McMaster Win Shares

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Win Shares is a player statistic which attempts to divvy up credit for team success to the individuals on the team. Under the original win share calculations one win is equivalent to one win share. I kept the same assumption however the problem with University level sports is the sample size is not large enough to make this assumption work. The problem lies in the marginal offence for each player calculations which use the following formula:
Marginal offence = (Points Produced) - .92 (League Points Per Possession)(Offensive Possessions)
The problem here lies that the .92 factor is the factor used for NBA players (and only those of the past 40 years). I found that a more appropriate constant was .85 to adjust for the skill level. From this I calculated Win Shares. Some players have negative win shares. This is because there is a logic that these players are so poor that they are taking away wins that his teammate has generated. The following is the data I used to make the calculations and the latter is the actual calculations.

League Points Per Possession
0.842
Team Pace
96.4
League Pace
95.7
League Point Per Game
81.4
Marginal Point Per Win
26.23852874

	McMaster Win Shares			
Player	Point Produced on the Season	Offensive Possessions	Marginal Offense	Offensive Win Shares
Kostecki	149	191	12.3013	0.46882583
Collins	371	480	27.464	1.04670503
Simic	139	210	-11.297	-0.430550055
Quiring	282	299	68.0057	2.591825963
Seward	386	402	98.2886	3.745964608
Nardini	46	100	-25.57	-0.974521104
McCulloch	410	438	96.5234	3.678689494
Adu-Poku	122	147	16.7921	0.639978719
Thompson	6	34	-18.3338	-0.698735824
Toic	109	208	-39.8656	-1.519353482
Total	2020	2509		8.548829176

As we see that from the data who our players that are helping us win and who are not helping us win.