In my Data Analytics class, we were asked to pull data from the *EVE Online* Forums and run a causal mediation analysis for a given dependent variable, to then develop a sales pitch where we interpret our findings and make a recommendation to the developers. My group’s dependent variable was **social,** which we mediated with related terms found on the forums and used regression to interpret the findings in R. Below are some of the results of the regression models that we found useful towards making our recommendation.

Average Causal Mediation Effects (ACME)

Average Direct Effect (ADE)

Prop. Mediated (ACME/ Total Effect)

social, family, relig, netspeak

* Low: ACME .0014, ADE -.0271, Prop Mediated -.0542
* High: ACME .0014, ADE -0.271, Prop Mediated -0.542

social, family, relig, informal

* Low: ACME .0015, ADE .0156, Prop Mediated .087
* High: ACME .0021, ADE .0009, Prop Mediated .6990, p values 2e-16, .8, .6

social, family, relig, posemo

* Low: ACME .0017, ADE -.0333, Prop Mediated -.05318
* High: ACME .0024, ADE -0.452, Prop Mediated -.0563

**Social, Family, Relig, Affiliation**

Good mediation effect

Total effect changes from *-.06* to *-.08*, a *33%* increase from moderation

* Low: ACME -.0260, ADE -.0409, Prop Mediated .3890
* High: ACME -.0372, ADE -.0503, Prop Mediated .4249

social, family, money, netspeak

* Low: ACME .0005, ADE -.0136, Prop Mediated -.0411
* High: ACME .0009, ADE -0.218, Prop Mediated -.0451

social, family, money, informal

* Low: ACME .0006, ADE -.0191, Prop Mediated -.0305
* High: ACME .0010, ADE -.0291, Prop Mediated -.0354

social, family, money, posemo

* Low: ACME .0006, ADE -.0271, Prop Mediated -.0244
* High: ACME .0011 ADE -.0308, Prop Mediated -.0383

**Social, Family, Money, Affiliation**

Good mediation effect

*16%* increase in total effect from moderation

P value is *.2* on estimates, but normal for prop mediated

Estimates are also relatively small at between 2% and 3% of a standard deviation

* Low: ACME -.0100, ADE -.0165, Prop Mediated .3774
* High: ACME -.0175, ADE -.0133, Prop Mediated .5679

social, family, leisure, netspeak

* Low: ACME -.0227, ADE 0.4525, Prop Mediated -0.528
* High: ACME -.0201, ADE .4, Prop Mediated -.0529

social, family, leisure, informal

* Low: ACME -.0229, ADE .4473, Prop Mediated -.0540
* High: ACME -.0203, ADE .3941, Prop Mediated -.0542

social, family, leisure, posemo

* Low: ACME -0.266, ADE .4402, Prop Mediated -.0643
* High: ACME -.0235, ADE .3893, Prop Mediated -.0644

**Social, Family, Leisure, Affiliation**

Very high mediation

Moderation from low to high causes an *18%* *decrease* in total effect but an *8.5%* *increase* in prop mediated

* Low: ACME .4193, ADE 0.813, Prop Mediated .8376
* High: ACME .3711, ADE .0372, Prop Mediated .9090

social, family, achieve, netspeak

* Low: ACME -.0018, ADE .0333, Prop Mediated -.0560
* High: ACME -.0025, ADE .0481, Prop Mediated -.0554

social, family, achieve, informal

* Low: ACME -.0019, ADE .0282, Prop Mediated -.0707
* High: ACME -.0027, ADE .0413, Prop Mediated -.0690

social, family, achieve, posemo

* Low: ACME -.0022, ADE .0380, Prop Mediated -.0602
* High: ACME -.0031, ADE .0515, Prop Mediated -.0637

social, family, achieve, affiliation

* Low: ACME .0333, ADE .0123, Prop Mediated .7310
* High: ACME .0476, ADE .0349, Prop Mediated .5769

social, family, sexual, netspeak

* Low: ACME -.0065, ADE .1286, Prop Mediated -.0531
* High: ACME -.0057, ADE .1126, Prop Mediated -.0529

social, family, sexual, informal

* Low: ACME -.0069, ADE .1441, Prop Mediated -.0501
* High: ACME -.0060, ADE .1241, Prop Mediated -.0501

social, family, sexual, posemo

* Low: ACME -.0078, ADE .1304, Prop Mediated -.0638
* High: ACME -.0068, ADE .1124, Prop Mediated -.0647

social, family, sexual, affiliation

* Low: ACME .1210, ADE .0340, Prop Mediated .7808
* High: ACME .1056, ADE .0795, Prop Mediated .5706

social, family, health, netspeak

* Low: ACME -.0014, ADE .0271, Prop Mediated -.0548, p-values 0.4
* High: ACME -.0021, ADE .0401, Prop Mediated -.0549

social, family, health, informal

* Low: ACME -.0015, ADE .0247, Prop Mediated -.0639
* High: ACME -.0022, ADE .0349, Prop Mediated -.0672

social, family, health, posemo

* Low: ACME -.0017, ADE .0116, Prop Mediated -.1723
* High: Acme -.0025, ADE .0239, Prop mediated -.1179

social, family, health, affiliation

* Low: ACME .0263, ADE .0090, Prop Mediated .7450, p value 0.6
* High: ACME .0389, ADE .0512, Prop Mediated .4319

social, family, body, netspeak

* Low: ACME -.0007, ADE .0124, Prop Mediated -.0614, p value 1
* High: ACME -.0011, ADE .0214, Prop Mediated -.0523

social, family, body, informal

* Low: ACME .0008, ADE .0180, Prop Mediated -.0441 p value 0.8
* High: ACME .0011, ADE .0269, Prop Mediated -.0436

social, family, body, posemo

* Low: ACME -.0009, ADE -.0004, Prop Mediated .7094, p values .8, 1, .2
* High: ACME -.0013, ADE .0085, Prop Mediated -.1778

social, family, body, affiliation

* Low: ACME .0134, ADE .0264, Prop Mediated .3378, p values 0.4, 0.2, 0.2
* High: ACME .0199, ADE .0513, Prop Mediated .2792

social, family, bio, netspeak

* Low: ACME -.0072, ADE .1440, Prop Mediated -.0528
* High: ACME -.0072, ADE .1444, Prop Mediated -.0526

social, family, bio, informal

* Low: ACME -.0077, ADE .1464, Prop Mediated -.0556
* High: ACME 0.0077, ADE .1453, Prop Mediated -.0560

social, family, bio, posemo

* Low: ACME -.0088, ADE .1439, Prop Mediated -.0649
* High: ACME -.0088 ADE .1450, Prop Mediated -.0644

social, family, bio, affiliation

* Low: ACME .1354, ADE .0143, Prop Mediated .9042
* High: ACME .1353, ADE .0430, Prop Mediated .7590

social, work, relig, netspeak

* Low: ACME .0011, ADE -.0227, Prop Mediated -.0518
* High: ACME -.0007 ADE .0135, Prop Mediated -.0507

social, work, relig, informal

* Low: ACME .0011, ADE .0178, Prop Mediated .0597
* High: ACME -.0007, ADE .0432, Prop Mediated -.0154

social, work, relig, posemo

* Low: ACME .0014, ADE -.0296, Prop Mediated -.0501
* High: ACME -.0008, ADE .0077, Prop Mediated -.1189

social, work, relig, affiliation

* Low: ACME -.0225, ADE -.0493, Prop Mediated .3134
* High: ACME .0131, ADE -.0041, Prop Mediated 1.4632

social, work, money, netspeak

* Low: ACME 0.00163, ADE -0.03694, Prop Mediated -0.04614
* High: ACME 0.00166, ADE - 0.03666, Prop Mediated -0.04737

social, work, money, informal

* Low: ACME 0.001623, ADE -0.043311, Prop Mediated -0.038939
* High: ACME 0.00165, ADE - 0.04085, Prop Mediated -0.04214

social, work, money, posemo

* Low: ACME 0.00205, ADE -0.04867, Prop Mediated -0.04399
* High: ACME 0.00209, ADE - 0.04515, Prop Mediated -0.04847

social, work, money, affiliation

* Low: ACME -0.0326, ADE -0.0173, Prop Mediated 0.6537
* High: ACME -0.0331, ADE - 0.0272, Prop Mediated 0.5494

social, work, leisure, netspeak

* Low: ACME -0.0205, ADE -0.4260, Prop Mediated -0.0505
* High: ACME -0.0204, ADE 0.4242, Prop Mediated -0.0505

social, work, leisure, informal

* Low: ACME -0.0194, ADE 0.4203, Prop Mediated -0.0484
* High: ACME -0.0193, ADE 0.4202, Prop Mediated -0.0481

social, work, leisure, posemo

* Low: ACME -0.0250, ADE 0.4132, Prop Mediated -0.0645
* High: ACME -0.0249, ADE 0.4147, Prop Mediated -0.0639

social, work, leisure, affiliation

* Low: ACME .4070, ADE .0613, Prop Mediated .8691
* High: ACME .4051, ADE .0345, Prop Mediated .9215