[1] "Loading the list of 10 model-ready datasets..."

[1] "Preparing data..."

[1] "Data preparation complete."

[1] "Running analysis for each of the 10 plausible values..."

[1] "Analysis complete. Pooling results..."

[1] "=================================================="

[1] " RESULTS FOR MODEL 1 (using `survey` package) "

[1] "=================================================="

Multiple imputation results:

MIcombine.default(list\_of\_models)

results se (lower

(Intercept) -1.820358566 0.339199070 -2.489029967

c.ESCS 0.309789572 0.161857525 -0.010948803

c.AGE 0.211075355 0.288059310 -0.365003359

c.BSMJ 0.001159461 0.004860842 -0.008450414

FEMALE1 -0.867267576 0.127366351 -1.118692200

ISCEDP344 1.296186031 0.265579276 0.764645724

ISCEDP354 1.918965448 0.379330045 1.159207579

IMMIG2 0.343770094 0.204561121 -0.064359125

IMMIG3 0.064303658 0.196221205 -0.324217158

OCOD3\_major\_group1 0.025924895 0.515755099 -1.008411113

OCOD3\_major\_group2 0.210196308 0.172338455 -0.130173833

OCOD3\_major\_group3 -0.580618896 0.274101128 -1.126730686

OCOD3\_major\_group4 1.245668147 0.636513352 -0.025921279

OCOD3\_major\_group5 -0.534117721 0.305083437 -1.147079263

OCOD3\_major\_group6 -4.404932175 4.856527752 -15.282451181

OCOD3\_major\_group7 -0.862012475 0.301846515 -1.461135180

OCOD3\_major\_group8 -2.302664851 0.719589966 -3.733044886

OCOD3\_major\_group9 0.124136081 0.416493174 -0.707604827

c.ESCS\_sch\_mean -0.203681262 0.305951318 -0.804766520

c.AGE\_sch\_mean -0.418469539 0.668539838 -1.742897478

c.BSMJ\_sch\_mean 0.007426649 0.008395809 -0.009395023

CNTARG -0.711829143 0.304926529 -1.311462759

CNTAUS 0.058712356 0.330464963 -0.591622704

CNTAUT -1.890567732 0.306546707 -2.493232165

CNTBEL -2.004316731 0.433688537 -2.855685861

CNTBGR -1.524637599 0.361586606 -2.236370693

CNTBRA -0.787225364 0.261078466 -1.299754159

CNTBRN -1.122276070 0.270691173 -1.653465654

CNTCAN -0.761354503 0.210113190 -1.176399787

CNTKHM 0.255628786 0.214401795 -0.165481627

CNTQAZ -0.061802538 0.394779777 -0.848302341

upper) missInfo

(Intercept) -1.15168716 21 %

c.ESCS 0.63052795 30 %

c.AGE 0.78715407 40 %

c.BSMJ 0.01076934 26 %

FEMALE1 -0.61584295 24 %

ISCEDP344 1.82772634 41 %

ISCEDP354 2.67872332 42 %

IMMIG2 0.75189931 38 %

IMMIG3 0.45282447 29 %

OCOD3\_major\_group1 1.06026090 43 %

OCOD3\_major\_group2 0.55056645 25 %

OCOD3\_major\_group3 -0.03450711 36 %

OCOD3\_major\_group4 2.51725757 39 %

OCOD3\_major\_group5 0.07884382 45 %

OCOD3\_major\_group6 6.47258683 97 %

OCOD3\_major\_group7 -0.26288977 32 %

OCOD3\_major\_group8 -0.87228482 34 %

OCOD3\_major\_group9 0.95587699 39 %

c.ESCS\_sch\_mean 0.39740400 14 %

c.AGE\_sch\_mean 0.90595840 29 %

c.BSMJ\_sch\_mean 0.02424832 42 %

CNTARG -0.11219553 16 %

CNTAUS 0.70904742 18 %

CNTAUT -1.28790330 16 %

CNTBEL -1.15294760 11 %

CNTBGR -0.81290450 18 %

CNTBRA -0.27469657 11 %

CNTBRN -0.59108649 10 %

CNTCAN -0.34630922 25 %

CNTKHM 0.67673920 13 %

CNTQAZ 0.72469727 36 %

[1] "=================================================="

MODEL2

[1] "Loading the list of 10 model-ready datasets..."

[1] "Preparing data..."

[1] "Data preparation complete."

[1] "SUCCESS: All variables in the formula were found in the dataset."

[1] "Running analysis for Model 2 for each of the 10 plausible values..."

[1] "=================================================="

[1] " RESULTS FOR MODEL 2 (Psychological Factors) "

[1] "=================================================="

Multiple imputation results:

MIcombine.default(list\_of\_models\_M2)

results se (lower

(Intercept) -1.5848264072 0.358163343 -2.292196389

c.ESCS 0.2883292236 0.175771896 -0.060498883

c.AGE 0.1619456871 0.301469419 -0.440923709

c.BSMJ -0.0008605338 0.004936764 -0.010608190

FEMALE1 -0.9198434057 0.133650036 -1.183520546

ISCEDP344 1.1875629171 0.282952104 0.620383384

ISCEDP354 1.8378660902 0.393768240 1.045575616

IMMIG2 0.3213553519 0.208268533 -0.094207310

IMMIG3 -0.0252054048 0.206383269 -0.433970948

OCOD3\_major\_group1 0.0394631290 0.523935246 -1.014301316

OCOD3\_major\_group2 0.2349323120 0.171237542 -0.102754928

OCOD3\_major\_group3 -0.5580632574 0.273498536 -1.098969906

OCOD3\_major\_group4 1.1541227727 0.666309556 -0.176457245

OCOD3\_major\_group5 -0.5579094432 0.318302788 -1.197663929

OCOD3\_major\_group6 -4.5097809531 4.877844694 -15.411931587

OCOD3\_major\_group7 -0.7939815829 0.310446735 -1.410563550

OCOD3\_major\_group8 -2.1926891177 0.688153925 -3.548709952

OCOD3\_major\_group9 0.2173823742 0.418594237 -0.617592384

c.ESCS\_sch\_mean -0.2504724119 0.313559284 -0.866065906

c.AGE\_sch\_mean -0.4705735957 0.675833439 -1.810897461

c.BSMJ\_sch\_mean 0.0076100991 0.008677401 -0.009735411

CNTARG -0.7147568517 0.323477699 -1.352120614

CNTAUS -0.1047468863 0.348378184 -0.790296658

CNTAUT -1.9429235999 0.311277672 -2.555086243

CNTBEL -2.0187404480 0.451845520 -2.905858323

CNTBGR -1.6124270023 0.390159397 -2.382103677

CNTBRA -0.8243438698 0.272561458 -1.359968704

CNTBRN -1.1256165083 0.288768721 -1.693186679

CNTCAN -0.8374501459 0.253912251 -1.341697074

CNTKHM 0.1798585950 0.234733016 -0.282080669

CNTQAZ -0.0428598524 0.431708220 -0.906332627

c.EXPECEDU 0.0857287931 0.034181335 0.017909938

c.SISCO -0.0446601463 0.504159697 -1.050825116

Math\_Disposition\_RC1 0.0816133819 0.070314650 -0.057437236

Math\_Disposition\_RC2 -0.0425261198 0.073112538 -0.186537221

Social\_Emotional\_Skills\_RC1 0.0788939058 0.090983021 -0.103867513

Social\_Emotional\_Skills\_RC2 -0.0386672423 0.079887385 -0.197332461

Openness\_Creativity\_PC1 -0.0167473442 0.083266371 -0.181067846

Self\_Directed\_Learning\_PC1 -0.0696150157 0.069232833 -0.205937530

upper) missInfo

(Intercept) -0.877456425 25 %

c.ESCS 0.637157330 32 %

c.AGE 0.764815084 40 %

c.BSMJ 0.008887122 24 %

FEMALE1 -0.656166265 23 %

ISCEDP344 1.754742450 43 %

ISCEDP354 2.630156565 46 %

IMMIG2 0.736918014 38 %

IMMIG3 0.383560138 29 %

OCOD3\_major\_group1 1.093227573 46 %

OCOD3\_major\_group2 0.572619552 22 %

OCOD3\_major\_group3 -0.017156609 27 %

OCOD3\_major\_group4 2.484702791 39 %

OCOD3\_major\_group5 0.081845042 45 %

OCOD3\_major\_group6 6.392369681 97 %

OCOD3\_major\_group7 -0.177399616 33 %

OCOD3\_major\_group8 -0.836668284 21 %

OCOD3\_major\_group9 1.052357132 38 %

c.ESCS\_sch\_mean 0.365121083 11 %

c.AGE\_sch\_mean 0.869750270 31 %

c.BSMJ\_sch\_mean 0.024955609 40 %

CNTARG -0.077393089 20 %

CNTAUS 0.580802886 18 %

CNTAUT -1.330760957 16 %

CNTBEL -1.131622573 12 %

CNTBGR -0.842750328 23 %

CNTBRA -0.288719035 14 %

CNTBRN -0.558046338 15 %

CNTCAN -0.333203218 33 %

CNTKHM 0.641797859 18 %

CNTQAZ 0.820612922 41 %

c.EXPECEDU 0.153547648 31 %

c.SISCO 0.961504823 38 %

Math\_Disposition\_RC1 0.220664000 27 %

Math\_Disposition\_RC2 0.101484982 20 %

Social\_Emotional\_Skills\_RC1 0.261655324 45 %

Social\_Emotional\_Skills\_RC2 0.119997976 33 %

Openness\_Creativity\_PC1 0.147573157 23 %

Self\_Directed\_Learning\_PC1 0.066707499 19 %

[1] "=================================================="

Model 3

[1] "Loading the list of 10 model-ready datasets..."

[1] "Preparing data..."

[1] "Data preparation complete."

[1] "SUCCESS: All variables in the formula were found in the dataset."

[1] "Running analysis for Model 3 for each of the 10 plausible values..."

[1] "=================================================="

[1] " RESULTS FOR MODEL 3 (Engagement Variables) "

[1] "=================================================="

Multiple imputation results:

MIcombine.default(list\_of\_models\_M3)

results se (lower

(Intercept) -0.596233072 0.536584778 -1.659511883

c.ESCS 0.172930520 0.204704176 -0.233169759

c.AGE 0.548735115 0.393044358 -0.247286420

c.BSMJ -0.001964676 0.006611886 -0.015048886

FEMALE1 -1.177074500 0.180023050 -1.533623048

ISCEDP344 0.687714205 0.426607666 -0.175621136

ISCEDP354 1.383886575 0.585418755 0.209533361

IMMIG2 0.353687297 0.246182246 -0.136568705

IMMIG3 0.015104805 0.212827058 -0.404266139

OCOD3\_major\_group1 0.427724677 0.637910890 -0.845731849

OCOD3\_major\_group2 0.448132620 0.229590041 -0.005477651

OCOD3\_major\_group3 -0.299782281 0.344511828 -0.981060021

OCOD3\_major\_group4 1.368599102 0.846348139 -0.317018430

OCOD3\_major\_group5 -0.377472130 0.381303533 -1.142651693

OCOD3\_major\_group6 -8.435514099 6.326227318 -22.613727551

OCOD3\_major\_group7 -0.653711308 0.377395296 -1.401234019

OCOD3\_major\_group8 -1.805429724 0.816345844 -3.413563744

OCOD3\_major\_group9 -0.005037544 0.668252836 -1.328926140

c.ESCS\_sch\_mean -0.081530527 0.367706831 -0.804330601

c.AGE\_sch\_mean -0.183271553 0.792545925 -1.761122575

c.BSMJ\_sch\_mean 0.007302076 0.009838865 -0.012254682

CNTARG -0.685854974 0.440351282 -1.555635577

CNTAUS -0.635787165 0.484146359 -1.604163756

CNTBEL -1.773396228 0.578364722 -2.912029410

CNTBGR -1.514956695 0.535341657 -2.580697036

CNTBRA -0.764015948 0.370529915 -1.498326743

CNTBRN -1.386989221 0.417150933 -2.210017912

CNTCAN -0.993793418 0.341378847 -1.672252164

CNTQAZ 0.297384783 0.617539651 -0.940146452

c.EXPECEDU 0.068750940 0.046612002 -0.023517505

c.SISCO 0.422493701 0.669752544 -0.932479831

Math\_Disposition\_RC1 0.106457179 0.084939142 -0.061796848

Math\_Disposition\_RC2 0.071935851 0.083307913 -0.092064083

Social\_Emotional\_Skills\_RC1 0.135189774 0.087185908 -0.037490571

Social\_Emotional\_Skills\_RC2 -0.048632225 0.096394680 -0.240740534

Openness\_Creativity\_PC1 -0.081295825 0.100037680 -0.279407462

Self\_Directed\_Learning\_PC1 -0.079277338 0.081727942 -0.240487420

REPEAT1 -1.137524131 0.543912379 -2.208934182

MISSSC1 -0.500029075 0.494752075 -1.507519561

SKIPPING1 -0.003882258 0.203035141 -0.405851946

TARDYSD1 -0.192925390 0.213889818 -0.621367851

TARDYSD2 -0.415881815 0.304721417 -1.021599069

EXERPRAC -0.013444692 0.029661408 -0.072440393

STUDYHMW 0.007862837 0.030611807 -0.052844736

WORKPAY -0.076136746 0.038866916 -0.153110427

WORKHOME -0.034856478 0.025670536 -0.085685802

INFOSEEK 0.021054904 0.072396486 -0.121174307

EXPOFA 0.064704909 0.096535706 -0.126554730

EXPO21ST -0.007797177 0.114565576 -0.239179626

CREATAS -0.069764986 0.105409378 -0.277090337

CREATOOS -0.196276550 0.111418981 -0.415111053

upper) missInfo

(Intercept) 0.4670457380 30 %

c.ESCS 0.5790307986 31 %

c.AGE 1.3447566504 52 %

c.BSMJ 0.0111195337 28 %

FEMALE1 -0.8205259524 29 %

ISCEDP344 1.5510495468 51 %

ISCEDP354 2.5582397894 43 %

IMMIG2 0.8439432985 36 %

IMMIG3 0.4344757492 21 %

OCOD3\_major\_group1 1.7011812036 39 %

OCOD3\_major\_group2 0.9017428917 25 %

OCOD3\_major\_group3 0.3814954580 27 %

OCOD3\_major\_group4 3.0542166346 36 %

OCOD3\_major\_group5 0.3877074320 44 %

OCOD3\_major\_group6 5.7426993524 97 %

OCOD3\_major\_group7 0.0938114028 29 %

OCOD3\_major\_group8 -0.1972957037 20 %

OCOD3\_major\_group9 1.3188510532 29 %

c.ESCS\_sch\_mean 0.6412695471 15 %

c.AGE\_sch\_mean 1.3945794692 36 %

c.BSMJ\_sch\_mean 0.0268588343 34 %

CNTARG 0.1839256284 25 %

CNTAUS 0.3325894261 41 %

CNTBEL -0.6347630468 19 %

CNTBGR -0.4492163547 36 %

CNTBRA -0.0297051534 30 %

CNTBRN -0.5639605308 23 %

CNTCAN -0.3153346711 34 %

CNTQAZ 1.5349160183 42 %

c.EXPECEDU 0.1610193844 28 %

c.SISCO 1.7774672327 51 %

Math\_Disposition\_RC1 0.2747112050 29 %

Math\_Disposition\_RC2 0.2359357845 19 %

Social\_Emotional\_Skills\_RC1 0.3078701195 29 %

Social\_Emotional\_Skills\_RC2 0.1434760845 37 %

Openness\_Creativity\_PC1 0.1168158121 29 %

Self\_Directed\_Learning\_PC1 0.0819327441 23 %

REPEAT1 -0.0661140792 20 %

MISSSC1 0.5074614112 56 %

SKIPPING1 0.3980874294 28 %

TARDYSD1 0.2355170720 42 %

TARDYSD2 0.1898354397 34 %

EXERPRAC 0.0455510092 34 %

STUDYHMW 0.0685704093 31 %

WORKPAY 0.0008369351 29 %

WORKHOME 0.0159728464 29 %

INFOSEEK 0.1632841153 14 %

EXPOFA 0.2559645481 29 %

EXPO21ST 0.2235852708 49 %

CREATAS 0.1375603644 17 %

CREATOOS 0.0225579523 13 %

[1] "=================================================="

Model 4

[1] "Loading the list of 10 model-ready datasets..."

[1] "Preparing data..."

[1] "Data preparation complete."

[1] "SUCCESS: All variables in the formula were found in the dataset."

[1] "Running analysis for Model 4 for each of the 10 plausible values..."

[1] "=================================================="

[1] " RESULTS FOR MODEL 4 (Teacher & Home Environment Variables) "

[1] "=================================================="

Multiple imputation results:

MIcombine.default(list\_of\_models\_M4)

results se (lower

(Intercept) -0.613299300 0.537391260 -1.678734786

c.ESCS 0.181188290 0.202215371 -0.219973245

c.AGE 0.538590203 0.391879979 -0.255133310

c.BSMJ -0.002248679 0.006572963 -0.015250408

FEMALE1 -1.179345911 0.179002110 -1.533173661

ISCEDP344 0.694232008 0.430776029 -0.178019406

ISCEDP354 1.395078934 0.588764672 0.213166879

IMMIG2 0.353557690 0.248684330 -0.141562748

IMMIG3 0.018054433 0.213306112 -0.402143408

OCOD3\_major\_group1 0.455420050 0.649427218 -0.842709597

OCOD3\_major\_group2 0.452833551 0.231523917 -0.004492762

OCOD3\_major\_group3 -0.305725194 0.346490274 -0.991140006

OCOD3\_major\_group4 1.366716521 0.852916770 -0.329263946

OCOD3\_major\_group5 -0.385534089 0.381220972 -1.150670767

OCOD3\_major\_group6 -8.431688881 6.318554919 -22.593540247

OCOD3\_major\_group7 -0.659781459 0.378215465 -1.409080384

OCOD3\_major\_group8 -1.786140817 0.815247294 -3.392089354

OCOD3\_major\_group9 -0.028775468 0.667130820 -1.350992248

c.ESCS\_sch\_mean -0.094573387 0.368924695 -0.820211663

c.AGE\_sch\_mean -0.185899008 0.791303397 -1.761366083

c.BSMJ\_sch\_mean 0.007732625 0.009901679 -0.011959931

CNTARG -0.668575187 0.443530803 -1.545510588

CNTAUS -0.618227222 0.488517558 -1.596360216

CNTBEL -1.687318457 0.569756264 -2.807881979

CNTBGR -1.528508644 0.538510025 -2.599215496

CNTBRA -0.754697838 0.373623230 -1.496109039

CNTBRN -1.375021434 0.419283682 -2.201992758

CNTCAN -0.992069554 0.341254315 -1.668549259

CNTQAZ 0.372338300 0.633026577 -0.898833020

c.EXPECEDU 0.068626186 0.046636475 -0.023673264

c.SISCO 0.389472350 0.665893471 -0.956589225

Math\_Disposition\_RC1 0.096327695 0.088643585 -0.079124000

Math\_Disposition\_RC2 0.059332310 0.087374841 -0.112710176

Social\_Emotional\_Skills\_RC1 0.127153523 0.093580924 -0.058352806

Social\_Emotional\_Skills\_RC2 -0.049326855 0.097470094 -0.243887866

Openness\_Creativity\_PC1 -0.106326900 0.102390651 -0.309378731

Self\_Directed\_Learning\_PC1 -0.086770788 0.088188719 -0.261536400

REPEAT1 -1.132693751 0.549103672 -2.214368651

MISSSC1 -0.494802081 0.494777662 -1.502610692

SKIPPING1 0.002813116 0.202488736 -0.398065082

TARDYSD1 -0.198947339 0.215796272 -0.631619905

TARDYSD2 -0.418942547 0.300801803 -1.016417416

EXERPRAC -0.013717567 0.030015096 -0.073500533

STUDYHMW 0.007137532 0.031009717 -0.054382582

WORKPAY -0.076076441 0.038256553 -0.151904110

WORKHOME -0.035060214 0.025676116 -0.085875488

INFOSEEK 0.024471465 0.071395600 -0.115725967

EXPOFA 0.059613614 0.097309550 -0.133260509

EXPO21ST -0.011166385 0.114215853 -0.241903846

CREATAS -0.069875773 0.106342719 -0.279145375

CREATOOS -0.194825431 0.111589496 -0.413983077

Teacher\_Classroom\_Exp\_RC1 -0.024327987 0.096288038 -0.213930876

Teacher\_Classroom\_Exp\_RC2 0.081256462 0.088025340 -0.091808769

Home\_Learning\_Env\_PC1 0.058495823 0.116207013 -0.172341730

Remote\_Learning\_Exp\_PC1 0.021274801 0.129120130 -0.241744613

upper) missInfo

(Intercept) 0.452136185 30 %

c.ESCS 0.582349826 31 %

c.AGE 1.332313716 52 %

c.BSMJ 0.010753051 27 %

FEMALE1 -0.825518161 26 %

ISCEDP344 1.566483422 51 %

ISCEDP354 2.576990990 44 %

IMMIG2 0.848678128 36 %

IMMIG3 0.438252275 20 %

OCOD3\_major\_group1 1.753549697 40 %

OCOD3\_major\_group2 0.910159864 25 %

OCOD3\_major\_group3 0.379689617 27 %

OCOD3\_major\_group4 3.062696988 34 %

OCOD3\_major\_group5 0.379602588 44 %

OCOD3\_major\_group6 5.730162486 97 %

OCOD3\_major\_group7 0.089517465 29 %

OCOD3\_major\_group8 -0.180192279 20 %

OCOD3\_major\_group9 1.293441312 30 %

c.ESCS\_sch\_mean 0.631064889 17 %

c.AGE\_sch\_mean 1.389568066 36 %

c.BSMJ\_sch\_mean 0.027425180 34 %

CNTARG 0.208360214 26 %

CNTAUS 0.359905773 42 %

CNTBEL -0.566754934 16 %

CNTBGR -0.457801792 34 %

CNTBRA -0.013286637 32 %

CNTBRN -0.548050111 22 %

CNTCAN -0.315589850 30 %

CNTQAZ 1.643509619 44 %

c.EXPECEDU 0.160925636 28 %

c.SISCO 1.735533924 50 %

Math\_Disposition\_RC1 0.271779389 28 %

Math\_Disposition\_RC2 0.231374795 19 %

Social\_Emotional\_Skills\_RC1 0.312659852 30 %

Social\_Emotional\_Skills\_RC2 0.145234156 39 %

Openness\_Creativity\_PC1 0.096724932 31 %

Self\_Directed\_Learning\_PC1 0.087994823 30 %

REPEAT1 -0.051018852 20 %

MISSSC1 0.513006530 56 %

SKIPPING1 0.403691313 28 %

TARDYSD1 0.233725227 43 %

TARDYSD2 0.178532321 33 %

EXERPRAC 0.046065398 36 %

STUDYHMW 0.068657645 31 %

WORKPAY -0.000248771 30 %

WORKHOME 0.015755059 28 %

INFOSEEK 0.164668897 12 %

EXPOFA 0.252487738 30 %

EXPO21ST 0.219571076 50 %

CREATAS 0.139393830 18 %

CREATOOS 0.024332214 13 %

Teacher\_Classroom\_Exp\_RC1 0.165274902 19 %

Teacher\_Classroom\_Exp\_RC2 0.254321692 16 %

Home\_Learning\_Env\_PC1 0.289333375 33 %

Remote\_Learning\_Exp\_PC1 0.284294214 56 %

[1] "=================================================="