[PROJECT TITLE] [DATE OF REPORT]

This report is for the EVI-2 administration in November 2002. There were 52 pre-tests and 57 post-tests administered and completed. A total of 47 students completed both the pre- and post-test. Because there were more than thirty participants with both pre- and post-test scores, repeated measures t-tests could be conducted on the scale scores in order to assess if there was a significant increase in the scores after participation in the program. Descriptive statistics for each subscale, and the total score can be found in Table 1 below, with the results of the repeated measures t-tests included in the right-hand column of the descriptive statistics table.

There was a significant increase in the subscales of Integrity, Values, and Ethics. There was no significant difference from pre- to post-test in the Community subscale. There was also a significant increase in the total scores from pre- to post-test.

Table 2 provides descriptive statistics for each item at both pre- and post-test. The percentage of students answering each item correctly, can be obtained by looking at the means for each item.

Reliability estimates (Cronbachs coefficient alpha) were computed for the scores from both the subscales and total test at both pre- and post-testing occasions. The results of these analyses are in Table 3. Reliability is the degree to which the items representing a construct are answered consistently. Reliability, in this case internal consistency, is necessary to assess if one intends to compute summated scores. In the current situation, the EVI-2 was designed to produce a total and four subscale summated scores. Therefore, the consistency of the responses to the items representing each summated scale score must be assessed. If reliability is poor, one should not compute a summated scale score because the items used to compute the score are not answered consistently. The more reliable a test, the more confidence we can have that the scores obtained from the administration of the test are essentially the same scores that would be obtained if the test were readministered. Reliability is expressed numerically, usually as a coefficient that ranges from 0 to 1.00. A high coefficient indicates high reliability or consistency. If the test scores were perfectly reliable, the coefficient would be 1.00. However, seldom are test scores perfectly reliable. Scores can be affected by errors in measurement or characteristics of the test itself (e.g., ambiguous items, items with no variance). In general, reliabilities above .70 are considered adequate for program evaluation or research. For evaluation of individual students, reliabilities closer to .80 are desirable. Examining the results in Table 3, we can see that scores from the total test can be considered reliable. However, the reliability estimates of the subscale scores are low to moderate.

In order to get a better picture of why the reliability estimates are low to moderate for the subscale scores, correlation matrices, item total correlations, and the reliability value if an item was removed from the scale should be examined. These, therefore, are presented in Appendix A. When examining the correlation matrices, negative correlations and extremely low correlations should be noted. This indicates that an item is negatively, or very weakly, related to another item that represents the construct. If two items are actually representing the same construct, one would expect them to have a moderate to strong positive relationship. Along the same lines, the item-total correlation indicates how correlated the corresponding item is to the total of all the items representing the subscale. If all the items consistently represent the construct, one would expect these item-total correlations to be positive and of at least moderate magnitude (i.e., at least .40). Finally, the column entitled Alpha if Item Deletedindicates what the reliability of the subscale score would be if the corresponding item was deleted. This should be compared to the actual Cronbachs Coefficient Alpha value (called Alphain Appendix A). If the value of

alpha is higher if the item is deleted, it indicates that this item isnt answered in the same manner as the other items representing the scale.

By looking at the correlation matrix for the Integrity subscale, it is apparent that items 9, 27, and 34 are negatively correlated with several other items representing the subscale. In addition, when looking at the Item-Total Correlation column, we can see that all three of these items have low values (below .14 !). Further inspection of the Alpha if Item Deletedcolumn reveals that if items 27 and 34 were removed, the reliability estimate of the scores would increase from .4761 to the .50 range. In fact, if all three of these items were removed from the scale the reliability of the Integrity scores would equal .56 (this information was gathered from re-running the analysis with these three items removed). The above evidence would suggest that these three items may need inspection to see if the wording of the items or the distracters could be contributing to them being negatively correlated to the other items in the subscale.

When looking at the correlation matrix for the Values subscale, items 6, 7, 8 and 31 have several negative or extremely weak correlations with other items representing the subscale. In fact, item 6 has some serious problems as it is negatively correlated with ten of the other eleven items representing the subscale. Therefore, it is not a surprise that it has a negative item-total correlation (-.04). The negative and weak correlations between items 7, 8, and 31 with other items on the scale produces low item-total correlations for these three items (.09, .18, .21). Finally, the Alpha if Item Deleted column indicates that the reliability estimate of the scores would increase if items 6 or 7 are removed and would remain the same if item 8 removed. In fact, if items 6, 7, and 8 are removed, the reliability increases to .70.

Problems items were also easily identified for the Ethics subscale. Specifically, items 24, 28, 32, 36, 38 and 39 had several negative or extremely weak relationships with other items representing the subscale. This information is further represented by the low or negative item-total correlations for these items. If items 24, 32, 38, or 39 were deleted reliability would increase (if all four are deleted it increases to .60, if 36 was also deleted it would increase to .61).

For the Community subscale, items 25 and 41 have several negative correlations with other items representing this construct. They, in turn, have negative item-total correlations. The Alpha if Item Deletedcolumn reveals that if item 25 were removed from the subscale, the reliability estimate of the scores would increase from .5233 to .6500; this is quite an increase. In addition, it indicates that reliability would increase if item 41 was deleted. In fact, reliability increases to .69 when both items are removed from the subscale.

When examining the statistical characteristics of the items listed above (6, 7, 8, 9, 24, 25, 27, 28, 31, 32, 34, 36, 38, 39, 41), a few of them have little or no variance (e.g., 6, 7, 27) at post-test (see Table 2). Because reliability is a function of the variance of the responses to items, low variance results in low reliability. Specifically, all or almost all students are responding correctly to these three items at post-test. Obviously, this is a good thing if the program promotes understanding of the concepts these items represent (even though it does decrease the estimate of reliability). However, notice that the majority of the students understood these concepts before completing the program (high percentage passing at pre-test). This questions the necessity of these items for evaluating the effectiveness of the program.

At this point, the items that functioned poorly for each subscale should be examined by content/program experts to try to identify the cause of the problem (poorly worded item, item doesnt actually represent construct, confusing options, etc.). For example, items 9, 27, and 34 of the Integrity scale caused concern. As noted above, item 27 had no variance at post-test, which in turn decreases its relationship with other items representing the scale. That is fairly easy to diagnose. Item 9, however, had extremely weak relationships with other items and this doesnt seem to be due to a lack of variance. This item was not answered in the same manner as the other items representing the Integrity construct (demonstrated by the weak relationships with other items). The same can be said for item 34. The question that needs to be answered by program directors is why? Obviously, there is no right or wrong answer

to this question, but if these items continue to function poorly something should be done. What that something is depends on how the problem is diagnosed.

When looking at the reliability of the scores from the Values subscale, it looks adequate. In fact, the items causing the biggest problems (6, 7) are simply a function of no variance (everyone is basically answering the question correctly at post-test). As noted above, given that students come in to the program with this knowledge, a decision should be made if these items are necessary to cover the breadth of this construct.

There were several items that caused problems for the Ethnic subscale. Again, you should go through each of these items to try to diagnose the problem. For example, Item 38 displays some interesting characteristics. There is variability in the responses (see Table 2) so the problem is not a function of low variance. When looking at the frequency distributions in Appendix B, it seems that students are split between b, the correct answer, and c, one of the distracters. Therefore, a possibility for the negative correlation with other items on the scale is that students who have gotten the other items correct may have gotten this item wrong because they felt that cis the best definition.

As a final example, item 25 was one of the problem items representing the Community scale. However, on the surface, the wording of the item appears to fit in the Values subscale. Each item should clearly represent the construct of interest with limited overlap with other constructs. This may be an issue with this item.

It should be re-stated that the reliability estimates reviewed above are for the post-test scores. Analyses were also conducted for the pre-test scores and they indicated that items 6, 25, and 39 present the same concern as they did on the post-test. However, at pre-test, items 11, 12, 28, 29, and 32 also have negative correlations with the total subscale scores. To summarize our reliability analyses, it seems that one can confidently make inferences about program effectiveness using the total score, however, we caution use of the subscale scores. If the instrument was designed for the purpose of attaining a studentsprofile in terms of integrity, values, ethics, and community, we highly encourage further work on this measure.

Appendix B contains the frequency distributions for the unscored items both before and after the program (make sure to examine the Valid Percent Column). These items were left unscored so one could see which distracter options were being chosen most often at each time period (the option with the * next to it was the correct answer). This can help identify misconceptions students bring to the program and those they leave with. Interestingly, there are several items that a majority of students answer correctly at the pre-test. This indicates that they come into the program with this knowledge. If 70% or more students answered the item correctly, it was considered that they had prior knowledge of the item. Items showing this effect are items 1-12, 14, 17, 24, 26, 27, 28, 31, 32, 34-37, 39-44, 46, and 47 (68% of the items). This indicates that students know the majority of the concepts before completing the program. This information can be useful in program development or redesign. Interestingly, for item 19, fewer students get the item correct at post-test than at pre-test.

Finally, Table 4 displays the results for the demographic items (48-51). According to these results, most students taking this administration of the EVI-2 are males, sophomores, and have not completed the By the Numbers or the Calling the Shots sanctions.

TABLE 1

Scale	Pre-Test Mean (SD)	Post-Test Mean (SD)	Number of Subjects	t-values, p
Integrity (items 2, 5, 9, 15, 17, 21, 27, 34)	6.1277 (1.32889)	6.7872 (1.33410)	47	3.028, p=.004
Values (items 1, 4, 6, 7, 8, 14, 20, 22, 23, 26, 31, 45)	9.2128 (1.68027)	10.2979 (1.87564)	47	3.944, p=.000
Ethics (items 11, 13, 16, 18, 19, 24 28, 29, 30, 32, 33, 35, 36, 38, 39, 40, 46)	11.3191 (1.95722)	13.3617 (2.35377)	47	3.660, p=.001
Community (items 3, 10, 12, 25, 37, 41, 42, 43, 44, 47)	7.5745 (1.26396)	7.9149 (1.26542)	47	1.563, p=.125
Total	35.1489 (4.42807)	39.2979 (5.83809)	47	5.833, p=.000

Subscale Means, Standard Deviations, and t-values

TABLE 2

Item Number	Pre-Test Mean (SD)	Post-Test Mean (SD)	Number of Subjects
1	.81 (.398)	.85 (.360)	47
2	.83 (.383)	.85 (.360)	47
3	.92 (.282)	.94 (.247)	47
4	.85 (.360)	.91 (.282)	47
5	.77 (.428)	.96 (.204)	47
6	.87 (.337)	1.00 (.000)	47
7	.96 (.204)	.98 (.146)	47
8	.98 (.146)	.87 (.337)	47
9	.83 (.383)	.81 (.398)	47
10	.89 (.312)	.94 (.247)	47
11	.77 (.428)	.89 (.312)	47
12	.96 (.204)	.94 (.247)	47
13	.40 (.496)	.75 (.441)	47
14	.92 (.282)	.94 (.247)	47
15	.64 (.486)	.79 (.414)	47
16	.53 (.504)	.72 (.452)	47

Item Means and Standard Deviations

			Number
Item	Pre-Test	Post-Test	of
Number	Mean (SD)	Mean (SD)	Subjects
17	.96 (.204)	.83 (.380)	47
18	.34 (.479)	.75 (.441)	47
19	.70 (.462)	.55 (.503)	47
20	.38 (.491)	.62 (.491)	47
21	.53 (.504)	.72 (.452)	47
22	.30 (.462)	.66 (.479)	47
23	.72 (.452)	.91 (.285)	47
24	.89 (.312)	.89 (.312)	47
25	.47 (.504)	.60 (.496)	47
26	.81 (.398)	.85 (.360)	47
27	.85 (.360)	1.00 (.000)	47
28	.85 (.360)	.85 (.360)	47
29	.11 (.312)	.57 (.500)	47
30	.49 (.505)	.68 (.471)	47
31	.92 (.282)	.92 (.282)	47
32	.87 (.337)	.85 (.363)	47
33	.68 (.471)	.85 (.360)	47
34	.89 (.312)	.83 (.380)	47
35	.94 (.247)	.98 (.146)	47
36	.92 (.282)	.94 (.247)	47
37	.89 (.312)	.98 (.146)	47
38	.45 (.503)	.60 (.496)	47
39	.85 (.360)	.94 (.247)	47
40	.79 (.414)	.77 (.428)	47
41	.89 (.312)	.94 (.247)	47
42	.94 (.247)	.89 (.312)	47
43	.87 (.337)	.89 (.312)	47
44	.89 (.315)	.87 (.337)	47
45	.70 (.462)	.81 (.398)	47
46	.75 (.441)	.81 (.398)	47
47	.79 (.414)	.87 (.337)	47

TABLE 3

Kellabilliy of 10lal 1est and Subscales	Reliability	of Total	Test and	Subscales
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	Pre-Test	Post Test
Integrity Subscale	a=.3826	a=.4761
Values Subscale	a=.4835	a=.6765
Ethics Subscale	a=.3822	a=.5344
Community Subscale	a=.4517	a=.5233
Total Test	a=.7152	a=.8393

TABLE 4

Results of Demographics Items 48-51

The breakdown of the total number of students who responded to these demographic items at pre-test and post-test is reported. The **Combined** columns are the results for those who responded at *both* pre- test and post-test. Some students did not answer these or used a response that is not included in the choice of responses.

	PRE-	TEST	POST	-TEST	COME	SINED	
	Ν	%	N	%	N	%	
		(Gender:				
Male	40	78.4	39	70.9	35	76.1	
Female	11	21.6	16	29.0	11	23.9	
Total	51	100.00	55	100.00	46	100.00	
		Cla	ss Level:				
Freshman	14	27.5	1	21.4	11	23.9	
Sophomore	27	52.9	29	51.8	26	56.5	
Junior	7	13.7	9	16.1	6	13.0	
Senior	3	5.9	6	10.7	3	6.6	
Total	51	100.00	56	100.00	46	100.00	
B	y the Nut	nbers wo	tkshop:				
Yes	11	22.0	12	22.6	10	22.2	
No	39	78.0	41	77.4	35	77.8	
Total	50	100.00	53	10.00	45	100.00	
Calling the Shots program:							
Yes	3	6.1	3	5.6	3	6.7	
No	46	93.9	51	94.4	42	93.3	
Total	49	100.0	54	100.0	45	100.0	

APPENDIX A

Item Total Correlations and Correlation Matrices for Subscales

INTEGRITY SUBSCALE

Correlation Matrix

	I2P	I5P	I9P	I15P	I17P	I21P	I27P	I34P
I2P	1.0000							
I5P	.0532	1.0000						
I9P	.3791	.0358	1.0000					
I15P	.2869	0080	.1304	1.0000				
I17P	0536	.1831	0732	.2144	1.0000			
I21P	.1263	.2918	.0849	.3417	.4341	1.0000		
I27P	0771	.2779	0826	0985	.0880	.0596	1.0000	
I34P	.0792	.0200	0732	.2144	0915	0492	0880	1.0000

Item-Total Statistics

	Scale Mean	Corrected Variance	Item-Total	Alpha
	if Item Deleted	if Item Deleted	Correlation	if Item Deleted
I2P	5.8070	1.4799	.2704	.4203
I5P	5.7544	1.5815	.2374	.4377
I9P	5.8246	1.5758	.1324	.4750
I15P	5.8772	1.2882	.4027	.3512
I17P	5.8421	1.4925	.2065	.4457
I21P	6.0175	1.1604	.4252	.3244
I27P	5.7018	1.8202	0425	.5032
I34P	5.8421	1.6711	.0152	.5227

Alpha=.4761

Correlation Matrix

	I1P	I4P	I6P	I7P	I8P
I1P	1.0000				
I4P	.2831	1.0000			
I6P	0550	0374	1.0000		
I7P	.1964	0534	0259	1.0000	
I8P	.0236	.1281	0467	0667	1.0000
I14P	.3561	.2419	0321	0458	.1740
I20P	.0896	.2028	.1676	.0422	.0760
I22P	.1386	.2406	0966	.0653	.1176
I23P	1278	.3995	0422	.2772	.0940
I26P	.3771	.2562	0590	0842	.1628
I31P	1132	.1923	0374	0534	.1281
I45P	.1835	.3864	0667	.1470	.1194

	I14P	I20P	I22P	I23P	I26P	I31P	I45P
I14P	1.0000						
I20P	.2958	1.0000					
I22P	.1645	.4275	1.0000				
I23P	.2036	.2610	.4369	1.0000			
I26P	.3278	.1458	.0972	.2040	1.0000		
I31P	0660	.3448	.3870	.1563	1214	1.0000	
I45P	.0820	.2465	.2153	.3181	.2732	.0374	1.0000

Item-Total Statistics

	Scale Mean if Item Deleted	Corrected Variance if Item Deleted	Item-Total Correlation	Alpha if Item Deleted
I1P	9.4643	3.0169	.2583	.6665
I4P	9.3929	2.9701	.4698	.6385
I6P	9.3393	3.4646	0483	.6886
I7P	9.3571	3.3610	.0908	.6815
I8P	9.4286	3.1584	.1826	.6764
I14P	9.3750	3.1114	.3686	.6538
I20P	9.7143	2.4987	.4601	.6286
I22P	9.6607	2.5192	.4688	.6261
I23P	9.4107	2.9373	.4444	.6391
I26P	9.4821	2.9088	.3262	.6552
I31P	9.3929	3.1883	.2183	.6701
I45P	9.5179	2.7633	.4010	.6411



Correlation Matrix

	I11P	I13P	I16P	I18P	I19P
I11P	1.0000				
I13P	0044	1.0000			
I16P	.0273	.1771	1.0000		
I18P	.1526	.1771	.0418	1.0000	
I19P	.1336	.1307	.2045	.0341	1.0000
I24P	.2588	2025	.1056	.1056	.1291
I28P	0214	.0413	.1928	.1928	.1405
I29P	.3240	.0822	.0750	.1591	.2544
I30P	.0987	.0914	.2414	.1511	.0161
I32P	.0179	.2359	0979	.2778	.0223
I33P	0386	.3208	1672	.0492	.0000
I35P	.3563	.2125	0795	.2329	.1667
I36P	0917	.0224	.2272	.0434	.1307
I38P	.0367	0914	.1421	2015	.1222
I39P	.1031	1794	1637	1637	0857
I40P	.0624	.2432	2076	.0955	.1078
I46P	0546	.1801	.2296	.0209	.1485

	I24P	I28P	I29P	I30P	I32P
I24P	1.0000				
I28P	.0311	1.0000			
I29P	.2319	.2054	1.0000		
I30P	.0622	0831	.2842	1.0000	
I32P	1208	0214	0060	0193	1.0000
I33P	1491	.0463	.3457	.1947	0386
I35P	0430	0602	.1547	.2035	.3563
I36P	0760	1062	.1115	.0126	0917
I38P	.0118	3476	0123	.0412	1878
I39P	0886	.0654	.0359	1873	1069
I40P	.1392	.2423	.2453	.2182	.0624
I46P	1581	.0246	.0183	.0590	0546

	I33P	I35P	I36P	I38P	I39P
I33P	1.0000				
I35P	0642	1.0000			
I36P	1132	0327	1.0000		
I38P	0794	1069	.3056	1.0000	
I39P	.0495	0381	0673	.0681	1.0000
I40P	.3217	.2576	1269	2339	.1911
I46P	.2357	.2722	.0801	0187	.2100

Item-Total Statistics

	Scale Mean	Corrected Variance	Item-Total	Alpha
	if Item Deleted	if Item Deleted	Correlation	if Item Deleted
I11P	12.5455	4.8451	.2206	.5132
I13P	12.7091	4.5434	.2719	.4993
I16P	12.6727	4.7057	.2023	.5150
I18P	12.6727	4.6687	.2226	.5106
I19P	12.8182	4.4108	.3032	.4905
I24P	12.5091	5.1064	.0719	.5355
I28P	12.5818	4.9515	.1167	.5308
I29P	12.8545	4.0896	.4667	.4468
I30P	12.7273	4.5354	.2678	.5000
I32P	12.5455	5.1414	.0199	.5451
I33P	12.6000	4.7630	.2180	.5123
I35P	12.4364	5.0653	.3317	.5173
I36P	12.4727	5.1428	.0862	.5327
I38P	12.8000	5.2741	1020	.5840
I39P	12.4909	5.2916	0626	.5510
I40P	12.6364	4.6061	.2823	.4986
I46P	12.6182	4.7589	.2061	.5144

Alpha=.5344

COMMUNITY SUBSCALE

Correlation Matrix

	I3P	I10P	I12P	I25P	I37P
I3P	1.0000				
I10P	.2963	1.0000			
I12P	.2963	.6481	1.0000		
I25P	0255	.1359	.1359	1.0000	
I37P	.5669	.5669	.5669	1059	1.0000
I41P	0648	0648	0648	0767	0367
I42P	.2046	.2046	.2046	2458	.4309
I43P	.1512	.1512	.1512	1868	.3571
I44P	.1512	.1512	.1512	0771	.3571
I47P	.1310	.1310	.1310	.0946	.3307

	I41P	I42P	I43P	I44P	I47P
I41P	1.0000				
I42P	0852	1.0000			
I43P	.3157	.2619	1.0000		
I44P	1028	.2619	.3486	1.0000	
I47P	.0867	.0532	.1566	.1566	1.0000

Item-Total Statistics

	Scale Mean	Corrected Variance	Item-Total	Alpha
	if Item Deleted	if Item Deleted	Correlation	if Item Deleted
I3P	7.9474	1.4793	.3156	.4784
I10P	7.9474	1.4079	.4571	.4456
I12P	7.9474	1.4079	.4571	.4456
I25P	8.2807	1.5627	0822	.6500
I37P	7.9123	1.4743	.6565	.4509
I41P	7.9649	1.6416	0076	.5531
I42P	7.9825	1.4818	.2011	.5028
I43P	8.0175	1.3390	.3320	.4601
I44P	8.0175	1.3747	.2816	.4774
I47P	8.0351	1.3559	.2749	.4793
Alpha=.5233				

APPENDIX B

Frequency Tables for Items 1-47

The letter (P) in the item number indicates that this is a post-test item. The asterisk (*) indicates the correct response. Examine the valid percent column as it does not include missing data.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A*	43	70.5	82.7	82.7
	С	9	14.8	17.3	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

I1P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A*	48	78.7	85.7	85.7
	b	1	1.6	1.8	87.5
	с	7	11.5	12.5	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

12

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	3	4.9	5.9	5.9
	b	7	11.5	13.7	19.6
	C*	41	67.2	80.4	100.0
	Total	51	83.6	100.0	
Missing	System	10	16.4		
Total		61	100.0		

I2P

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	а	6	9.8	10.7	10.7
	b	2	3.3	3.6	14.3
	C*	48	78.7	85.7	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

11

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	4	6.6	7.7	7.7
	False*	48	78.7	92.3	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

13	D
10	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	2	3.3	3.6	3.6
	False*	53	86.9	94.6	98.2
	3.0	1	1.6	1.8	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	6	9.8	11.5	11.5
	b	1	1.6	1.9	13.5
	C*	45	73.8	86.5	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

1412	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	4	6.6	7.1	7.1
	C*	52	85.2	92.9	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	41	67.2	78.8	78.8
	False	11	18.0	21.2	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	51	83.6	91.1	91.1
	False	5	8.2	8.9	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

16

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	45	73.8	86.5	86.5
	False	7	11.5	13.5	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

16P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	55	90.2	98.2	98.2
	False	1	1.6	1.8	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

17

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	50	82.0	96.2	96.2
	False	2	3.3	3.8	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

170	

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	54	88.5	96.4	96.4
	False	2	3.3	3.6	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

I5P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A*	51	83.6	98.1	98.1
	С	1	1.6	1.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

8	P	
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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	A*	50	82.0	89.3	89.3
	b	1	1.6	1.8	91.1
	с	5	8.2	8.9	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

19			
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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	3	4.9	5.9	5.9
	b	6	9.8	11.8	17.6
	C*	42	68.9	82.4	100.0
	Total	51	83.6	100.0	
Missing	System	10	16.4		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	4	6.6	7.1	7.1
	b	5	8.2	8.9	16.1
	C*	47	77.0	83.9	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	2	3.3	3.8	3.8
	b	2	3.3	3.8	7.7
	С	1	1.6	1.9	9.6
	d*	47	77.0	90.4	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	2	3.3	3.6	3.6
	С	1	1.6	1.8	5.4
	d*	53	86.9	94.6	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

111

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	38	62.3	73.1	73.1
	False	13	21.3	25.0	98.1
	4.0	1	1.6	1.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

111P

		Frequency	Percent	Valid Percent	Cumulative
		Frequency	Fercent	valiu Percent	Fercent
Valid	True*	49	80.3	87.5	87.5
	False	7	11.5	12.5	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

112

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	True	2	3.3	3.8	3.8
	False*	50	82.0	96.2	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	3	4.9	5.4	5.4
	False*	53	86.9	94.6	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	6	9.8	11.5	11.5
	b	1	1.6	1.9	13.5
	C*	22	36.1	42.3	55.8
	d	23	37.7	44.2	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	2	3.3	3.6	3.6
	b	2	3.3	3.6	7.1
	C*	41	67.2	73.2	80.4
	d	11	18.0	19.6	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	а	1	1.6	1.9	1.9
	С	3	4.9	5.8	7.7
	d*	48	78.7	92.3	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	2	3.3	3.6	3.6
	С	1	1.6	1.8	5.4
	d*	53	86.9	94.6	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	34	55.7	65.4	65.4
	b	13	21.3	25.0	90.4
	с	5	8.2	9.6	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	44	72.1	78.6	78.6
	b	8	13.1	14.3	92.9
	С	4	6.6	7.1	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

116

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	o*	20	45.0	52.0	E2.0
valiu	a	20	45.9	00.0	00.0
	b	13	21.3	25.0	78.8
	С	11	18.0	21.2	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	42	68.9	75.0	75.0
	b	8	13.1	14.3	89.3
	С	6	9.8	10.7	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	9	14.8	17.3	17.3
	b*	42	68.9	80.8	98.1
	с	1	1.6	1.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

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					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	а	7	11.5	12.5	12.5
	b*	46	75.4	82.1	94.6
	с	3	4.9	5.4	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	5	8.2	9.6	9.6
	b	6	9.8	11.5	21.2
	C*	18	29.5	34.6	55.8
	d	23	37.7	44.2	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

118P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	1	1.6	1.8	1.8
	b	2	3.3	3.6	5.4
	C*	41	67.2	73.2	78.6
	d	12	19.7	21.4	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative
		riequency	rereent	Valia Forecent	1 croom
Valid	a*	36	59.0	69.2	69.2
	b	4	6.6	7.7	76.9
	С	12	19.7	23.1	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
		riequency	rereent	Valia Forecent	1 Groom
Valid	a*	33	54.1	58.9	58.9
	b	7	11.5	12.5	71.4
	с	16	26.2	28.6	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

120

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	22	36.1	42.3	42.3
	b	11	18.0	21.2	63.5
	C*	19	31.1	36.5	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

120P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	9	14.8	16.1	16.1
	b	13	21.3	23.2	39.3
	C*	34	55.7	60.7	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	а	9	14.8	17.3	17.3
	b	16	26.2	30.8	48.1
	C*	27	44.3	51.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

121

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	6	9.8	10.7	10.7
	b	13	21.3	23.2	33.9
	C*	37	60.7	66.1	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	24	39.3	46.2	46.2
	b	14	23.0	26.9	73.1
	С*	14	23.0	26.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

I22P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	14	23.0	25.0	25.0
	b	5	8.2	8.9	33.9
	С*	37	60.7	66.1	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

123

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	35	57.4	67.3	67.3
	b	8	13.1	15.4	82.7
	с	9	14.8	17.3	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	50	82.0	90.9	90.9
	b	1	1.6	1.8	92.7
	с	4	6.6	7.3	100.0
	Total	55	90.2	100.0	
Missing	System	6	9.8		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	b*	47	77.0	90.4	90.4
	С	5	8.2	9.6	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	b*	51	83.6	91.1	91.1
	С	5	8.2	8.9	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

125

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	25	41.0	48.1	48.1
	False	27	44.3	51.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

125P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	34	55.7	60.7	60.7
	False	22	36.1	39.3	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

126

		F	Descent	Malid Descent	Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	a*	42	68.9	80.8	80.8
	b	9	14.8	17.3	98.1
	с	1	1.6	1.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	48	78.7	85.7	85.7
	b	8	13.1	14.3	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	b*	44	72.1	84.6	84.6
	с	8	13.1	15.4	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total	-	61	100.0		

127

127P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	2	3.3	3.6	3.6
	b*	54	88.5	96.4	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

128

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	7	11.5	13.5	13.5
	b*	43	70.5	82.7	96.2
	с	2	3.3	3.8	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

Cumulative Frequency Percent Valid Percent Percent Valid а 8 13.1 14.3 14.3 b* 83.9 98.2 47 77.0 100.0 С 1 1.6 1.8 Total 56 91.8 100.0 Missing System 5 8.2 Total 61 100.0

129						
	Frequency	Percent	Valid Percent			
	13	21.3	25.0			
	33	54.1	63.5			
	6	9.8	11.5			

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					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	а	13	21.3	23.2	23.2
	b	12	19.7	21.4	44.6
	C*	31	50.8	55.4	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

130

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	25	41.0	48.1	48.1
	b*	26	42.6	50.0	98.1
	с	1	1.6	1.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	15	24.6	26.8	26.8
	b*	39	63.9	69.6	96.4
	с	2	3.3	3.6	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	47	77.0	90.4	90.4
	b	2	3.3	3.8	94.2
	С	3	4.9	5.8	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	52	85.2	92.9	92.9
	b	3	4.9	5.4	98.2
	с	1	1.6	1.8	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	а	8	13.1	15.4	15.4
	b*	44	72.1	84.6	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	7	11.5	12.7	12.7
	b*	48	78.7	87.3	100.0
	Total	55	90.2	100.0	
Missing	System	6	9.8		
Total		61	100.0		

133

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	8	13.1	15.4	15.4
	b*	35	57.4	67.3	82.7
	С	9	14.8	17.3	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	5	8.2	8.9	8.9
	b*	46	75.4	82.1	91.1
	с	5	8.2	8.9	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	45	73.8	86.5	86.5
	False	7	11.5	13.5	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	46	75.4	82.1	82.1
	False	9	14.8	16.1	98.2
	3.0	1	1.6	1.8	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

135

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	48	78.7	92.3	92.3
	b	1	1.6	1.9	94.2
	с	3	4.9	5.8	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

135P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	a*	55	90.2	98.2	98.2
	С	1	1.6	1.8	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

136

			-		Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	b*	48	78.7	92.3	92.3
	С	4	6.6	7.7	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	2	3.3	3.6	3.6
	b*	53	86.9	94.6	98.2
	С	1	1.6	1.8	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	True	5	8.2	9.6	9.6
	False*	47	77.0	90.4	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	1	1.6	1.8	1.8
	False*	55	90.2	98.2	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

138

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	4	6.6	7.7	7.7
	b*	25	41.0	48.1	55.8
	С	23	37.7	44.2	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

138P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	2	3.3	3.6	3.6
	b*	34	55.7	60.7	64.3
	с	20	32.8	35.7	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	45	73.8	86.5	86.5
	False	6	9.8	11.5	98.1
	3.0	1	1.6	1.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

139

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	52	85.2	92.9	92.9
	False	4	6.6	7.1	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

140

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	4	6.6	7.7	7.7
	b	7	11.5	13.5	21.2
	C*	41	67.2	78.8	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

140P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	3	4.9	5.4	5.4
	b	9	14.8	16.1	21.4
	C*	44	72.1	78.6	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

141

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	46	75.4	88.5	88.5
	False	5	8.2	9.6	98.1
	3.0	1	1.6	1.9	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	52	85.2	92.9	92.9
	False	4	6.6	7.1	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	1	1.6	1.9	1.9
	b	1	1.6	1.9	3.8
	С	1	1.6	1.9	5.8
	d*	49	80.3	94.2	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

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		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	2	3.3	3.6	3.6
	b	1	1.6	1.8	5.4
	С	2	3.3	3.6	8.9
	d*	51	83.6	91.1	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True*	45	73.8	86.5	86.5
	False	7	11.5	13.5	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

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					Cumulative
		Frequency	Percent	Valid Percent	Percent
Valid	True*	49	80.3	87.5	87.5
	False	7	11.5	12.5	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	1	1.6	2.0	2.0
	b	4	6.6	7.8	9.8
	C*	46	75.4	90.2	100.0
	Total	51	83.6	100.0	
Missing	System	10	16.4		
Total		61	100.0		

		Frequency	Porcont	Valid Parcent	Cumulative
		Frequency	Fercent	valiu Fercent	Feiceni
Valid	а	2	3.3	3.6	3.6
	b	5	8.2	8.9	12.5
	C*	49	80.3	87.5	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

145

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	5	8.2	9.6	9.6
	b*	36	59.0	69.2	78.8
	с	11	18.0	21.2	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

145P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	8	13.1	14.3	14.3
	b*	45	73.8	80.4	94.6
	С	3	4.9	5.4	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	13	21.3	25.0	25.0
	False*	39	63.9	75.0	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

146P

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	True	11	18.0	20.0	20.0
	False*	44	72.1	80.0	100.0
	Total	55	90.2	100.0	
Missing	System	6	9.8		
Total		61	100.0		

146

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	3	4.9	5.8	5.8
	b	7	11.5	13.5	19.2
	C*	42	68.9	80.8	100.0
	Total	52	85.2	100.0	
Missing	System	9	14.8		
Total		61	100.0		

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	а	3	4.9	5.4	5.4
	b	5	8.2	8.9	14.3
	C*	48	78.7	85.7	100.0
	Total	56	91.8	100.0	
Missing	System	5	8.2		
Total		61	100.0		