

Back-to-School Purchase Intent & Brand Preference Survey Design

A complete record of the research design process for the Back-to-School (BTS) shopping study.

1. Initial Request & Drivers Assessment

User:

I want to do a 15 minute survey about the drivers behind intent to purchase for back-to-school items among the drivers to test I want to include excitement about back-to-school anticipation about back-to-school the enjoyment of office supplies, prices of office supplies and school supplies, and brand recognition. Suggest other drivers to be tested. I want to be able to generate data that can then be analyzed using factor analysis and regression analysis to truly determine what drives intent to purchase for back to school items.

AI:

Your current list of drivers provides a strong foundation, capturing both the **hedonic** (excitement, anticipation, enjoyment) and **commercial** (price, brand recognition) aspects of back-to-school (BTS) shopping. To build a robust model for factor analysis and regression, you need to capture a wider spectrum of consumer psychology. Here are additional drivers you should consider testing:

- **Social and Normative Influences:** Peer Influence / "Fitting In", School Mandates (Compliance), Nostalgia.
- **Utilitarian and Functional Factors:** Perceived Quality and Durability, Convenience / Ease of Shopping, Product Innovation/Novelty.
- **Economic and Promotional Factors:** Deal-Seeking / Promotion Proneness, Budgetary Anxiety / Constraints.
- **Values-Based Drivers:** Sustainability / Eco-Friendliness.

To ensure your survey generates clean data suitable for **Exploratory/Confirmatory Factor Analysis (EFA/CFA)** and **Multiple Regression**, you must structure your questions deliberately with 3-5 Likert scale statements per driver.

2. Shifting the Dependent Variable

User:

Make the dependent variable likelihood to buy premium or brand labels over store label.

AI:

Shifting your dependent variable (DV) to **Premium/National Brands vs. Store Labels** is an excellent strategic pivot. Instead of just measuring *if* they will buy, you are now predicting *what kind of value* they are willing to pay for.

New Drivers to Add for Brand vs. Store Label:

- **Social Risk (The "Crayola Effect"):** The fear of a child being judged for having the "wrong" brand.
 - **Functional Risk (Reliability):** The perception that store brands will break.
 - **Self-Expression / Identity:** How much the items act as an extension of the student's personality.
 - **Retailer Affinity / Trust:** The strength of the store brand itself.
 - **Category Involvement:** People are not brand-loyal across *all* supplies (e.g., premium electronics vs. store-brand filler paper).
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3. Drafting Likert Statements for New Drivers

User:

Can you draft the 3-5 Likert scale statements for the new drivers like Social Risk, Functional Risk, and Self-Expression?

AI:

Here are 4 to 5 Likert-scale statements for each of the new drivers (measured 1=Strongly Disagree to 7=Strongly Agree).

1. Social Risk

- "I worry my child will feel left out if they don't have the popular brands of school supplies."
- "I feel that teachers or other parents might judge the quality of the supplies I send to school with my child."
- "It is important to me that my child's school supplies match what their peers are using."
- "I buy name-brand items to ensure my child isn't teased for having generic supplies."
- "I feel a sense of social pressure to buy specific brands on the back-to-school shopping list."

2. Functional Risk

- "I worry that store-brand school supplies will break or wear out before the school year ends."
- "Name-brand office and school supplies perform noticeably better than generic versions."
- "Buying cheaper, generic school supplies usually ends up costing more because I have to replace them mid-year."
- "I stick to premium brands because I cannot risk a product leaking, tearing, or failing during use."
- "When it comes to school supplies, you truly get what you pay for in terms of quality."

3. Self-Expression and Identity

- "The school supplies we choose reflect my (or my child's) unique personality and style."
 - "Having aesthetically pleasing or stylish school supplies is very important to our back-to-school experience."
 - "We actively look for school supplies that help my child stand out from the crowd."
 - "Choosing the right colors, patterns, and brands is an important form of self-expression for my child."
 - "Having premium or distinct school supplies makes my child feel more confident walking into the classroom."
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4. Addressing Category Involvement

User:

How do I account for the fact that people might buy premium backpacks but store-brand paper?
How do we ask that?

AI:

This is one of the most critical nuances in consumer research: **Category Involvement**. To account for this, separate your **Dependent Variable (Purchase Intent)** into specific category buckets using a **Matrix (Grid) question**.

The Matrix Question:

"When shopping for back-to-school items, our preference for name brands versus store brands (generics) often changes depending on what we are buying. For each category below, please indicate your typical buying preference."

(Scale: 1 = Exclusively buy Store/Generic Brands -> 7 = Exclusively buy Name Brands)

- Backpacks, lunchboxes, and apparel
- Calculators and tech accessories
- Art and writing supplies

- Basic paper goods

By structuring the survey this way, you no longer run just *one* regression—you run **four separate regressions** to generate rich insights across product categories.

5. The Final Complete Study Design

User:

At this point, draft the entire questionnaire. Make sure that the audience is parents of K-12 children. Can you write the entire study now?

AI:

Understanding the Drivers of Premium Brand Preference in Back-to-School (BTS) Shopping

1. Research Objectives

This study aims to determine which psychological, functional, and economic factors drive parents to abandon store-brand generics in favor of premium or national brands.

- Identify the underlying factors that influence BTS shopping behaviors.
- Measure how "Category Involvement" alters brand preference.
- Quantify the weight of each driver using multiple regression to identify the highest-ROI marketing messages.

2. Methodology

- **Target Audience:** Primary or shared decision-makers for back-to-school shopping with at least one child entering grades K-12.
- **Estimated Length:** 10–15 minutes.
- **Survey Format:** Online quantitative questionnaire.
- **Data Analysis:** Exploratory Factor Analysis (EFA) for construct validation, followed by Multiple Linear Regression.

3. The Survey Instrument

Section A: Screening & Dependent Variable (Purchase Intent)

Q1. Are you the primary or shared decision-maker for back-to-school shopping for at least one child entering grades K-12?

- Yes (*Continue*) / No (*Terminate*)

Q2. When shopping for the following back-to-school items, please indicate your typical buying preference.

(Matrix using a 1-7 Scale: 1 = Exclusively buy Store/Generic Brands, 4 = No Preference, 7 = Exclusively buy Name Brands)

- Backpacks, lunchboxes, and apparel
- Calculators and tech accessories (headphones, flash drives)
- Art and writing supplies (crayons, markers, specific pens)
- Basic paper goods (filler paper, plain folders, index cards)

Section B: The Drivers (Independent Variables)

(Scale: 1 = Strongly Disagree to 7 = Strongly Agree)

Construct 1: Excitement & Anticipation (Hedonic Drivers)

- Q3. I actively look forward to the back-to-school shopping season every year.
- Q4. I genuinely enjoy the process of browsing for new stationery and school supplies.
- Q5. Organizing new school supplies gives me a sense of satisfaction.
- Q6. Back-to-school shopping feels like a fun annual tradition for my family.

Construct 2: Self-Expression & Identity

- Q7. The supplies we choose reflect my child's unique personality and style.
- Q8. Having aesthetically pleasing or stylish school supplies is very important to us.
- Q9. We actively look for school supplies that help my child stand out.
- Q10. Having premium or distinct school supplies makes my child feel more confident walking into the classroom.

Construct 3: Social Risk (The "Fitting In" Factor)

- Q11. I worry my child will feel left out if they do not have the popular brands of school supplies.
- Q12. I buy name-brand items to ensure my child isn't teased for having generic supplies.
- Q13. It is important to me that my child's school supplies match what their peers are using.
- Q14. I feel a sense of social pressure from teachers or other parents to buy specific brands.

Construct 4: Functional Risk (Reliability)

- Q15. I worry that store-brand school supplies will break or wear out before the school year ends.

- Q16. Name-brand office and school supplies perform noticeably better than generic versions.
- Q17. Buying cheaper, generic school supplies usually ends up costing more because I have to replace them mid-year.
- Q18. I stick to premium brands because I cannot risk a product failing during the school day.

Construct 5: Price Sensitivity & Economics

- Q19. Finding the absolute lowest price is my top priority, regardless of the brand.
- Q20. I am willing to buy name-brand items, but only if I can find them on sale or promotion.
- Q21. Sticking to a strict budget is more important than getting the exact brands my child wants.
- Q22. I actively compare prices across multiple stores before making my back-to-school purchases.

Section C: Demographics

Q23. What grade level(s) is your child/children entering this fall? (*Select all that apply*)

- Elementary (K-5) / Middle School (6-8) / High School (9-12)

Q24. Which of the following best describes your total annual household income?

- Under \$50,000 / \$50,000 to \$99,999 / \$100,000 to \$149,999 / \$150,000 or more

4. Data Analysis Plan

Step 1: Factor Analysis (Data Reduction & Validation)

Run Exploratory Factor Analysis (EFA) to prove mathematically that your grouped questions reliably measure the intended constructs (Excitement, Social Risk, etc.). Average the questions into "Factor Scores".

Step 2: Multiple Linear Regression

Run the regression model four separate times (once for each product category measured in Q2). The output will identify the statistical significance (*p-value*) and weight (*beta coefficient*) of each driver across the different categories.

User:

Write the entire survey now.

AI:

Here is the complete research study design. It is structured as a professional market research brief, expanding the questionnaire to include the required 3 to 4 statements per construct so your factor analysis will be statistically valid.

Study Title

Understanding the Drivers of Premium Brand Preference in Back-to-School (BTS) Shopping

1. Research Objectives

While overall intent to purchase during the BTS season is guaranteed, the *value* of those purchases fluctuates. This study aims to determine which psychological, functional, and economic factors drive parents to abandon store-brand generics in favor of premium or national brands.

Specifically, this study will:

- Identify the underlying factors that influence BTS shopping behaviors
- Measure how "Category Involvement" (e.g., backpacks vs. loose-leaf paper) alters brand preference.
- Quantify the weight of each driver using multiple regression to identify the highest-ROI marketing messages.

2. Methodology

- **Target Audience:** Primary or shared decision-makers for back-to-school shopping with at least one child entering grades K-12.
- **Estimated Length:** 10–15 minutes.
- **Survey Format:** Online quantitative questionnaire.
- **Data Analysis:** Exploratory Factor Analysis (EFA) for construct validation, followed by Multiple Linear Regression.

3. The Survey Instrument

Section A: Screening & Dependent Variable (Purchase Intent)

This section confirms the audience and measures their baseline preference for name brands across different product categories.

Q1. Are you the primary or shared decision-maker for back-to-school shopping for at least one child entering grades K-12?

- Yes (*Continue*)

- No (*Terminate*)

Q2. When shopping for the following back-to-school items, please indicate your typical buying preference.

(Matrix using a 1-7 Scale: 1 = Exclusively buy Store/Generic Brands, 4 = No Preference, 7 = Exclusively buy Name Brands)

- Backpacks, lunchboxes, and apparel
- Calculators and tech accessories (headphones, flash drives)
- Art and writing supplies (crayons, markers, specific pens)
- Basic paper goods (filler paper, plain folders, index cards)

Section B: The Drivers (Independent Variables)

Instruction: Please rate how strongly you agree or disagree with the following statements when thinking about your back-to-school shopping. (1 = Strongly Disagree to 7 = Strongly Agree).

Construct 1: Excitement & Anticipation (Hedonic Drivers)

- Q3. I actively look forward to the back-to-school shopping season every year.
- Q4. I genuinely enjoy the process of browsing for new stationery and school supplies.
- Q5. Organizing new school supplies gives me a sense of satisfaction.
- Q6. Back-to-school shopping feels like a fun annual tradition for my family.

Construct 2: Self-Expression & Identity

- Q7. The supplies we choose reflect my child's unique personality and style.
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Construct 3: Social Risk (The "Fitting In" Factor)

- Q11. I worry my child will feel left out if they do not have the popular brands of school supplies.
- Q12. I buy name-brand items to ensure my child isn't teased for having generic supplies.
- Q13. It is important to me that my child's school supplies match what their peers are using.
- Q14. I feel a sense of social pressure from teachers or other parents to buy specific brands.

Construct 4: Functional Risk (Reliability)

- Q15. I worry that store-brand school supplies will break or wear out before the school year ends.
- Q16. Name-brand office and school supplies perform noticeably better than generic versions.
- Q17. Buying cheaper, generic school supplies usually ends up costing more because I have to replace them mid-year.
- Q18. I stick to premium brands because I cannot risk a product failing during the school day.

Construct 5: Price Sensitivity & Economics

- Q19. Finding the absolute lowest price is my top priority, regardless of the brand.
- Q20. I am willing to buy name-brand items, but only if I can find them on sale or promotion.
- Q21. Sticking to a strict budget is more important than getting the exact brands my child wants.
- Q22. I actively compare prices across multiple stores before making my back-to-school purchases.

Section C: Demographics

These will act as control variables in the regression.

Q23. What grade level(s) is your child/children entering this fall? (Select all that apply)

- Elementary (K-5)
- Middle School (6-8)
- High School (9-12)

Q24. Which of the following best describes your total annual household income?

- Under \$50,000
- \$50,000 to \$99,999
- \$100,000 to \$149,999
- \$150,000 or more

4. Data Analysis Plan

Once the data is collected, the analysis will follow a two-step mathematical process to ensure accuracy.

Step 1: Factor Analysis (Data Reduction & Validation)

Before running the regression, you will run an **Exploratory Factor Analysis (EFA)** using Principal Component Analysis with a Varimax rotation.

- **Purpose:** To mathematically prove that questions Q3-Q6 actually measure "Excitement," Q11-Q14 measure "Social Risk," etc.
- **Action:** The software will calculate a Cronbach's Alpha for each construct (aiming for > 0.70). It will then average the 4 questions from each construct into a single, clean "Factor Score" for each respondent.

Step 2: Multiple Linear Regression

Because you measured brand preference across four different product categories (Q2), you will run the regression model four separate times.

The standard Ordinary Least Squares (OLS) regression equation for each category will be:

$$BrandPreference = \beta_0 + \beta_1(Excitement) + \beta_2(SelfExpression) + \beta_3(SocialRisk) + \beta_4(FunctionalR$$

- **Interpretation:** The output will give you the *p-value* (statistical significance) and the *beta coefficient* (weight) for each driver.
- **Expected Output Example:** You may find that for basic paper goods, only β_5 (Price Sensitivity) is significant, but for backpacks, β_3 (Social Risk) and β_2 (Self-Expression) carry the highest mathematical weight. This tells marketing exactly which messaging to use for which product line.