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*************************************************************************************************************
*********ANALYSIS SYNTAX TO COMPUTE SCHOOL PERFORMANCE INDEX**************
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REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT ITBS_read
  /METHOD=ENTER edattain_HS_9899 edattain_BA_9899 house_inc9899 pct_married_9899
spct_black spct_hisp dcepp spctFRL
  sch_enroll d_enroll
  /SAVE PRED RESID .

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT ITBS_math
  /METHOD=ENTER edattain_HS_9899 edattain_BA_9899 house_inc9899 pct_married_9899
spct_black spct_hisp dcepp spctFRL
  sch_enroll d_enroll
  /SAVE PRED RESID .

COMPUTE SPIr_04 = (ITBS_read / PRE_1)*100 .
VARIABLE LABELS SPIr_04 'school performance index reading 2004 (actual over predicted)' .
EXECUTE .

COMPUTE SPIm_04 = (ITBS_math / PRE_2)*100 .
VARIABLE LABELS SPIm_04 'school performance index math 2004 (actual over predicted)' .
EXECUTE .

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT g11lit_ss_0405
  /METHOD=ENTER edattain_HS_9899 edattain_BA_9899 house_inc9899 pct_married_9899
sch_enroll d_enroll spct_black
  spct_hisp dcepp spctFRL
  /SAVE PRED RESID .

COMPUTE SPIeoc_04 = (g11lit_ss_0405 / PRE_3)*100 .
VARIABLE LABELS SPIeoc_04 'school performance index end of course exam 2004 (actual over
predicted)' .
EXECUTE .


*************************************************************************************************************
ADJUSTING STATE LEVEL VARIABLES FOR NATIONAL INFLUENCE
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COMPUTE pctblack = TOTALSTUDENTSBLACKNONHISP.STATE200304 /
TOTALSTUDENTSSTATE200304 .
VARIABLE LABELS pctblack 'percent of black students' .
EXECUTE .

COMPUTE pcthisp = TOTALSTUDENTSHISPANICSTATE200304 /
TOTALSTUDENTSSTATE200304 .
VARIABLE LABELS pcthisp 'percent hispanic' .
EXECUTE .

COMPUTE pctFRL = FREEANDREDUCEDLUNCHSCHOOL200304 /
TOTALSTUDENTSSTATE200304 .
EXECUTE .


COMPUTE totalexp_pp = TOTALEXPENDITURESFOREDUC.STATEFIN.200203 /
TOTALSTUDENTSSTATE200304 .
VARIABLE LABELS totalexp_pp 'total expenditures per pupil' .
EXECUTE .

COMPUTE cepp = CURRENTEXPENDITURESSTATEFIN.200203 /
TOTALSTUDENTSSTATE200304 .
VARIABLE LABELS cepp 'current expenditures per pupil' .
EXECUTE .

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Grade4Reading
  /METHOD=ENTER pctblack pcthisp pctFRL cepp MedianIncome20022004in04dollars
Percentfamilyhouseholdsmarried2000
  Percent25yrshighschoolgraduateorhigher2000 Percent25yrsBAorhigher2000
  /SAVE PRED RESID .

COMPUTE statePI_gr4r = (Grade4Reading / PRE_1)*100 .
VARIABLE LABELS statePI_gr4r 'state performance index grade 4 reading' .
EXECUTE .

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Grade4Math
  /METHOD=ENTER pctblack pcthisp pctFRL cepp MedianIncome20022004in04dollars
Percentfamilyhouseholdsmarried2000
  Percent25yrshighschoolgraduateorhigher2000 Percent25yrsBAorhigher2000
  /SAVE PRED RESID .

COMPUTE statePI_gr4m = (Grade4Math / PRE_2)*100 .
VARIABLE LABELS statePI_gr4m 'state performance index grade 4 math' .
EXECUTE .

REGRESSION
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  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Grade8Reading
  /METHOD=ENTER pctblack pcthisp pctFRL cepp MedianIncome20022004in04dollars
Percentfamilyhouseholdsmarried2000
  Percent25yrshighschoolgraduateorhigher2000 Percent25yrsBAorhigher2000
  /SAVE PRED RESID .

COMPUTE statePI_gr8r = (Grade8Reading / PRE_3)*100 .
VARIABLE LABELS statePI_gr8r 'state performance index grade 4 reading' .
EXECUTE .

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Grade8Math
  /METHOD=ENTER pctblack pcthisp pctFRL cepp MedianIncome20022004in04dollars
Percentfamilyhouseholdsmarried2000
  Percent25yrshighschoolgraduateorhigher2000 Percent25yrsBAorhigher2000
  /SAVE PRED RESID .

COMPUTE statePI_gr8m = (Grade8Math / PRE_4)*100 .
VARIABLE LABELS statePI_gr8m 'state performance index grade 4 math' .
EXECUTE .

COMPUTE statePIr_total = (statePI_gr4r + statePI_gr8r)/2 .
VARIABLE LABELS statePIr_total 'state performance index reading total' .
EXECUTE .

COMPUTE statePIm_total = (statePI_gr4m + statePI_gr8m)/2 .
VARIABLE LABELS statePIm_total 'state performance index math total' .
EXECUTE .

*****************************************************************************************************************
SITUATE SPI IN NATIONAL CONTEXT : adjusted state level performance index multiplied by the
state level performance of Arkansas on the NAEP reading and math
end of course calibration is the grade 8 reading exam
*****************************************************************************************************************

COMPUTE aSPIm = SPIm_04* (100.30/100) .
VARIABLE LABELS aSPIm 'adjusted SPI math -- SPIm multiplied by 100.30' .
EXECUTE .

COMPUTE aSPIr = SPIr_04* (100.33/100) .
VARIABLE LABELS aSPIr 'adjusted SPI reading -- SPIr multiplied by 100.33' .
EXECUTE .

COMPUTE aSPIeoc = SPIeoc_04* (99.85/100) .
VARIABLE LABELS aSPIeoc 'adjusted SPI end of course -- SPIeoc multiplied by 99.85' .
EXECUTE .

COMPUTE SPItotal = (SPIr_04 + SPIm_04) / 2 .
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VARIABLE LABELS SPItotal ' SPI total -- SPI reading and math ratings added together and
divided by 2 -- this is unweighted' .
EXECUTE .


*************************************************************************************************************
COMPUTE POINTS FOR WEIGHTED AVERAGE AFTER AGGREGATING TO DISTRICT
LEVEL
*************************************************************************************************************
*****STEP 1: COMPUTE TOTAL N*******

RECODE
  g11eoc_tot_n
  (SYSMIS=0)  (ELSE=Copy)  INTO  rcg11eoc_n .
VARIABLE LABELS rcg11eoc_n 'grade 11 end of course number of test takers'.
EXECUTE .

RECODE
  ITBSm_n
  (SYSMIS=0)  (ELSE=Copy)  INTO  rcITBSm_n .
VARIABLE LABELS rcITBSm_n 'ITBS math number of test takers'.
EXECUTE .

RECODE
  ITBSr_n
  (SYSMIS=0)  (ELSE=Copy)  INTO  rcITBSr_n .
VARIABLE LABELS rcITBSr_n 'ITBS reading number of test takers'.
EXECUTE .

COMPUTE aSPI_tot_n = rcITBSr_n + rcITBSm_n + rcg11eoc_n .
VARIABLE LABELS SPI_tot_n 'total number of students taking math, reading, or eoc exam' .
EXECUTE .

****STEP 2: COMPUTE TOTAL POINTS****

COMPUTE ITBSm_pts = aSPIm * rcITBSm_n .
VARIABLE LABELS ITBSm_pts 'total number of ITBS math points per school' .
EXECUTE .

COMPUTE ITBSr_pts = aSPIr * rcITBSr_n .
VARIABLE LABELS ITBSr_pts 'total number of ITBS reading points per school' .
EXECUTE .

COMPUTE eoc_pts = SPIeoc_04 * rcg11eoc_n .
VARIABLE LABELS eoc_pts 'total number of end of course points per school' .
EXECUTE .

COMPUTE SPI_tot_pts = ITBSm_pts + ITBSr_pts + eoc_pts .
VARIABLE LABELS SPI_tot_pts 'total number of points for math, reading, or eoc exam = n of
each meausure * score on each measure' .
EXECUTE .

*****STEP 3: DIVIDE TOTAL POINTS BY TOTAL N****

COMPUTE SPI_school = SPI_tot_pts / aSPI_tot_n .
VARIABLE LABELS SPI_school 'school level SPI' .
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EXECUTE .

*************************************************************************************************************
CREATE DISTRICT LEVEL DATASET Aggregate -- SUM the total points and total number of test takers per district then divided total points by total test takers for SPI_total
*************************************************************************************************************

AGGREGATE
  /OUTFILE='C:\Documents and Settings\winters\Desktop\marcus files\Data Check\district performance.sav'
  /BREAK=d_LEA
  /ITBSr_n_mean = MEAN(ITBSr_n) /ITBSm_n_mean = MEAN(ITBSm_n) /read_tot_ile_sum_mean = MEAN(read_tot_ile_sum)
  /math_tot_ile_sum_mean = MEAN(math_tot_ile_sum) /d_LEA_sum_mean = MEAN(d_LEA_sum) /read_points_sum_mean =
  MEAN(read_points_sum) /math_points_sum_mean = MEAN(math_points_sum) /ITBS_read_mean = MEAN(ITBS_read) /ITBS_math_mean =
  MEAN(ITBS_math) /g11eoc_tot_n_mean = MEAN(g11eoc_tot_n) /g11lit_ss_0405_mean = MEAN(g11lit_ss_0405) /sch_enroll_mean =
  MEAN(sch_enroll) /spct_black_mean = MEAN(spct_black) /spct_hisp_mean = MEAN(spct_hisp) /spctFRL_mean = MEAN(spctFRL)
  /d_FRL_mean = MEAN(d_FRL) /dcepp_mean = MEAN(dcepp) /edattain_HS_9899_mean = MEAN(edattain_HS_9899) /edattain_BA_9899_mean =
  MEAN(edattain_BA_9899) /house_inc9899_mean = MEAN(house_inc9899) /num_kids9899_mean = MEAN(num_kids9899)
  /pct_married_9899_mean = MEAN(pct_married_9899) /d_enroll_mean = MEAN(d_enroll) /pct_black0405_mean = MEAN(pct_black0405)
  /pct_hisp0405_mean = MEAN(pct_hisp0405) /PRE_1_mean = MEAN(PRE_1) /RES_1_mean = MEAN(RES_1) /PRE_2_mean = MEAN(PRE_2)
  /RES_2_mean = MEAN(RES_2) /PRE_3_mean = MEAN(PRE_3) /RES_3_mean = MEAN(RES_3) /SPIr_04_mean = MEAN(SPIr_04) /SPIm_04_mean =
  MEAN(SPIm_04) /SPIeoc_04_mean = MEAN(SPIeoc_04) /aSPIm_sum = SUM(aSPIm) /aSPIr_sum = SUM(aSPIr) /aSPIeoc_sum = SUM(aSPIeoc)
  /SPItotal_sum = SUM(SPItotal) /rcg11eoc_n_sum = SUM(rcg11eoc_n) /rcITBSm_n_sum = SUM(rcITBSm_n) /rcITBSr_n_sum =
  SUM(rcITBSr_n) /aSPI_tot_n_sum = SUM(aSPI_tot_n) /ITBSm_pts_sum = SUM(ITBSm_pts) /ITBSr_pts_sum = SUM(ITBSr_pts)
  /eoc_pts_sum = SUM(eoc_pts) /SPI_tot_pts_sum = SUM(SPI_tot_pts).

MATCH FILES /FILE=*
  /TABLE='C:\Documents and Settings\winters\Desktop\marcus files\Data Check\Performance & Efficiency Index\performance by'+
  ' district MEAN.sav'
  /RENAME (aSPI_total aSPIeoc aSPIm aSPIr d_enroll d_pctFRL dcepp diff_FRL edattain_BA_9899 edattain_HS_9899 eoc_pts
  g11eoc_tot_n g11lit_ss_0405 house_inc9899 ITBS_math ITBS_read ITBSm_n ITBSm_pts ITBSr_n ITBSr_pts num_kids9899
  pct_married_9899 PRE_1 PRE_2 PRE_3 rcg11eoc_n rcITBSm_n rcITBSr_n RES_1 RES_2 RES_3 sch_enroll spct_black spct_hisp spctFRL
  SPI_tot_n SPI_tot_pts SPIeoc_04 SPIm_04 SPIr_04 SPItotal SPItotal_04 = d0 d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15
  d16 d17 d18 d19 d20 d21 d22 d23 d24 d25 d26 d27 d28 d29 d30 d31 d32 d33 d34 d35 d36 d37 d38 d39 d40 d41)
  /BY d_LEA
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 /DROP= d0 d1 d2 d3 d4 d5 d6 d7 d8 d9 d10 d11 d12 d13 d14 d15 d16 d17 d18 d19 d20 d21
d22 d23 d24 d25 d26 d27 d28 d29 d30 d31
  d32 d33 d34 d35 d36 d37 d38 d39 d40 d41.
EXECUTE.

*****************************************************************************************************************
COMPUTE DISTRICT SPI WITH SUMMED SCORES SO SPI IS WEIGHTED BY TEST TAKERS
*****************************************************************************************************************

COMPUTE SPI_dmath = ITBSm_pts_sum / rcITBSm_n_sum .
VARIABLE LABELS SPI_dmath 'district level SPI math' .
EXECUTE .

COMPUTE SPI_dread = ITBSr_pts_sum / rcITBSr_n_sum .
VARIABLE LABELS SPI_dread 'district level SPI reading' .
EXECUTE .

COMPUTE SPI_deoc = eoc_pts_sum / rcg11eoc_n_sum .
VARIABLE LABELS SPI_deoc 'district level SPI end-of-course' .
EXECUTE .

COMPUTE SPI_district = SPI_tot_pts_sum / aSPI_tot_n_sum .
VARIABLE LABELS SPI_district 'district level SPI total' .
EXECUTE .
```