

GROUP 3.1

INFLUENCERS X ADVERTISEMENTS

QUANTITATIVE METHODS

AGENDA



Executive
Summary



Research
Objectives



Survey
Design



Sample
Demographics



Concept
Test



Factor
Analysis



Linear
Regression

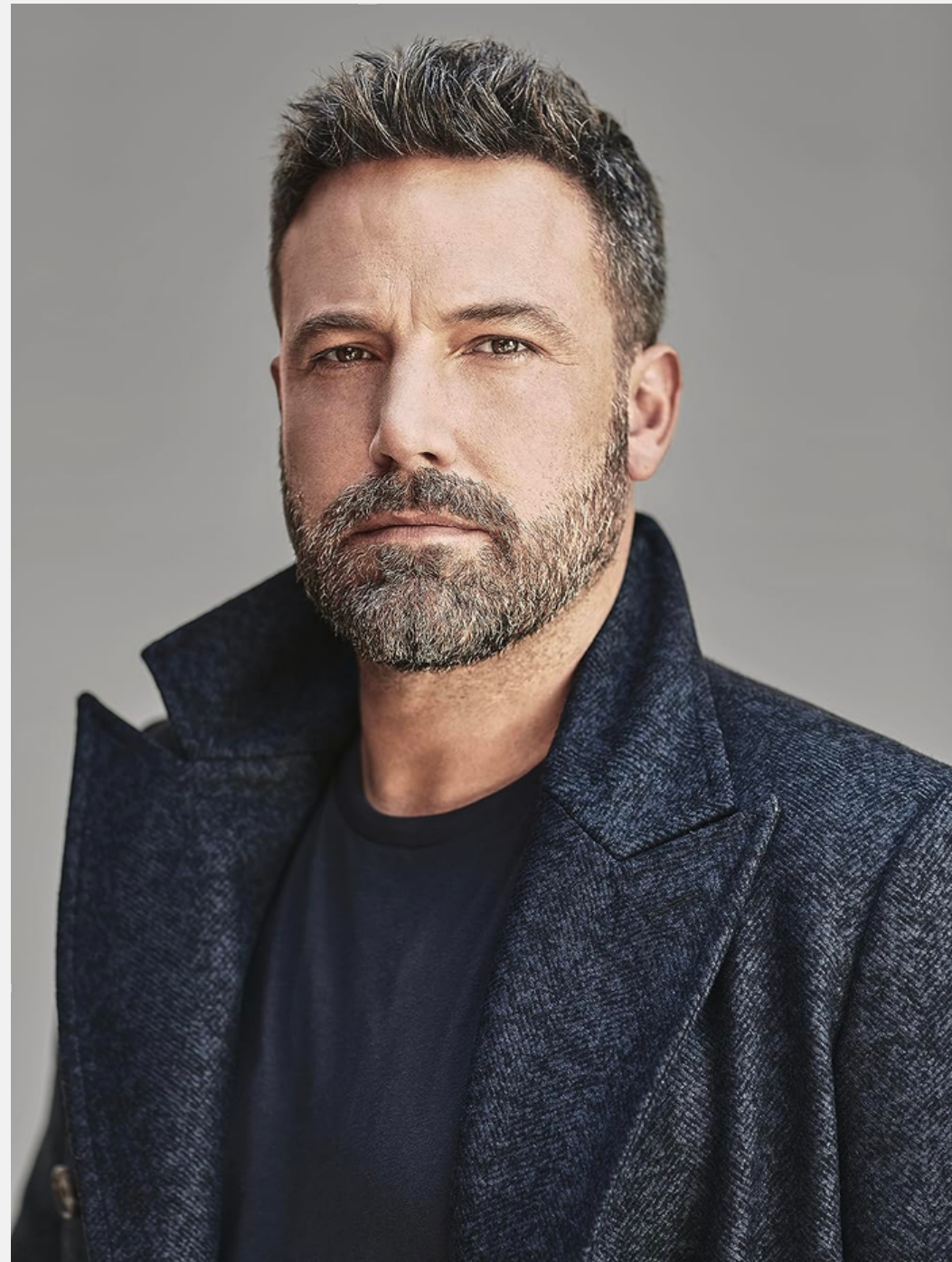


ANOVA



Managerial
Insights

WHAT BRAND DOES THIS PERSON REMIND YOU OF?

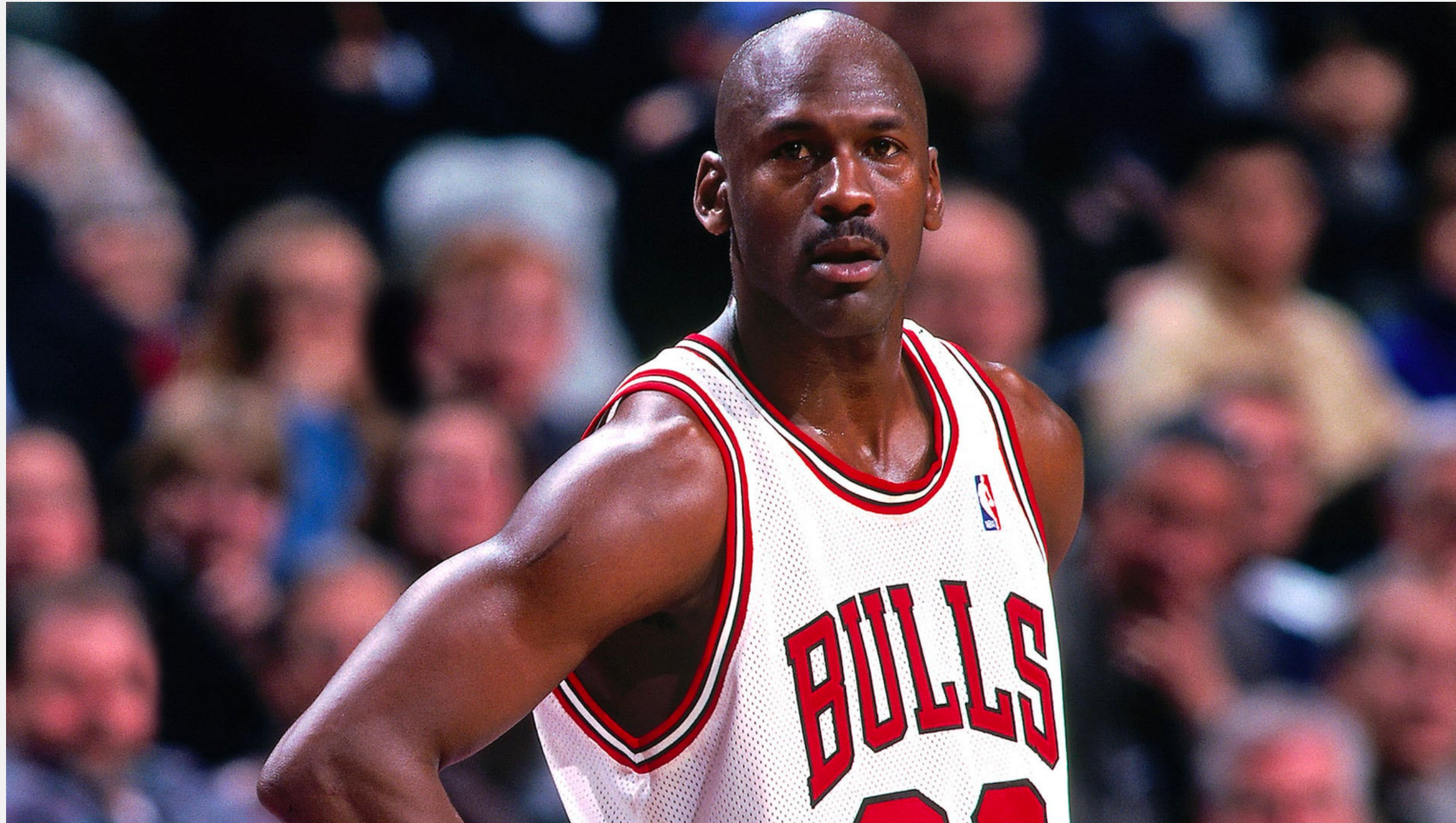


BEN AFFLECK

DUNKIN DONUTS



WHAT BRAND DOES THIS PERSON REMIND YOU OF?



MICHAEL JORDAN

NIKE



JORDAN

WHAT BRAND DOES THIS PERSON REMIND YOU OF?



DYLAN AND COLE SPROUSE

DANIMALS



NERDS GUMMY CLUSTERS INTRODUCTION

Nerds Gummy Clusters is a product line created by Nerds, which takes traditional, rainbow Nerd candies and surrounds them on a red gummy center to make tasty bite-sized clusters.



PRODUCT BACKGROUND

- Nerds was launched in 1983 under the Willy Wonka Candy Company
- In 2000, Nerds was bought by the Ferrara Candy Company
- Nerds Gummy Clusters debuted in 2020
- In the last 5 years, Nerd's revenue has skyrocketed from \$50 million to \$500 million
- On February 11, 2024, Nerds made its debut as a Super Bowl LVIII advertiser
 - Ad featuring influencer Addison Rae

ADVERTISEMENT BACKGROUND

“While most everyone loves Nerds, our core consumer is Gen Z, so we wanted to connect with them through a recognizable talent who is active on the channels where they are most engaged.” - Magen Hanrahan, Senior Vice President at Ferrara



EXECUTIVE SUMMARY

In this study, we are consulting Nerds who is continuing to create advertisements for their product Nerds Gummy Clusters after the Super Bowl. We're aiming to find if adding influencers to advertisements increases positive consumer sentiment compared to traditional product advertisements.

Our findings are based on the following statistical analysis from our survey respondents:

- Descriptives and Frequencies
- Factor Analysis
- One-way ANOVA
- Linear Regression



RESEARCH

RESEARCH QUESTIONS/OBJECTIVES

1

How does consumer sentiment differ when influencers are included versus excluded in advertisements?

- Brand sentiment
- Willingness to purchase
- Customer satisfaction

2

What are the preferences and behaviors of our target market?

- Preferences of candy flavors and types
- Intrinsic motivation
- Current social media practices

OUR PROPOSED HYPOTHESIS

Individuals will have higher positive sentiment and willingness to purchase if they see an advertisement that features an influencer rather than an advertisement with no influencer.



SURVEY DESIGN

Exploratory and Secondary Research

Used existing literature and online sources from Statista to gain deeper understanding about the influencer marketing industry

Target Population and Sample Size

Generation Z individuals with a sample size of 56 respondents

Data Collection Methods

Qualtrics survey sent via SMS messaging

Pretesting Process

The survey was distributed to peers and Dr. Salerno to make improvements to the survey's formatting and wording

SURVEY DESIGN

Introduction



Demographics

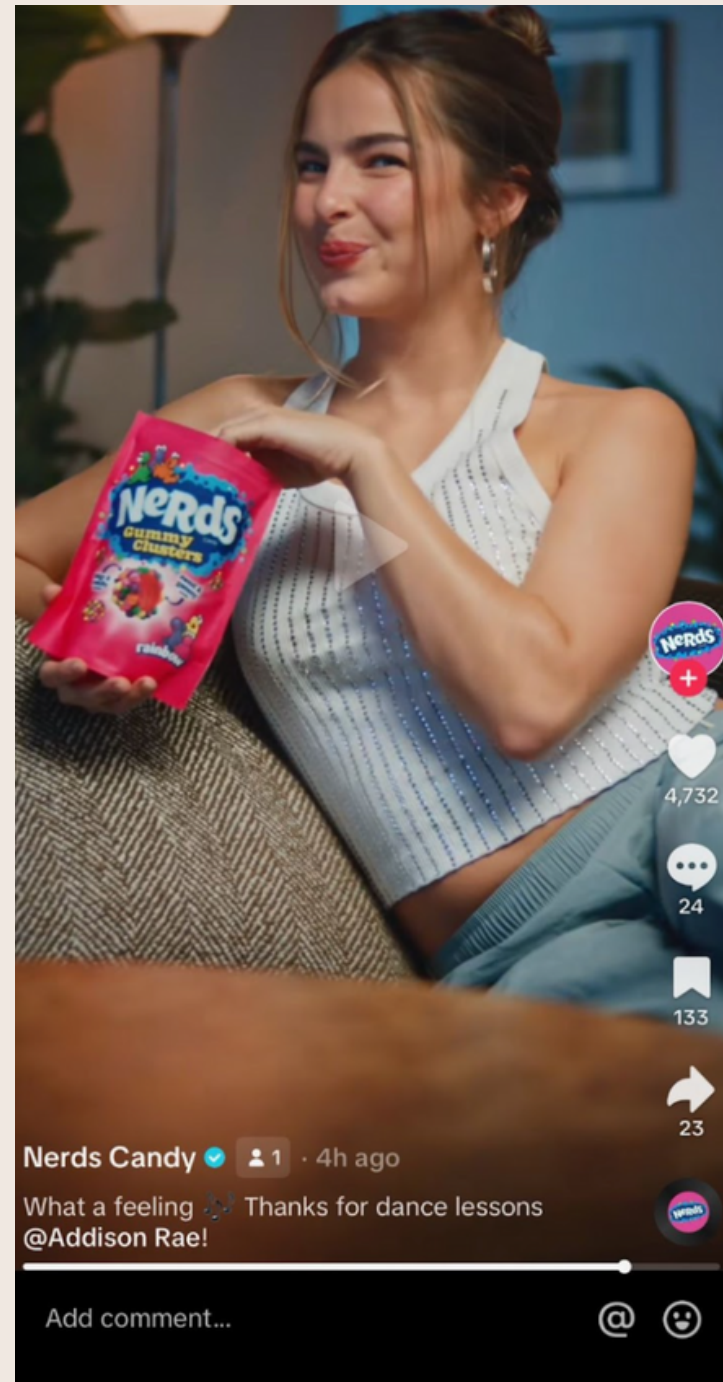


Concept A/B



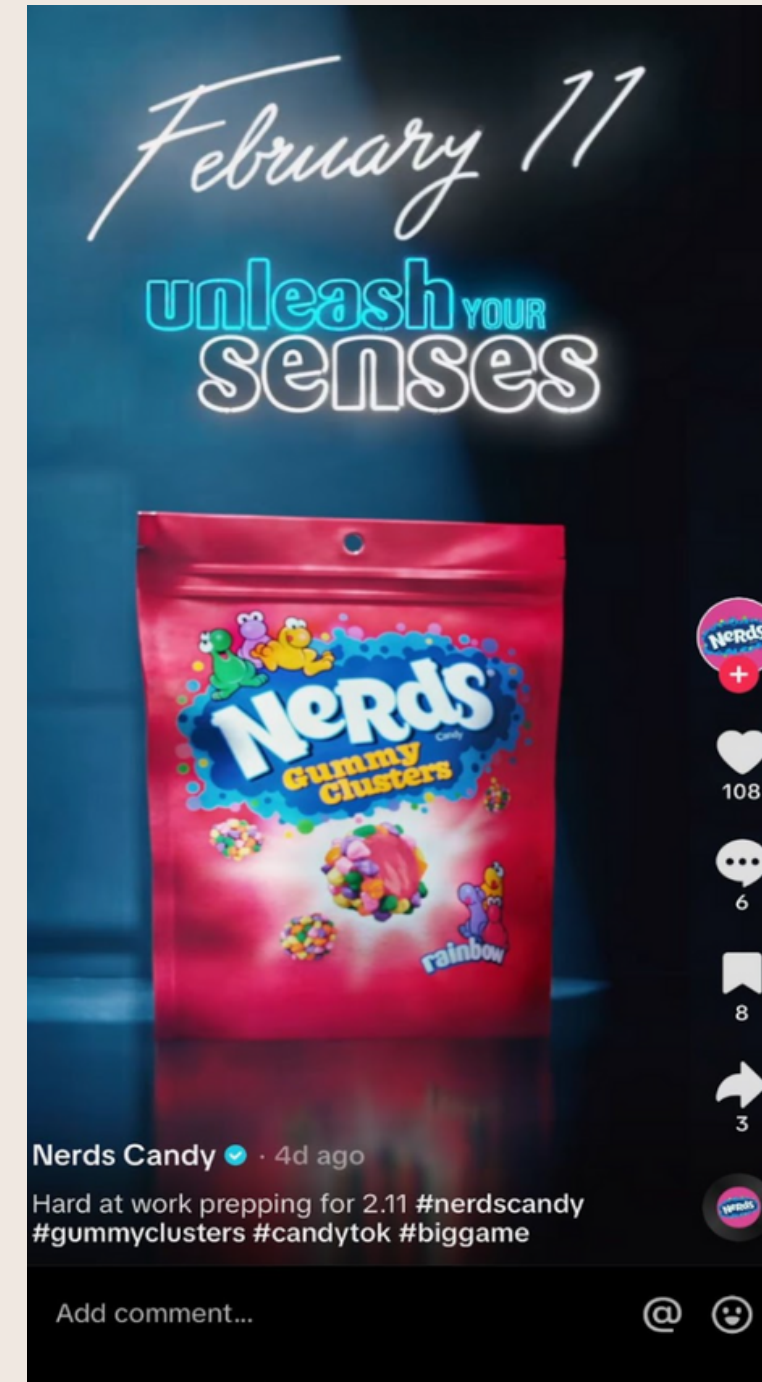
Consumer Behavior and
Preferences

A/B CONCEPT TEST



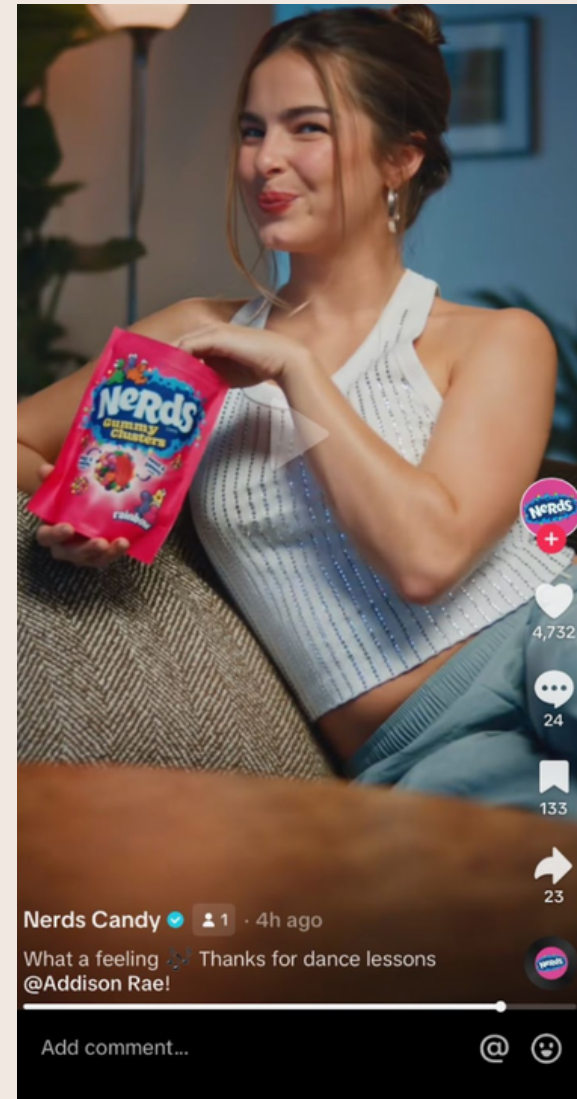
CONCEPT A

VS.



CONCEPT B

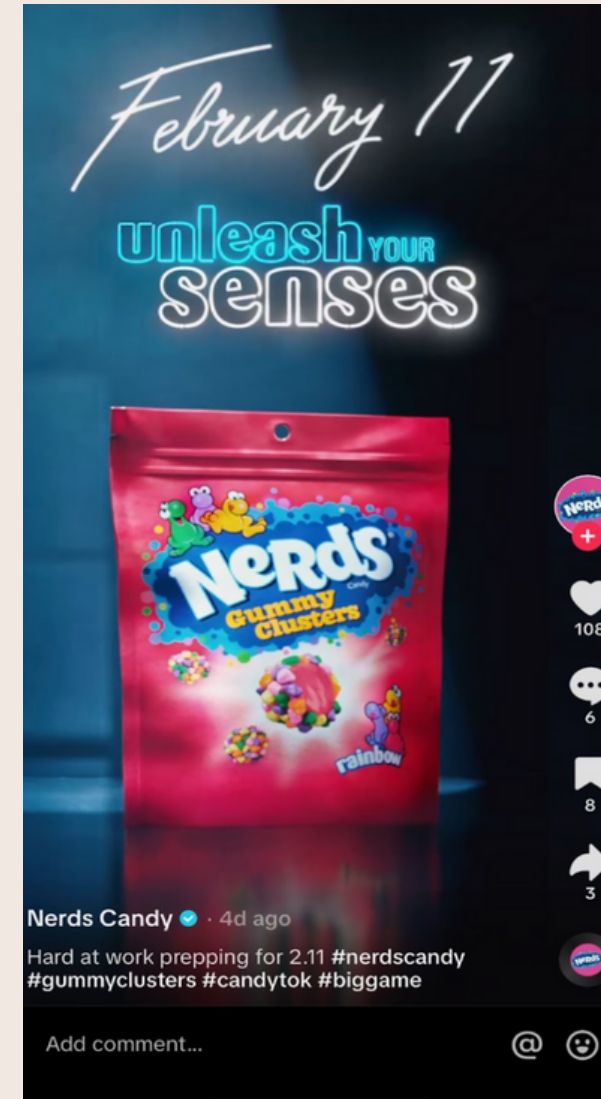
RECOMMENDATION



CONCEPT A

**30.6% RANKED AT A 1
(EXTREMELY UNLIKELY)**

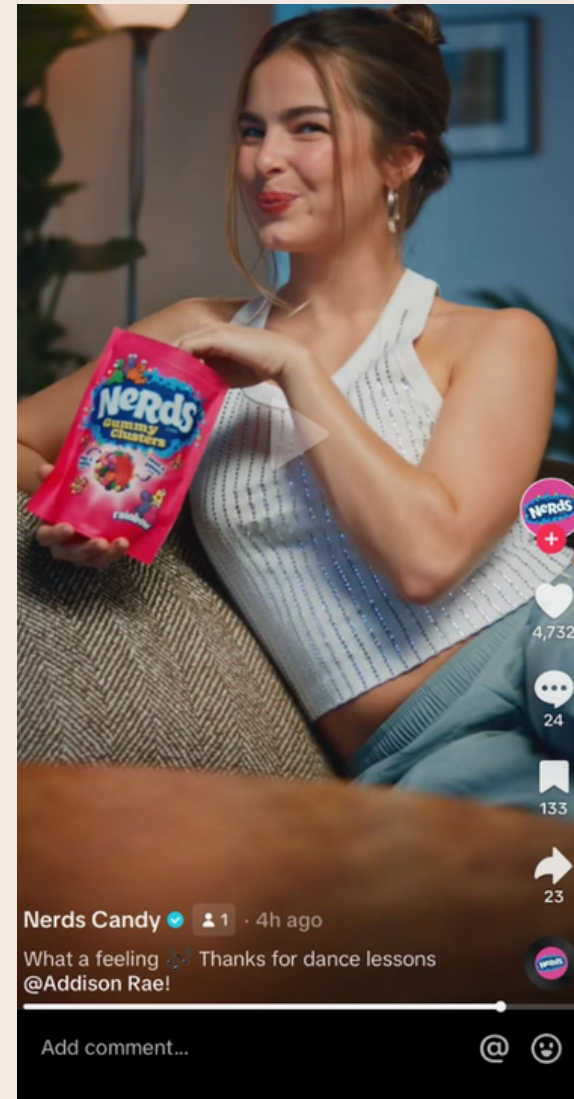
VS.



CONCEPT B

**55% RANKED AT A 4
(SOMEWHAT LIKELY)**

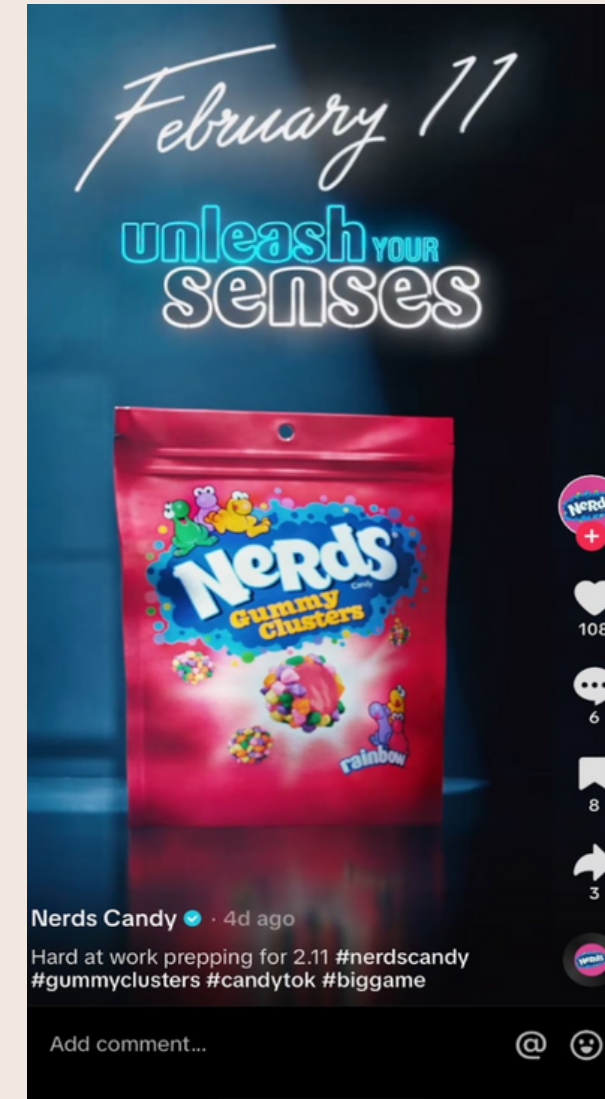
REMEMBRANCE



CONCEPT A

**44.4% RANKED AT 4
(SOMEWHAT LIKELY)**

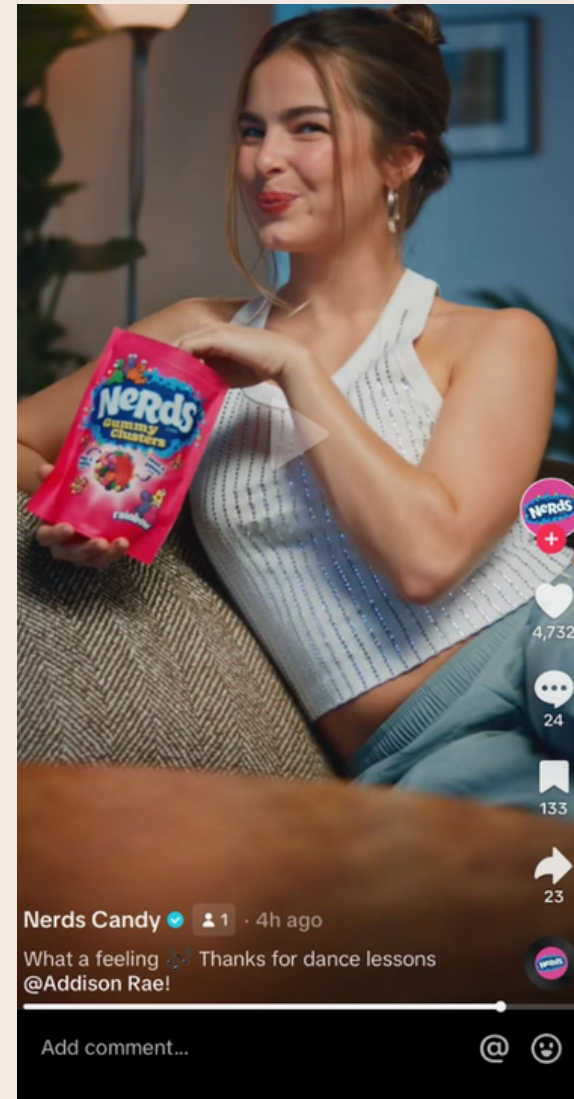
VS.



CONCEPT B

**45% RANKED AT 2
(SOMEWHAT UNLIKELY)**

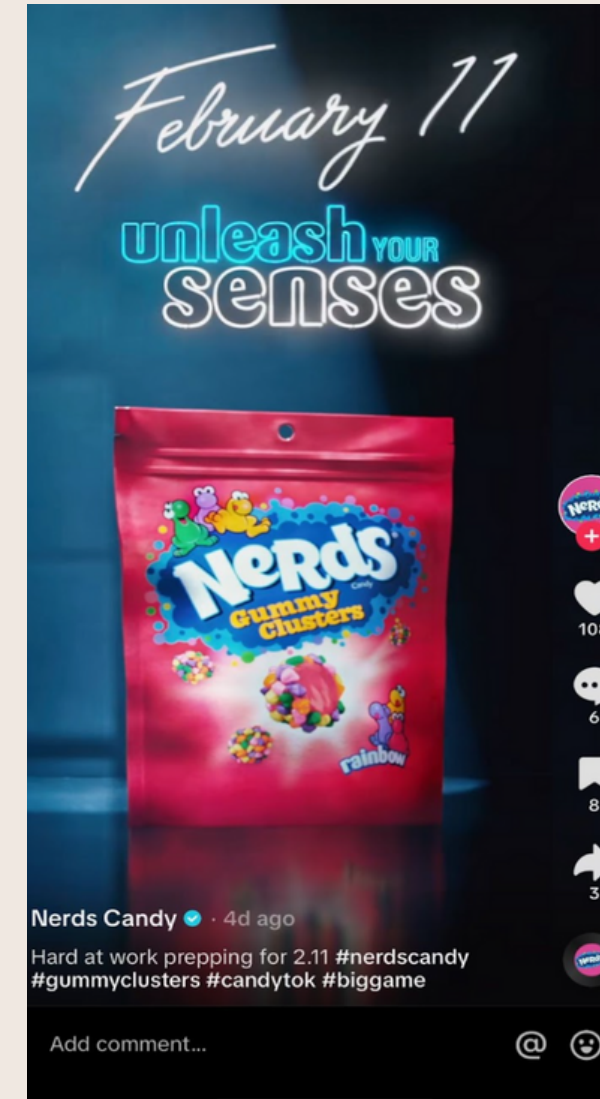
EMOTION EVOKED



CONCEPT A

16.7% AT 2 (1-10 RANGE)

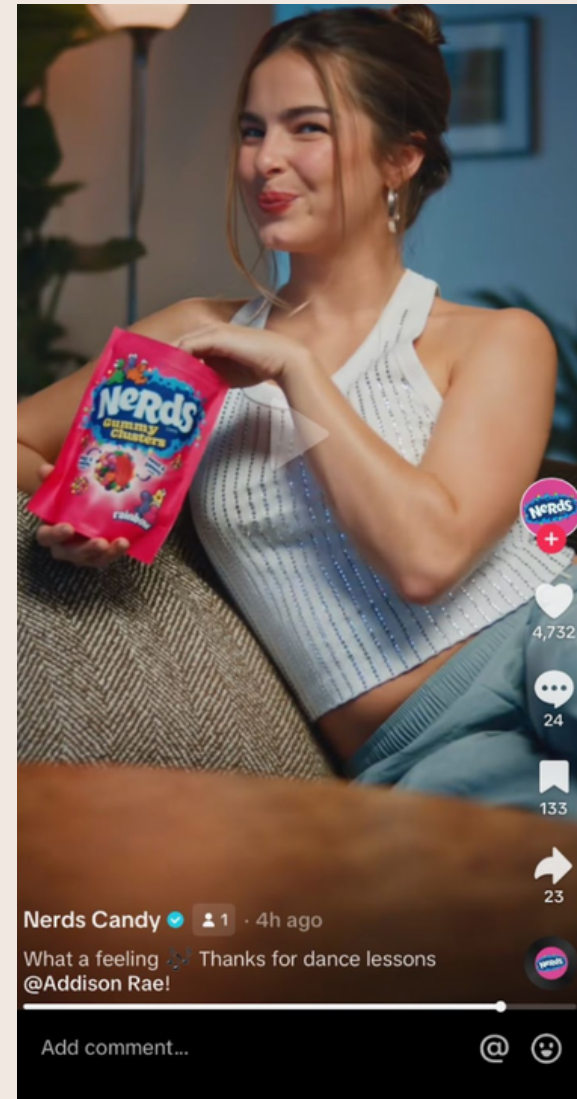
VS.



CONCEPT B

40% AT 5 (1-10 RANGE)

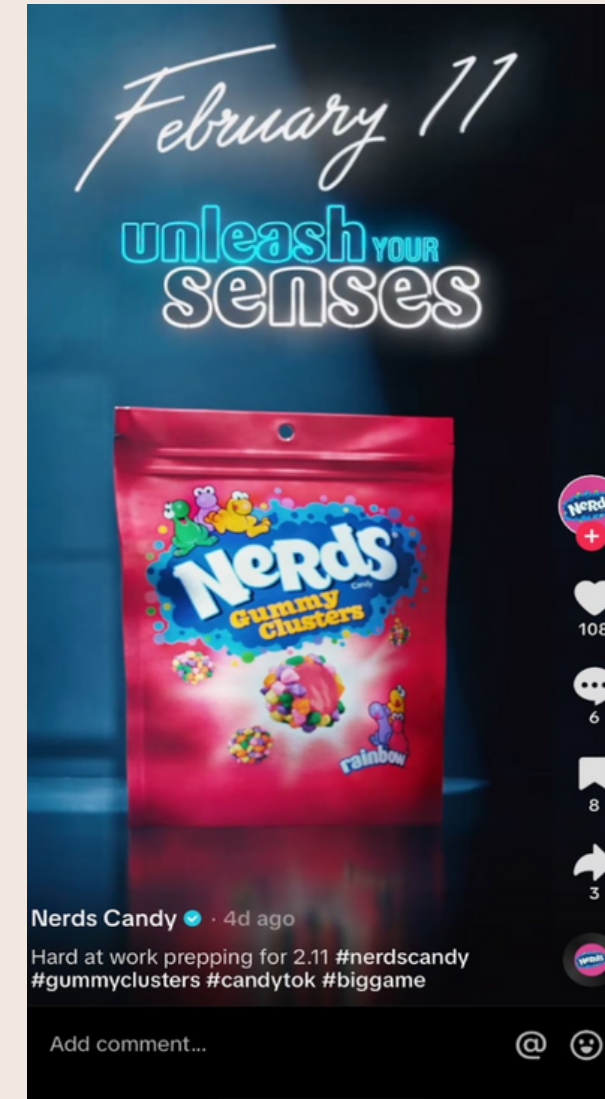
VISUAL APPEAL



CONCEPT A

13.9% AT 7 (1-10 RANGE)

VS.



CONCEPT B

30% AT 7 (1-10 RANGE)

RESULTS AND ANALYSIS

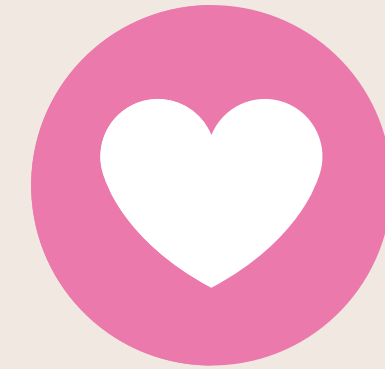
SAMPLE DEMOGRAPHICS

56
PARTICIPANTS

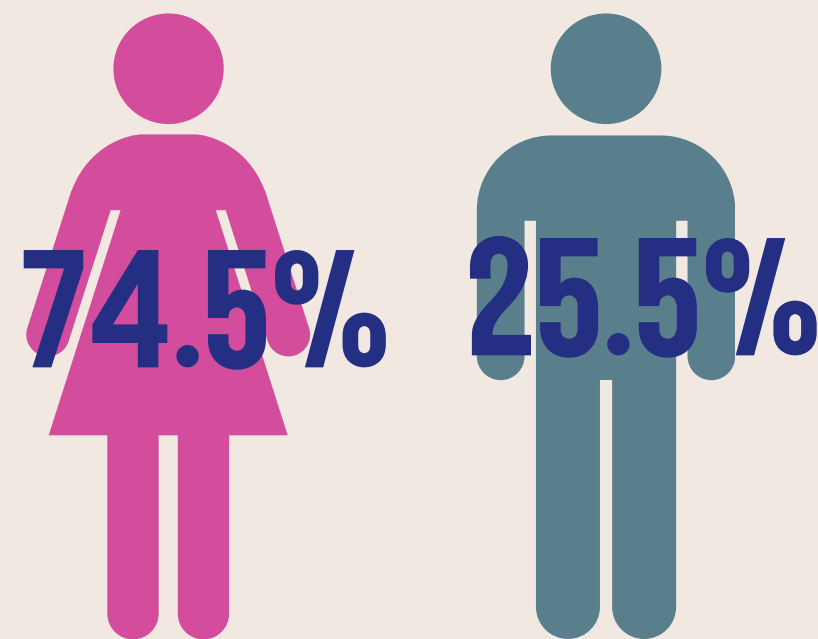


45.1%

**HIGH SCHOOL
OR GED**



78.4% SINGLE



86.3%

AGE 18-24

FREQUENCY (CANDY RANK)

1 30.4% DARK CHOCOLATE

2 35.7% MILK CHOCOLATE

3 26.8% GUMMIES

4 16.1% CARAMEL

5 21.4% LOLLIPOP

6 25% LOLLIPOP

7 23.2% LOLLIPOP

8 67.9% LICORICE

**DISCLAIMER: PERCENTAGE EQUALS HOW MANY RESPONDENTS
AGREE WITH THE INDIVIDUAL RANKING**

ANOVA

One way ANOVA

		ANOVA				
		Sum of Squares	df	Mean Square	F	Sig.
happy	Between Groups	.635	1	.635	1.134	.292
	Within Groups	30.222	54	.560		
	Total	30.857	55			
hungry	Between Groups	1.835	1	1.835	1.524	.222
	Within Groups	65.022	54	1.204		
	Total	66.857	55			
purchase	Between Groups	6.400	1	6.400	3.822	.056
	Within Groups	90.439	54	1.675		
	Total	96.839	55			
visual_appeal	Between Groups	3.968	1	3.968	.706	.404
	Within Groups	303.389	54	5.618		
	Total	307.357	55			
brand_rep	Between Groups	17.082	1	17.082	2.652	.109
	Within Groups	334.918	52	6.441		
	Total	352.000	53			
remembrance	Between Groups	6.400	1	6.400	4.643	.036
	Within Groups	74.439	54	1.378		
	Total	80.839	55			

		ANOVA Effect Sizes ^{a,b}		
		Point Estimate	95% Confidence Interval	
			Lower	Upper
happy	Eta-squared	.021	.000	.141
	Epsilon-squared	.002	-.019	.125
	Omega-squared Fixed-effect	.002	-.018	.123
	Omega-squared Random-effect	.002	-.018	.123
hungry	Eta-squared	.027	.000	.155
	Epsilon-squared	.009	-.019	.139
	Omega-squared Fixed-effect	.009	-.018	.137
	Omega-squared Random-effect	.009	-.018	.137
purchase	Eta-squared	.066	.000	.217
	Epsilon-squared	.049	-.019	.203
	Omega-squared Fixed-effect	.048	-.018	.200
	Omega-squared Random-effect	.048	-.018	.200
visual_appeal	Eta-squared	.013	.000	.123
	Epsilon-squared	-.005	-.019	.107
	Omega-squared Fixed-effect	-.005	-.018	.105
	Omega-squared Random-effect	-.005	-.018	.105
brand_rep	Eta-squared	.049	.000	.194
	Epsilon-squared	.030	-.019	.179
	Omega-squared Fixed-effect	.030	-.019	.176
	Omega-squared Random-effect	.030	-.019	.176
remembrance	Eta-squared	.079	.000	.235
	Epsilon-squared	.062	-.019	.221
	Omega-squared Fixed-effect	.061	-.018	.218
	Omega-squared Random-effect	.061	-.018	.218

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

b. Negative but less biased estimates are retained, not rounded to zero.

INDEPENDENT SAMPLE T-TEST

STATISTICS

	condition	N	Mean	Std. Deviation	Std. Error Mean
happy	'Product'	20	3.50	.688	.154
	'celebrity'	36	3.28	.779	.130
purchase	'Product'	20	3.65	1.089	.244
	'celebrity'	36	2.94	1.393	.232
visual_appeal	'Product'	20	6.25	1.860	.416
	'celebrity'	36	5.69	2.606	.434
brand_rep	'Product'	20	6.40	2.326	.520
	'celebrity'	34	5.24	2.652	.455
remembrance	'Product'	20	2.35	1.040	.233
	'celebrity'	36	3.06	1.241	.207
recommend	'Product'	20	3.20	1.056	.236
	'celebrity'	36	2.53	1.341	.224

INDEPENDENT SAMPLE TEST

		Independent Samples Test										
		Levene's Test for Equality of Variances		t-test for Equality of Means							95% Confidence Interval of the Difference	
		F	Sig.	t	df	Significance		Mean Difference	Std. Error Difference	Lower	Upper	
						One-Sided p	Two-Sided p					
happy	Equal variances assumed	.005	.946	1.065	54	.146	.292	.222	.209	-.196	.641	
	Equal variances not assumed			1.104	43.649	.138	.276	.222	.201	-.184	.628	
purchase	Equal variances assumed	3.076	.085	1.955	54	.028	.056	.706	.361	-.018	1.429	
	Equal variances not assumed			2.097	47.782	.021	.041	.706	.336	.029	1.382	
visual_appeal	Equal variances assumed	4.720	.034	.840	54	.202	.404	.556	.661	-.770	1.881	
	Equal variances not assumed			.924	50.453	.180	.360	.556	.601	-.652	1.763	
brand_rep	Equal variances assumed	.851	.361	1.629	52	.055	.109	1.165	.715	-.270	2.600	
	Equal variances not assumed			1.686	44.266	.049	.099	1.165	.691	-.228	2.557	
remembrance	Equal variances assumed	1.417	.239	-2.155	54	.018	.036	-.706	.327	-1.362	-.049	
	Equal variances not assumed			-2.267	45.491	.014	.028	-.706	.311	-1.332	-.079	
recommend	Equal variances assumed	2.949	.092	1.931	54	.029	.059	.672	.348	-.026	1.370	
	Equal variances not assumed			2.067	47.567	.022	.044	.672	.325	.018	1.326	

FACTOR ANALYSIS

KMO AND BARTLETT'S TEST

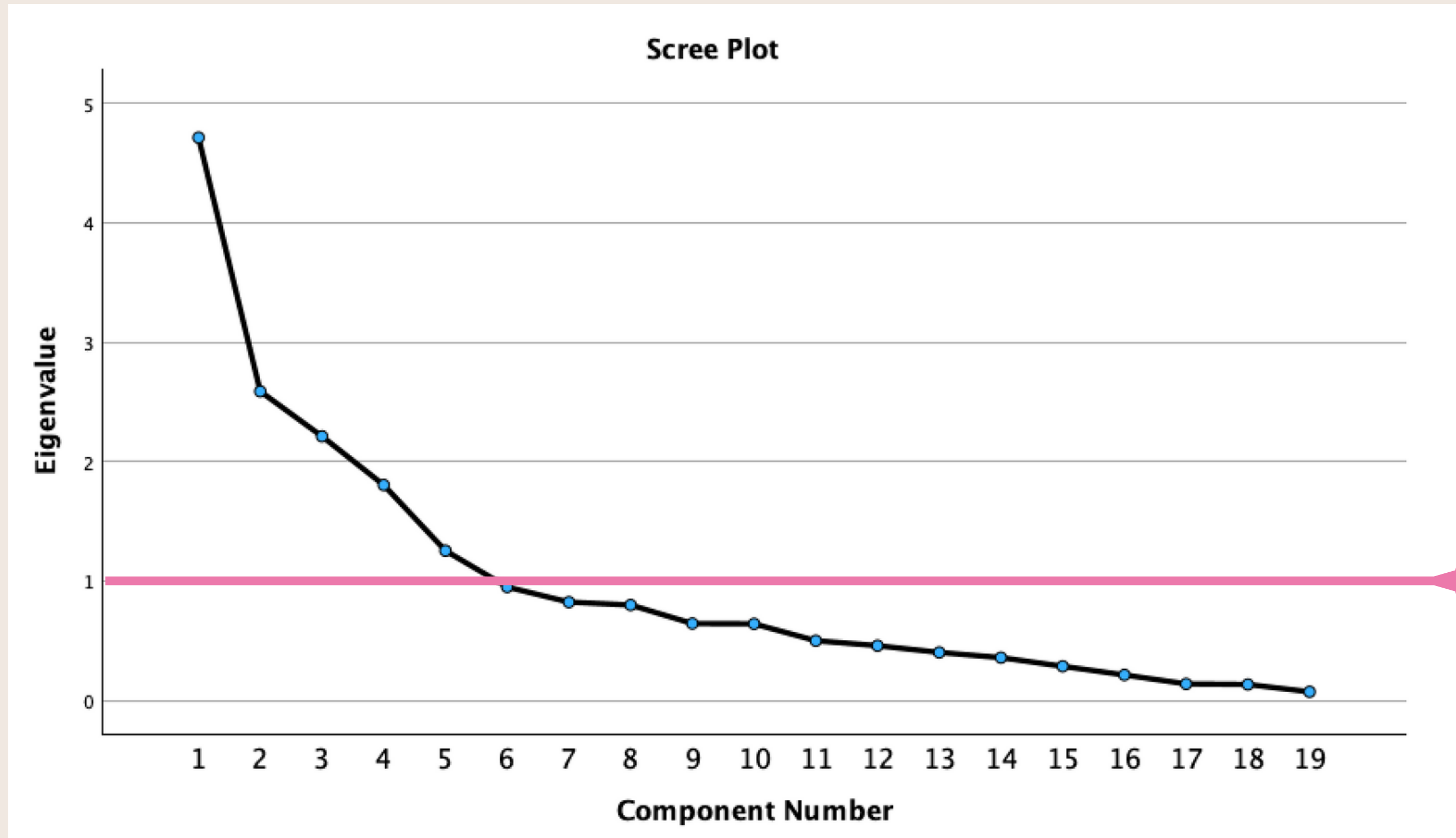
Kaiser-Meyer-Olkin Measure of sampling Adequacy	.633	
Bartlett's Test of Sphericity	Approx. Chi Square	470.105
	df	171
	sig.	<.001



IDENTIFYING FACTORS

Component	Total	Initial Eigen Values % of Variance	Cummulative %
1	4.713	24.808%	24.808%
2	2.589	13.624%	38.432%
3	2.212	11.642%	50.074%
4	1.804	9.496%	59.569%
5	1.254	6.602%	66.171%

SCREE PLOT



FACTOR 1

SOCIAL MEDIA ACTIVIST

I use social media to connect and communicate with friends, family, or colleagues

I find social media content entertaining

I regularly use social media

I tend to avoid social gatherings and prefer spending time alone.

FACTOR 2

UNCONSCIOUSLY TRENDY

I often look to influencers and celebrities on social media for recommendations

I'm not particularly concerned with following social trends

I trust recommendations or endorsements from social media influencers regarding products and brands

I actively seek out and stay updated on the latest trends

I make decisions quickly and trust my instincts.

I use social media to discover new content, trends, and insights

FACTOR 3

EXPLORER

I embrace change and see it as an opportunity

I explore by trying new things and exploring different ideas.

I enjoy meeting new people.

Before making decisions, I thoroughly consider the pros and cons of each option.

I actively seek out social events.

FACTOR 4

SOCIAL PARTICIPANT

I engage with brands on social media for promotions and updates on products/services

I have participated in or sought support through online communities or groups on social media

FACTOR 5

RISK AVERSION

I prefer to gather input from others and collaborate before deciding.

I prefer to avoid risks and opt for safer choices

REGRESSION

Regression 1.0

Model		Coefficients ^a				
		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4.347	1.142		3.807	<.001
	condition	-.279	.256	-.180	-1.090	.281
	gender	-.413	.353	-.236	-1.169	.249
	age	-.085	.369	-.038	-.230	.820
	relationship	.028	.143	.031	.200	.843
	education	.023	.155	.023	.148	.883
	REGR factor score 1 for analysis 1	.099	.118	.132	.840	.406
	REGR factor score 2 for analysis 1	.139	.130	.185	1.066	.292
	REGR factor score 3 for analysis 1	.025	.118	.033	.211	.834
	REGR factor score 4 for analysis 1	.040	.113	.054	.357	.723
	REGR factor score 5 for analysis 1	.046	.124	.061	.369	.714

a. Dependent Variable: happy

Dependent variable: I feel happy after viewing this ad.
Variable of interest: Condition (which as they saw)
 R_square=0.07
 F=0.330
 Significant level=0.968
 Regression not jointly significant

Regression 2.0

Model		Coefficients ^a				
		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	9.414	3.606		2.611	.012
	condition	-1.307	.814	-.246	-1.606	.116
	gender	-1.638	1.131	-.266	-1.448	.155
	age	.605	1.170	.080	.517	.608
	relationship	.344	.454	.108	.757	.453
	education	-.971	.492	-.286	-1.974	.055
	REGR factor score 1 for analysis 1	.537	.446	.181	1.205	.235
	REGR factor score 2 for analysis 1	.603	.426	.234	1.416	.164
	REGR factor score 3 for analysis 1	.322	.391	.122	.824	.415
	REGR factor score 4 for analysis 1	-.211	.363	-.082	-.583	.563
REGR factor score 5 for analysis 1	.266	.427	.099	.624	.536	

a. Dependent Variable: brand_rep

Dependent variable: Good representation of the brand
Variable of interest: Condition (which as they saw)
 R_square=0.235
 F=1.29
 Significant level=0.267
 Regression not jointly significant

Regression 3.0

Model		Coefficients ^a				
		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	5.558	1.870		2.972	.005
	condition	-1.145	.419	-.416	-2.731	.009
	gender	-.825	.578	-.265	-1.427	.161
	age	-.142	.605	-.036	-.234	.816
	relationship	.157	.234	.095	.672	.505
	education	-.058	.254	-.033	-.229	.820
	REGR factor score 1 for analysis 1	.130	.194	.098	.672	.505
	REGR factor score 2 for analysis 1	.094	.214	.071	.440	.662
	REGR factor score 3 for analysis 1	.306	.193	.229	1.587	.120
	REGR factor score 4 for analysis 1	-.051	.186	-.038	-.273	.786
	REGR factor score 5 for analysis 1	-.142	.203	-.106	-.699	.488

a. Dependent Variable: purchase

Dependent variable: After viewing this ad, I would purchase Nerd Cluster
Variable of interest: Condition (which as they saw)

R_square=0.210

F=1.173

Significant level=0.331

Regression is not jointly significant

MANAGERIAL RECOMMENDATIONS

MANAGERIAL INSIGHTS



Competition

Nerds Clusters is a market leader in the candy product categories.



Sentiment

Influencers don't have a strong ability to evoke emotion in consumers in this specific scenario.



Social Media

100% of respondents agree that they use social media to connect and communicate with others, so Nerds should strive to create shareable content.



Familiarity

25% of respondents had never tried of Nerds Gummy Clusters before this, so Nerds should increase sampling

CONCLUSIONS & RECOMMENDATIONS

**NERDS GUMMY CLUSTERS SHOULD
REEVALUATE INCORPORATING
INFLUENCERS IN ADVERTISEMENTS**

**HYPOTHESIS IS WRONG -
INFLUENCERS WERE NOT BENEFICIAL
AT PROMOTING THE BRAND**

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**THANK YOU
VERY MUCH**