

Independent Variable

- **BLOCKCH**: Blockchain treatment condition (0=Traditional verification, 1=Blockchain verification)

Primary Dependent Variables

- **WTP_PUR**: Willingness to purchase the luxury product (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
- **WTP_MORE**: Percentage premium willing to pay for blockchain verification (5-point scale: 1=None, 2=0%-3%, 3=3%-5%, 4=5%-7%, 5=7%-10%)

Secondary Dependent Variable

- **WTP_PAY**: Willingness to pay (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
- **WTPOVRL**: Composite score created using mean of WTP_PUR and WTP_PAY (Range: 1-7)

Mediator

- **Investment Orientation**: Measured with 3 items (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
 - INV_OR1: Investment orientation item 1
 - INV_OR2: Investment orientation item 2
 - INV_OR3: Investment orientation item 3
 - **INVORIE**: Composite score created using mean of all items (Range: 1-7)

Moderator

- **Temporal Orientation**: Measured with 4 items (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
 - TMP_OR1: Future orientation item 1
 - TMP_OR2: Future orientation item 2
 - TMP_OR3: Present orientation item 3 (before reverse-coding)
 - TMP_OR4: Present orientation item 4 (before reverse-coding)
 - TMP_OR3R: Present orientation item 3 (reverse-coded)
 - TMP_OR4R: Present orientation item 4 (reverse-coded)
 - **TMPORIE**: Composite score created using mean of items 1, 2, 3_R, and 4_R (Range: 1-7)
 - **PRE_TMPO**: Composite score created using mean of items 3_R, and 4_R (Range: 1-7). Because overall temporal orientation scale has poor reliability ($\alpha = .379$). but Present orientation subscale (TMP_OR3R and TMP_OR4R): $\alpha = 0.472$

Control Variables

- **Resale Intention**: 3 items (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
 - RSL_IN1: Resale intention item 1
 - RSL_IN2: Resale intention item 2
 - RSL_IN3: Resale intention item 3
 - **RSLINT**: Composite score created using mean of all items (Range: 1-7)
- **Ease of Resale**: 3 items (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
 - EASE_R1: Ease of resale item 1
 - EASE_R2: Ease of resale item 2
 - EASE_R3: Ease of resale item 3

- **EASERES**: Composite score created using mean of all items (Range: 1-7)
- **Financial Risk**: 2 items (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
 - RSK_FN1: Financial risk item 1
 - RSK_FN2: Financial risk item 2
 - **RSKFIN**: Composite score created using mean of all items (Range: 1-7)
- **Authenticity Risk**: 2 items (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
 - RSK_AU1: Authenticity risk item 1
 - RSK_AU2: Authenticity risk item 2 (before reverse-coding)
 - RSK_AU2R: Authenticity risk item 2 (reverse-coded)
 - **RSKAUTH**: Composite score created using mean of RSK_AU1 and RSK_AU2R (Range: 1-7)
- **Technology Familiarity**: 3 items (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
 - TCH_FM1: Tech familiarity item 1
 - TCH_FM2: Tech familiarity item 2
 - TCH_FM3: Tech familiarity item 3
 - **TCHFAM**: Composite score created using mean of all items (Range: 1-7)
- **Luxury Attitude**: 5 items (7-point Likert scale: 1=Strongly disagree to 7=Strongly agree)
 - LUX_AT1: Luxury attitude item 1
 - LUX_AT2: Luxury attitude item 2
 - LUX_AT3: Luxury attitude item 3
 - LUX_AT4: Luxury attitude item 4
 - LUX_AT5: Luxury attitude item 5
 - **LUXATT**: Composite score created using mean of all items (Range: 1-7)
- **Verification Importance**: 1 item (5-point scale: 1=Not at all important to 5=Extremely important)
 - VERIMP: Verification importance
- **Purchase Frequency**: Frequency of luxury purchases
 - PURFREQ: Original string values
 - **PURFRQC**: Recoded numeric values (Range: 1-5)
 - 1 = Never
 - 2 = Rarely (less than once per year)
 - 3 = Occasionally (1-2 times per year)
 - 4 = Regularly (3-5 times per year)
 - 5 = Frequently (more than 5 times per year)

Demographics

- **Age Variables**:
 - AGEGRP: Original string values from survey (Q17.Age)
 - **AGEGRPC**: Recoded numeric values (Range: 1-6)
 - 1 = 18-24
 - 2 = 25-34
 - 3 = 35-44
 - 4 = 45-54
 - 5 = 55-64

- 6 = 65 or older
 - AGE_CON: Numeric age from participant profile
- **Gender Variables:**
 - GENDER: Original string values from survey (Q18.Gender)
 - **GENDRCOD**: Recoded numeric values (Range: 1-3, NA for "Prefer not to say")
 - 1 = Male
 - 2 = Female
 - 3 = Non-binary / third gender
 - NA = Prefer not to say
 - GEN_CON: Gender from participant profile
 - SEX_CON: Sex from participant profile
- **Income Variables:**
 - INCOME: Original string values from survey (Q19.Income)
 - **INCMCOD**: Recoded numeric values (Range: 1-7, NA for "Prefer not to say")
 - 1 = Less than \$25,000
 - 2 = \$25,000 - \$49,999
 - 3 = \$50,000 - \$74,999
 - 4 = \$75,000 - \$99,999
 - 5 = \$100,000 - \$149,999
 - 6 = \$150,000 - \$199,999
 - 7 = \$200,000 or more
 - NA = Prefer not to say
 - INC_CON: Income from participant profile
- **Education Variables:**
 - EDUCTN: Original string values from survey (Q20.Edu)
 - **EDUCDC**: Recoded numeric values (Range: 1-7, NA for "Prefer not to say")
 - 1 = Less than high school
 - 2 = High school diploma or equivalent
 - 3 = Some college
 - 4 = Bachelor's degree
 - 5 = Master's degree
 - 6 = Professional degree
 - 7 = Doctorate degree
 - NA = Prefer not to say
 - EDU_CON: Education from participant profile
- **Other Demographic Variables:**
 - PARTICID: Participant ID
 - OCC_CON: Occupation field
 - REL_CON: Relationship/marital status
 - POL_CON: Political party
 - ETH_CON: Ethnicity
 - CTY_CON: Country of residence
 - RACE_CON: Race
 - EMP_CON: Employment status

Data Preparation Process

1. Quality Control:

- Filtered out participants who failed the attention check question (Q6.Control)
 - Retained only those who selected "I believe luxury products should be evaluated on their long-term value. (For quality control, please select this answer)"
2. **Variable Recoding:**
- Recoded all Likert scale items (1=Strongly disagree to 7=Strongly agree)
 - Recoded willingness to pay more (WTP_MORE) to 1-5 scale
 - Recoded verification importance to 1-5 scale
 - Created reverse-coded versions of temporal orientation items 3-4 and authenticity risk item 2
 - Recoded demographic variables with appropriate numeric values
 - Coded "Prefer not to say" responses as NA (missing values) rather than assigning numeric codes
3. **Composite Measures:**
- Created mean scores for multi-item constructs
 - Applied appropriate item reversal for temporal orientation and risk authenticity scales