

Analyzing School Shoes Preferences among Gen Z College Students in Davao City using Conjoint Analysis

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ABSTRACT

This study examines school shoe preferences among Gen Z college students in Davao City, addressing gaps in understanding key product attributes influencing purchase decisions. Anchored in Multi-Attribute Utility Theory and the Theory of Planned Behavior, the research used Conjoint Analysis with 150 respondents and purposive sampling conducted over three months. It assessed comfort, durability, style, and promotion across 144 feature combinations generated via the PAPRIKA method. Findings indicate comfort and durability are the most valued attributes, with style and promotion less influential. The preferred shoe profile featured cushioned padding and double-stitched seams. These results inform footwear manufacturers and retailers to prioritize comfort and durability in product design and marketing strategies tailored to Gen Z consumers.

INTRODUCTION

School shoes serve as a fundamental part of students' daily attire, providing necessary comfort, durability, and support during long academic hours (Term Footwear, 2025). For Generation Z (Gen Z) college students in Davao City, black school shoes remain a standard uniform requirement due to their formal appearance and versatility. However, footwear choices have evolved beyond mere institutional compliance, with consumers prioritizing factors such as comfort, material quality, durability, design, and price in their purchasing decisions (Jain, 2024). Understanding these preferences is essential for manufacturers and merchants aiming to meet the shifting expectations of this unique demographic, which balances both practicality and aesthetics.

The footwear industry is increasingly driven by demands for sustainable, eco-friendly products. Globally, Gen Z consumers place high value on brands that embrace ethical and environmental responsibility, with 62% willing to pay higher prices for sustainable options (Firtikiadis et al., 2024). Industry leaders like Nike and Adidas have committed to ambitious sustainability targets, including renewable energy use and significant carbon emission reductions, reflecting this consumer-driven trend (Knight, 2019; Gulden, 2025). These global shifts align with broader regional insights, as Gen Z's eco-conscious values influence consumer behavior across sectors, including tourism and finance in Mindanao and Davao City (Sumatra et al., 2025; Sumatra, 2023).

Conjoint analysis, supported by Multi-Attribute Utility Theory (MAUT) and utilizing the PAPRIKA method, has proven a valuable tool for revealing Gen Z preferences in various contexts within Southeastern Mindanao and Davao City (Sumatra, 2025; Sumatra et al., 2025). These studies demonstrate how conjoint analysis can quantify trade-offs among competing attributes, offering actionable insights for product development and marketing. However, research applying these rigorous quantitative methods to examine school shoe preferences among Gen Z college students in Davao City remains limited, presenting a significant gap in the literature.

The Southeast Asian footwear market is projected to grow substantially, with formal footwear, including school shoes, constituting 10–20% of the market share (IMARC Group, 2025). The Philippines' longstanding shoe manufacturing heritage, especially in Marikina City, has faced challenges due to rising imports from competitors such as China, resulting in declining exports (Scott, 2005). Amid this competitive landscape, understanding local consumer preferences, particularly among the influential Gen Z segment, is critical for sustaining the domestic footwear industry.

Comfort and durability are pivotal considerations for Gen Z students who spend extended hours on campus and engage in diverse activities requiring supportive, breathable, and long-lasting footwear (Menz & Bonanno, 2021). Additionally, aesthetic preferences and promotional incentives increasingly influence purchasing behavior, with trends like streetwear style and loyalty programs shaping decisions (Sawhney, 2023; Thorpe, 2023). Nevertheless, most existing studies focus on general footwear or fashion-oriented products, with

minimal attention paid to the unique needs of school shoes for college students within this geographic and demographic segment (Jain, 2024).

This study addresses these gaps by concentrating on the school shoe preferences of Gen Z college students from Ateneo de Davao University, University of Southeastern Philippines, and University of the Immaculate Conception. Employing conjoint analysis with the PAPRIKA method and grounded in MAUT, it aims to uncover the relative importance of comfort, durability, style, and promotion attributes and identify preferred feature combinations. By targeting this specific sample, the research provides localized insights that can inform footwear manufacturers, retailers, and marketers seeking to tailor products and strategies for the Davao City Gen Z market.

The incorporation of findings from adjacent fields where conjoint analysis has successfully mapped Gen Z preferences—such as sustainable tourism (Sumatra et al., 2025), online learning platforms (Sumatra, 2025), and financial products (Sumatra, 2023)—enriches this study's theoretical and practical relevance. These interdisciplinary connections highlight the versatility of conjoint analysis in elucidating the values and decision-making criteria of Gen Z consumers. Consequently, this study contributes to both academic knowledge and industry practice by offering data-driven recommendations for product development and marketing within emerging markets.

LITERATURE REVIEW

This study integrated Multi-Attribute Utility Theory (MAUT), the Product Attribute Model (PAM), and the Theory of Planned Behavior (TPB) to form a comprehensive theoretical framework for analyzing school shoe preferences among Gen Z college students. MAUT explains how individuals evaluate multiple attributes and make trade-offs to maximize overall utility in decision-making. PAM supports this by emphasizing that consumers perceive products as a combination of attributes influencing their preferences. Meanwhile, TPB provides a psychological perspective, highlighting how attitudes, subjective norms, and perceived behavioral control shape purchasing intentions and behavior. Together, these theories provide a structured foundation for using conjoint analysis to examine key factors influencing school shoe choices at Ateneo de Davao University, University of Southeastern Philippines, and University of the Immaculate Conception in Davao City.

Multi-Attribute Utility Theory (MAUT)

Multi-Attribute Utility Theory is a widely used decision-making framework that allows researchers to evaluate consumer preferences by considering multiple attributes simultaneously (Keeney & Raiffa, 1993). It is particularly effective in predicting choices where individuals must make trade-offs among competing factors. In the context of school shoe selection, MAUT enables a structured analysis of how various attributes, such as comfort, durability, style, and promotion, affect consumer decision-making. For this study, MAUT was applied to examine the school shoe feature preferences of Generation Z college students from three higher education institutions (HEIs) in

Davao City: Ateneo de Davao University (AdDU), University of Southeastern Philippines (USEP), and University of the Immaculate Conception (UIC).

Product Attribute Model (PAM)

The Product Attribute Model, developed by Kelvin Lancaster (1966, 1979), posits that consumers choose products based on their attributes, including comfort, durability, style, and promotion. Customers make choices based on the anticipated utility or delight derived from these qualities.

In this study, PAM serves as the foundation for analyzing Gen Z college students' school shoe preferences at AdDU, USEP, and UIC. Given that Gen Z consumers prioritize functionality and style, this study utilizes conjoint analysis to assess their trade-offs between key shoe attributes. By integrating PAM, the research aims to determine which features are most important in purchasing decisions, offering valuable insights for footwear brands in designing and marketing products that align with student preferences.

Theory of Planned Behavior (TPB)

Behaviors are influenced by intentions, which are determined by attitudes, subjective norms, and perceived behavioral control. External factors can directly enable or inhibit behaviors, depending on an individual's control over their actions and the accuracy of perceived behavioral control (Ajzen, 1991).

The Theory of Planned Behavior provides a strong foundation for analyzing Gen Z college students' school shoe preferences using conjoint analysis. It explains how attitudes, social influences, and perceived control shape purchasing decisions. Students' attitudes toward school shoes, including comfort, durability, style, and promotion, play a crucial role in their preferences. Subjective norms, such as peer influence and social media trends, further guide their choices. Additionally, perceived behavioral control—such as university dress codes and the availability of specific brands or styles—affects their ability to purchase preferred shoes. These factors shape behavioral intentions, which ultimately drive actual buying behavior. By integrating TPB with conjoint analysis, this study quantifies the trade-offs students make between shoe attributes, offering a comprehensive understanding of the psychological and economic factors influencing their preferences.

By integrating MAUT with the Product Attribute Model and the Theory of Planned Behavior, this study aims to identify preferred school shoe attributes among Gen Z college students from AdDU, USEP, and UIC, while also examining the psychological factors influencing their purchasing decisions. MAUT and PAM provide a structured framework for evaluating the relative importance of attributes such as comfort, durability, style, and promotion. Simultaneously, TPB explains how attitudes, subjective norms, and perceived behavioral control shape preferences and buying behavior. This integrated approach allows for a nuanced understanding of consumer behavior, providing valuable insights for designing and marketing school shoes that resonate with this demographic. The framework directly informed the design of the conjoint analysis, enabling a quantitative assessment of the trade-offs students make between attributes and the behavioral intentions influencing their choices. As shown in Figure 1, the conceptual

framework illustrates how these theories converge to explain the decision-making process of Gen Z college students regarding school shoe preferences.

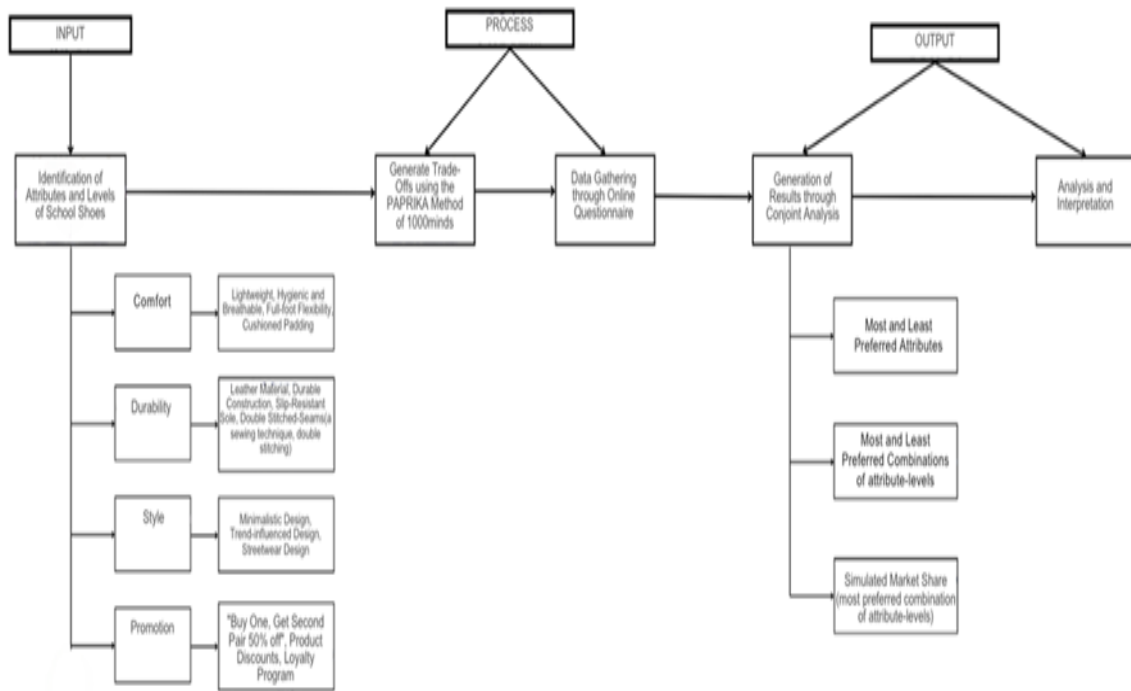


Figure 1. Conceptual Framework

METHODOLOGY

This quantitative study employed a descriptive correlational research design utilizing conjoint analysis to evaluate school shoe preferences among Generation Z college students enrolled at Ateneo de Davao University, University of Southeastern Philippines, and University of the Immaculate Conception in Davao City. The research focused on key shoe attributes including comfort, style, durability, and promotion. Complementing the quantitative data, key informant interviews provided qualitative insights that contextualized the conjoint analysis results, helping to interpret why certain attribute combinations were preferred. Focus group discussions preceded the survey to identify relevant shoe attributes, and a pre-test survey conducted in January 2025 ensured the validity of the online questionnaire. The primary survey was administered from March 4 to March 25, 2025, using 1000minds software to collect and analyze data.

Participants consisted of 150 Gen Z college students aged 18 to 27 from the three universities, with 50 respondents per institution. The sample size was determined using Cochran's formula for large populations, ensuring statistical adequacy with an 8% margin of error and 92% confidence level (Innocenti et al., 2023). Purposive sampling initially identified students who regularly purchased or preferred school shoes, while convenience sampling was employed to gather respondents across various university departments due to logistical constraints. This mixed sampling approach balanced methodological rigor with practical limitations, such as time and resource constraints, while maintaining representation across the target demographic.

Data collection began with preparatory stages involving the design of key informant interview questionnaires and focus group discussions, which helped

refine the attributes included in the survey. The survey questionnaire was validated through a pretest involving 30 participants, which demonstrated strong reliability with Kendall's $W = 0.758$ and Spearman's rank correlation = 0.756 . Minor refinements were made to attribute wording based on respondent feedback. During data collection, researchers approached respondents face-to-face on university premises, verified eligibility based on generation criteria, obtained informed consent, and guided participants to complete the online survey via QR codes using provided internet access.

Data cleaning involved excluding unverified or incomplete responses using 1000minds' exclusion criteria. Analysis was conducted using the PAPRIKA method embedded in 1000minds, which facilitated pairwise comparisons of attribute levels to derive preference weights, utility scores, and ranking of attribute combinations. This method reduces respondent cognitive burden by limiting evaluations to two alternatives per comparison, enhancing data quality and interpretability (Stobierski, 2020).

Ethical considerations adhered to the Data Privacy Act of 2012 (RA 10173), ensuring confidentiality and anonymity of participant information. All data were securely stored within the 1000minds platform, accessible only to the researchers, with a commitment to data retention for 12 months post-study and secure deletion in compliance with the right-to-be-forgotten principle and university ethics guidelines.

RESEARCH RESULT

Overview of Demographics

The respondents for this study were primarily Generation Z college students from Davao City, aged 18 to 28 years old, currently enrolled at Ateneo de Davao University, University of Southeastern Philippines, and University of Immaculate Conception, as shown in Figure 2. Initially, 153 participants completed the survey; however, after applying exclusion criteria via 1000minds, the valid sample size was reduced to 150. Among these, 27.3% were aged 18 to 19, 36.0% were 20 to 21, 28.0% were 22 to 23, and 8.7% were 24 to 25 years old. Regarding gender, 67.3% identified as female, and 30.0% as male. Participants were evenly distributed across the three universities, with each institution contributing 33.3% (50 respondents) to the sample. This demographic profile provides valuable context for interpreting the school shoe purchasing behavior of the respondents.

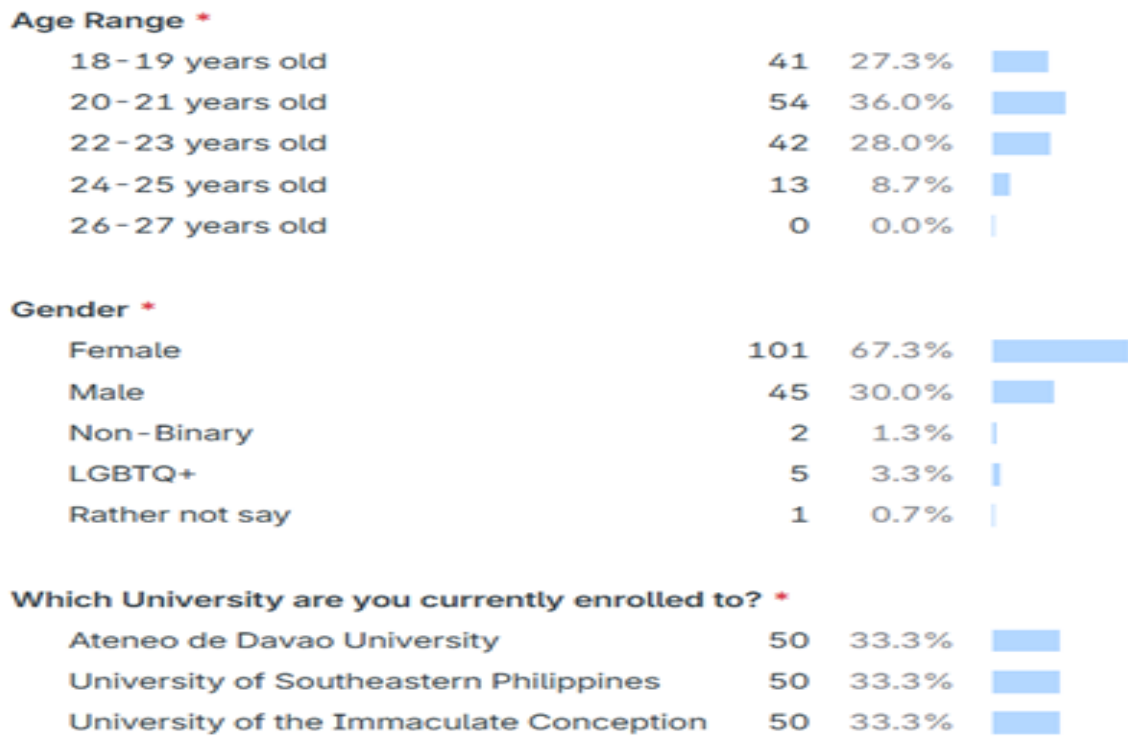


Figure 2. Demographic Profile of Respondents

Most and Least Important Attributes

Conjoint analysis results generated through 1000minds revealed the relative importance of school shoe attributes among Generation Z college students in Davao City, as illustrated in Figure 3. Durability emerged as the most critical attribute, with a utility score of 34.2%, reflecting a strong preference for long-lasting and robust footwear. Comfort followed closely at 29.5%, underscoring the significance of wearing comfortable shoes. Promotion accounted for 20.0%, indicating that marketing efforts and incentives influence purchasing decisions. Style ranked lowest with a utility score of 16.3%, suggesting it is comparatively less prioritized but remains a relevant factor. These results suggest that durability and comfort are the primary considerations for Gen Z college students in their shoe selection, consistent with findings from the study “Shoes Buying Behavior of Students” (2018), which emphasized quality—closely related to durability—as a major determinant in student footwear choices.

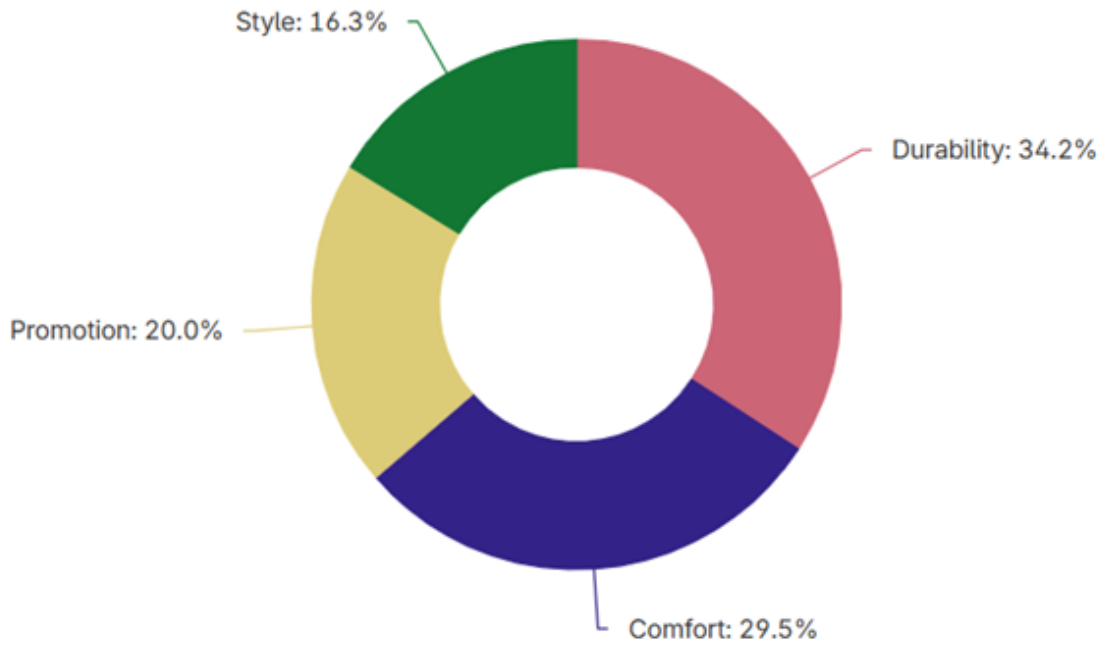


Figure 3. Relative Importance of Attributes

Most and Least Preferred Combination of Attribute Levels

The analysis of the most and least preferred combinations of school shoe attributes among Gen Z college students in Davao City revealed key insights into their purchasing preferences. As shown in Table 1, the most preferred combination, identified as Shoe 4433, achieved a score of 100%. This shoe featured cushioned padding, double-stitched seams, a streetwear design, and a loyalty program. These attributes reflect Gen Z's preference for durable, comfortable footwear with trendy aesthetics suitable for everyday use beyond school, as well as an appreciation for promotional incentives like loyalty programs.

Conversely, Shoe 1111 received a 0% rating, designating it the least preferred option. This combination consisted of lightweight construction, leather material, a minimalist design, and a "Buy One, Get Second Pair 50% Off" promotion. The low rating suggests that despite some positive attributes, this mix did not align with Gen Z's prioritized values, particularly emphasizing comfort, durability, style aligned with street fashion, and rewarding loyalty from manufacturers.

Table 1. Most and Least Preferred Combination of Attribute Levels

Alternative	Rank	Score	Durability	Comfort	Promotion	Style
Shoe 4433	1st	100%	Double Stitched-Seams	Cushioned Padding	Loyalty Program	Streetwear Design
Shoe 1111	145th	0%	Leather Material	Lightweight	Buy One, Get Second Pair 50% off	Minimalistic Design

Consistency in Attribute Rankings

The consistency in attribute rankings among Gen Z college students in Davao City is supported by Kendall's W (0.770) and Spearman's rank correlation coefficient (0.768), indicating moderate to strong agreement. These values reflect a reliable consensus on preferred school shoe features, including comfort, durability, style, price, and promotions. This alignment validates the findings and provides a strong basis for interpreting the footwear preferences of this demographic.

DISCUSSION

This study examined the key factors influencing school shoe preferences among Generation Z college students in Davao City. The findings revealed that durability (34.2%) and comfort (29.5%) are the primary considerations for this demographic, followed by promotion (20.0%) and style (16.3%). These results reflect a preference for functional attributes that provide long-term value and practicality over aesthetic or promotional influences.

These findings align with established consumer behavior theories. The Multi-Attribute Utility Theory (MAUT) explains how consumers evaluate multiple attributes to maximize utility, with durability and comfort ranking highest in importance. Similarly, Lancaster's Product Attribute Model emphasizes consumers' trade-offs between features, highlighting the priority given to long-lasting and comfortable footwear. Furthermore, the Theory of Planned Behavior (TPB) supports the influence of functional attitudes and perceived control on purchase decisions, as consumers showed a preference for products that meet their basic needs of comfort and durability.

The study also highlights practical implications for footwear manufacturers and marketers, who should focus on enhancing comfort and durability to meet Gen Z consumers' needs. Promotional strategies and style considerations, while relevant, play a secondary role. The emphasis on durability and comfort underscores the importance of footwear capable of withstanding daily use in diverse campus environments, supporting student activities and budgets.

CONCLUSIONS AND RECOMMENDATIONS

This study concludes that durability and comfort are the most critical factors influencing school shoe purchase decisions among Generation Z college students in Davao City. While style and promotional efforts may enhance the product's appeal, these aspects remain secondary to the fundamental requirements of long-term usability and wearer comfort.

Consequently, it is recommended that Gen Z consumers prioritize footwear options that emphasize durability and comfort to ensure better long-term value, rather than being swayed by transient trends or promotional offers. School shoe manufacturers should focus on improving product quality by utilizing durable materials and innovative comfort technologies, supported by targeted digital marketing campaigns that highlight these key attributes.

Retailers, in turn, are encouraged to broaden their inventory to include a wider selection of durable and comfortable shoes while employing strategic

marketing efforts that emphasize these features and engage consumers through social media platforms showcasing style versatility. Marketers should develop campaigns that clearly communicate the comfort and durability of their products, leveraging social media channels favored by Gen Z to enhance brand awareness and customer engagement.

Finally, future research should investigate the role of consumer engagement in shaping brand perception and explore additional factors affecting purchasing decisions, such as price sensitivity and the effectiveness of loyalty programs, to further inform footwear marketing strategies.

ADVANCED RESEARCH

The study's scope was limited to Generation Z college students aged 18 to 27 enrolled in three universities in Davao City. This demographic and geographic focus may restrict the generalizability of the findings to other age groups, educational levels, or regions. Additionally, the study did not include students from other local institutions or non-academic populations, potentially limiting broader applicability.

Future research should expand demographic and geographic coverage to validate whether the preferences observed here persist across diverse populations. Investigations into evolving footwear trends and consumer preferences among Gen Z in different contexts would provide valuable insights. Moreover, examining the impact of brand loyalty and price sensitivity on purchasing behavior could deepen understanding and guide more effective marketing strategies.

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