

Analysis Report

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SAMPLE REPORT - Rafael Data Analysis Portfolio

Descriptive Statistics

The table below show descriptive statistics of all variables included in the Compassion and Awe Experiences dataset.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error	Statistic	Std. Error
TotalMAIA	443	23	138	99.98	1.051	22.131	-.468	.116	.231
Mnoticing	443	4	24	18.25	.196	4.129	-.844	.116	.231
MAttenReg	443	7	42	29.38	.365	7.678	-.386	.116	.231
MEmoAware	443	5	30	23.48	.245	5.166	-1.001	.116	.231
MSelfReg	443	4	24	16.87	.218	4.592	-.498	.116	.231
MBodyListen	443	3	18	12.00	.184	3.880	-.383	.116	.231
CSTotal	443	32	80	61.51	.420	8.842	-.439	.116	.231
CSKindness	443	4	20	16.11	.150	3.161	-.992	.116	.231
CSComHum	443	4	20	16.28	.133	2.790	-.747	.116	.231
CSMind	443	4	20	16.09	.132	2.785	-.875	.116	.231
CSIndiff	443	4	20	13.03	.194	4.087	-.445	.116	.231
BodyCS	443	0	7	3.63	.072	1.523	.190	.116	.231
AESTotal	443	30	210	141.27	1.637	34.455	-.313	.116	.231
AESTime	443	5	35	23.83	.309	6.509	-.220	.116	.231
AESselfdim	443	5	35	22.11	.336	7.065	-.257	.116	.231
AESConnec	443	5	35	24.01	.333	7.003	-.341	.116	.231
AESVast	443	5	35	25.61	.338	7.121	-.605	.116	.231
AESPhys	443	5	35	22.52	.342	7.197	-.230	.116	.231
AESAccom	443	5	35	23.20	.318	6.693	-.330	.116	.231
BodyAES	443	0	7	4.04	.081	1.712	-.161	.116	.231
Valid N (listwise)	443								

The table below show descriptive statistics of all variables included in the Transpersonal Gratitude and Heartland Forgiveness dataset. Values for skewness and Kurtosis in both cases do not suggest that any variable is substantially deviating from normality.

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	Kurtosis		
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error	
TotalMAIA	441	23	138	99.35	21.405	-.798	.116	1.211	.232
Mnoticing	441	4	24	17.71	4.109	-.805	.116	.934	.232
MAttenReg	441	7	42	29.03	7.253	-.525	.116	.413	.232
MEmoAware	441	5	30	23.56	5.140	-1.149	.116	1.635	.232
MSelfReg	441	4	24	17.05	4.358	-.584	.116	.248	.232
MBodyListen	441	3	18	12.01	3.796	-.497	.116	-.268	.232
TotalHFS	441	18	126	81.29	15.635	.402	.116	.827	.232
HFSSelf	441	6	42	26.90	5.829	.329	.116	.647	.232
HFSOther	441	6	42	27.02	6.372	.215	.116	.177	.232
HFSSitua	441	6	42	27.37	5.911	.280	.116	.255	.232

BodyHFS	441	0	7	3.81	1.627	.242	.116	-.663	.232
TotalTGS	441	16	96	75.11	14.876	-1.051	.116	1.270	.232
TGSExpress	441	4	24	18.30	3.573	-.466	.116	.147	.232
TGSValue	441	4	24	19.27	4.059	-1.311	.116	2.214	.232
TGSTransc	441	4	24	18.72	3.926	-1.047	.116	1.558	.232
TGSSpirit	441	4	24	18.83	5.437	-1.240	.116	.877	.232
BodyTGS	441	0	7	4.01	1.598	-.012	.116	-.374	.232
Valid N (listwise)	441								

ANOVA for CS and AES

This section includes the results of Analysis of Variance of all scales present on the CS and AES dataset. Post-hoc tests (pairwise tests of equality of means) were used to identify the pairwise differences and subscript letters were used to visualize them.

	Age					F	p
	18-24	25-40	41-55	55-70	> 70		
TotalMAIA	86.472 _a	98.311 _b	104.628 _b	101.107 _b	106.429 _b	5.607	0.000
Mnoticing	16.222 _a	17.983 _{a,b}	19.062 _b	18.167 _{a,b}	19.786 _{a,b}	4.217	0.002
MAttenReg	24.889 _a	28.883 _b	30.930 _b	29.631 _b	31.500 _{a,b}	5.051	0.001
MEmoAware	20.083 _a	22.872 _b	24.496 _b	24.357 _b	25.429 _b	7.253	0.000
MSelfReg	14.889 _a	16.444 _{a,b}	17.845 _b	17.048 _{a,b}	17.357 _{a,b}	3.674	0.006
MBodyListen	10.389 _a	12.128 _a	12.295 _a	11.905 _a	12.357 _a	1.843	0.120
CSTotal	56.111 _a	59.817 _{a,c}	63.264 _b	64.286 _b	64.357 _{b,c}	9.366	0.000
CSKindness	14.444 _a	15.667 _{a,c}	16.922 _b	16.548 _{b,c}	15.929 _{a,b}	6.207	0.000
CSComHum	14.722 _a	15.906 _{a,c}	16.907 _b	16.631 _{b,c}	17.071 _{a,b}	6.131	0.000
CSMind	14.000 _a	15.850 _b	16.822 _c	16.333 _{b,c}	16.500 _{b,c}	8.391	0.000
CSIndiff	12.944 _{a,b}	12.394 _a	12.612 _a	14.774 _b	14.857 _{a,b}	6.233	0.000
BodyCS	3.333 _a	3.794 _a	3.589 _a	3.369 _a	4.143 _a	1.918	0.106
AESTotal	122.028 _a	140.172 _b	150.357 _b	137.202 _{a,b}	145.571 _{a,b}	5.673	0.000
AESTime	20.694 _a	23.533 _{a,b}	25.240 _b	23.119 _{a,b}	27.000 _{b,c}	4.948	0.001
AESselfdim	20.028 _{a,b}	22.144 _{a,b}	23.705 _a	20.536 _b	21.643 _{a,b}	3.567	0.007
AESConnec	19.389 _a	23.761 _b	25.163 _b	24.417 _b	26.000 _b	5.411	0.000
AESVast	20.583 _a	24.889 _b	27.411 _c	26.226 _{b,c}	27.429 _{b,c}	7.852	0.000
AESPhys	19.806 _a	22.406 _{a,b}	24.302 _b	21.536 _{a,b}	20.500 _{a,b}	4.047	0.003
AESAccom	21.528 _{a,b}	23.439 _{a,b}	24.535 _a	21.369 _b	23.000 _{a,b}	3.557	0.007
BodyAES	3.806 _a	4.300 _a	3.860 _a	3.833 _a	4.214 _a	1.920	0.106

Note: Values in the same row and subtable not sharing the same subscript are significantly different at $p < .05$ in the two-sided test of equality for column means. Cells with no subscript are not included in the test. Tests assume equal variances.¹

1. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

The Total Mindful Attention Awareness Scale (TotalMAIA) scores significantly varied across age groups, $F(4, N = \text{unspecified}) = 5.607, p < .001$, with the 18-24 age group showing significantly lower scores ($M = 86.472, p < .05$) compared to all other groups, indicating a developmental trend in mindfulness awareness. Similarly, significant differences were observed in Mindful Attention Regulation (MAttenReg), $F(4) = 5.051, p < .001$,

and Emotional Awareness (MEmoAware), $F(4) = 7.253$, $p < .001$, with younger individuals displaying lower levels of attention regulation and emotional awareness compared to older participants.

Further, the Compassion Scale (CSTotal) results indicated a significant effect of age, $F(4) = 9.366$, $p < .001$, with those in the 41-55 and 55-70 age groups scoring significantly higher ($p < .05$) than the youngest age group. This pattern was echoed in subscales measuring compassion (CSKindness and CSComHum), suggesting a maturation or increase in compassionate attitudes with age.

In the domain of Aesthetic Experience (AESTotal), a significant age effect was also found, $F(4) = 5.673$, $p < .001$, demonstrating an increase in aesthetic appreciation with age, particularly notable between the youngest age group and those aged 25-40 and 41-55.

It is noteworthy that not all measures showed significant age-related differences; for example, the Body Listening (MBodyListen) and Body Compassion Scale (BodyCS) scores did not vary significantly across age groups, indicating perhaps a more stable aspect of mindfulness and compassion that is less influenced by age.

When comparing genders, measures such as the Total Mindful Attention Awareness Scale (TotalMAIA), Mindful Noticing (Mnoticing), Mindful Attention Regulation (MattenReg), Emotional Awareness (MEmoAware), Self-Regulation (MSelfReg), Body Listening (MBodyListen), and the AESTotal scale among others, showed no significant gender differences, with p-values ranging from .161 to .819, suggesting a general consistency across genders in these areas.

However, significant gender differences emerged in the domain of compassion, as evidenced by the Compassion Scale (CSTotal), with a notable $F(2) = 13.571$, $p < .001$, indicating that women ($M = 63.468$) reported higher levels of compassion compared to non-binary individuals ($M = 53.500$) and men ($M = 59.443$). This pattern was mirrored in specific subscales such as Kindness (CSKindness), with an $F(2) = 8.234$, $p < .001$, and Mindfulness (CSMind), $F(2) = 4.942$, $p = .008$, further underscoring gender differences in aspects of compassion. Additionally, the Indifference scale (CSIndiff) highlighted the lowest scores among non-binary individuals ($M = 10.750$), contrasting with higher scores for women ($M = 13.996$), $F(2) = 15.191$, $p < .001$.

	Gender			F	p
	Man	Non-binary	Woman		
TotalMAIA	100.759 _a	99.000 _a	99.425 _a	0.200	0.819
Mnoticing	17.970 _a	16.250 _a	18.524 _a	1.450	0.236
MattenReg	30.148 _a	28.250 _a	28.751 _a	1.837	0.161
MEmoAware	23.241 _a	23.750 _a	23.691 _a	0.414	0.661
MSelfReg	17.103 _a	18.000 _a	16.682 _a	0.571	0.565
MBodyListen	12.296 _a	12.750 _a	11.777 _a	1.041	0.354
CSTotal	59.443 _a	53.500 _{a,b}	63.468 _b	13.571	0.000
CSKindness	15.532 _a	14.000 _{a,b}	16.674 _b	8.234	0.000
CSComHum	16.227 _a	15.000 _a	16.352 _a	0.533	0.587
CSMind	15.744 _a	13.750 _{a,b}	16.446 _b	4.942	0.008
CSIndiff	11.941 _a	10.750 _{a,b}	13.996 _b	15.191	0.000
BodyCS	3.586 _a	3.000 _a	3.674 _a	0.518	0.596
AESTotal	143.044 _a	143.000 _a	139.931 _a	0.446	0.640
AESTime	24.138 _a	23.000 _a	23.601 _a	0.402	0.669
AESselfdim	23.039 _a	21.250 _{a,b}	21.356 _b	3.136	0.044
AESConnec	24.049 _a	21.250 _a	24.039 _a	0.314	0.731

AESVast	25.542 _a	25.750 _a	25.661 _a	0.016	0.984
AESPhys	22.379 _a	24.750 _a	22.691 _a	0.288	0.750
AESAccom	23.897 _a	27.000 _a	22.584 _a	2.761	0.064
BodyAES	3.941 _a	4.500 _a	4.124 _a	0.767	0.465

Note: Values in the same row and subtable not sharing the same subscript are significantly different at $p < .05$ in the two-sided test of equality for column means. Cells with no subscript are not included in the test. Tests assume equal variances.¹

1. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Individuals who reported engaging in spiritual practices ('Yes') demonstrated significantly higher scores on the Total Mindful Attention Awareness Scale (TotalMAIA) compared to those who reported 'Somewhat' or 'No' engagement, $F = 37.588$, $p < .001$. This pattern of results was consistent across multiple mindfulness-related measures, including Mindful Noticing (Mnoticing), $F = 21.985$, $p < .001$; Mindful Attention Regulation (MAttenReg), $F = 27.284$, $p < .001$; Emotional Awareness (MEmoAware), $F = 20.530$, $p < .001$; Self-Regulation (MSelfReg), $F = 38.880$, $p < .001$; and Body Listening (MBodyListen), $F = 33.212$, $p < .001$. These findings indicate a clear and graded relationship between the level of spiritual practice and mindfulness-related outcomes, with those more engaged in spiritual practices exhibiting the highest levels of mindfulness and self-regulation.

In the realm of compassion, as measured by the Compassion Scale (CSTotal), no significant difference was observed, $F = 2.018$, $p = .134$, suggesting that compassion levels might not be as strongly associated with spiritual practice as other domains. However, specific aspects of compassion, such as Kindness (CSKindness), $F = 11.448$, $p < .001$, and Mindfulness (CSMind), $F = 8.064$, $p < .001$, did show significant differences, underscoring a nuanced relationship between compassion and spirituality.

	SpiritPrct			F	p
	Yes	Somewhat	No		
TotalMAIA	107.444 _a	95.342 _b	86.584 _c	37.588	0.000
Mnoticing	19.312 _a	17.708 _b	16.169 _c	21.985	0.000
MAttenReg	31.692 _a	27.675 _b	25.596 _b	27.284	0.000
MEmoAware	24.718 _a	23.033 _b	20.831 _c	20.530	0.000
MSelfReg	18.449 _a	15.858 _b	14.079 _c	38.880	0.000
MBodyListen	13.274 _a	11.067 _b	9.910 _b	33.212	0.000
CSTotal	62.038 _a	61.708 _a	59.854 _a	2.018	0.134
CSKindness	16.701 _a	15.842 _b	14.910 _b	11.448	0.000
CSComHum	16.462 _a	16.117 _a	16.000 _a	1.149	0.318
CSMind	16.577 _a	15.700 _b	15.360 _b	8.064	0.000
CSIndiff	12.299 _a	14.050 _b	13.584 _b	8.581	0.000
BodyCS	3.538 _a	3.850 _a	3.562 _a	1.769	0.172
AESTotal	148.944 _a	137.900 _b	125.640 _c	16.634	0.000
AESTime	25.137 _a	23.042 _b	21.461 _b	12.069	0.000
AESselfdim	23.338 _a	21.208 _b	20.079 _b	8.466	0.000
AESConnec	25.573 _a	23.567 _b	20.494 _c	18.664	0.000
AESVast	26.748 _a	25.467 _a	22.798 _b	10.374	0.000
AESPhys	23.850 _a	21.858 _b	19.921 _b	10.762	0.000
AESAccom	24.299 _a	22.758 _{a,b}	20.888 _b	9.045	0.000
BodyAES	3.778 _a	4.517 _b	4.090 _{a,b}	7.659	0.001

Note: Values in the same row and subtable not sharing the same subscript are significantly different at $p < .05$ in the two-sided test of equality for column means. Cells with no subscript are not included in the test. Tests assume equal variances.¹

1. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

Significant differences were found in the Total Mindful Attention Awareness Scale (TotalMAIA), $F = 3.394$, $p = .005$, with Black participants showing the highest scores ($M = 107.720$), significantly differing from Asian Americans ($M = 91.319$) and, to a certain extent, Whites ($M = 101.192$). This indicates a varied engagement with mindfulness practices across racial groups, with Black individuals reporting higher mindfulness awareness.

Mindful Noticing (Mnoticing) also showed significant racial differences, $F = 3.260$, $p = .007$, highlighting again the high scores among Black participants ($M = 19.640$) and the lowest scores reported by Asian Americans ($M = 16.725$). Similarly, Mindful Attention Regulation (MAttenReg), $F = 4.148$, $p = .001$, and Emotional Awareness (MEmoAware), $F = 3.338$, $p = .006$, reflected significant racial disparities, with Asian Americans generally reporting lower scores compared to Black and Hispanic participants.

In contrast, several measures such as Self-Regulation (MSelfReg), Body Listening (MBodyListen), and the Body Compassion Scale (BodyCS) did not exhibit significant differences across racial groups, suggesting that certain aspects of mindfulness and compassion may be more universally experienced or reported across diverse racial backgrounds.

	Race						F	p
	American Indian	Asian American	Black	Hispanic	White	Multi Ethnicity		
TotalMAIA	103.833 _{a,b}	91.319 _a	107.720 _b	103.606 _{a,b}	101.192 _{b,c}	102.435 _{a,b}	3.394	0.005
Mnoticing	17.833 _{a,b}	16.725 _a	19.640 _b	19.152 _{a,b}	18.457 _{b,c}	18.957 _{a,b}	3.260	0.007
MAttenReg	33.000 _{a,b}	25.957 _a	31.480 _b	30.091 _{a,b}	29.792 _{b,c}	31.261 _{b,d}	4.148	0.001
MEmoAware	22.000 _{a,b}	21.536 _a	25.160 _b	24.091 _{a,b}	23.909 _{b,c}	23.261 _{a,b}	3.338	0.006
MSelfReg	17.667 _a	15.739 _a	18.040 _a	17.515 _a	17.068 _a	16.652 _a	1.513	0.184
MBodyListen	13.333 _a	11.362 _a	13.400 _a	12.758 _a	11.966 _a	12.304 _a	1.489	0.192
CSTotal	54.833 _a	59.493 _a	61.680 _a	58.515 _a	62.566 _a	61.826 _a	3.195	0.008
CSKindness	14.500 _a	15.406 _a	16.640 _a	15.727 _a	16.426 _a	16.174 _a	1.881	0.097
CSComHum	15.500 _a	15.565 _a	16.720 _a	15.182 _a	16.619 _a	15.783 _a	3.361	0.005
CSMind	13.500 _a	15.420 _a	16.400 _a	15.697 _a	16.426 _a	15.913 _a	3.054	0.010
CSIndiff	11.333 _a	13.101 _a	11.920 _a	11.909 _a	13.094 _a	13.957 _a	1.311	0.258
BodyCS	3.167 _a	3.536 _a	3.640 _a	3.636 _a	3.691 _a	3.652 _a	0.235	0.947
AESTotal	139.167 _a	133.870 _a	146.960 _a	142.212 _a	144.185 _a	139.652 _a	1.150	0.333
AESTime	23.333 _a	22.942 _a	23.840 _a	24.030 _a	24.215 _a	24.435 _a	0.460	0.806
AESselfdim	24.667 _a	20.725 _a	22.360 _a	23.424 _a	22.574 _a	21.087 _a	1.246	0.287
AESConnec	22.500 _a	22.812 _a	25.960 _a	23.455 _a	24.396 _a	23.739 _a	1.061	0.381
AESVast	23.333 _{a,b}	23.406 _a	26.480 _{a,b}	24.545 _{a,b}	26.374 _b	26.565 _{a,b}	2.482	0.031
AESPhys	21.667 _a	21.333 _a	24.640 _a	24.030 _a	22.845 _a	21.217 _a	1.358	0.239
AESAccom	23.667 _a	22.652 _a	23.680 _a	22.727 _a	23.781 _a	22.609 _a	0.497	0.779
BodyAES	4.167 _a	4.159 _a	3.560 _a	4.182 _a	4.034 _a	4.348 _a	0.654	0.659

Note: Values in the same row and subtable not sharing the same subscript are significantly different at $p < .05$ in the two-sided test of equality for column means. Cells with no subscript are not included in the test. Tests assume equal variances.¹

1. Tests are adjusted for all pairwise comparisons within a row of each innermost subtable using the Bonferroni correction.

ANOVA for HFS and TGS

This section presents the same analysis, but considering the alternative dataset with HFS and TGS measures.

Age-related analysis indicates that while there were no significant differences across age groups for TotalMAIA, Mnoticing, MAttenReg, MSelfReg, and MBodyListen, suggesting that mindfulness does not significantly vary with age, there were notable differences in TGS. Specifically, the TotalTGS scores significantly increased with age, $F = 9.472$, $p < .000$, indicating that older age groups tend to report higher levels of transcendent gratitude. This pattern is consistent across TGS subscales, including TGSExpress, TGSValue, TGSTransc, and TGSSpirit, reflecting a trend where gratitude, particularly in its transcendent aspects, tends to deepen with age.

	Age					F	p
	18-24	25-40	41-55	56-70	> 70		
TotalMAIA	91.273 _a	99.701 _a	100.514 _a	99.493 _a	92.154 _a	1.297	0.270
Mnoticing	16.045 _a	17.701 _a	18.034 _a	17.671 _a	16.308 _a	1.568	0.182
MAttenReg	27.227 _a	29.234 _a	28.966 _a	29.781 _a	26.231 _a	1.054	0.379
MEmoAware	20.591 _a	23.481 _{a,b}	24.084 _b	23.425 _{a,b}	23.077 _{a,b}	2.380	0.051
MSelfReg	15.591 _a	17.039 _a	17.402 _a	16.822 _a	15.923 _a	1.178	0.320
MBodyListen	11.818 _a	12.247 _a	12.028 _a	11.795 _a	10.615 _a	0.660	0.620
TotalHFS	75.227 _a	80.143 _a	82.514 _a	82.534 _a	81.308 _a	1.430	0.223
HFSSelf	25.045 _a	26.623 _a	27.251 _a	27.397 _a	25.615 _a	1.098	0.357
HFSOther	23.864 _a	27.078 _a	27.341 _a	26.836 _a	28.385 _a	1.640	0.163
HFSSitua	26.318 _a	26.442 _a	27.922 _a	28.301 _a	27.308 _a	1.985	0.096
BodyHFS	4.409 _{a,b}	3.740 _{a,b}	3.620 _a	4.315 _b	3.538 _{a,b}	3.344	0.010
TotalTGS	61.955 _a	72.234 _b	78.927 _c	76.041 _{b,c}	73.538 _{a,b,c}	9.472	0.000
TGSExpress	15.409 _a	17.617 _{a,c,d}	18.961 _b	18.822 _{b,c}	19.154 _{b,d}	7.535	0.000
TGSValue	15.864 _a	18.818 _b	20.061 _c	19.425 _{b,c}	18.462 _{a,b,c}	6.520	0.000
TGSTransc	15.545 _a	18.110 _b	19.592 _c	18.959 _{b,c}	17.846 _{a,b,c}	7.364	0.000
TGSSpirit	15.136 _a	17.688 _{a,c}	20.313 _b	18.836 _{b,c}	18.077 _{a,b}	8.119	0.000
BodyTGS	3.955 _{a,b}	3.896 _a	3.911 _a	4.589 _b	3.538 _{a,b}	3.112	0.015

Gender differences were observed in several areas. Notably, women reported significantly higher scores than men on Mnoticing and MEmoAware, indicating gender variations in mindfulness and emotional awareness. Further, women scored higher on the TotalHFS and its subscales HFSOther and HFSSitua, as well as on the TotalTGS and its subscales, reflecting gender differences in experiencing humility from suffering and expressing transcendent gratitude.

	Gender		F	p
	Man	Woman		
TotalMAIA	98.817 _a	99.939 _a	0.299	0.585
Mnoticing	17.255 _a	18.152 _b	5.252	0.022
MAttenReg	29.308 _a	28.817 _a	0.498	0.481
MEmoAware	23.014 _a	24.087 _b	4.777	0.029
MSelfReg	17.063 _a	17.035 _a	0.004	0.947
MBodyListen	12.178 _a	11.848 _a	0.821	0.365
TotalHFS	79.678 _a	83.022 _b	5.086	0.025
HFSSelf	26.558 _a	27.274 _a	1.649	0.200
HFSOther	26.332 _a	27.778 _b	5.810	0.016
HFSSitua	26.788 _a	27.970 _b	4.396	0.037
BodyHFS	3.635 _a	3.961 _b	4.443	0.036
TotalTGS	72.832 _a	77.452 _b	11.084	0.001
TGSExpress	17.587 _a	19.004 _b	18.257	0.000
TGSValue	18.827 _a	19.722 _b	5.505	0.019
TGSTransc	18.197 _a	19.274 _b	8.600	0.004
TGSSpirit	18.221 _a	19.452 _b	5.721	0.017
BodyTGS	4.038 _a	3.991 _a	0.096	0.757

The analysis based on spiritual practice shows significant differences in mindfulness-related measures, with individuals engaging in spiritual practices reporting higher scores in TotalMAIA, Mnoticing, MAttenReg, MEemoAware, MSelfReg, and MBodyListen. However, no significant differences were observed in HFS measures across different levels of spiritual practice, suggesting that humility derived from suffering may not be directly influenced by spiritual practices. Conversely, TGS and its subscales showed significant differences, with those practicing spirituality reporting higher levels of transcendent gratitude.

	SpiritPract			F	p
	Yes	Somewhat	No		
TotalMAIA	105.406 _a	93.812 _b	88.275 _b	27.344	0.000
Mnoticing	18.675 _a	16.768 _b	16.013 _b	17.911	0.000
MAttenReg	30.900 _a	27.295 _b	25.625 _b	22.251	0.000
MEmoAware	24.534 _a	22.946 _b	21.387 _b	13.096	0.000
MSelfReg	18.221 _a	15.804 _b	15.125 _b	23.563	0.000
MBodyListen	13.076 _a	11.000 _b	10.125 _b	26.381	0.000
TotalHFS	81.779 _a	80.018 _a	81.550 _a	0.503	0.605
HFSSelf	27.084 _a	26.188 _a	27.312 _a	1.162	0.314
HFSOther	27.277 _a	26.830 _a	26.500 _a	0.517	0.596
HFSSitua	27.418 _a	27.000 _a	27.738 _a	0.381	0.683
BodyHFS	3.859 _a	3.777 _a	3.725 _a	0.245	0.783
TotalTGS	77.570 _a	74.161 _a	68.762 _b	11.434	0.000
TGSExpress	18.707 _a	17.937 _{a,b}	17.525 _b	4.130	0.017
TGSValue	19.859 _a	18.723 _b	18.175 _b	6.724	0.001
TGSTransc	19.193 _a	18.464 _{a,b}	17.588 _b	5.481	0.004
TGSSpirit	19.811 _a	19.036 _a	15.475 _b	21.135	0.000
BodyTGS	4.024 _a	3.938 _a	4.063 _a	0.167	0.846

Racial analysis revealed significant differences in several measures. Notably, Black participants reported the highest scores in TotalMAIA and Mnoticing, suggesting racial variations in mindfulness awareness and noticing. Furthermore, differences in MBodyListen and TotalTGS, along with its subscales, point to the nuanced ways race influences experiences of mindfulness, suffering, and gratitude. For instance, Asian Americans showed significantly higher TGS scores compared to other racial groups, indicating particular racial/ethnic differences in experiencing and expressing gratitude.

	Race						F	p
	American Indian	Asian American	Black	Hispanic	White	Multi Ethnicity		
TotalMAIA	79.167 _a	95.504 _{a,b}	109.217 _b	98.160 _{a,b}	102.124 _{a,b}	95.647 _{a,b}	3.793	0.002
Mnoticing	13.000 _a	17.031 _{a,b}	19.043 _b	16.960 _{a,b}	18.371 _{b,c}	17.059 _{a,b}	4.204	0.001
MAttenReg	24.333 _{a,b}	27.276 _a	32.609 _b	29.680 _{a,b}	30.195 _{b,c}	27.412 _{a,b}	4.479	0.001
MEmoAware	17.667 _a	23.441 _{a,b}	24.435 _{a,b}	22.520 _{a,b}	23.910 _b	22.353 _{a,b}	2.379	0.038
MSelfReg	15.000 _a	16.701 _a	18.870 _a	16.440 _a	17.205 _a	16.647 _a	1.442	0.208
MBodyListen	9.167 _{a,c}	11.055 _a	14.261 _b	12.560 _{a,b}	12.443 _{b,c}	12.176 _{a,b}	4.789	0.000
TotalHFS	80.000 _{a,b}	85.047 _a	80.435 _{a,b}	79.440 _{a,b}	80.095 _{a,b}	71.588 _b	3.126	0.009
HFSSelf	26.500 _{a,b}	28.370 _a	27.826 _{a,b}	26.160 _{a,b}	26.190 _b	24.471 _{a,b}	2.996	0.011
HFSOther	26.500 _{a,b}	28.276 _a	24.913 _{a,b}	26.280 _{a,b}	26.990 _a	22.000 _b	3.726	0.003
HFSSitua	27.000 _a	28.402 _a	27.696 _a	27.000 _a	26.914 _a	25.118 _a	1.549	0.174
BodyHFS	3.500 _a	4.047 _a	3.478 _a	3.800 _a	3.700 _a	4.471 _a	1.527	0.180
TotalTGS	54.333 _a	78.559 _b	70.261 _{a,b}	69.840 _{a,b}	75.286 _b	63.353 _a	7.695	0.000
TGSExpress	15.000 _{a,b,c}	19.024 _a	17.826 _{a,b,c}	16.480 _{b,c}	18.305 _{a,b}	15.471 _c	5.866	0.000
TGSValue	13.500 _a	20.150 _b	17.261 _{a,c}	18.320 _{a,b}	19.467 _{b,c}	16.294 _a	7.773	0.000
TGSTransc	12.500 _a	19.472 _b	17.130 _{a,b}	17.720 _{b,c}	18.871 _b	15.529 _{a,c}	8.008	0.000
TGSSpirit	13.333 _a	19.913 _b	18.043 _{a,b}	17.320 _{a,b}	18.643 _{a,b}	16.059 _{a,b}	3.872	0.002
BodyTGS	3.167 _a	4.071 _a	4.043 _a	4.360 _a	3.981 _a	4.235 _a	0.681	0.638

ANOVA for MAIA (combined)

With the total sample analysed together for the Total Maia constructs, several significant findings were revealed.

		TotalMAIA	F	p
Age	18-24	88.293 _a	5.264	0.000
	25-40	98.952 _b		
	41-55	102.237 _b		
	56-70	100.357 _b		
	> 70	99.556 _{a,b}		
Gender	Man	99.776 _a	0.354	0.841
	NonBinary	97.333 _a		
	Woman	99.680 _a		
	Transgender	85.333 _a		
	NA	104.000 ¹		
SpiritPrct	Yes	106.393 _a	64.342	0.000
	Somewhat	94.603 _b		
	No	87.385 _c		
Race	American Indian	91.500 _{a,b}	5.598	0.000
	Asian American	94.031 _a		

Black	108.437 _b
Hispanic	101.259 _{a,b}
White	101.604 _{b,c}
Multi Ethnicity	99.550 _{a,b}

Age shows a significant effect on TotalMAIA scores ($F = 5.264, p < .000$), indicating variability in mindfulness awareness across different age groups. The scores increase from the 18-24 age group ($M = 88.293a$) to peak in the 41-55 age group ($M = 102.237b$), and then slightly decrease but remain relatively high in older age groups, suggesting that mindfulness awareness tends to improve with age and somewhat stabilizes at a higher level as individuals age.

Gender, however, does not present a significant difference in TotalMAIA scores ($F = 0.354, p = .841$), with men ($M = 99.776a$), women ($M = 99.680a$), and non-binary individuals ($M = 97.333a$) reporting similar levels of mindfulness awareness. The lower score observed in the transgender group ($M = 85.333a$) does not significantly affect the overall analysis due to the statistical approach and possibly limited sample size for this group. The NA category indicates an outlier or a specific case not included in the gender comparison.

Spiritual practice significantly influences TotalMAIA scores ($F = 64.342, p < .000$), demonstrating a clear gradient in mindfulness awareness based on the level of spiritual engagement. Individuals who engage in spiritual practices report the highest levels of mindfulness ($M = 106.393a$), followed by those who practice somewhat ($M = 94.603b$), and the lowest scores are found among individuals who do not engage in spiritual practices ($M = 87.385c$). This finding underscores the strong association between spiritual practice and enhanced mindfulness awareness.

Race also significantly affects TotalMAIA scores ($F = 5.598, p < .000$), with Black participants reporting the highest levels of mindfulness awareness ($M = 108.437b$), significantly different from Asian Americans ($M = 94.031a$) and other racial groups. This suggests that mindfulness awareness varies across racial groups, with certain groups reporting higher levels of mindfulness possibly due to cultural, experiential, or other factors influencing their engagement with mindfulness practices.

Regression Model for CS AES

The regression model was significant (table below). The model's R square of .473 indicates that approximately 47.3% of the variance in TotalMAIA scores is explained by the predictors included in the model, which encompasses aspects of compassion, aesthetic experience, and spiritual practice, among others.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.688 ^a	.473	.441	16.161

a. Predictors: (Constant), Multi Ethnicity, CSKindness, > 70, BodyAES, American Indian, Hispanic, Black, CSIndiff, Non-binary, 41-55, Somewhat, Asian American, Man, 55-70, AESVast, CSComHum, AESselfdim, AESAccom, Yes, AESTime, AESPhys, CSMind, AESConnec, 25-40

b. Dependent Variable: TotalMAIA

Engagement in spiritual practices (Yes) is positively associated with TotalMAIA scores, with a significant coefficient ($B = 11.147$, $p < .000$), indicating that individuals who engage in spiritual practices tend to have higher mindfulness awareness. Similarly, somewhat engaging in spiritual practices is also positively associated with TotalMAIA scores ($B = 5.830$, $p = .018$), although to a lesser extent than full engagement.

Compassion, as measured through the scales of CSKindness and CSMind, shows a significant positive relationship with TotalMAIA scores. Specifically, CSKindness is associated with an increase in TotalMAIA scores ($B = 1.090$, $p = .016$), and CSMind shows a stronger positive association ($B = 1.659$, $p = .002$). In contrast, CSIndiff, representing indifference, is negatively associated with TotalMAIA scores ($B = -.960$, $p = .000$), suggesting that higher levels of indifference correlate with lower mindfulness awareness.

Aesthetic experience, as measured by AESTime and AESConnec, also exhibits a significant positive relationship with TotalMAIA scores. AESTime ($B = .446$, $p = .028$) and AESConnec ($B = .454$, $p = .030$) both contribute positively to mindfulness awareness, indicating the beneficial role of aesthetic experience in enhancing mindfulness.

Coefficients^a

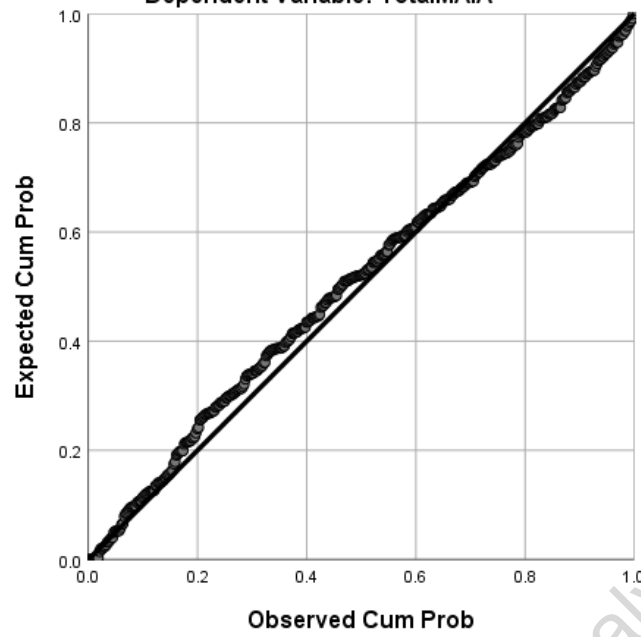
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	34.493	7.709		4.474	.000
	CSKindness	1.090	.449	.154	2.425	.016
	CSComHum	-.079	.400	-.010	-.197	.844
	CSMind	1.659	.534	.208	3.106	.002
	CSIndiff	-.960	.239	-.181	-4.019	.000
	AESTime	.446	.202	.133	2.209	.028
	AESselfdim	.129	.166	.042	.775	.439
	AESConnec	.454	.208	.146	2.181	.030
	AESVast	-.013	.215	-.004	-.060	.952
	AESPhys	-.150	.179	-.050	-.842	.400
	AESAccom	.100	.193	.031	.520	.603
	BodyAES	.081	.486	.006	.166	.868
	25-40	1.742	3.145	.040	.554	.580
	41-55	3.988	3.365	.084	1.185	.237
	55-70	6.845	3.571	.124	1.917	.056
	> 70	7.436	5.711	.057	1.302	.194
	Man	.992	1.733	.023	.573	.567
	Non-binary	-.476	8.513	-.002	-.056	.955
	Yes	11.147	2.294	.258	4.860	.000
	Somewhat	5.830	2.453	.120	2.377	.018
	American Indian	9.213	6.837	.051	1.347	.179
	Asian American	-3.789	2.303	-.065	-1.645	.101
	Black	5.217	3.534	.056	1.476	.141
	Hispanic	3.490	3.156	.044	1.106	.269
	Multi Ethnicity	4.103	3.706	.043	1.107	.269

a. Dependent Variable: TotalMAIA

The residual plots below suggest that all residual assumptions were not violated. The P-P plot shows a diagonal pattern and the scatterplot shows a well-dispersed pattern.

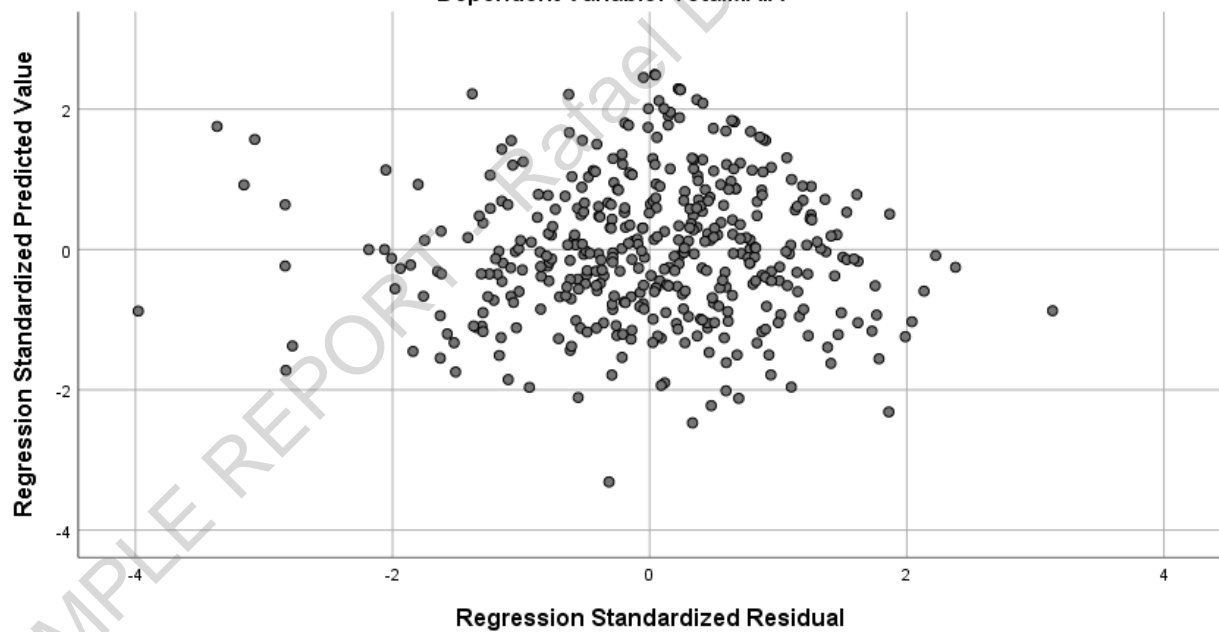
Normal P-P Plot of Regression Standardized Residual

Dependent Variable: TotalMAIA



Scatterplot

Dependent Variable: TotalMAIA



Regression Model for HFS and TGS

The model's R square value of .404 indicates that approximately 40.4% of the variance in TotalMAIA scores can be explained by the included predictors.

Model Summary^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.636 ^a	.404	.373	16.993

a. Predictors: (Constant), Multi Ethnicity, 41-55, Black, BodyTGS, Somewhat, HFSSitua, Hispanic, > 70, American Indian, Man, TGSSpirit, Asian American, BodyHFS, HFSOther, 25-40, TGSExpress, HFSSelf, Yes, TGSTransc, TGSValue

b. Dependent Variable: TotalMAIA

Significantly, the model identifies spiritual practice engagement ('Yes') as a potent predictor of higher TotalMAIA scores, with a substantial positive coefficient ($B = 14.890$, $p < .000$). This underscores the strong link between spiritual practices and enhanced mindfulness awareness. Similarly, somewhat engaging in spiritual practices also shows a positive association with TotalMAIA scores ($B = 7.957$, $p = .004$), though the impact is less pronounced than full engagement.

Among the TGS components, TGSValue stands out with a significant positive association with TotalMAIA scores ($B = 2.790$, $p < .000$), indicating that valuing transcendent aspects of gratitude is closely linked to higher mindfulness awareness. This highlights the integral role of gratitude, especially the value placed on gratitude, in cultivating mindfulness.

Race emerges as a significant variable, with Asian Americans showing a negative association with TotalMAIA scores ($B = -8.821$, $p < .000$), suggesting lower mindfulness awareness in this group compared to the reference category. Conversely, Black participants exhibit a positive association ($B = 13.789$, $p < .000$), indicating higher mindfulness awareness levels within this demographic.

Other variables related to humility from suffering (HFSSelf, HFSOther, HFSSitua) and additional aspects of transcendent gratitude (TGSExpress, TGSTransc, TGSSpirit) did not demonstrate significant relationships with TotalMAIA scores, as indicated by their p-values exceeding the conventional threshold for significance.

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	28.705	6.992		4.105	.000
	HFSSelf	.166	.202	.046	.824	.410
	HFSOther	-.077	.185	-.023	-.414	.679
	HFSSitua	.165	.220	.046	.750	.454

BodyHFS	-.008	.593	-.001	-.013	.990
TGSExpress	-.023	.375	-.004	-.063	.950
TGSValue	2.790	.422	.512	6.617	.000
TGSTransc	.234	.425	.042	.550	.583
TGSSpirit	-.300	.246	-.074	-1.219	.224
BodyTGS	.742	.599	.055	1.239	.216
25-40	2.126	2.381	.048	.893	.372
41-55	.670	2.397	.015	.279	.780
> 70	2.293	5.568	.017	.412	.681
Man	-1.366	1.814	-.032	-.753	.452
Yes	14.890	2.449	.344	6.079	.000
Somewhat	7.957	2.749	.160	2.894	.004
American Indian	-6.358	6.295	-.041	-1.010	.313
Asian American	-8.821	1.992	-.192	-4.427	.000
Black	13.789	3.647	.155	3.781	.000
Hispanic	-.366	3.509	-.004	-.104	.917
Multi Ethnicity	2.235	4.272	.021	.523	.601

a. Dependent Variable: TotalMAIA

Similar to the previous model, the residual plots suggest no violations of linearity, homoscedasticity or normality of residuals.

