Statistical Comparison of Model Effects for NFL Player Performance

Revised table generation function that shows differences and significance tests

across player types (Starter, On-Field, Attempt) for each model type (LPM, Probit, Logit)

Table 1: Offense Grades - Model Comparison of Player Type Differences

		LPM			Probit		Logit			
Variable	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	
Quarterbacks										
Short Grades Pass	-0.011(0.022)	0.013(0.017)	0.024(0.015)	-0.013(0.025)	0.020(0.019)	0.033(0.017)*	-0.014(0.026)	0.022(0.020)	0.036(0.018)**	
Medium Grades Pass	-0.012(0.020)	-0.022(0.014)	-0.010(0.015)	-0.017(0.023)	-0.024(0.016)	-0.007(0.018)	-0.016(0.024)	-0.025(0.017)	-0.009(0.018)	
Deep Grades Pass	0.012(0.019)	-0.017(0.014)	-0.029(0.014)**	0.016(0.022)	-0.020(0.016)	-0.036(0.016)**	0.014(0.023)	-0.022(0.017)	-0.037(0.017)**	
Running Backs										
Grades Pass Block	-0.031(0.015)**	-0.014(0.011)	0.017(0.011)	-0.037(0.017)**	-0.018(0.013)	0.019(0.012)	-0.038(0.018)**	-0.019(0.013)	0.019(0.012)	
Grades Run	0.001(0.029)	-0.012(0.016)	-0.013(0.029)	0.003(0.034)	-0.008(0.017)	-0.011(0.033)	0.005(0.035)	-0.005(0.017)	-0.010(0.034)	
Short Grades Pass	0.005(0.015)	0.004(0.011)	-0.002(0.011)	0.005(0.017)	0.004(0.012)	-0.001(0.012)	0.005(0.018)	0.003(0.013)	-0.002(0.013)	
Medium Grades Pass	-0.007(0.013)	-0.012(0.010)	-0.005(0.009)	-0.008(0.015)	-0.014(0.011)	-0.006(0.011)	-0.008(0.015)	-0.015(0.011)	-0.007(0.011)	
Deep Grades Pass	-0.002(0.013)	-0.006(0.010)	-0.005(0.009)	-0.002(0.015)	-0.006(0.011)	-0.004(0.011)	-0.002(0.016)	-0.006(0.012)	-0.004(0.011)	
WR1	(/	,	(,	(,	,	()	(,	()	()	
Grades Run Block	0.012(0.026)	0.011(0.016)	-0.001(0.021)	0.014(0.030)	0.010(0.018)	-0.004(0.024)	0.014(0.031)	0.012(0.019)	-0.003(0.025)	
Short Grades Pass	0.002(0.022)	0.005(0.014)	0.003(0.018)	0.003(0.024)	0.005(0.016)	0.002(0.019)	0.005(0.025)	0.008(0.017)	0.003(0.020)	
Medium Grades Pass	0.011(0.020)	0.005(0.014)	-0.006(0.015)	0.011(0.023)	0.009(0.016)	-0.002(0.017)	0.012(0.024)	0.009(0.016)	-0.003(0.018)	
Deep Grades Pass	-0.005(0.017)	-0.005(0.012)	-0.000(0.013)	-0.009(0.019)	-0.007(0.013)	0.002(0.014)	-0.009(0.020)	-0.007(0.014)	0.003(0.015)	
WR2	0.000(0.011)	0.000(0.012)	0.000(0.010)	0.000(0.010)	0.001(0.010)	0.002(0.011)	0.000(0.020)	0.007(0.011)	0.000(0.010)	
Grades Run Block	-0.043(0.041)	-0.019(0.017)	0.024(0.038)	-0.054(0.048)	-0.021(0.019)	0.034(0.044)	-0.056(0.049)	-0.023(0.020)	0.033(0.046)	
Short Grades Pass	-0.026(0.029)	-0.022(0.013)	0.005(0.027)	-0.034(0.033)	-0.024(0.015)	0.010(0.030)	-0.034(0.035)	-0.025(0.016)	0.009(0.031)	
Medium Grades Pass	0.024(0.023)	0.016(0.012)	-0.008(0.021)	0.032(0.027)	0.020(0.014)	-0.011(0.024)	0.033(0.028)	0.022(0.014)	-0.011(0.025)	
Deep Grades Pass	-0.010(0.020)	0.000(0.011)	0.010(0.017)	-0.015(0.023)	0.002(0.011)	0.017(0.019)	-0.014(0.024)	0.001(0.013)	0.015(0.020)	
WR3	0.010(0.020)	0.000(0.011)	0.010(0.011)	0.010(0.020)	0.002(0.010)	0.011(0.010)	0.011(0.021)	0.001(0.010)	0.010(0.020)	
Grades Run Block	-0.029(0.033)	-0.007(0.015)	0.023(0.030)	-0.035(0.038)	-0.008(0.017)	0.028(0.035)	-0.037(0.040)	-0.010(0.017)	0.027(0.037)	
Short Grades Pass	-0.016(0.026)	-0.009(0.012)	0.007(0.024)	-0.020(0.030)	-0.013(0.013)	0.007(0.027)	-0.025(0.031)	-0.014(0.014)	0.010(0.029)	
Medium Grades Pass	-0.010(0.020)	-0.003(0.012)	0.006(0.024)	-0.005(0.025)	-0.003(0.012)	0.002(0.023)	-0.006(0.026)	-0.002(0.013)	0.003(0.023)	
Deep Grades Pass	-0.016(0.018)	-0.000(0.011)	0.015(0.016)	-0.021(0.021)	0.001(0.012)	0.022(0.018)	-0.022(0.022)	0.000(0.012)	0.022(0.018)	
TE1	-0.010(0.010)	-0.000(0.010)	0.010(0.010)	-0.021(0.021)	0.001(0.012)	0.022(0.010)	-0.022(0.022)	0.000(0.012)	0.022(0.010)	
Grades Pass Block	-0.002(0.016)	0.024(0.012)**	0.026(0.012)**	-0.006(0.019)	0.029(0.014)**	0.036(0.014)**	-0.006(0.020)	0.031(0.014)**	0.036(0.014)**	
Grades Run Block	-0.013(0.022)	-0.019(0.016)	-0.006(0.012)	-0.013(0.026)	-0.024(0.018)	-0.011(0.019)	-0.015(0.027)	-0.025(0.019)	-0.009(0.020)	
Short Grades Pass	0.001(0.022)	0.001(0.013)	0.000(0.017)	0.000(0.023)	0.000(0.015)	-0.000(0.019)	-0.000(0.024)	0.000(0.016)	0.000(0.019)	
Medium Grades Pass	-0.038(0.015)**	-0.024(0.011)**	0.014(0.011)	-0.044(0.017)**	-0.026(0.013)**	0.017(0.013)	-0.047(0.018)***	-0.027(0.013)**	0.020(0.013)	
Deep Grades Pass	0.011(0.014)	-0.005(0.011)	-0.016(0.011)	0.013(0.015)	-0.006(0.013)	-0.019(0.011)*	0.015(0.016)	-0.005(0.013)	-0.020(0.013)*	
OL1	0.011(0.014)	-0.003(0.010)	-0.010(0.010)	0.013(0.013)	-0.000(0.011)	=0.019(0.011)	0.013(0.010)	-0.003(0.012)	-0.020(0.012)	
Grades Pass Block	0.024(0.015)	0.019(0.012)	-0.005(0.010)	0.030(0.018)*	0.023(0.014)*	-0.007(0.012)	0.032(0.018)*	0.024(0.015)*	-0.008(0.012)	
Grades Run Block	0.003(0.017)	0.007(0.012)	0.004(0.011)	0.005(0.018)	0.012(0.017)	0.007(0.012)	0.002(0.013)	0.011(0.017)	0.008(0.012)	
OL2	0.003(0.011)	0.007(0.013)	0.004(0.011)	0.003(0.020)	0.012(0.017)	0.007(0.012)	0.002(0.021)	0.011(0.011)	0.003(0.013)	
Grades Pass Block	-0.007(0.015)	-0.011(0.012)	-0.004(0.010)	-0.008(0.017)	-0.012(0.014)	-0.004(0.012)	-0.009(0.018)	-0.013(0.014)	-0.004(0.012)	
Grades Run Block	0.008(0.017)	-0.007(0.012)	-0.016(0.011)	0.010(0.020)	-0.012(0.014)	-0.020(0.012)*	0.012(0.021)	-0.009(0.014)	-0.022(0.012)*	
OL3	0.008(0.017)	-0.007(0.013)	-0.010(0.011)	0.010(0.020)	-0.010(0.017)	-0.020(0.012)	0.012(0.021)	-0.009(0.017)	-0.022(0.012)	
Grades Pass Block	0.001(0.015)	0.006(0.012)	0.005(0.010)	0.001(0.017)	0.008(0.014)	0.007(0.012)	0.002(0.018)	0.010(0.014)	0.008(0.012)	
Grades Run Block OL4	-0.021(0.017)	-0.014(0.015)	0.007(0.010)	-0.027(0.020)	-0.017(0.017)	0.010(0.012)	-0.029(0.021)	-0.019(0.018)	0.010(0.012)	
Grades Pass Block	0.015(0.010)	0.004(0.012*	0.000(0.010)	0.010(0.018)	0.000(0.014)**	0.010(0.010)	0.010(0.010)	0.020/0.015**	0.010(0.010)	
	0.015(0.016)	0.024(0.013)*	0.009(0.010)	0.019(0.018)	0.029(0.014)**	0.010(0.012)	0.019(0.019)	0.030(0.015)**	0.010(0.012)	
Grades Run Block	0.008(0.016)	-0.004(0.013)	-0.013(0.011)	0.008(0.018)	-0.007(0.015)	-0.015(0.012)	0.009(0.019)	-0.008(0.016)	-0.016(0.012)	
OL5	0.044/0.010)***	0.000(0.010)**	0.010(0.015)	0.051(0.010)***	0.000(0.014)**	0.010(0.012)	0.050(0.010)***	0.005/0.015**	0.010(0.053)	
Grades Pass Block	0.044(0.016)***	0.030(0.013)**	-0.013(0.011)	0.051(0.018)***	0.033(0.014)**	-0.018(0.012)	0.053(0.019)***	0.035(0.015)**	-0.018(0.013)	
Grades Run Block	-0.046(0.017)***	-0.035(0.014)**	0.011(0.011)	-0.054(0.019)***	-0.041(0.016)***	0.013(0.012)	-0.055(0.020)***	-0.042(0.016)***	0.013(0.013)	

Differences shown with standard errors in parentheses. Positive values indicate the first definition has a larger effect than the second. * * p < 0.10, ** p < 0.05, *** p < 0.01

Table 2: Offense Yards - Model Comparison of Player Type Differences

		LPM		Probit			Logit			
Variable	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	
Quarterbacks										
Short Yards	-0.004(0.019)	0.014(0.014)	0.017(0.014)	-0.005(0.022)	0.017(0.016)	0.022(0.016)	-0.005(0.023)	0.017(0.016)	0.021(0.017)	
Medium Yards	0.022(0.019)	0.018(0.014)	-0.004(0.014)	0.031(0.022)	0.029(0.016)*	-0.002(0.016)	0.031(0.023)	0.030(0.017)*	-0.000(0.017)	
Deep Yards	-0.018(0.017)	-0.043(0.013)***	-0.025(0.012)**	-0.024(0.019)	-0.052(0.014)***	-0.028(0.014)**	-0.025(0.020)	-0.053(0.015)***	-0.028(0.014)*	
Running Backs										
Grades Pass Block	-0.026(0.014)*	-0.010(0.010)	0.016(0.010)	-0.030(0.016)*	-0.012(0.012)	0.018(0.011)	-0.031(0.016)*	-0.013(0.012)	0.018(0.012)	
Yards	-0.017(0.013)	-0.006(0.010)	0.011(0.010)	-0.019(0.015)	-0.004(0.012)	0.014(0.011)	-0.020(0.016)	-0.004(0.012)	0.016(0.011)	
Short Yards	0.009(0.014)	-0.006(0.010)	-0.015(0.010)	0.011(0.016)	-0.007(0.012)	-0.018(0.011)	0.010(0.017)	-0.007(0.012)	-0.017(0.012)	
Medium Yards	-0.012(0.012)	-0.017(0.009)*	-0.005(0.008)	-0.015(0.014)	-0.018(0.010)*	-0.003(0.010)	-0.015(0.014)	-0.020(0.011)*	-0.005(0.010)	
Deep Yards	0.007(0.013)	0.009(0.010)	0.002(0.009)	0.010(0.015)	0.011(0.012)	0.001(0.011)	0.011(0.016)	0.010(0.012)	-0.000(0.011)	
WR1										
Grades Run Block	0.010(0.026)	0.011(0.016)	0.001(0.021)	0.011(0.030)	0.010(0.018)	-0.001(0.024)	0.011(0.031)	0.011(0.019)	0.000(0.025)	
Short Yards	-0.005(0.015)	-0.004(0.011)	0.001(0.011)	-0.006(0.017)	-0.005(0.012)	0.001(0.012)	-0.006(0.018)	-0.005(0.013)	0.000(0.013)	
Medium Yards	0.005(0.016)	0.000(0.011)	-0.005(0.012)	0.005(0.018)	0.002(0.013)	-0.004(0.013)	0.006(0.018)	0.001(0.013)	-0.005(0.013)	
Deep Yards	0.008(0.014)	0.025(0.010)**	0.017(0.010)*	0.010(0.016)	0.030(0.012)**	0.020(0.012)*	0.011(0.017)	0.032(0.012)***	0.021(0.012)*	
WR2										
Grades Run Block	-0.051(0.041)	-0.021(0.017)	0.030(0.038)	-0.063(0.048)	-0.022(0.020)	0.041(0.044)	-0.067(0.050)	-0.026(0.020)	0.042(0.046)	
Short Yards	-0.012(0.015)	-0.017(0.011)	-0.005(0.012)	-0.014(0.018)	-0.018(0.012)	-0.004(0.013)	-0.015(0.018)	-0.020(0.013)	-0.004(0.014)	
Medium Yards	0.011(0.016)	-0.002(0.011)	-0.013(0.012)	0.008(0.019)	-0.005(0.013)	-0.013(0.014)	0.010(0.019)	-0.005(0.013)	-0.015(0.015)	
Deep Yards	0.006(0.014)	0.011(0.010)	0.005(0.011)	0.008(0.017)	0.015(0.012)	0.006(0.012)	0.008(0.017)	0.016(0.012)	0.008(0.013)	
WR3										
Grades Run Block	-0.030(0.033)	-0.008(0.014)	0.022(0.030)	-0.036(0.038)	-0.010(0.017)	0.026(0.035)	-0.036(0.040)	-0.012(0.017)	0.025(0.037)	
Short Yards	-0.022(0.016)	-0.009(0.011)	0.013(0.012)	-0.024(0.018)	-0.011(0.012)	0.014(0.014)	-0.026(0.019)	-0.011(0.013)	0.015(0.014)	
Medium Yards	-0.021(0.016)	-0.021(0.011)*	-0.000(0.011)	-0.025(0.018)	-0.025(0.013)*	-0.000(0.013)	-0.025(0.019)	-0.026(0.014)*	-0.000(0.013)	
Deep Yards	0.011(0.014)	0.013(0.010)	0.002(0.011)	0.014(0.016)	0.016(0.011)	0.002(0.012)	0.015(0.017)	0.017(0.012)	0.003(0.012)	
TE1										
Grades Pass Block	-0.001(0.016)	0.024(0.012)**	0.026(0.012)**	-0.004(0.019)	0.031(0.014)**	0.035(0.014)**	-0.004(0.020)	0.031(0.014)**	0.035(0.014)**	
Grades Run Block	-0.016(0.022)	-0.023(0.015)	-0.007(0.017)	-0.020(0.025)	-0.031(0.017)*	-0.011(0.020)	-0.023(0.026)	-0.031(0.018)*	-0.009(0.020)	
Short Yards	0.009(0.015)	-0.001(0.012)	-0.010(0.011)	0.011(0.018)	-0.001(0.013)	-0.013(0.013)	0.012(0.018)	-0.000(0.014)	-0.012(0.013)	
Medium Yards	-0.025(0.015)*	-0.016(0.011)	0.009(0.011)	-0.029(0.017)*	-0.018(0.013)	0.011(0.012)	-0.031(0.018)*	-0.019(0.013)	0.011(0.013)	
Deep Yards	-0.004(0.013)	-0.007(0.010)	-0.003(0.009)	-0.006(0.015)	-0.011(0.012)	-0.005(0.011)	-0.006(0.016)	-0.011(0.012)	-0.005(0.011)	
OL1										
Grades Pass Block	0.024(0.015)	0.018(0.012)	-0.007(0.010)	0.030(0.017)*	0.021(0.014)	-0.009(0.012)	0.032(0.018)*	0.022(0.014)	-0.010(0.012)	
Grades Run Block	0.004(0.017)	0.008(0.015)	0.004(0.011)	0.006(0.020)	0.013(0.016)	0.007(0.012)	0.004(0.021)	0.012(0.017)	0.008(0.013)	
OL2										
Grades Pass Block	-0.008(0.015)	-0.011(0.012)	-0.003(0.011)	-0.010(0.017)	-0.012(0.014)	-0.002(0.012)	-0.011(0.018)	-0.013(0.014)	-0.002(0.012)	
Grades Run Block	0.008(0.017)	-0.009(0.014)	-0.017(0.011)	0.010(0.020)	-0.012(0.016)	-0.022(0.012)*	0.012(0.020)	-0.011(0.017)	-0.023(0.013)	
OL3										
Grades Pass Block	0.001(0.015)	0.006(0.012)	0.006(0.010)	0.001(0.017)	0.009(0.014)	0.008(0.012)	0.002(0.018)	0.011(0.015)	0.009(0.012)	
Grades Run Block	-0.018(0.017)	-0.012(0.015)	0.007(0.010)	-0.025(0.020)	-0.015(0.017)	0.010(0.012)	-0.027(0.021)	-0.018(0.018)	0.009(0.012)	
OL4						` '				
Grades Pass Block	0.015(0.016)	0.021(0.013)*	0.006(0.011)	0.018(0.018)	0.025(0.014)*	0.008(0.012)	0.019(0.019)	0.026(0.015)*	0.008(0.012)	
Grades Run Block	0.007(0.016)	-0.004(0.013)	-0.011(0.010)	0.007(0.018)	-0.007(0.015)	-0.014(0.012)	0.007(0.019)	-0.007(0.016)	-0.015(0.012)	
OL5	` '	, , ,	, , ,		` '	` '		` '	` ' '	
Grades Pass Block	0.036(0.016)**	0.022(0.013)*	-0.014(0.011)	0.041(0.018)**	0.023(0.014)	-0.018(0.012)	0.043(0.019)**	0.025(0.015)*	-0.018(0.013)	
Grades Run Block	-0.037(0.017)**	-0.026(0.014)*	0.011(0.011)	-0.043(0.019)**	-0.032(0.016)**	0.012(0.012)	-0.044(0.020)**	-0.032(0.016)**	0.012(0.013)	

Note: Differences shown with standard errors in parentheses. Positive values indicate the first definition has a larger effect than the second. * * p < 0.10, ** p < 0.05, *** p < 0.01

Table 3: Offense Completions - Model Comparison of Player Type Differences

		LPM		Probit			Logit			
Variable	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	
Quarterbacks										
Short Completions	-0.008(0.020)	0.022(0.014)	0.031(0.015)**	-0.010(0.023)	0.026(0.016)	0.037(0.017)**	-0.010(0.024)	0.025(0.017)	0.036(0.018)**	
Medium Completions	0.021(0.020)	0.012(0.014)	-0.009(0.015)	0.029(0.023)	0.021(0.016)	-0.007(0.017)	0.029(0.024)	0.023(0.017)	-0.006(0.018)	
Deep Completions	-0.006(0.017)	-0.038(0.013)***	-0.032(0.012)**	-0.009(0.020)	-0.046(0.015)***	-0.036(0.014)**	-0.010(0.021)	-0.046(0.015)***	-0.036(0.015)**	
Running Backs										
Grades Pass Block	-0.027(0.014)**	-0.011(0.010)	0.016(0.010)*	-0.033(0.016)**	-0.013(0.012)	0.020(0.011)*	-0.033(0.016)**	-0.014(0.012)	0.019(0.012)	
Attempts	-0.015(0.013)	-0.004(0.010)	0.011(0.010)	-0.016(0.016)	-0.002(0.012)	0.014(0.011)	-0.018(0.016)	-0.003(0.012)	0.015(0.011)	
Short Receptions	0.014(0.014)	-0.004(0.011)	-0.018(0.010)*	0.015(0.016)	-0.006(0.012)	-0.021(0.011)*	0.015(0.017)	-0.005(0.013)	-0.020(0.012)*	
Medium Receptions	-0.007(0.012)	-0.011(0.009)	-0.004(0.008)	-0.008(0.013)	-0.012(0.010)	-0.005(0.010)	-0.008(0.014)	-0.014(0.011)	-0.006(0.010)	
Deep Receptions	0.006(0.013)	0.002(0.010)	-0.004(0.009)	0.008(0.015)	0.003(0.012)	-0.005(0.010)	0.009(0.016)	0.003(0.012)	-0.006(0.011)	
WR1										
Grades Run Block	0.009(0.026)	0.010(0.016)	0.001(0.021)	0.009(0.030)	0.008(0.018)	-0.001(0.024)	0.010(0.031)	0.009(0.019)	-0.000(0.025)	
Short Receptions	-0.005(0.015)	-0.008(0.011)	-0.003(0.011)	-0.005(0.017)	-0.010(0.012)	-0.004(0.013)	-0.005(0.018)	-0.009(0.013)	-0.005(0.013)	
Medium Receptions	0.009(0.016)	0.009(0.012)	-0.001(0.012)	0.011(0.018)	0.012(0.013)	0.002(0.013)	0.011(0.019)	0.011(0.014)	0.000(0.014)	
Deep Receptions	0.006(0.014)	0.020(0.010)*	0.014(0.011)	0.007(0.016)	0.024(0.012)**	0.017(0.012)	0.008(0.017)	0.026(0.012)**	0.018(0.012)	
WR2		` ′								
Grades Run Block	-0.054(0.041)	-0.022(0.017)	0.033(0.038)	-0.067(0.048)	-0.024(0.019)	0.044(0.044)	-0.071(0.050)	-0.027(0.020)	0.044(0.046)	
Short Receptions	-0.010(0.016)	-0.020(0.011)*	-0.010(0.012)	-0.011(0.018)	-0.021(0.012)*	-0.010(0.014)	-0.012(0.019)	-0.022(0.013)*	-0.010(0.014)	
Medium Receptions	0.009(0.017)	0.002(0.012)	-0.007(0.013)	0.007(0.019)	0.001(0.013)	-0.007(0.015)	0.009(0.020)	0.001(0.014)	-0.009(0.015)	
Deep Receptions	0.001(0.015)	0.007(0.010)	0.005(0.011)	0.002(0.017)	0.009(0.012)	0.007(0.012)	0.002(0.017)	0.010(0.012)	0.008(0.013)	
WR3	()	(,	,	(,	()	()	()	()	()	
Grades Run Block	-0.030(0.033)	-0.009(0.014)	0.021(0.030)	-0.035(0.038)	-0.011(0.017)	0.024(0.035)	-0.036(0.040)	-0.012(0.017)	0.024(0.037)	
Short Receptions	-0.027(0.017)	-0.012(0.011)	0.015(0.013)	-0.031(0.019)	-0.014(0.013)	0.016(0.015)	-0.033(0.020)*	-0.015(0.013)	0.018(0.015)	
Medium Receptions	-0.017(0.017)	-0.016(0.012)	0.002(0.012)	-0.022(0.019)	-0.020(0.014)	0.002(0.014)	-0.022(0.020)	-0.020(0.014)	0.002(0.014)	
Deep Receptions	0.001(0.014)	0.008(0.010)	0.006(0.011)	0.003(0.016)	0.010(0.012)	0.007(0.012)	0.003(0.017)	0.010(0.012)	0.007(0.012)	
TE1	0.001(0.011)	0.000(0.010)	0.000(0.011)	0.000(0.010)	0.010(0.012)	0.001(0.012)	0.000(0.011)	0.010(0.012)	0.001(0.012)	
Grades Pass Block	-0.001(0.016)	0.026(0.012)**	0.028(0.012)**	-0.004(0.019)	0.032(0.014)**	0.037(0.014)***	-0.004(0.020)	0.033(0.014)**	0.037(0.014)***	
Grades Run Block	-0.017(0.022)	-0.024(0.015)	-0.007(0.017)	-0.020(0.025)	-0.032(0.018)*	-0.011(0.020)	-0.023(0.027)	-0.032(0.018)*	-0.010(0.020)	
Short Receptions	0.016(0.016)	-0.003(0.012)	-0.019(0.012)	0.020(0.018)	-0.002(0.014)	-0.023(0.013)*	0.021(0.019)	-0.001(0.014)	-0.022(0.014)	
Medium Receptions	-0.029(0.016)*	-0.020(0.012)*	0.009(0.011)	-0.035(0.018)*	-0.024(0.013)*	0.011(0.013)	-0.037(0.018)**	-0.025(0.014)*	0.011(0.013)	
Deep Receptions	-0.005(0.013)	-0.001(0.010)	0.005(0.011)	-0.008(0.016)	-0.004(0.013)	0.004(0.011)	-0.008(0.016)	-0.004(0.012)	0.003(0.012)	
OL1	0.000(0.010)	0.001(0.010)	0.000(0.010)	0.000(0.010)	0.001(0.012)	0.001(0.011)	0.000(0.010)	0.001(0.012)	0.000(0.012)	
Grades Pass Block	0.024(0.015)	0.018(0.012)	-0.006(0.010)	0.029(0.017)*	0.022(0.014)	-0.008(0.012)	0.031(0.018)*	0.022(0.014)	-0.009(0.012)	
Grades Run Block	0.004(0.017)	0.009(0.015)	0.005(0.011)	0.006(0.020)	0.014(0.016)	0.008(0.012)	0.004(0.021)	0.013(0.017)	0.009(0.012)	
OL2	0.001(0.011)	0.003(0.010)	0.000(0.011)	0.000(0.020)	0.014(0.010)	0.000(0.012)	0.004(0.021)	0.010(0.011)	0.005(0.010)	
Grades Pass Block	-0.009(0.015)	-0.011(0.012)	-0.002(0.011)	-0.010(0.017)	-0.012(0.014)	-0.002(0.012)	-0.011(0.018)	-0.013(0.014)	-0.002(0.012)	
Grades Run Block	0.009(0.013)	-0.008(0.014)	-0.017(0.011)	0.011(0.020)	-0.012(0.014)	-0.021(0.012)*	0.012(0.020)	-0.013(0.014)	-0.002(0.012)	
OL3	0.009(0.011)	=0.008(0.014)	-0.017(0.011)	0.011(0.020)	-0.010(0.010)	-0.021(0.012)	0.012(0.020)	-0.010(0.017)	-0.023(0.013)	
Grades Pass Block	0.002(0.015)	0.008(0.012)	0.006(0.010)	0.003(0.018)	0.011(0.014)	0.008(0.012)	0.004(0.018)	0.013(0.015)	0.009(0.012)	
Grades Run Block	-0.020(0.013)	-0.012(0.015)	0.008(0.010)	-0.028(0.020)	-0.016(0.017)	0.008(0.012)	-0.030(0.021)	-0.019(0.018)	0.009(0.012)	
OL4	-0.020(0.017)	-0.012(0.010)	0.000(0.010)	-0.020(0.020)	-0.010(0.017)	0.011(0.012)	-0.000(0.021)	-0.019(0.010)	0.011(0.012)	
Grades Pass Block	0.015(0.016)	0.022(0.013)*	0.007(0.011)	0.019(0.018)	0.027(0.014)*	0.008(0.012)	0.020(0.019)	0.028(0.015)*	0.008(0.012)	
Grades Run Block	0.007(0.016)	-0.004(0.013)	-0.011(0.011)	0.007(0.018)	-0.007(0.014)	-0.014(0.012)	0.007(0.019)	-0.008(0.016)	-0.015(0.012)	
OL5	0.007(0.016)	-0.004(0.013)	-0.011(0.011)	0.007(0.018)	-0.007(0.015)	-0.014(0.012)	0.007(0.019)	-0.000(0.010)	-0.013(0.012)	
Grades Pass Block	0.037(0.016)**	0.024(0.013)*	-0.013(0.011)	0.042(0.018)**	0.025(0.014)*	-0.018(0.012)	0.044(0.019)**	0.027(0.015)*	-0.017(0.013)	
Grades Pass Block Grades Run Block	-0.037(0.016)**	-0.027(0.014)*	0.010(0.011)	-0.043(0.019)**	-0.032(0.014)**	0.011(0.012)	-0.044(0.019)**	-0.033(0.016)**	0.011(0.013)	
Grades Rull Diock	-0.037(0.017)	-0.027(0.014)	0.010(0.011)	-0.043(0.019)	-0.032(0.010)	0.011(0.012)	-0.044(0.020)	-0.000(0.010)	0.011(0.013)	

Note: Differences shown with standard errors in parentheses. Positive values indicate the first definition has a larger effect than the second.
** p < 0.10, *** p < 0.05, **** p < 0.01

Table 4: Defense Stops - Model Comparison of Player Type Differences

		LPM			Probit		Logit			
Variable	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	
DL1										
Grades Stops	0.017(0.013)	0.010(0.009)	-0.008(0.009)	0.020(0.014)	0.012(0.011)	-0.008(0.011)	0.022(0.015)	0.013(0.011)	-0.009(0.011)	
Productivity Stops	-0.012(0.013)	-0.015(0.009)*	-0.003(0.009)	-0.016(0.014)	-0.019(0.010)*	-0.003(0.010)	-0.016(0.015)	-0.020(0.011)*	-0.004(0.011)	
DL2	()	()		()	(/	,	(,	(/	()	
Grades Stops	-0.020(0.013)	-0.010(0.009)	0.010(0.009)	-0.023(0.014)	-0.010(0.010)	0.013(0.010)	-0.023(0.015)	-0.010(0.011)	0.013(0.011)	
Productivity Stops	0.003(0.013)	-0.007(0.009)	-0.010(0.009)	0.003(0.015)	-0.010(0.010)	-0.013(0.011)	0.002(0.015)	-0.012(0.011)	-0.014(0.011)	
DL3	,		(,	()	(/	, , , , ,	()	()	, ,	
Grades Stops	-0.018(0.013)	-0.012(0.009)	0.006(0.011)	-0.021(0.015)	-0.016(0.010)	0.006(0.012)	-0.021(0.016)	-0.015(0.011)	0.006(0.012)	
Productivity Stops	0.002(0.013)	-0.002(0.009)	-0.004(0.010)	0.002(0.015)	-0.002(0.010)	-0.004(0.012)	0.002(0.016)	-0.003(0.011)	-0.005(0.012)	
DL4			` ′					` ′		
Grades Stops	0.002(0.014)	-0.001(0.010)	-0.003(0.011)	0.002(0.016)	-0.001(0.011)	-0.003(0.012)	0.001(0.016)	-0.003(0.011)	-0.004(0.012)	
Productivity Stops	0.012(0.014)	-0.009(0.010)	-0.021(0.010)**	0.015(0.016)	-0.010(0.011)	-0.025(0.012)**	0.016(0.016)	-0.011(0.011)	-0.027(0.012)**	
LB1	()	()	(, , ,	()	(,	(,	()	()	()	
Grades Stops	-0.005(0.014)	-0.012(0.010)	-0.006(0.010)	-0.007(0.015)	-0.012(0.011)	-0.006(0.012)	-0.006(0.016)	-0.011(0.011)	-0.006(0.012)	
Zone Stops	-0.010(0.014)	-0.012(0.010)	-0.002(0.011)	-0.011(0.016)	-0.014(0.011)	-0.003(0.012)	-0.012(0.017)	-0.016(0.012)	-0.005(0.013)	
Man Stops	-0.000(0.013)	-0.001(0.010)	-0.001(0.010)	-0.001(0.015)	-0.002(0.011)	-0.001(0.011)	-0.001(0.015)	-0.003(0.011)	-0.002(0.011)	
LB2	0.000(0.020)	0.00-(0.0-0)	0.002(0.020)	0.00=(0.0=0)	0.00=(0.01-)	0.002(0.022)	0.002(0.020)	0.000(0.011)	0.002(0.011)	
Grades Stops	0.018(0.014)	-0.003(0.010)	-0.021(0.011)*	0.021(0.017)	-0.004(0.011)	-0.025(0.013)**	0.022(0.017)	-0.004(0.012)	-0.027(0.013)**	
Zone Stops	-0.007(0.011)	0.001(0.010)	0.008(0.011)	-0.006(0.017)	0.002(0.012)	0.008(0.012)	-0.008(0.018)	0.002(0.012)	0.010(0.013)	
Man Stops	0.004(0.013)	-0.009(0.010)	-0.013(0.010)	0.005(0.017)	-0.011(0.011)	-0.016(0.011)	0.005(0.016)	-0.012(0.011)	-0.017(0.012)	
LB3	0.004(0.010)	-0.005(0.010)	-0.010(0.010)	0.000(0.010)	-0.011(0.011)	-0.010(0.011)	0.000(0.010)	-0.012(0.011)	-0.017(0.012)	
Grades Stops	0.005(0.017)	-0.005(0.011)	-0.010(0.013)	0.008(0.019)	-0.004(0.012)	-0.012(0.015)	0.008(0.020)	-0.004(0.013)	-0.013(0.015)	
Zone Stops	-0.016(0.017)	-0.006(0.011)	0.010(0.013)	-0.018(0.017)	-0.006(0.012)	0.012(0.013)	-0.019(0.018)	-0.007(0.012)	0.012(0.013)	
Man Stops	-0.025(0.013)*	-0.031(0.010)***	-0.006(0.012)	-0.031(0.015)**	-0.035(0.011)***	-0.004(0.011)	-0.032(0.016)**	-0.037(0.011)***	-0.005(0.011)	
LB4	-0.020(0.010)	-0.001(0.010)	-0.000(0.010)	-0.001(0.010)	-0.000(0.011)	-0.004(0.011)	-0.002(0.010)	-0.007(0.011)	-0.000(0.011)	
Grades Stops	-0.003(0.017)	-0.006(0.011)	-0.003(0.013)	-0.001(0.019)	-0.005(0.013)	-0.004(0.015)	-0.000(0.020)	-0.006(0.013)	-0.005(0.016)	
Zone Stops	0.000(0.017)	0.001(0.010)	0.000(0.013)	-0.003(0.017)	-0.001(0.012)	0.002(0.013)	-0.003(0.018)	0.001(0.013)	0.004(0.014)	
Man Stops	0.004(0.013)	0.005(0.010)	0.001(0.011)	0.006(0.017)	0.007(0.012)	0.002(0.013)	0.005(0.016)	0.006(0.013)	0.001(0.011)	
CB1	0.004(0.013)	0.003(0.010)	0.001(0.010)	0.000(0.013)	0.007(0.011)	0.001(0.011)	0.003(0.010)	0.000(0.012)	0.001(0.011)	
Grades Stops	-0.001(0.013)	0.017(0.009)*	0.018(0.010)*	0.001(0.015)	0.022(0.011)**	0.021(0.011)*	0.000(0.016)	0.022(0.011)**	0.022(0.012)*	
Zone Stops	-0.001(0.013)	-0.001(0.010)	0.018(0.010)	-0.009(0.015)	-0.002(0.011)	0.008(0.011)	-0.010(0.016)	-0.000(0.011)	0.010(0.011)	
Man Stops	-0.006(0.013)	0.008(0.010)	0.007(0.010)	-0.009(0.015)	0.007(0.011)	0.008(0.011)	-0.010(0.016)	0.006(0.011)	0.015(0.011)	
CB2	-0.006(0.013)	0.008(0.010)	0.014(0.010)	-0.008(0.013)	0.007(0.011)	0.015(0.011)	-0.010(0.015)	0.006(0.011)	0.015(0.011)	
	0.000(0.012)	0.000(0.000)	-0.001(0.010)	0.001(0.015)	0.009(0.011)	0.001/0.011)	0.000(0.016)	0.002/0.011)	0.001(0.010)	
Grades Stops Zone Stops	-0.002(0.013) -0.001(0.013)	-0.002(0.009) 0.002(0.009)	0.003(0.010)	-0.001(0.015) -0.003(0.015)	-0.003(0.011) 0.002(0.011)	-0.001(0.011) 0.005(0.011)	-0.002(0.016) -0.003(0.016)	-0.003(0.011) 0.000(0.011)	-0.001(0.012) 0.004(0.011)	
							()			
Man Stops CB3	-0.018(0.013)	-0.015(0.009)	0.002(0.010)	-0.021(0.015)	-0.020(0.011)*	0.001(0.011)	-0.021(0.015)	-0.020(0.011)*	0.000(0.011)	
	0.007(0.012)	0.010(0.010)*	0.000(0.010)	0.000(0.015)	0.010/0.011)*	0.011(0.011)	0.000(0.010)	0.010(0.011)	0.010(0.010)	
Grades Stops	-0.007(0.013)	-0.016(0.010)*	-0.009(0.010)	-0.008(0.015)	-0.019(0.011)*	-0.011(0.011)	-0.008(0.016)	-0.019(0.011)	-0.010(0.012)	
Zone Stops	0.006(0.014)	0.010(0.010)	0.003(0.011)	0.008(0.016)	0.013(0.011)	0.005(0.012)	0.007(0.017)	0.013(0.011)	0.006(0.013)	
Man Stops	0.018(0.013)	0.028(0.009)***	0.010(0.010)	0.021(0.015)	0.028(0.011)**	0.007(0.011)	0.021(0.015)	0.030(0.011)***	0.009(0.011)	
S1										
Grades Stops	0.001(0.014)	-0.005(0.010)	-0.006(0.010)	0.001(0.016)	-0.006(0.011)	-0.007(0.012)	0.002(0.016)	-0.006(0.012)	-0.008(0.012)	
Zone Stops	-0.005(0.013)	-0.005(0.010)	-0.000(0.010)	-0.005(0.015)	-0.004(0.011)	0.000(0.011)	-0.004(0.016)	-0.005(0.012)	-0.001(0.011)	
Man Stops	-0.003(0.014)	0.008(0.010)	0.011(0.010)	-0.005(0.015)	0.007(0.011)	0.012(0.011)	-0.006(0.016)	0.007(0.012)	0.013(0.012)	
S2										
Grades Stops	-0.015(0.014)	0.002(0.010)	0.017(0.011)	-0.018(0.016)	0.003(0.012)	0.021(0.012)*	-0.018(0.017)	0.004(0.012)	0.022(0.012)*	
Zone Stops	0.011(0.014)	0.005(0.010)	-0.006(0.011)	0.012(0.016)	0.006(0.012)	-0.006(0.012)	0.013(0.017)	0.006(0.012)	-0.007(0.012)	
Man Stops	0.020(0.013)	0.017(0.010)*	-0.003(0.010)	0.024(0.015)	0.021(0.011)*	-0.004(0.011)	0.026(0.016)*	0.021(0.011)*	-0.005(0.011)	
S3										
Grades Stops	-0.009(0.015)	-0.016(0.010)*	-0.008(0.012)	-0.009(0.017)	-0.018(0.011)	-0.009(0.013)	-0.010(0.018)	-0.019(0.012)	-0.009(0.014)	
Zone Stops	-0.010(0.014)	-0.008(0.010)	0.002(0.011)	-0.010(0.016)	-0.009(0.011)	0.001(0.013)	-0.011(0.017)	-0.010(0.011)	0.001(0.013)	
Man Stops	-0.014(0.013)	0.003(0.009)	0.017(0.010)*	-0.018(0.015)	0.002(0.011)	0.020(0.011)*	-0.017(0.016)	0.003(0.011)	0.020(0.012)*	

Note: Differences shown with standard errors in parentheses. Positive values indicate the first definition has a larger effect than the second. * * p < 0.10, ** p < 0.05, *** p < 0.01

Table 5: Defense Grades - Model Comparison of Player Type Differences

		LPM			Probit		Logit			
Variable	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	
DL1										
Grades Run Defense	0.037(0.017)**	0.036(0.014)***	-0.002(0.012)	0.045(0.020)**	0.045(0.016)***	0.000(0.014)	0.046(0.021)**	0.046(0.016)***	-0.000(0.014)	
Grds Pass Rush Def	-0.002(0.017)	-0.011(0.013)	-0.009(0.012)	-0.003(0.019)	-0.016(0.015)	-0.014(0.013)	-0.003(0.020)	-0.018(0.015)	-0.015(0.014)	
DL2	0.00=(0.01)	0.022(0.020)	01000(01012)	0.000(0.020)	0.010(0.010)	01012(01010)	0.000(0.020)	***************************************	0.010(0.011)	
Grades Run Defense	-0.020(0.025)	-0.004(0.014)	0.015(0.021)	-0.027(0.029)	-0.008(0.016)	0.019(0.024)	-0.025(0.030)	-0.006(0.016)	0.019(0.025)	
Grds Pass Rush Def	0.019(0.025)	0.005(0.013)	-0.014(0.021)	0.025(0.028)	0.004(0.015)	-0.020(0.024)	0.023(0.029)	0.004(0.016)	-0.019(0.025)	
DL3	0.010(0.020)	0.000(0.010)	0.011(0.021)	0.020(0.020)	0.001(0.010)	0.020(0.021)	0.020(0.020)	0.001(0.010)	0.010(0.020)	
Grades Run Defense	-0.016(0.041)	-0.021(0.014)	-0.005(0.039)	-0.019(0.046)	-0.029(0.016)*	-0.011(0.043)	-0.023(0.047)	-0.029(0.016)*	-0.006(0.045)	
Grds Pass Rush Def	-0.011(0.041)	0.003(0.013)	0.014(0.039)	-0.014(0.046)	0.006(0.015)	0.020(0.043)	-0.009(0.047)	0.006(0.016)	0.016(0.045)	
DL4	-0.011(0.041)	0.003(0.013)	0.014(0.039)	=0.014(0.040)	0.000(0.013)	0.020(0.043)	=0.009(0.041)	0.000(0.010)	0.010(0.043)	
Grades Run Defense	0.028(0.050)	-0.005(0.014)	-0.033(0.049)	0.037(0.056)	-0.003(0.016)	-0.040(0.054)	0.037(0.058)	-0.005(0.016)	-0.042(0.056)	
Grds Pass Rush Def	-0.011(0.051)	-0.011(0.014)	-0.000(0.050)	-0.016(0.057)	-0.016(0.016)	-0.001(0.055)	-0.015(0.059)	-0.015(0.016)	-0.000(0.057)	
LB1	0.040(0.040)	0.000(0.010)	0.000(0.040)	0.040(0.040)	0.000(0.04.1)	0.001(0.010)	0.044(0.040)	0.00=(0.04=)	0.001(0.011)	
Grades Run Defense	-0.010(0.016)	-0.008(0.013)	0.002(0.012)	-0.010(0.019)	-0.006(0.014)	0.004(0.013)	-0.011(0.019)	-0.007(0.015)	0.004(0.014)	
Man Grades Cov Def	-0.007(0.013)	-0.007(0.010)	-0.000(0.009)	-0.011(0.015)	-0.009(0.011)	0.002(0.010)	-0.010(0.015)	-0.008(0.012)	0.002(0.011)	
Zone Grades Cov Def	-0.009(0.015)	-0.004(0.012)	0.005(0.011)	-0.011(0.018)	-0.009(0.013)	0.002(0.013)	-0.011(0.018)	-0.010(0.014)	0.001(0.013)	
LB2										
Grades Run Defense	0.041(0.025)	0.027(0.012)**	-0.015(0.023)	0.048(0.029)*	0.034(0.014)**	-0.014(0.026)	0.051(0.031)*	0.035(0.014)**	-0.016(0.028)	
Man Grades Cov Def	-0.015(0.017)	-0.009(0.010)	0.007(0.014)	-0.021(0.019)	-0.011(0.012)	0.009(0.016)	-0.020(0.020)	-0.013(0.012)	0.008(0.017)	
Zone Grades Cov Def	-0.016(0.021)	0.008(0.011)	0.024(0.019)	-0.018(0.024)	0.008(0.013)	0.026(0.021)	-0.019(0.025)	0.006(0.013)	0.025(0.022)	
LB3										
Grades Run Defense	0.076(0.047)	0.009(0.013)	-0.067(0.046)	0.094(0.054)*	0.009(0.015)	-0.084(0.052)	0.095(0.057)*	0.010(0.015)	-0.085(0.055)	
Man Grades Cov Def	-0.030(0.021)	-0.012(0.011)	0.018(0.019)	-0.034(0.024)	-0.015(0.012)	0.020(0.022)	-0.036(0.025)	-0.015(0.013)	0.021(0.022)	
Zone Grades Cov Def	0.059(0.032)*	0.010(0.012)	-0.049(0.030)*	0.070(0.037)*	0.012(0.014)	-0.058(0.035)*	0.072(0.038)*	0.011(0.014)	-0.061(0.036)*	
LB4										
Grades Run Defense	-0.062(0.056)	0.013(0.013)	0.075(0.055)	-0.079(0.063)	0.014(0.015)	0.093(0.061)	-0.080(0.065)	0.014(0.015)	0.094(0.064)	
Man Grades Cov Def	0.016(0.022)	0.014(0.012)	-0.002(0.018)	0.023(0.025)	0.019(0.014)	-0.004(0.021)	0.024(0.026)	0.019(0.014)	-0.005(0.022)	
Zone Grades Cov Def	0.005(0.032)	-0.000(0.013)	-0.005(0.030)	0.001(0.039)	-0.004(0.015)	-0.005(0.036)	0.002(0.040)	-0.001(0.016)	-0.003(0.038)	
CB1	**************************************	0.000(0.020)	01000(01000)	0.002(0.000)	0.00 = (0.0=0)	()	0.00=(0.000)	0.002(0.020)	0.000(0.000)	
Grades Run Defense	0.037(0.023)	0.031(0.014)**	-0.006(0.019)	0.042(0.026)	0.037(0.016)**	-0.005(0.021)	0.043(0.027)	0.037(0.017)**	-0.006(0.022)	
Man Grades Cov Def	0.023(0.019)	-0.014(0.013)	-0.037(0.015)**	0.024(0.022)	-0.019(0.014)	-0.043(0.017)**	0.026(0.023)	-0.019(0.015)	-0.045(0.018)**	
Zone Grades Cov Def	0.023(0.019)	-0.014(0.013)	-0.026(0.017)	0.024(0.022)	-0.013(0.014)	-0.032(0.020)	0.020(0.025)	-0.013(0.013)	-0.031(0.020)	
CB2	0.017(0.021)	-0.010(0.014)	-0.020(0.017)	0.021(0.024)	-0.011(0.013)	-0.032(0.020)	0.020(0.023)	-0.011(0.010)	-0.031(0.020)	
Grades Run Defense	-0.025(0.026)	-0.050(0.014)***	-0.024(0.023)	-0.031(0.029)	-0.058(0.016)***	-0.027(0.025)	-0.032(0.031)	-0.061(0.017)***	-0.029(0.026)	
Man Grades Cov Def	-0.017(0.022)	-0.008(0.012)	0.009(0.019)	-0.018(0.026)	-0.008(0.014)	0.010(0.022)	-0.018(0.027)	-0.008(0.015)	0.009(0.023)	
Zone Grades Cov Def	0.040(0.026)	0.028(0.013)**	-0.012(0.023)	0.049(0.030)	0.033(0.015)**	-0.015(0.027)	0.049(0.032)	0.035(0.016)**	-0.014(0.028)	
CB3										
Grades Run Defense	0.032(0.040)	0.016(0.013)	-0.016(0.038)	0.037(0.046)	0.015(0.014)	-0.022(0.044)	0.040(0.048)	0.015(0.015)	-0.024(0.046)	
Man Grades Cov Def	0.022(0.033)	-0.000(0.012)	-0.022(0.031)	0.022(0.037)	-0.002(0.014)	-0.023(0.034)	0.023(0.038)	0.001(0.014)	-0.022(0.036)	
Zone Grades Cov Def	-0.008(0.037)	0.001(0.013)	0.009(0.036)	-0.008(0.042)	0.003(0.015)	0.011(0.040)	-0.010(0.044)	0.002(0.015)	0.012(0.041)	
S1										
Grades Run Defense	-0.011(0.021)	-0.025(0.015)	-0.014(0.017)	-0.013(0.024)	-0.028(0.017)	-0.015(0.019)	-0.012(0.025)	-0.032(0.018)*	-0.019(0.019)	
Man Grades Cov Def	0.005(0.019)	0.011(0.015)	0.005(0.014)	0.006(0.023)	0.011(0.017)	0.005(0.016)	0.006(0.024)	0.009(0.017)	0.003(0.017)	
Zone Grades Cov Def	0.003(0.019)	0.015(0.014)	0.011(0.014)	0.004(0.021)	0.021(0.016)	0.017(0.016)	0.004(0.022)	0.021(0.016)	0.017(0.016)	
S2										
Grades Run Defense	-0.011(0.033)	-0.027(0.016)*	-0.016(0.030)	-0.010(0.038)	-0.031(0.018)*	-0.021(0.034)	-0.011(0.040)	-0.030(0.019)	-0.019(0.036)	
Man Grades Cov Def	0.023(0.029)	0.013(0.015)	-0.011(0.026)	0.026(0.034)	0.014(0.017)	-0.012(0.030)	0.027(0.036)	0.015(0.017)	-0.012(0.032)	
Zone Grades Cov Def	-0.001(0.030)	-0.006(0.015)	-0.004(0.027)	0.001(0.035)	-0.007(0.017)	-0.008(0.032)	-0.001(0.037)	-0.007(0.018)	-0.006(0.033)	
S3	(0.000)	3.000(0.010)	3.001(0.021)	5.001(0.000)	3.001(0.011)	5.000(0.002)	5.001(0.001)	3.001(0.010)	3.000(0.000)	
Grades Run Defense	0.006(0.045)	0.007(0.013)	0.001(0.044)	0.008(0.053)	0.006(0.015)	-0.002(0.051)	0.009(0.057)	0.006(0.016)	-0.003(0.055)	
Man Grades Cov Def	-0.017(0.045)	-0.021(0.013)*	-0.004(0.044)	-0.026(0.051)	-0.027(0.015)*	-0.002(0.031)	-0.025(0.053)	-0.027(0.015)*	-0.002(0.051)	
	-0.011(0.040)	-0.021(0.013)	-0.004(0.040)	-0.020(0.001)	-0.021(0.013)	-0.002(0.049)	-0.020(0.000)	-0.021(0.013)	-0.002(0.001)	

Note: Differences shown with standard errors in parentheses. Positive values indicate the first definition has a larger effect than the second. * * p < 0.10, ** p < 0.05, *** p < 0.01

Table 6: Defense Tackles - Model Comparison of Player Type Differences

		LPM			Probit		Logit			
Variable	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	Start-Fld	Start-Att	Fld-Att	
DL1										
Grades Tackles	0.019(0.013)	0.009(0.009)	-0.011(0.009)	0.023(0.014)	0.012(0.011)	-0.011(0.010)	0.024(0.015)	0.012(0.011)	-0.012(0.011)	
Productivity Sacks	-0.005(0.012)	-0.012(0.009)	-0.007(0.009)	-0.006(0.014)	-0.015(0.010)	-0.008(0.011)	-0.006(0.015)	-0.015(0.011)	-0.009(0.011)	
DL2										
Grades Tackles	-0.028(0.013)**	-0.014(0.009)	0.015(0.009)	-0.033(0.015)**	-0.014(0.011)	0.019(0.011)*	-0.033(0.015)**	-0.014(0.011)	0.019(0.011)*	
Productivity Sacks	0.001(0.012)	-0.004(0.009)	-0.005(0.009)	0.001(0.014)	-0.006(0.010)	-0.006(0.010)	-0.000(0.015)	-0.007(0.011)	-0.007(0.011)	
DL3										
Grades Tackles	-0.016(0.014)	-0.018(0.009)**	-0.002(0.011)	-0.020(0.016)	-0.022(0.010)**	-0.003(0.012)	-0.019(0.016)	-0.022(0.011)**	-0.003(0.013)	
Productivity Sacks	-0.008(0.013)	-0.002(0.009)	0.006(0.010)	-0.009(0.015)	-0.002(0.010)	0.007(0.012)	-0.009(0.016)	-0.003(0.011)	0.006(0.012)	
DL4										
Grades Tackles	0.001(0.014)	0.003(0.010)	0.002(0.011)	0.001(0.016)	0.004(0.011)	0.003(0.013)	-0.000(0.017)	0.001(0.011)	0.001(0.013)	
Productivity Sacks	0.012(0.014)	-0.004(0.009)	-0.016(0.010)	0.014(0.015)	-0.006(0.011)	-0.020(0.012)*	0.015(0.016)	-0.006(0.011)	-0.021(0.012)*	
LB1	(,	(,	(,	()	, , ,	()	(,	(,	(,	
Grades Tackles	-0.015(0.016)	-0.008(0.012)	0.007(0.012)	-0.018(0.018)	-0.009(0.013)	0.009(0.014)	-0.018(0.019)	-0.008(0.014)	0.010(0.014)	
Man Tackles	-0.001(0.015)	-0.006(0.011)	-0.005(0.011)	-0.002(0.017)	-0.006(0.013)	-0.004(0.013)	-0.002(0.018)	-0.007(0.013)	-0.005(0.013)	
Zone Tackles	0.005(0.018)	-0.009(0.013)	-0.014(0.013)	0.008(0.020)	-0.009(0.014)	-0.017(0.015)	0.007(0.021)	-0.009(0.015)	-0.017(0.016)	
LB2	0.000(0.000)	0.000(0.020)	0.022(0.020)	***************************************	01000(0102-2)	0.021(0.020)	0.007(0.0=2)	0.000(0.000)	0.021(0.020)	
Grades Tackles	0.026(0.017)	-0.002(0.012)	-0.028(0.013)**	0.030(0.020)	-0.003(0.013)	-0.034(0.015)**	0.031(0.020)	-0.004(0.014)	-0.035(0.016)**	
Man Tackles	-0.010(0.015)	-0.007(0.011)	0.003(0.011)	-0.011(0.017)	-0.009(0.013)	0.001(0.013)	-0.012(0.018)	-0.009(0.013)	0.002(0.013)	
Zone Tackles	-0.017(0.018)	-0.005(0.013)	0.011(0.013)	-0.019(0.020)	-0.005(0.015)	0.014(0.015)	-0.019(0.021)	-0.005(0.015)	0.014(0.015)	
LB3	0.021(0.020)	0.000(0.020)	0.011(0.010)	0.010(0.020)	01000(01020)	0.011(0.010)	01020(01022)	0.000(0.000)	0.011(0.010)	
Grades Tackles	0.011(0.020)	-0.007(0.013)	-0.018(0.016)	0.016(0.023)	-0.006(0.015)	-0.022(0.018)	0.016(0.024)	-0.007(0.015)	-0.023(0.019)	
Man Tackles	-0.026(0.016)*	-0.024(0.011)**	0.003(0.011)	-0.032(0.018)*	-0.026(0.013)*	0.006(0.013)	-0.033(0.019)*	-0.027(0.013)**	0.006(0.013)	
Zone Tackles	-0.002(0.019)	0.008(0.013)	0.010(0.014)	-0.004(0.021)	0.007(0.015)	0.012(0.016)	-0.003(0.022)	0.009(0.015)	0.012(0.017)	
LB4	0.00=(0.000)	***************************************	***************************************	0.00-(0.02-)	0.007(0.020)	***************************************	0.000(0.00=)	0.000(0.020)	0.012(0.011)	
Grades Tackles	-0.001(0.019)	-0.005(0.012)	-0.004(0.016)	0.002(0.022)	-0.004(0.014)	-0.006(0.018)	0.001(0.023)	-0.006(0.014)	-0.007(0.019)	
Man Tackles	0.022(0.015)	0.006(0.011)	-0.016(0.011)	0.028(0.018)	0.008(0.013)	-0.020(0.013)	0.028(0.018)	0.008(0.013)	-0.020(0.013)	
Zone Tackles	-0.017(0.017)	-0.001(0.012)	0.016(0.014)	-0.021(0.020)	-0.001(0.014)	0.019(0.016)	-0.021(0.021)	-0.000(0.014)	0.021(0.017)	
CB1	0.027(0.027)	0.00-(0.0)	0.010(0.011)	0.022(0.020)	01002(01022)	01010(01010)	0.022(0.022)	0.000(0.022)	0.0=-(0.0-1)	
Grades Tackles	0.001(0.013)	0.005(0.009)	0.004(0.010)	0.002(0.015)	0.007(0.010)	0.005(0.011)	0.002(0.015)	0.007(0.011)	0.005(0.011)	
Man Tackles	-0.020(0.015)	0.008(0.011)	0.028(0.011)**	-0.023(0.017)	0.009(0.012)	0.031(0.012)**	-0.024(0.017)	0.008(0.013)	0.032(0.013)**	
Zone Tackles	-0.005(0.014)	-0.001(0.010)	0.004(0.010)	-0.006(0.016)	-0.001(0.011)	0.006(0.012)	-0.008(0.017)	-0.001(0.012)	0.007(0.012)	
CB2	01000(01022)	0.002(0.020)	***************************************	0.000(0.000)	01002(01022)	***************************************	0.000(0.001)	0.00-(0.01-2)	0.001(0.012)	
Grades Tackles	-0.007(0.014)	-0.008(0.010)	-0.001(0.010)	-0.009(0.016)	-0.009(0.011)	-0.000(0.012)	-0.010(0.016)	-0.009(0.011)	0.000(0.012)	
Man Tackles	0.004(0.015)	0.012(0.010)	0.008(0.011)	0.006(0.016)	0.014(0.012)	0.008(0.012)	0.007(0.017)	0.015(0.012)	0.008(0.013)	
Zone Tackles	-0.006(0.014)	-0.010(0.010)	-0.005(0.011)	-0.007(0.016)	-0.011(0.012)	-0.004(0.012)	-0.006(0.017)	-0.012(0.012)	-0.005(0.013)	
CB3	0.000(0.011)	0.010(0.010)	0.000(0.011)	0.001(0.010)	0.011(0.012)	0.001(0.012)	0.000(0.011)	0.012(0.012)	0.000(0.010)	
Grades Tackles	0.001(0.015)	-0.005(0.010)	-0.006(0.012)	0.002(0.018)	-0.005(0.012)	-0.007(0.013)	0.001(0.018)	-0.006(0.012)	-0.007(0.014)	
Man Tackles	0.028(0.015)*	0.016(0.011)	-0.013(0.012)	0.033(0.017)*	0.017(0.012)	-0.016(0.013)	0.033(0.018)*	0.017(0.012)	-0.015(0.014)	
Zone Tackles	0.009(0.016)	0.007(0.010)	-0.002(0.013)	0.012(0.019)	0.009(0.012)	-0.003(0.015)	0.012(0.019)	0.010(0.012)	-0.003(0.015)	
S1	0.003(0.010)	0.001(0.010)	-0.002(0.010)	0.012(0.013)	0.003(0.012)	-0.000(0.010)	0.012(0.013)	0.010(0.012)	-0.000(0.010)	
Grades Tackles	-0.009(0.014)	-0.004(0.010)	0.005(0.010)	-0.011(0.016)	-0.004(0.012)	0.007(0.012)	-0.012(0.016)	-0.005(0.012)	0.007(0.012)	
Man Tackles	-0.011(0.014)	-0.003(0.010)	0.008(0.011)	-0.011(0.016)	-0.005(0.012)	0.006(0.012)	-0.013(0.017)	-0.006(0.012)	0.007(0.012)	
Zone Tackles	0.006(0.014)	0.007(0.010)	0.001(0.010)	0.008(0.016)	0.009(0.012)	0.001(0.011)	0.010(0.017)	0.009(0.012)	-0.001(0.012)	
S2	0.000(0.014)	0.001(0.010)	0.001(0.010)	0.000(0.010)	0.003(0.012)	0.001(0.011)	0.010(0.011)	0.003(0.012)	-0.001(0.012)	
Grades Tackles	-0.006(0.015)	-0.001(0.010)	0.005(0.012)	-0.005(0.018)	0.001(0.012)	0.006(0.014)	-0.006(0.018)	0.001(0.012)	0.008(0.014)	
Man Tackles	0.010(0.015)	0.012(0.011)	0.003(0.012)	0.011(0.017)	0.015(0.012)	0.005(0.013)	0.013(0.018)	0.016(0.013)	0.003(0.014)	
Zone Tackles	0.001(0.013)	0.004(0.011)	0.003(0.011)	0.001(0.017)	0.002(0.012)	0.003(0.013)	0.001(0.018)	0.001(0.013)	-0.000(0.013)	
S3	3.001(0.010)	5.004(0.010)	5.000(0.012)	5.001(0.010)	5.002(0.012)	3.001(0.014)	5.001(0.010)	5.001(0.012)	3.000(0.014)	
Grades Tackles	-0.023(0.017)	-0.012(0.011)	0.011(0.014)	-0.028(0.020)	-0.014(0.013)	0.014(0.016)	-0.030(0.021)	-0.014(0.013)	0.016(0.016)	
Man Tackles	-0.023(0.017)	-0.012(0.011)	-0.000(0.013)	-0.028(0.020)	-0.014(0.013)	-0.003(0.015)	-0.002(0.021)	-0.014(0.013)	-0.002(0.016)	
iviali Tackies	-0.002(0.010)	-0.002(0.011)	-0.000(0.013)	-0.001(0.019)	-0.004(0.012)	-0.003(0.013)	-0.002(0.020)	-0.003(0.013)	-0.002(0.010)	

Note: Differences shown with standard errors in parentheses. Positive values indicate the first definition has a larger effect than the second. * * p < 0.10, ** p < 0.05, *** p < 0.01