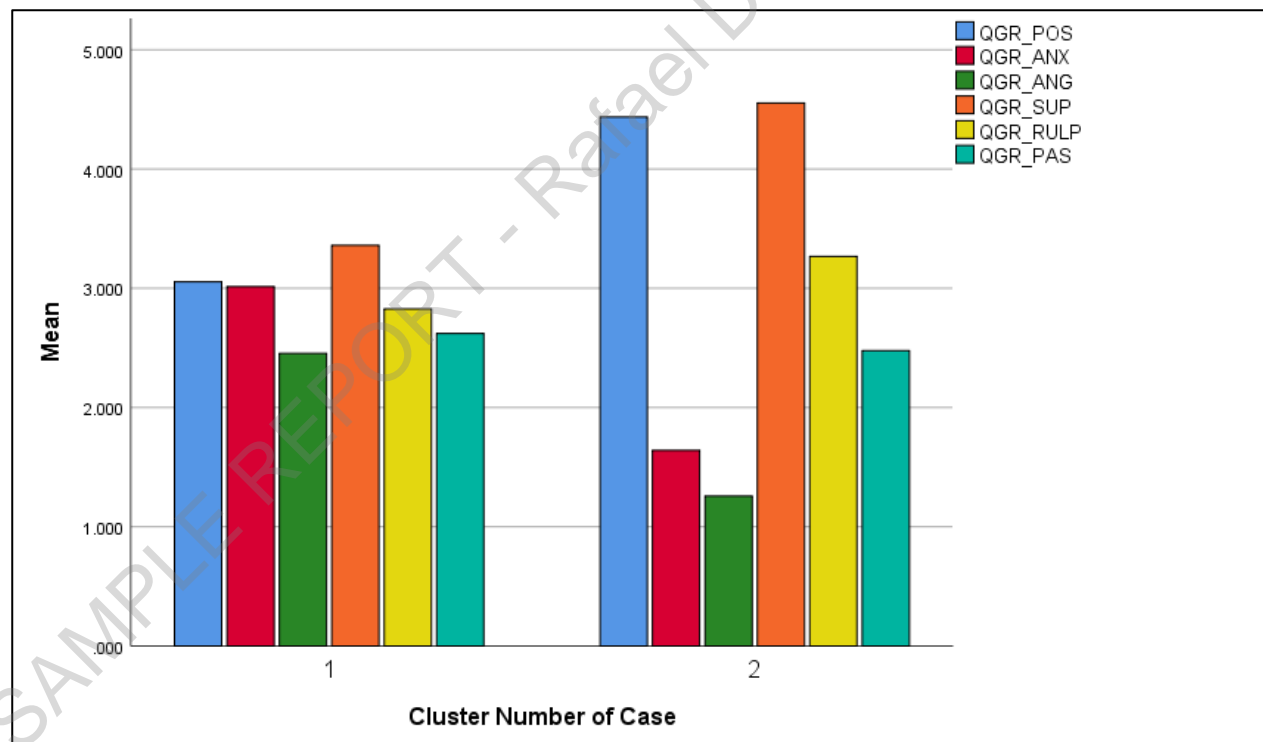


**Cluster 2:** This larger cluster, consisting of 52 individuals, shows higher mean scores in Positive Feelings Toward God and Supportive Actions, and lower mean scores in Anxiety Toward God, Anger Toward God, suggesting a more positive or authoritative religious perspective.

The clusters thus seem to represent two distinct religious orientations: a more negative-authoritarian perspective versus a more positive-authoritative one. Therefore, Cluster 1 was labelled Negative-Authoritarian and Cluster 2 Positive-Authoritative.

	Total			Cluster Number of Case					
	Mean	SEM	SD	Negative-Authoritarian			Positive-Authoritative		
Positive Feelings Toward God	4.052	0.100	0.850	3.053	0.137	0.612	4.436	0.079	0.570
Anxiety Toward God	2.022	0.113	0.956	3.013	0.230	1.029	1.641	0.081	0.586
Anger Toward God	1.589	0.086	0.730	2.453	0.174	0.776	1.256	0.046	0.334
Supportive Actions	4.222	0.086	0.727	3.360	0.150	0.672	4.554	0.056	0.405
Ruling or Punishing Actions	3.144	0.107	0.911	2.827	0.196	0.875	3.267	0.125	0.903
Passivity	2.517	0.113	0.956	2.620	0.175	0.784	2.477	0.141	1.019

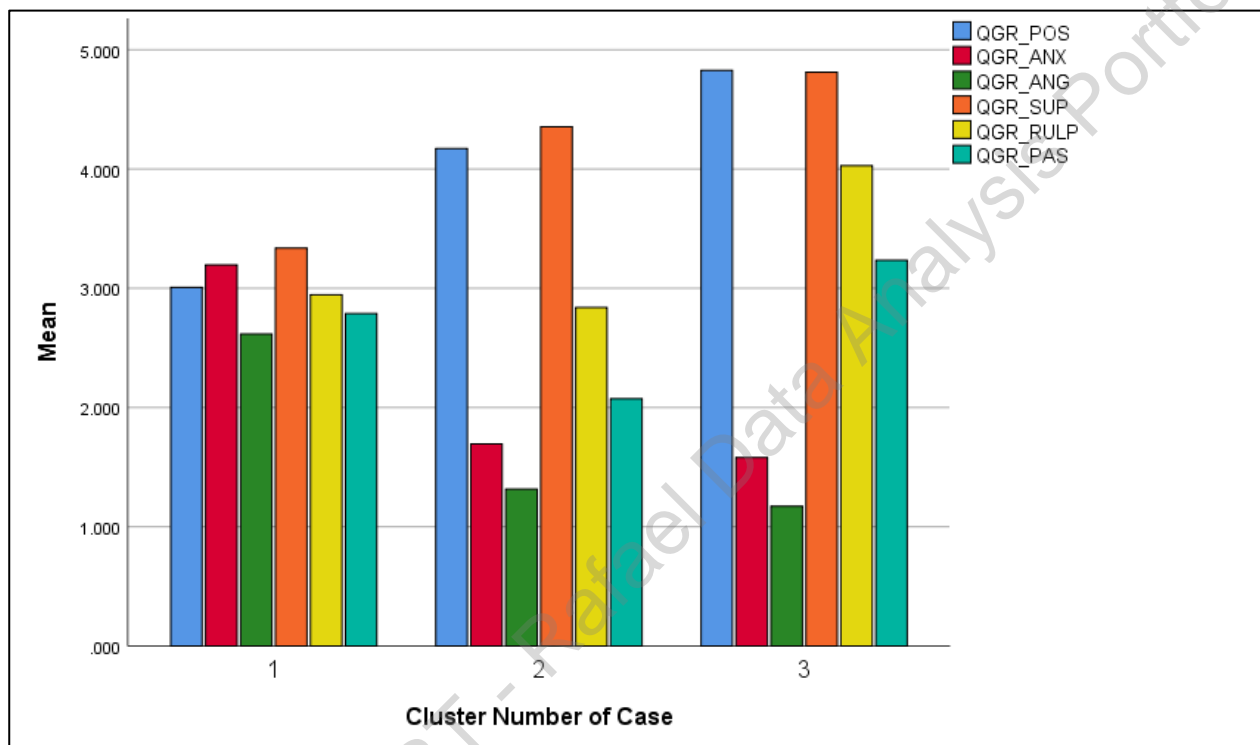
The graph below shows the mean scores of each cluster for the several subscales that comprise the QGR scale.



A 3-cluster solution was also attempted. However, the results indicated no notable difference between clusters 2 and 3 (table below), suggesting that a two-cluster solution might be more appropriate for this data set.

	Cluster Number of Case								
	1			2			3		
	Mean	SEM	SD	Mean	SEM	SD	Mean	SEM	SD
Positive Feelings Toward God	3.008	0.152	0.626	4.172	0.102	0.632	4.827	0.060	0.248
Anxiety Toward God	3.196	0.229	0.945	1.695	0.100	0.619	1.580	0.143	0.591
Anger Toward God	2.616	0.175	0.721	1.316	0.059	0.361	1.173	0.060	0.248
Supportive Actions	3.337	0.161	0.664	4.354	0.081	0.498	4.812	0.071	0.295
Ruling or Punishing Actions	2.945	0.215	0.888	2.839	0.120	0.738	4.027	0.179	0.736
Passivity	2.788	0.175	0.723	2.074	0.141	0.868	3.235	0.203	0.837

The graph illustrates the mean scores for each cluster.



### **Regression Analysis – Hypothesis 1**

The regression analysis presented investigates two hypotheses related to religious and spiritual (R/S) struggles. The analysis utilizes multiple predictors, including demographic factors, psychological domains, and interaction terms in the case of Hypothesis 2. The coefficients table for each model provides insight into the individual contribution of each predictor.

The analysis progresses through three models, showing a steady increase in R Square, indicating an improvement in the model's explanatory power with each step. The final model (Model 3) explains 70.4% of the variance (Adjusted R Square = 62.5%) in R/S struggles. The first model includes sociodemographic factors, GAD and PHQ. The second adds Disconnection/Rejection and Overvigilance and Inhibition domains. The third and final model includes four modes.

# Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.640 <sup>a</sup>	.410	.324	.599968	.410	4.780	9	62	.000
2	.765 <sup>b</sup>	.585	.509	.511475	.175	12.655	2	60	.000
3	.839 <sup>c</sup>	.704	.625	.446660	.120	5.669	4	56	.001

a. Predictors: (Constant), PHQ, Income = >\$100,000, Gender = Female, Education = Some College or Higher, Race = Non-White, Income = \$50,000-\$74,999, Age = 21 years or older, GAD, Income = \$75,000-\$99,999

b. Predictors: (Constant), PHQ, Income = >\$100,000, Gender = Female, Education = Some College or Higher, Race = Non-White, Income = \$50,000-\$74,999, Age = 21 years or older, GAD, Income = \$75,000-\$99,999, Overvigilance and Inhibition domain, Disconnection/Rejection domain

c. Predictors: (Constant), PHQ, Income = >\$100,000, Gender = Female, Education = Some College or Higher, Race = Non-White, Income = \$50,000-\$74,999, Age = 21 years or older, GAD, Income = \$75,000-\$99,999, Overvigilance and Inhibition domain, Disconnection/Rejection domain, Healthy Adult Mode, Demanding Parent Mode, Punitive Parent Mode, Vulnerable Child Mode

d. Dependent Variable: R/S struggles

In the final model, significant predictors include Gender = Female (positively related to R/S struggles) and Punitive Parent Mode (also positively related). The positive coefficients indicate that being female positively influences R/S struggles. Similarly, Punitive Parent modes has a positive effect on R/S struggles.

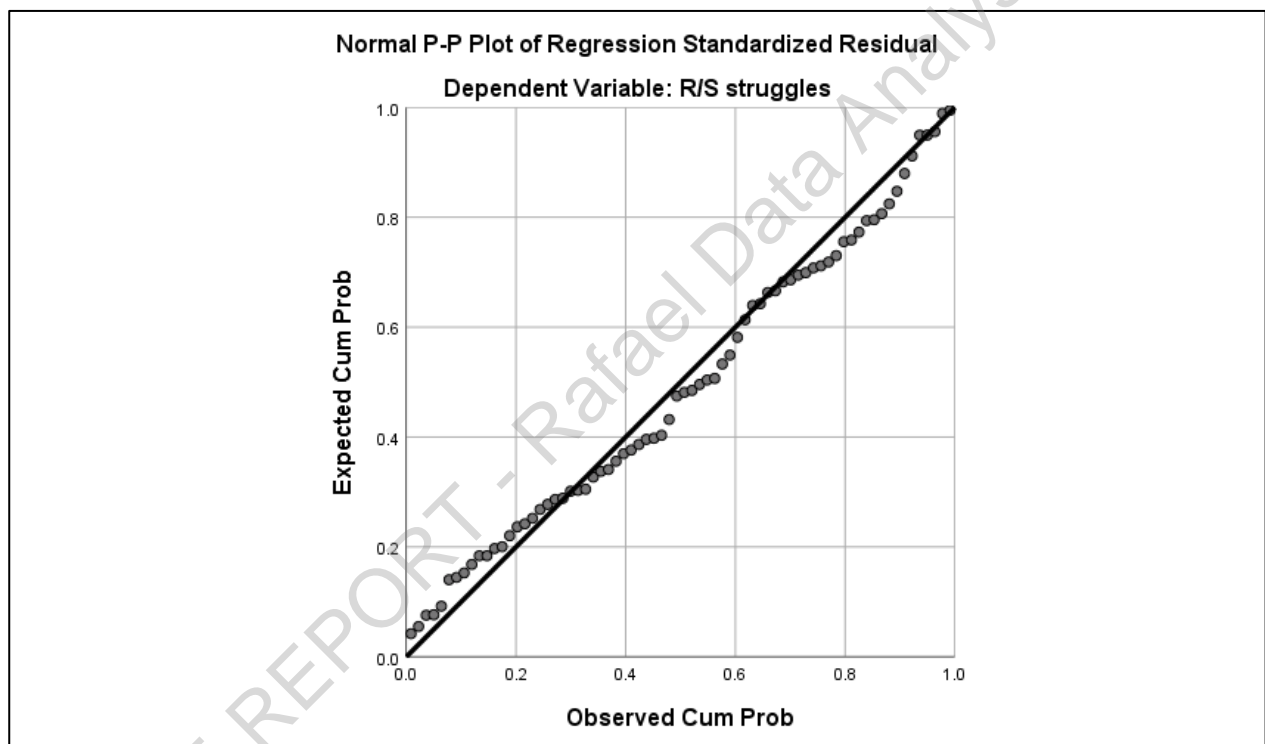
## Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients		t	Sig.
	B	Std. Error	Beta			
1 (Constant)	1.303	0.333			3.913	0.000
Age = 21 years or older	-0.337	0.166	-0.231		-2.031	0.047
Education = Some College or Higher	0.113	0.209	0.060		0.540	0.591
Income = \$50,000-\$74,999	0.008	0.203	0.005		0.040	0.968
Income = \$75,000-\$99,999	-0.417	0.244	-0.228		-1.706	0.093
Income = >\$100,000	0.212	0.215	0.131		0.987	0.327
Race = Non-White	0.259	0.173	0.177		1.498	0.139
Gender = Female	0.045	0.216	0.022		0.209	0.835
GAD	0.306	0.118	0.325		2.592	0.012
PHQ	0.214	0.146	0.183		1.468	0.147
2 (Constant)	0.434	0.369			1.176	0.244
Age = 21 years or older	-0.144	0.148	-0.099		-0.978	0.332
Education = Some College or Higher	-0.135	0.185	-0.072		-0.733	0.467
Income = \$50,000-\$74,999	0.095	0.175	0.056		0.543	0.589
Income = \$75,000-\$99,999	-0.303	0.210	-0.165		-1.440	0.155
Income = >\$100,000	0.290	0.185	0.179		1.566	0.123
Race = Non-White	0.025	0.155	0.017		0.161	0.872
Gender = Female	0.258	0.193	0.128		1.338	0.186
GAD	0.119	0.108	0.127		1.104	0.274
PHQ	-0.031	0.134	-0.026		-0.228	0.820
Disconnection/Rejection domain	0.592	0.129	0.645		4.601	0.000
Overvigilance and Inhibition domain	-0.079	0.114	-0.077		-0.694	0.491
3 (Constant)	-0.456	0.488			-0.934	0.354
Age = 21 years or older	-0.017	0.134	-0.012		-0.127	0.899
Education = Some College or Higher	-0.213	0.171	-0.113		-1.249	0.217
Income = \$50,000-\$74,999	-0.022	0.161	-0.013		-0.139	0.890
Income = \$75,000-\$99,999	-0.373	0.195	-0.204		-1.908	0.062

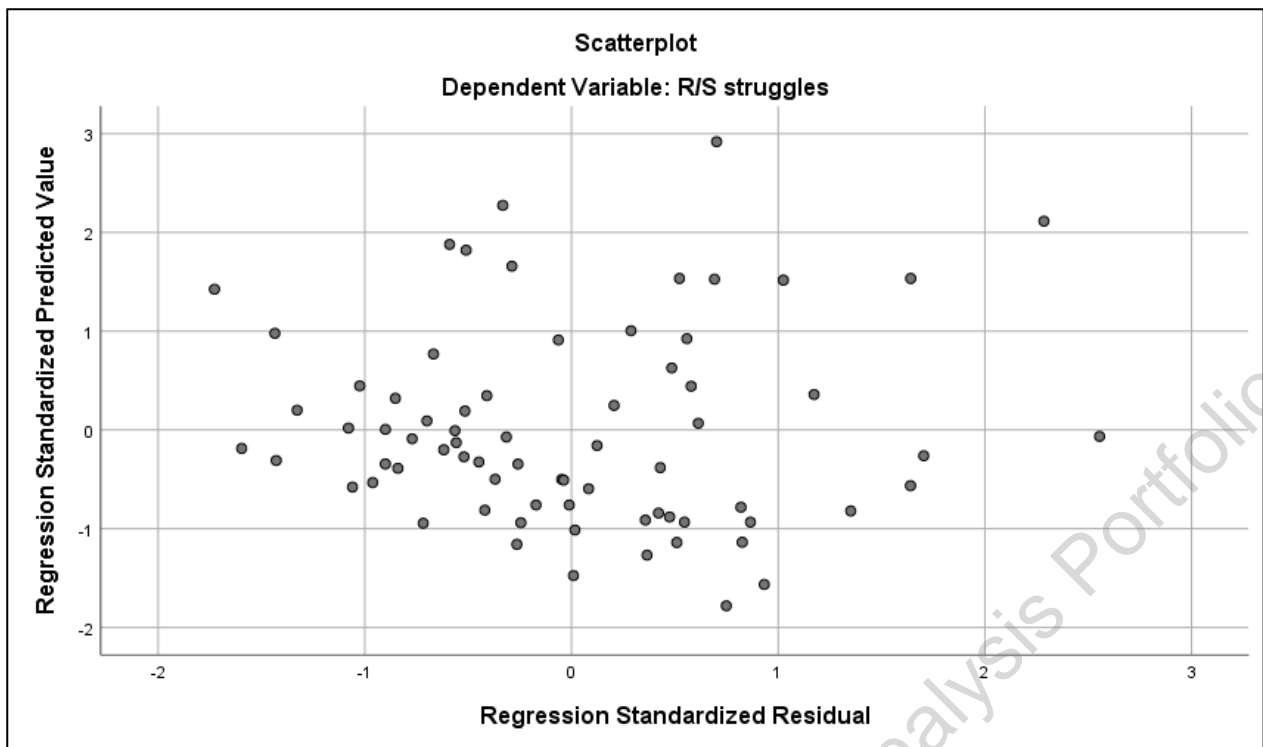
Income = >\$100,000	0.149	0.174	0.092	0.860	0.394
Race = Non-White	-0.049	0.139	-0.033	-0.353	0.726
Gender = Female	0.384	0.173	0.191	2.218	0.031
GAD	-0.119	0.120	-0.127	-0.992	0.326
PHQ	-0.009	0.119	-0.008	-0.077	0.939
Disconnection/Rejection domain	0.043	0.179	0.047	0.241	0.810
Overvigilance and Inhibition domain	-0.009	0.121	-0.009	-0.073	0.942
Vulnerable Child Mode	0.261	0.150	0.295	1.741	0.087
Demanding Parent Mode	0.101	0.106	0.117	0.946	0.348
Punitive Parent Mode	0.459	0.122	0.497	3.757	0.000
Healthy Adult Mode	0.063	0.120	0.051	0.523	0.603

a. Dependent Variable: R/S struggles

Violations of the assumptions of normality, linearity and homoscedasticity of residuals (errors) were examined for the regression model. The next figure shows a P-P plot, which is used to assess the normality of residuals. The observations should follow a diagonal pattern to suggest normality of residuals



The next figure shows a scatterplot of standardized residuals and standardized predicted values of the dependent variable. If points are well distributed along the X and Y axes, this would suggest homoscedasticity and linearity. Nonlinearity is indicated when most of the residuals are above the zero line on the plot at some predicted values and below the zero line at other predicted values.



## **Regression Analysis – Hypothesis 2**

The regression analysis for Hypothesis 2 is centered around exploring the influence of various predictors on religious and spiritual (R/S) struggles. This analysis involves a complex model that includes not only direct predictors but also interaction terms to understand the moderating effects.

**Model 1:** This initial model explains a significant portion of the variance in R/S struggles (R Square = 0.704). It includes a wide range of predictors like demographic factors, psychological domains, and Generalized Anxiety Disorder (GAD).

**Model 2:** The introduction of the 'Negative Authoritarian' variable slightly increases the R Square to 0.706, indicating a marginal improvement in the model's explanatory power.

**Model 3:** This model further adds interaction terms between 'Negative Authoritarian' and various psychological domains. The R Square improves to 0.761, suggesting these interaction terms contribute additional explanatory power.

# Model Summary<sup>d</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.839 <sup>a</sup>	.704	.625	.446660	.704	8.899	15	56	.000
2	.840 <sup>b</sup>	.706	.620	.449720	.001	.241	1	55	.626
3	.872 <sup>c</sup>	.761	.653	.429829	.055	1.868	6	49	.105

a. Predictors: (Constant), Healthy Adult Mode, Overvigilance and Inhibition domain, Income = >\$100,000, Education = Some College or Higher, Gender = Female, PHQ, Race = Non-White, Income = \$50,000-\$74,999, Age = 21 years or older, Punitive Parent Mode, Demanding Parent Mode, Income = \$75,000-\$99,999, GAD, Vulnerable Child Mode, Disconnection/Rejection domain

b. Predictors: (Constant), Healthy Adult Mode, Overvigilance and Inhibition domain, Income = >\$100,000, Education = Some College or Higher, Gender = Female, PHQ, Race = Non-White, Income = \$50,000-\$74,999, Age = 21 years or older, Punitive Parent Mode, Demanding Parent Mode, Income = \$75,000-\$99,999, GAD, Vulnerable Child Mode, Disconnection/Rejection domain, Negative Authoritarian

c. Predictors: (Constant), Healthy Adult Mode, Overvigilance and Inhibition domain, Income = >\$100,000, Education = Some College or Higher, Gender = Female, PHQ, Race = Non-White, Income = \$50,000-\$74,999, Age = 21 years or older, Punitive Parent Mode, Demanding Parent Mode, Income = \$75,000-\$99,999, GAD, Vulnerable Child Mode, Disconnection/Rejection domain, Negative Authoritarian, Moderation Negative Authoritarian x Punitive Parent Mode, Moderation Negative Authoritarian x Overvigilance and Inhibition domain, Moderation Negative Authoritarian x Healthy Adult Mode, Moderation Negative Authoritarian x Vulnerable Child Mode, Moderation Negative Authoritarian x Demanding Parent Mode, Moderation Negative Authoritarian x Disconnection/Rejection domain

d. Dependent Variable: R/S struggles

Being Negative Authoritarian shows no significant effect on R/S struggles whatsoever (Model 2). Nevertheless, Model 3 shows that this classification strengthens the effect of Punitive Parent Mode on R/S struggles.

## Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
1 (Constant)	-0.456	0.488		-0.934	0.354
Age = 21 years or older	-0.017	0.134	-0.012	-0.127	0.899
Education = Some College or Higher	-0.213	0.171	-0.113	-1.249	0.217
Income = \$50,000-\$74,999	-0.022	0.161	-0.013	-0.139	0.890
Income = \$75,000-\$99,999	-0.373	0.195	-0.204	-1.908	0.062
Income = >\$100,000	0.149	0.174	0.092	0.860	0.394
Race = Non-White	-0.049	0.139	-0.033	-0.353	0.726
Gender = Female	0.384	0.173	0.191	2.218	0.031
GAD	-0.119	0.120	-0.127	-0.992	0.326
PHQ	-0.009	0.119	-0.008	-0.077	0.939
Disconnection/Rejection domain	0.043	0.179	0.047	0.241	0.810
Overvigilance and Inhibition domain	-0.009	0.121	-0.009	-0.073	0.942
Vulnerable Child Mode	0.261	0.150	0.295	1.741	0.087
Demanding Parent Mode	0.101	0.106	0.117	0.946	0.348
Punitive Parent Mode	0.459	0.122	0.497	3.757	0.000
Healthy Adult Mode	0.063	0.120	0.051	0.523	0.603
2 (Constant)	-0.388	0.511		-0.760	0.451
Age = 21 years or older	-0.024	0.135	-0.016	-0.175	0.862
Education = Some College or Higher	-0.216	0.172	-0.114	-1.254	0.215
Income = \$50,000-\$74,999	-0.027	0.163	-0.016	-0.163	0.871
Income = \$75,000-\$99,999	-0.367	0.197	-0.200	-1.861	0.068
Income = >\$100,000	0.149	0.175	0.092	0.853	0.398

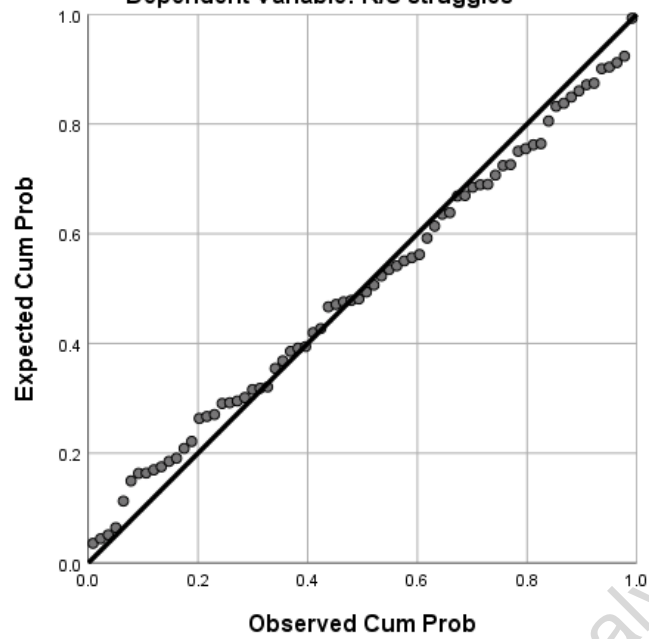
Race = Non-White	-0.044	0.140	-0.030	-0.311	0.757
Gender = Female	0.383	0.174	0.190	2.194	0.033
GAD	-0.127	0.122	-0.135	-1.038	0.304
PHQ	0.000	0.122	0.000	0.003	0.998
Disconnection/Rejection domain	0.031	0.182	0.034	0.169	0.867
Overvigilance and Inhibition domain	-0.005	0.122	-0.005	-0.039	0.969
Vulnerable Child Mode	0.243	0.155	0.275	1.571	0.122
Demanding Parent Mode	0.105	0.107	0.122	0.975	0.334
Punitive Parent Mode	0.453	0.124	0.491	3.664	0.001
Healthy Adult Mode	0.056	0.122	0.045	0.461	0.647
Negative Authoritarian	0.083	0.170	0.052	0.490	0.626
3 (Constant)	-0.183	0.597		-0.307	0.760
Age = 21 years or older	0.020	0.136	0.014	0.145	0.885
Education = Some College or Higher	-0.223	0.178	-0.118	-1.250	0.217
Income = \$50,000-\$74,999	0.148	0.171	0.087	0.864	0.392
Income = \$75,000-\$99,999	-0.290	0.195	-0.159	-1.488	0.143
Income = >\$100,000	0.200	0.178	0.124	1.125	0.266
Race = Non-White	-0.067	0.142	-0.046	-0.472	0.639
Gender = Female	0.193	0.181	0.096	1.066	0.292
GAD	-0.135	0.125	-0.144	-1.085	0.283
PHQ	0.021	0.124	0.018	0.172	0.864
Disconnection/Rejection domain	0.153	0.218	0.167	0.701	0.486
Overvigilance and Inhibition domain	0.011	0.132	0.010	0.081	0.936
Vulnerable Child Mode	0.135	0.164	0.152	0.820	0.416
Demanding Parent Mode	0.138	0.115	0.160	1.198	0.237
Punitive Parent Mode	0.227	0.161	0.245	1.405	0.166
Healthy Adult Mode	0.116	0.134	0.093	0.862	0.393
Negative Authoritarian	0.177	1.096	0.109	0.162	0.872
Moderation Negative Authoritarian x Disconnection/Rejection domain	-0.838	0.427	-1.793	-1.961	0.056
Moderation Negative Authoritarian x Overvigilance and Inhibition domain	0.616	0.389	1.350	1.584	0.120
Moderation Negative Authoritarian x Vulnerable Child Mode	0.743	0.390	1.695	1.902	0.063
Moderation Negative Authoritarian x Demanding Parent Mode	-0.493	0.323	-1.271	-1.524	0.134
Moderation Negative Authoritarian x Punitive Parent Mode	0.578	0.277	1.162	2.091	0.042
Moderation Negative Authoritarian x Healthy Adult Mode	-0.523	0.271	-1.067	-1.929	0.060

a. Dependent Variable: R/S struggles

The residual plots below indicate that there was no violation of assumptions, thus making the model valid and interpretable.

Normal P-P Plot of Regression Standardized Residual

Dependent Variable: R/S struggles



Scatterplot

Dependent Variable: R/S struggles

