**Differential Prediction: for two levels of race (White, AA) on Meam3PA**

***(see also below: Simple*** *Instructions for plotting MMR lines in SPSS)*

**Data set: DAP chem340 7\_1.sav**

1. Compute Mean3PA

Transform> compute: Target Variable- Mean3PA “Numeric Expression”- Mean(PAself to PApeer) “OK”

1. Select race 2 levels for white and AA

Data> Select Cases> Select if… race < 3 “Continue”

1. Determine if race (now only W & AA) means differ on WPT and Mean3PA

Analyze > Compare Means > One-way ANOVA

Dependent List: Mean3PA, WPT Factor: race (now 2 levels) “OK”

1. If means differ by race then test for differential prediction

Transform> Compute: Target Variable - raceXwpt (interaction term) “Numeric Expression” – race\*wpt “OK”

1. Test for differential prediction

Analyze>Regression>Linear: Dependent- Mean3PA

 Independent(s) wpt (model 1) “next”

 Independent(s) wpt, race (model 2) “next”

 Independent(s) wpt, race, raceXwpt (model 3 – see if R2 change is sig)

 Statistics: check Estimates, Model fit, R squared change, Descriptives – “Continue” “OK”If R2 change is sig (in model 3) then plot regression lines for race to see if they interact

Graphs>Legacy Dialogues> Scatter/Dot Simple Scatter Define

 Y Axis: Mean2 PA, X Axis: Wpt; Set Markers by: race (not raceXwpt) OK

 Double click in graph

choose (6th from left on tray right above graph) “”Add Fit Line at Subgroups”

Instructions for plotting MMR lines in SPSS

Simple overview:

For plotting multiple regression lines on the same graph to examine differential predictive validity the syntax is simple:

 GRAPH /SCATTERPLOT(BIVAR)= X\_Variable WITH Y\_Variable BY Moderator.

 After running, double click on the resulting graph, click the little icon that reads "Add fit lines at subgroups" This icon looks like a scatter plot with 2 fit lines.

A regression line for each level of the moderator will appear.