



Institutional Research

DATE: March 14, 2017
TO: A. Wade
FROM: A. Andreu
RE: WF Non-Return Analysis¹

Executive Summary

This report performs further analysis from the initial report *Demographic Information of Fall 2016 WF*; here I look at differences between those who returned in spring 2017 versus those that did not return. The analysis focused on the following topics: holds, WF credit break-point, domestic, financial aid, and academics.

The data showed that the two main holds placed on students who did not return were “SAO Past Due Balance” and “Bursar Hold Canceled Aid.” Two hundred and eighty-eight had one hold, one hundred and eighteen had two holds and eleven had three holds.

A look at the percent of credits from faculty withdrawal (WF) to the total registered credit hours of students showed that when the percent of WF credits exceed one-third students were more likely not to return.

The domestic topic was taken from the perspective of having dependents (as identified in FASFA). It was found that a greater proportion of non-returning students had dependents than those who did return and there was no difference if the student was single or married/domestic partner.

There was no difference in the proportion of PELL eligibility between the two groups; however there were significant differences in the type of financial aid accepted by the returning vs. not-returning students. In particular, those who had no aid (greater percent of not-returning had no aid) and PELL & TAP (where a greater percent of returning had PELL&TAP). There was no difference in the proportion of returned vs. not-returned in PELL Only or TAP Only, but there was a statistical difference in the amount accepted/paid out in PELL and TAP between the two groups, viz., those who returned had a greater average amount accepted or paid than those who did not return. The financial aid results suggest that those who did not return may have a financial issue. That is, why is it that there is no difference in PELL eligibility and yet those who did not return had no financial aid (proportion wise) – could it be that while eligible some process/issue presented a barrier? Also, there is another dynamic: the amount of financial aid accepted & paid – did this have to do with being withdrawn?

Lastly, the academic analysis showed that the returning student had a greater GPA than the non-returning student. Also, academic risk at entry, which is based on placement, showed a greater proportion of returning students were college ready in both English and Mathematics; although the percents were less than 20% and the populations matched on all other academic risk levels.

In sum, there are some tells that distinguish between the two groups, but this analysis doesn't show a direct causal link with WF. At best it shows there are some associations/interactions with WFs and further analysis may bring in more to light.

¹ Cite report as: Andreu, A. (March 2017) *WF Non-Return Analysis*, IR, Total pp

Holds

Table 1 shows the types of holds that students who did not return had placed on them. Two hundred and eighty-eight had one hold, one hundred and eighteen had two holds and eleven had three holds.

Table 1

Holds	Did Not Return
SAO Past Due Balance	395
Bursar Hold Canceled Aid	108
Health Services	22
Housing Financial Above \$200	10
Dropped for Non-Payment	5
Student Services	5
Prior Yr FA Bal > \$200	4
Bad Check under \$200	2
Sent to Collection Agency	2
Bad Check \$200 or More	1
Disciplinary Dismissal	1
Emergency Loan	1
Public Safety Conduct Issue	1

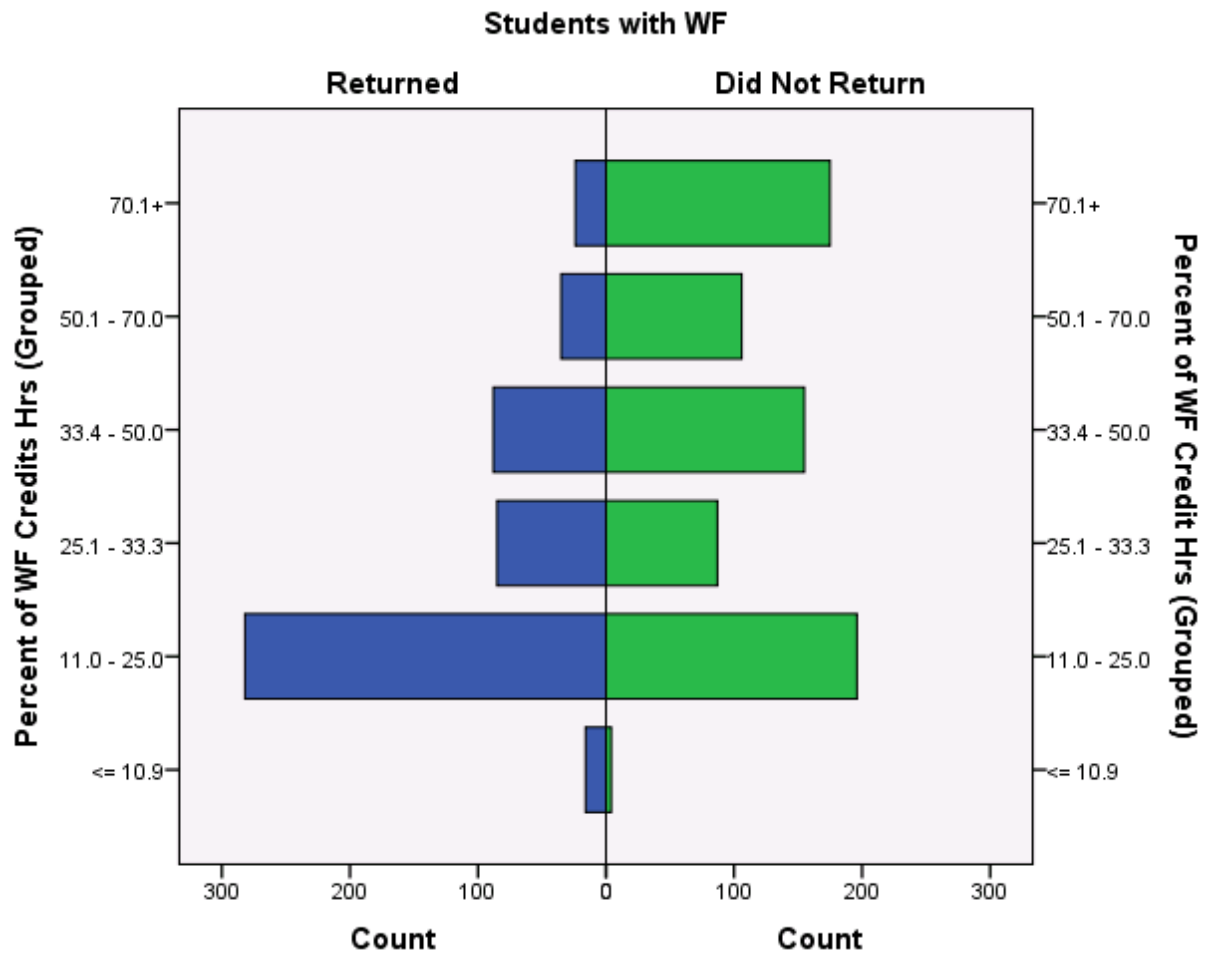
As can be noted in Figure 1, next page, there are greater numbers of students who did not return that had higher proportions of WF credit hours. Analysis showed that if a student had one-third or more of their credits hours withdrawn by faculty, two-thirds did not return the following term. Another way to state this would be: students are 3.86 times more likely to return if they have less than one-third of their total credits hours be WF (odds-ratio of the event returned & less than 1/3). The one-third split is statistically significant, which means that there is a relationship between not returning and the proportion of total credit hours that are WF. It is interesting to note that 145 students ended up with 100% of their withdrawal credit coming from faculty; 131 did not return while 14 did.

Table 2

	Returned	Did not Return	Total
Less than one-third total credit hours WF	353 (67%)	246 (34%)	599 (48%)
One-third or more total credit hours WF	177 (33%)	477 (66%)	654 (52%)
Total	530	723	1253

See Appendix, page 8.

Figure 1



Tables 3 to 5, page 3, looks at the return vs. did not return from a **Domestic Perspective**.

Table 3 shows that there is a difference (statistically significant) that there is a relationship between having dependents (as defined in FASFA) and returning the following term. That is, if you have no dependents you are 1.8 times more likely to return.

Table 3

Has Dependents in Aid year 1617	Returned	Did not Return	Total
No	372 (85%)	423 (76%)	795
Yes	66 (15%)	135 (24%)	201
Total	438	558	996

Fisher Exact Test, p-value = 0.0003

In Table 4 we note that a greater number of the non-returning students were single and had dependents (as defined in FASFA). But as a proportion between the Return vs. Did not Return, there is no statistical difference. While Table 3 demonstrates a difference, parsing out by marital status showed no difference, meaning that just having dependents is associated with not returning.

Table 4

Has Dependents in Aid year 1617	Returned	Did not Return	Total
Married or Domestic Partner	9 (14%)	16 (12%)	25
Single	57 (86%)	119 (88%)	176
Total	66	135	201

Fisher Exact Test, p-value = 0.82

Table 5 shows that there is no difference in the distribution of children; but we only have information on 5.5% of the WF population. Given the results from Table 3 above shows that we do have an under count on the distribution of children.

Table 5

		Returned	Did Not Return	Total
I have children who are age 5 and younger and/or I'm expecting a baby	Count	13	7	20
	%	27.7%	30.4%	28.6%
I have children who are age 6-18	Count	13	6	19
	%	27.7%	26.1%	27.1%
I have children who are in both of the above age groups	Count	9	5	14
	%	19.1%	21.7%	20.0%
I don't have any children in the above age groups	Count	12	5	17
	%	25.5%	21.7%	24.3%
Total	Count	47	23	70
	%	100.0%	100.0%	100.0%

Chi-Square Test, p-value = 0.978

Financial Aid Perspective

A look at PELL eligibility shows that there is no difference.

Table 6

PELL Eligible		Returned	Did Not Return	Total
No	Count	197	269	466
	%	37.1%	37.1%	37.1%
Yes	Count	334	457	791
	%	62.9%	62.9%	62.9%
Total	Count	531	726	1257
	%	100.0%	100.0%	100.0%

Chi-Square Test, p-value = 0.986

There are significant differences in the type of financial aid accepted by the returning vs. not-returning students, Table 7. In particular, None (greater percent of not-returning had no aid) and PELL & TAP (where a greater percent of returning had PELL&TAP).

Table 7

		Returned	Did Not Return	Total
None*	Count	184	352	536
	%	34.7%	48.5%	42.6%
PELL Only	Count	116	182	298
	%	21.8%	25.1%	23.7%
PELL & TAP*	Count	201	153	354
	%	37.9%	21.1%	28.2%
TAP Only	Count	30	39	69
	%	5.6%	5.4%	5.5%
Total	Count	531	726	1257
	%	100.0%	100.0%	100.0%

*p-value < 0.00001

While there was no difference in the proportion of returned vs. not-returned in PELL Only or TAP Only, there was a statistical difference in the amount accepted/paid out in PELL and TAP between the two groups, viz., those who returned had a greater average amount accepted or paid than those who did not return, Tables 8 & 9.

Table 8

		N	Mean	Std. Deviation
PELL Accepted*	Returned	531	\$ 1,502.71	\$ 1,339.41
	Did Not Return	726	\$ 934.90	\$ 1,194.80
TAP Accepted*	Returned	531	\$ 633.48	\$ 843.32
	Did Not Return	726	\$ 399.98	\$ 744.14

*p-value < 0.000001

Table 9

		N	Mean	Std. Deviation
PELL Paid*	Returned	531	\$ 1,489.02	\$ 1,341.32
	Did Not Return	726	\$ 927.86	\$ 1,192.67
TAP Paid*	Returned	531	\$ 602.61	\$ 831.80
	Did Not Return	726	\$ 386.35	\$ 735.69

*p-value < 0.000001

The results from Tables 6 – 9 suggest that those who did not return may have a financial issue. That is, why is it that there is no difference in PELL eligibility and yet those who did not return had no financial aid (proportion wise) – could it be that while eligible some process/issue presented a barrier? Also, there is another dynamic: the amount of financial aid accepted & paid – did this have to do with being withdrawn?

Academic Perspective

The end-of-term (EOT) fall 2016 GPA between those who returned vs. those who did not were statistically different. The returning group had a greater GPA (see Table 10)

Table 10

Status	N	EOT Mean GPA	Std. Deviation
Returned	531	1.7376	1.0837
Did Not Return	726	1.2178	1.1488

A look at academic risk at entry shows that a greater proportion was college ready, while the remaining risk categories were similar, Table 11.

Table 11

Risk at entry		Returned	Did Not Return	Total
College ready in both English and Math*	Count	75	46	121
	%	14.1%	6.3%	9.6%
One level below College ready in either English or Math	Count	102	138	240
	%	19.2%	19.0%	19.1%
Two levels below in College ready in either English or Math or both	Count	273	392	665
	%	51.4%	54.0%	52.9%
English placement missing	Count	9	13	22
	%	1.7%	1.8%	1.8%
Math placement mission	Count	23	23	46
	%	4.3%	3.2%	3.7%
No placement information	Count	49	114	163
	%	9.2%	15.7%	13.0%
Total	Count	531	726	1257
	%	100.0%	100.0%	100.0%

*p-value < 0.00001

In sum, there are some tells that distinguish between the two groups, but this analysis doesn't show a direct causal link with WF. At best it shows there are some associations/interactions with WFs and further analysis may bring in more to light.

Appendix I

Figure 2 shows the logistic curve that shows the break point on percent of WF credits and the likelihood of returning in spring 2017. Another way to see the break point is in Figure 3, next page. You'll note that around the 33.3 point (along the horizontal axis) the red line (not-returning) is consistently above the blue line (returning).

Figure 2

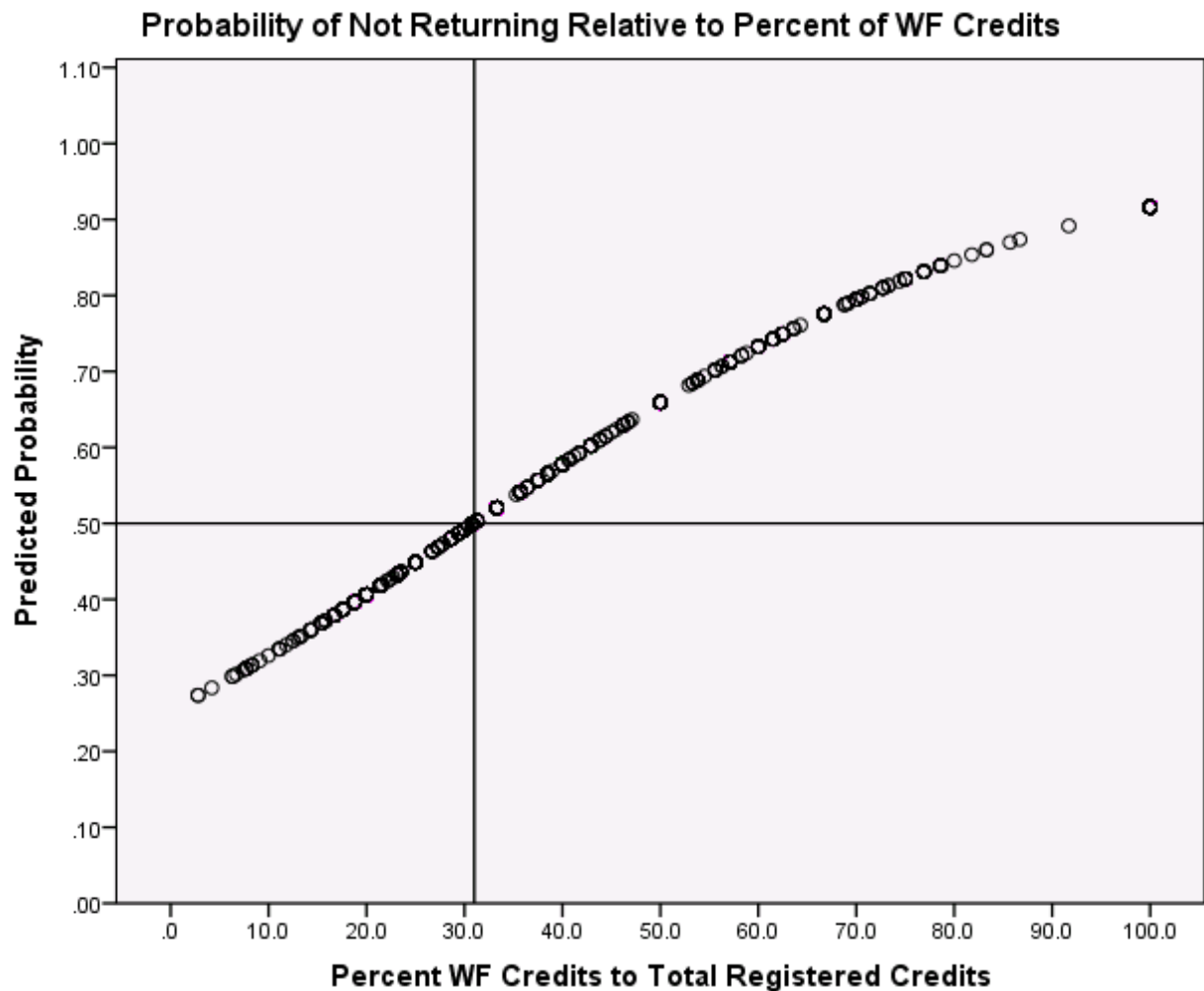


Figure 3

