

# Validating the **Brand Personality Appeal Framework** in a QSR Context: **Multiple Regression and Confirmatory Factor Analysis**

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## BACKGROUND

This is the fourth in a series of in-depth reports from the Zion & Zion market research team that have sought broad understanding about how consumers perceive a brand's personality. The first wave of studies focused on the quick service restaurant (QSR) industry. The previous studies on this topic conducted by Zion & Zion are:

- Utilizing Stanford professor Jennifer Aaker's widely accepted brand personality measurement framework to study the nation's largest QSR brands. The study—[found here](#)—reveals how each restaurant chain ranks on Aaker's five dimensions of brand personality: Sincerity, Competence, Excitement, Sophistication, and Ruggedness.
- An exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) that verify the efficacy of using Aaker's framework to study QSRs, and reveals a potential new dimension of Authenticity—[read the study here](#).
- Studying QSRs via Brand Personality Appeal, first identified and studied by Traci Freling, Jody Crosno, and David Henard in their well-regarded 2010 research, "Brand Personality Appeal." [The report reveals how the 26 QSRs rank for brand Clarity, Favorability, and Originality.](#)

In this study, the Zion & Zion market research team performs both confirmatory factor analysis (CFA) and multiple regression analysis to assess how well the three dimensions of Brand Personality Appeal (Clarity, Favorability, and Originality) apply to QSR brands and the role of Clarity and Originality in Favorability ratings.

## EXECUTIVE SUMMARY

The Zion & Zion market research team undertook a confirmatory factor analysis (CFA) and multiple regression analysis to better understand the application of Traci Freling, Jody Crosno, and David Henard's Brand Personality Appeal dimensions (Clarity, Originality, and Favorability) to quick service restaurant (QSR) chains. For both the CFA and regression, our research team surveyed 4,363 adults 18 years of age and up. Each respondent was asked to rate one of 26 QSRs on each of 16 brand personality appeal semantic differential scales. Our research team only included data from respondents who were at least somewhat familiar with the particular QSR they were being asked to rate. That resulted in a usable data set of 3,205 responses. Our CFA reveals that the Brand Personality Appeal three-factor framework is remarkably valid for measuring QSR brand personalities. The regression analysis indicates that Clarity and Originality together explain 75.8% of Favorability. Of the two factors, Clarity has 2.4 times the effect on Favorability than Originality in a QSR context. This suggests that while Originality is important, restaurant chains should consider spending more time on ensuring that consumers have a clear understanding of the QSR's brand.

## DOES THE FRAMEWORK FIT? (CONFIRMATORY FACTOR ANALYSIS)

The original Freling/Crosno/Henard research (2010, Journal of the Academy of Marketing Science), which developed a measurement framework for Brand Personality Appeal, began with an initial pool of 75 nonredundant characteristics which were evaluated by a series of focus groups. These were then converted into 49 word-pairs. Following a series of additional focus groups and interviews with adult consumers, as well as a review of existing literature, an additional 26 word-pairs were added, resulting in 75 contrasting word-pairs. Subsequent testing (i.e., confirmatory factor analysis, internal scale reliability, and convergent validity), analysis, and categorization eventually reduced the items to the final 16 word-pairs to establish the Brand Personality Appeal framework: Favorability (seven word-pairs), Originality (four), and Clarity (five).

The Zion & Zion market research team conducted a confirmatory factor analysis (CFA) on our data in order to verify that, for the QSR industry, the three factors of Brand Personality Appeal exist as demonstrated by Freling/Crosno/Henard and that their 16 word-pair analysis can be reliably used to rate and compare the Brand Personality Appeal of QSR brands. In this case, one of the reasons for conducting a CFA is because the Freling/Crosno/Henard study does not disclose if any (or how many) restaurants were included in the framework's creation and testing, thereby making our exploration of the three dimensions of Brand Personality Appeal in a QSR context particularly meaningful.

Our CFA analysis demonstrates that the Brand Personality Appeal framework is indeed highly applicable in a QSR context, with all three factors coming back very clean.

All five word-pairs used to assess Brand Personality Appeal Clarity loaded above .800.

Figure 1

Component Matrix*		Component 1
Unapparent:Apparent		.869
Indistinct:Distinct		.837
Not Obvious:Obvious		.803
Vague:Well-Defined		.866
Unclear:Clear		.869

The Brand Personality Appeal factor of Favorability also comes out extremely clean, with all seven word-pairs loading well above .800.

Figure 2

Component Matrix*		Component 1
Unsatisfactory:Satisfactory		.910
Unpleasant:Pleasant		.908
Unattractive:Attractive		.866
Negative:Positive		.898
Bad:Good		.906
Poor:Excellent		.889
Undesirable:Desirable		.896

The Brand Personality Appeal factor of Originality also comes out clean, with all four word-pairs loading above .800.

Figure 3

Component Matrix*		Component 1
Common:Distinctive		.836
Ordinary:Novel		.829
Predictable:Surprising		.818
Routine:Fresh		.835

## WHAT PREDICTS FAVORABILITY? (MULTIPLE REGRESSION ANALYSIS)

We sought to understand whether Brand Personality Appeal Clarity or Originality (or both) predict Favorability. For example, if a restaurant chain was interested in increasing how consumers rate the Favorability of its Brand Personality Appeal, would its resources be better spent focusing on Clarity or Originality?

This investigation was undertaken via multiple regression analysis that used Clarity and Originality as independent variables and Favorability as the dependent variable. The Model Summary (Figure 4) and ANOVA (Analysis of Variance, Figure 5) address whether Clarity and Originality **together** drive Favorability.

The significance value in Figure 5 of .000 validates the model. The .758 R Square value (Figure 4) means that Clarity and Originality together explain 75.8% of the Favorability.

Figure 4

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.871*	.758	.758	.7868844530

Figure 5

Model	Sum of Squares	df	Mean Square	F	Sig.	
1	Regression	6203.795	2	3101.898	5009.629	.000**
	Residual	1982.637	3202	.619		
	Total	8186.433	3204			

Figure 6 (Coefficients) answers the next questions: Do Clarity and Originality by themselves predict and explain Favorability? And which (or both) is most important? Both Clarity and Originality show a significance value of .000, meaning that they independently explain and predict Favorability. But which is stronger? This is answered by looking at Figure 6's Coefficients, which indicates:

- If a QSR's Brand Personality Appeal Clarity rating goes up by one unit on the 1-to-7 survey scale (assuming that its Originality rating does not change), its Favorability will rise by .722.
- If a QSR's Brand Personality Appeal Originality goes up by one unit on the 1-to-7 survey scale (assuming that its Clarity rating does not change), its Favorability will rise .297.

Of the two factors, Clarity has a 2.4 times greater effect on Favorability than Originality in a QSR context.

Figure 6

Model		Unstandardized Coefficients		Standard Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.149	.053		2.834	.005
	BPA: CLARITY	.722	.013	.662	57.338	.000
	BPA: ORIGINALITY	.297	.012	.278	24.127	.000

A final analysis sought to understand if variability between restaurants explains Clarity's strength over Originality as a predictor of Favorability. The analysis in Figure 7 shows that even when controlling for individual differences between restaurants, the resulting coefficients are virtually identical to those in Figure 6 (.724 compared to .722, and .293 compared to .297). This confirms the 2.4 times strength of Clarity over Originality as a predictor of Favorability.

Figure 7

Model		Unstandardized Coefficients		Standard Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.127	.084		1.511	.131
	BPA: CLARITY	.724	.013	.663	57.260	.000
	BPA: ORIGINALITY	.293	.012	.275	23.689	.000
Restaurant=Burger King	Restaurant=Carl's Jr	-.076	.107	-.008	-.714	.475
	Restaurant=Chick-fil-A	-.018	.098	-.002	-.189	.850
	Restaurant=Chipotle	-.058	.104	-.006	-.564	.573
	Restaurant=Dairy Queen	.104	.097	.013	1.079	.281
	Restaurant=Domino's	.063	.094	.008	.662	.508
	Restaurant=Dunkin' Donuts	.115	.096	.014	1.200	.230
	Restaurant=Five Guys	.260	.106	.027	2.441	.015
	Restaurant=Hardee's	.019	.105	.002	.178	.859
	Restaurant=Jack in the Box	-.009	.106	.000	-.023	.982
	Restaurant=Jimmy John's	-.039	.108	-.004	-.377	.721
	Restaurant=KFC	-.016	.093	-.002	-.157	.859
	Restaurant=Little Caesars	-.024	.096	-.003	-.251	.802
	Restaurant=McDonald's	-.144	.092	-.020	-1.562	.118
	Restaurant=Panda Express	.105	.101	.012	1.037	.300
	Restaurant=Panera Bread	.288	.099	.034	2.906	.004
	Restaurant=Papa John's	.006	.095	.001	.059	.953
	Restaurant=Pizza Hut	.100	.093	.013	1.067	.286
	Restaurant=Popeyes	.036	.101	.004	.352	.725
	Restaurant=Sonic Drive-In	.053	.099	.006	.535	.593
	Restaurant=Starbucks	-.045	.098	-.005	-.460	.646
Restaurant=Subway	.078	.093	.005	.846	.685	
Restaurant=Taco Bell	-.038	.093	-.010	-.401	.400	
Restaurant=Wendy's	.031	.095	.004	.325	.745	
Restaurant=Wingstop	.210	.119	.019	1.771	.007	

## PUTTING THE DATA TO WORK

Our CFA illustrates that measuring the three dimensions of Brand Personality Appeal in a QSR context is a straightforward exercise, and our regression illustrates how Favorability can be impacted.

Brands put a tremendous amount of emphasis on being original. Think of the efforts taken by Jack in the Box, Burger King, Chick-fil-A, etc., in order to stand out and differentiate themselves in consumers' minds. The phrase, "we have to cut through the clutter" and "we have to rise above the noise," resounds in QSR corporate headquarters across the land. However, our study shows that Clarity is more than twice as impactful on Favorability than is Originality.

This suggests that while QSRs should indeed focus on Originality, as it does impact Favorability, they should also spend at least as much time making sure that their expression of Originality is clear and well-understood by customers.

References:

Freling, Crosno, and Henard (August 2010), "Brand Personality Appeal: Conceptualization and Empirical Validation," Journal of the Academy of Marketing Science, pp. 392-406