

MGT 6463 01-03 Quant Methods for Marketing (2026S), Finale- Just Deserts Case Writeup.

By: Sparsh Singhal, Section 1, Master of Marketing

The core questions Felicity wished to answer were whether any measures of satisfaction were more important than others and exactly what drove customer satisfaction at Finale. In consideration of that, there a variety of statistical tests that may come to mind, however, not all of them are appropriate.

A correlation analysis would inform us strength and direction of the relationship between two variables, but it would fail to explain whether one caused the other, as correlation does not equate to causation. Although, it is useful to note that a correlation would be helpful in determining the appropriateness of a factor analysis.

A T-Test or an ANOVA would be helpful in determining significant differences across means of each variable affecting satisfaction and finding which measure of satisfaction is more important than the other. However, these tests would not be able to identify what exactly drove customer satisfaction.

Crosstabs chi-square analysis is an option. However, it is not ideal as there are several variables present. Additionally, the applicability of this analysis is more appropriate when most variables are nominal. Several variables here are interval, therefore, they would need to be converted to nominal before they can be researched, which would take a huge sum of time. Through this test, we would be able to identify which variable is more important. However, identifying what exactly drove customer satisfaction would be difficult and tedious as it would require us to run each variable against each other.

Linear regression can be identified to be an ideal choice as it meets both criteria of what Felicity wishes to find. However, due to the sheer volume of variables and similarities among them (for instance: Ordered Alcohol vs Ordered Beverage) can lead to multicollinearity issues, making it difficult to precisely identify which variable affects satisfaction the most. Running a quick regression test, we find this assumption to be correct, as only three variables stand out as significant. (**Exhibit 1**)

Therefore, I believe the most appropriate test would be a **factor analysis regression**. This test would address the issue of multicollinearity and condense several variables into factors, giving us a specific point to focus on. Moreover, the Bartlett and KMO test values (tests used to determine appropriateness of a factor analysis) were sufficient. (**Exhibit 2**) (Bartlett p value < 0.001, KMO value 0.619 > 0.6). The hypothesis statement can be found in **Exhibit 3**.

Running the same (**Exhibit 4**), we find that the most important factor to be Factor 1 (as Standardized Beta value/p value of Factor 1 is more than Factor 3). However, factor 1 still had 4 variables within it. Therefore, another regression analysis was conducted to exactly find which variable to prioritize in contrast to others within Factor 1 (**Exhibit 5**). Through that, we found that food & beverage satisfaction and price have the highest impact on newcomers (their standardized Beta values are nearly identical). Therefore, these 2 variables must be prioritized.

Additionally, another regression was run to find if location, month or survey method had any impact on regulars (**Exhibit 6**). Results did not show a significant difference. (See memo statement at **Exhibit 7**).

Exhibits

1. Exhibit 1: Regression Analysis considering all variables

Note: Return likelihood and Would recommend variables were excluded as these variables were inferred to broadly be part of satisfaction. They are not independent variables impacting overall satisfaction.

Coefficients ^a					
Model		Unstandardized Coefficients		Standardized Coefficients	Sig.
		B	Std. Error	Beta	
1	(Constant)	-1.222	.536		.023
	Worth the Price	.159	.040	.170	<.001
	Joined Rewards Program	.117	.131	.028	.373
	Service Satisfaction	.618	.036	.634	<.001
	Clean/Appear Satisfaction	.066	.046	.054	.148
	Food/Bev Satisfaction	.208	.049	.183	<.001
	Ordered Lunch?	.444	.456	.038	.331
	Ordered Bakery?	.224	.322	.026	.487
	Ordered Beverage?	.036	.144	.008	.802
	Ordered Alcohol?	.030	.127	.008	.814
	Ordered Dinner?	-.330	.152	-.070	.031
	Ordered Dessert?	.610	.304	.090	.046
	How Often Visit	.015	.049	.010	.761

a. Dependent Variable: Overall Satisfaction

2. Exhibit 2: Factor analysis appropriateness identifiers

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.619
Bartlett's Test of Sphericity	Approx. Chi-Square	551.409
	df	66
	Sig.	<.001

3. Exhibit 3: Hypothesis Statement

(i) There is no significant difference between in overall satisfaction across variables.
 $H_0: \mu_1 = \mu_2; \mu_1 - \mu_2 = 0$

There is a significant difference between in overall satisfaction across variables.
 $H_1: \mu_1 \neq \mu_2; \mu_1 - \mu_2 \neq 0$

(ii) {Insert variable name here} does not have a greater impact on overall satisfaction than {Insert variable name here}.

$H_0: \mu_1 \leq \mu_2; \mu_1 - \mu_2 \leq 0$

{Insert variable name here} has a greater impact on overall satisfaction than {Insert variable name here}.

$$H1: \mu_1 > \mu_2; \mu_1 - \mu_2 > 0$$

This hypothesis statement would be repeated with every single variable with each other.

4. **Exhibit 4:**

(i) Factor analysis output

Note: Only 5 factors had an Eigen value of > 1 .

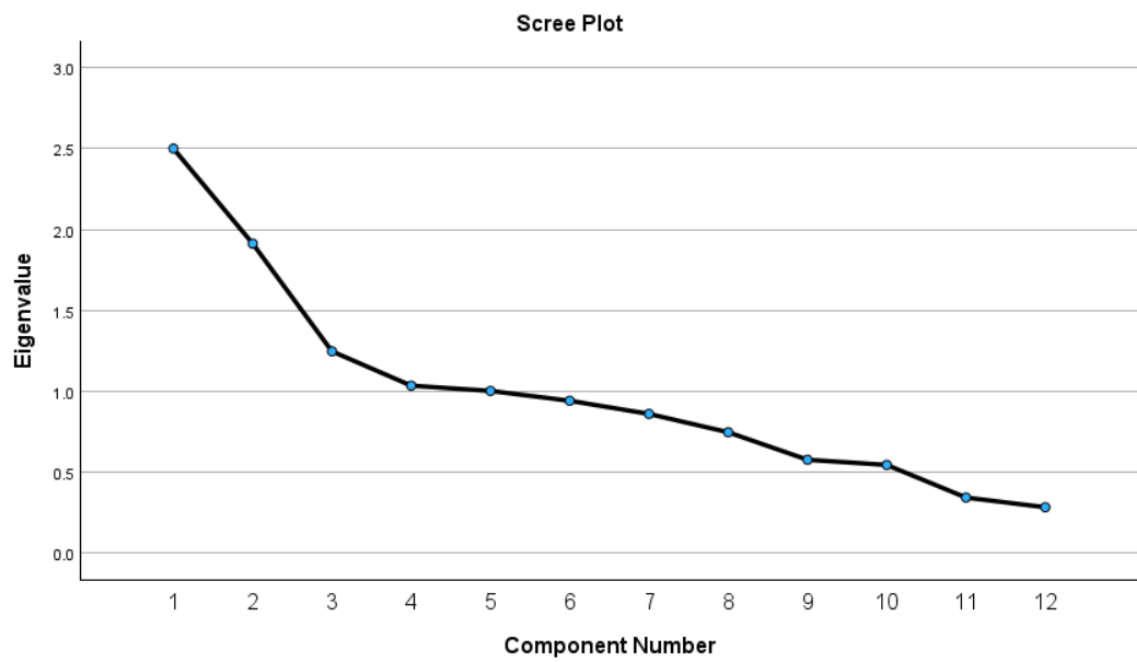
Communalities

	Initial	Extraction
How Often Visit	1.000	.618
Ordered Lunch?	1.000	.778
Ordered Bakery?	1.000	.650
Ordered Beverage?	1.000	.482
Ordered Alcohol?	1.000	.562
Ordered Dinner?	1.000	.545
Ordered Dessert?	1.000	.825
Service Satisfaction	1.000	.541
Clean/Appear Satisfaction	1.000	.568
Food/Bev Satisfaction	1.000	.698
Joined Rewards Program	1.000	.752
Worth the Price	1.000	.681

Extraction Method: Principal Component Analysis.

Total Variance Explained									
Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.501	20.840	20.840	2.501	20.840	20.840	2.436	20.304	20.304
2	1.914	15.946	36.787	1.914	15.946	36.787	1.657	13.805	34.109
3	1.248	10.397	47.184	1.248	10.397	47.184	1.256	10.467	44.576
4	1.035	8.628	55.812	1.035	8.628	55.812	1.251	10.423	54.999
5	1.003	8.358	64.169	1.003	8.358	64.169	1.100	9.171	64.169
6	.942	7.850	72.019						
7	.861	7.173	79.192						
8	.747	6.227	85.418						
9	.577	4.810	90.229						
10	.545	4.544	94.773						
11	.344	2.864	97.637						
12	.284	2.363	100.000						

Extraction Method: Principal Component Analysis.



Rotated Component Matrix^a

	Component				
	1	2	3	4	5
Food/Bev Satisfaction	.827	-.029	-.048	.096	.046
Worth the Price	.817	-.028	-.027	.097	.049
Clean/Appear Satisfaction	.746	.082	.040	.054	.007
Service Satisfaction	.702	.002	-.135	-.109	-.137
Ordered Lunch?	.056	.868	.021	-.129	-.063
Ordered Dessert?	.017	-.839	.088	-.322	-.095
Ordered Alcohol?	-.014	-.025	.747	-.047	.023
Ordered Dinner?	-.110	-.023	.719	.124	-.002
How Often Visit	.093	.070	.111	.769	-.030
Ordered Bakery?	-.049	.354	-.342	.542	.334
Joined Rewards Program	.029	-.063	.074	.060	.859
Ordered Beverage?	.091	-.233	.122	.437	-.462

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 8 iterations.

Component Transformation Matrix

Component	1	2	3	4	5
1	.964	.126	-.160	.173	-.001
2	.215	-.829	.277	-.342	-.268
3	.010	.042	.769	.625	-.125
4	.029	-.332	.057	.138	.931
5	.154	.430	.550	-.665	.214

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

(ii) Regression analysis output

Factor 1 is the most important factor. (As p is more significant AND the standardized Beta value is much more than partiers. Also, the reason why the name 'newcomers' was chosen for factor1 was because regulars would not be affected by the price.)

Dependent:

Overall Satisfaction [OverallSat]

Block 1 of 1

newcomers [newcomers]

officeworkers [officeworkers]

night goers/partiers/occasion [nightouters]

dailybakers [dailybakers]

rewardsmember [rewardsmember]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.804 ^a	.646	.639	1.065

a. Predictors: (Constant), rewardsmember, dailybakers, night goers/partiers/occasion, officeworkers, newcomers

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	528.009	5	105.602	93.145	<.001 ^b
	Residual	289.102	255	1.134		
	Total	817.111	260			

a. Dependent Variable: Overall Satisfaction

b. Predictors: (Constant), rewardsmember, dailybakers, night goers/partiers/occasion, officeworkers, newcomers

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.778	.066		133.183	<.001
	newcomers	1.397	.066	.788	21.151	<.001
	officeworkers	-.069	.066	-.039	-1.046	.297
	night goers/partiers/occasion	-.245	.066	-.138	-3.705	<.001
	dailybakers	-.085	.066	-.048	-1.283	.201
	rewardsmember	-.091	.066	-.051	-1.379	.169

a. Dependent Variable: Overall Satisfaction

5. **Exhibit 5:** Regression analysis conducted to find which variables to prioritise

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.995 ^a	.991	.991	.09744026

a. Predictors: (Constant), Worth the Price, Service Satisfaction, Clean/Appear Satisfaction, Food/Bev Satisfaction

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	257.569	4	64.392	6781.993	<.001 ^b
	Residual	2.431	256	.009		
	Total	260.000	260			

a. Dependent Variable: newcomers

b. Predictors: (Constant), Worth the Price, Service Satisfaction, Clean/Appear Satisfaction, Food/Bev Satisfaction

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-6.707	.044		-152.348	<.001
	Service Satisfaction	.156	.004	.284	40.340	<.001
	Clean/Appear Satisfaction	.215	.005	.312	42.986	<.001
	Food/Bev Satisfaction	.219	.005	.341	40.994	<.001
	Worth the Price	.179	.004	.338	41.231	<.001

a. Dependent Variable: newcomers

6. **Exhibit 6:** Regression analysis ran to find if store location, month or survey method had any impact on newcomers

Dependent:

 newcomers [newcomers]

1 of 1

Block 1 of 1

 Month [Month]

 Survey Method [Source]

 Store Code [Storecode]

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.096 ^a	.009	-.002	1.00121373

a. Predictors: (Constant), Store Code, Month, Survey Method

ANOVA^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.376	3	.792	.790	.500 ^b
	Residual	257.624	257	1.002		
	Total	260.000	260			

a. Dependent Variable: newcomers

b. Predictors: (Constant), Store Code, Month, Survey Method

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.160	.445		.359	.720
	Month	.036	.092	.025	.396	.692
	Survey Method	-.061	.069	-.057	-.875	.382
	Store Code	-.055	.073	-.050	-.760	.448

a. Dependent Variable: newcomers

7. Exhibit 7: Ms. Klass's short memo to Mr. Conforti

MEMORANDUM

DATE: February 4, 2026
FROM: Felicity Klass
TO: Paul Conforti
SUBJECT: Survey research analysis recommendations

A thorough analysis of the survey results obtained by Finale spanning from February to May. The analysis was conducted with the objective to determine an actionable variable to focus on in order to increase the overall satisfaction of Finale. A factor analysis paired with regression analysis were conducted to determine so. Our analysis showed areas of focus to be price and food and beverage.

Based on the results of our analysis, I suggest Finale to reconsider their pricing strategy and food and beverage selection to better increase their overall satisfaction.