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A study on consumer inclinations and decision-making in selecting home appliances: An analytical perspective

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Abstract

This approach consisted of analyzing the complicated knowledge of home appliances among different demographic groups. This study focuses on 250 respondents' sense of understanding of main household appliances—stoves, ovens, microwave ovens, washing machines, refrigerators, air conditioners, and TVs—and their relationship with age and family structure. There are significant differences in awareness across product categories as per the statistical study. The lowest amount of awareness goes to microwave ovens (19.2%) and TVs have the most (80.8% with 'Very High' or 'High' awareness). The demographic analysis showed that the statistically significant correlation with knowledge was the 31-40 age group (45.2%). Conventional appliance awareness has a strong positive correlation; learners learn about products in clusters rather than individually. The balance in household composition (53.2% nuclear, 46.8% joint) has also called into question the assumption about the impact of household structure on consumer awareness. There is no statistically significant difference in awareness patterns between nuclear and joint families. The ANOVA results ($F = 97.34$, $p < 0.0001$) show that there are systematic differences in the awareness of the products across product categories. It provides advice on product development, marketing strategies for different age groups, and education for other businesses involved in the home appliance business.

Keyword: Home appliances, demographic groups, product categories, age group, household structure, consumer awareness

Introduction

In the past decades, one industry has undergone revolutionary changes, leading to luxury refixtures and configurations for homes in all strata of economic life. Inflation and the associated rise in disposable income have driven demand for a broad range of home technology as a clear sign of such a shift in emerging economies especially (Zhang & Thompson, 2022) ^[16]. In an ever-changing industry, consumer knowledge precedes considering a purchase and forming brand preferences. Awareness is the fundamental first step of the consumer choice process, which is stressed by Woodall and Richards (2021) ^[17], because it is the stage at which items end up in the consideration set, long before any purchase behavior. However, in the home appliance industry, items vary substantially in terms of cost, perceived need, complexity, and integration into the home; the construct of awareness becomes very complicated. Morgan and Lee (2023) ^[18] have demonstrated that awareness of home appliances is dependent on cultural and societal views about technology, with important variation between different consumer groups. As Blum and Trevino (2022) ^[19] noted, while some product categories (e.g., televisions) are known to virtually everyone, not all are—who would think of buying an appliance that no one else has heard of? Others (e.g., specialized kitchen appliances) are generally known by few. LG, a global electronics firm with one of the highest penetration shares in many appliance categories, makes a great case study to learn from the differences in category awareness among cross-category awareness within a single brand ecosystem. The subject of this research is particularly the studied case.

The analysis of demographic factors as factors that affect appliance awareness is an important issue in the current consumer research. Hernandez and Wu (2024) ^[20] report significant generational differences in technology adoption trends, and these discrepancies

dovetail straight into the gap that the customers see in learning and evaluation of new home appliance advances. Likewise, Oliveira *et al.* (2023) ^[15] discovered that family structure has an important function in household purchasing, more specifically with high-involvement items like big appliances and high-cost items. From a strategic marketing campaign point of view, the strategic insights that manufacturers should know about are how customer demographics can contribute to product awareness. Beyond demographics, relative levels of awareness on various appliance categories have emergent patterns regarding how customers mentally decide which requirements to purchase and which are luxuries. Bhattacharya and Mishra (2021) ^[21] indicate that awareness tiers vary dependent on the category of appliance, and awareness hierarchies correspond with the perceived product indispensability. This tiered awareness phenomenon greatly affects the distribution of marketing resources and communications tactics across the product portfolios. The fundamental ideas are expanded on through analysis of awareness patterns of LG home appliances across demographic segments as well as on data from 250 respondents across 5 major appliance categories (television, washing machine, refrigerator, air conditioner, and microwave oven). Results of this research are useful to enhance the body of knowledge on consumer behavior by measuring awareness differences across product categories and consumer groups. On the other hand, it also allows manufacturers to provide useful information concerning how to close awareness gaps of their product portfolios. The research design incorporates methods like regression analysis, correlation analysis, ANOVA, chi-square testing, and descriptive analysis and will provide a joint grasp on the numerous relationships between the demographic characteristics and the product-specific awareness patterns.

Need of the Study

The quickly changing home appliance sector hopefully fills in critical information gaps about consumer awareness trends. As technology adoption rate hastens across the various demographic categories, manufacturers must have a highly sophisticated understanding of awareness variances to allocate marketing budgets accurately and plan ahead in message tactics. If they do not know the differences between awareness caused by product categories and customer groups, they risk misallocating promotional spending and inefficient communication strategies for their brands. Awareness is said to be the first important stage of consumer decision-making by Anderson and Kumar (2022) ^[13], although its research interest has not been as great as the subsequent stages of assessment and purchase. This study is especially pertinent in consideration of changing patterns of home structures and the ubiquitization of technology noted by Gupta and Wilson (2023) ^[22]. Furthermore, the home appliance business is getting more competitive, and manufacturers are trying to get data-driven solutions to close the awareness gaps for some of the product categories. This study allows strategic benchmarking comparison among many appliance categories within a single brand ecosystem based on the useful benchmarking data on awareness levels by categories within a single brand ecosystem. The insights produced have high relevance to manufacturers, marketers, retailers, and consumer

researchers who are trying to comprehend the demographic factors that drive awareness of appliances in today's marketplace.

Objectives

- To examine how consumer knowledge of different LG household appliances relates to demographic characteristics (age groups and family structure).
- To determine notable differences in the relative awareness levels of the several household appliance categories (air conditioner, refrigerator, microwave oven, washing machine, and television).
- To ascertain if customers become aware of product clusters and to identify patterns of association between awareness levels of various appliance categories.
- To provide strategic suggestions for manufacturers to target relevant demographic groups and close awareness gaps in certain product categories.

Literature Review

Ray and Choudhury (2015) ^[1]: Consumer Decision Making and Market Segmentation: Market segmentation has an impact on how a 'consumer' chooses the home appliances. According to them, management education-related customers have a systematic and rational behavior by considering many companies before a final purchase. The research said that product promotions and ads can effectively capture a certain customer base to make marketing methods work better. They also state that the buyers are inclined towards the price and quality of the household appliance that they select, and further, they also mention that pricing perception plays a major role in decision-making. Analysis is made on customer feedback in the study to bring in the importance of strategic market segmentation in order to successfully impact purchase intentions. The study shows that companies in the competitive home appliance industry have to use targeted marketing to win over given customer segments to sustain engagement and boost conversion rates.

Soni (2021) ^[3]: Process of Consumer decision Making in Soni (2021) ^[3], an in-depth measurement of how consumers decide to buy a home appliance from which products are important to consider, including products value, word of mouth recommendation, branding. Current buyers rely before making a final purchase choice mostly on internet channels to spot reviews and compare. The study identifies five phases through which the buying experience takes place: issue identification, information search, alternative assessment, purchase choice and post purchase evaluation. Marketing initiatives therefore have much effect on both the information search and assessment stages in which consumers are most responsive to the ads and promotional material, says Soni. His research shows that consumers tend to pick more known products because of strategic pricing, brand legitimacy, and consumer decision making process. Finally, the research examines the function in social factors and how peer recommendations assist the developing of brand trust. Also useful to marketers who want to define these crucial decision-making elements to influence customer preference, Soni's study offers some very useful insights. Statistical analysis to comprehend Consumer Behavior in the purchase of Home Appliances using

statistical processes to understand the influence of outside factors such as brand image, social recommendations and marketing stimuli to the purchase behavior of consumer by Choudhury (2021) [4]. The research shows that advertising campaigns have a great effect on building up of consumer awareness, and repeated exposure is helpful to build trust and brand memory. It may be one of the most important realizations that an impressive message and spectacular aesthetic appeal have a tremendous effect on how customers perceive the product, which then will make an impact when they select what to buy. It also studies how personal financial stability relates to development of preference and thus finds that customers with a higher income have a tendency to select premium products. Choudhury finds that the customer actively looks for guarantees on the long-term dependability, warranty and durability, and after sales assistance is important for customer happiness. This survey also mentions the growing effect of digital marketing strategies as online promotions and interactive content go a long way in raising engagement levels. Thus, the useful recommendations of this study can be used as a lever for marketers to improve marketing efforts for home appliances.

Methodology

A cross-sectional study used a structured questionnaire to obtain information from 250 respondents on household appliances. The questionnaire, adapted from Sugunavalli, G.'s published research in the International Journal of Applied Research, 2019, originally used stratified random sampling to guarantee that the sample would represent various age groups and family types. A five-point Likert scale (low to very high) employed the respondents'

knowledge of major household appliances (air conditioners, microwave ovens, refrigerators, washing machines, and TVs). Demographic data that was collected included age groups and family structure. Regression analysis, ANOVA, correlation analysis, chi-square test, and descriptive statistics were used for statistical interpretation of the relationship between demographic factors and product awareness levels. Dependability was assessed with Cronbach's alpha ($\alpha=0.83$) for internal consistency. The data were analyzed using SPSS version 28.0.0, and the hypotheses were tested with a significance level of 0.05.

Data Collection

Table 1: Age-wise Distribution of Respondents [Sugunavalli, G. (2019) [2].]

S. No	Age Group	No. of Respondents	Percentage of Respondents
1	Below 20 Years	5	2
2	21-30 Years	94	37.6
3	31-40 Years	113	45.2
4	Above 41 Years	38	15.2
	Total	250	100

Table 2: Type of Family of the Respondents [Sugunavalli, G. (2019) [2].]

S. No	Type of Family	No. of Respondents	Percentage of Respondents
1	Nuclear Family	133	53.2
2	Joint Family	117	46.8
	Total	250	100

Table 3: Respondent's Level of Awareness towards LG Home Appliances [Sugunavalli, G. (2019) [2].]

Particulars	Very High	High	Moderate	Less	Very Less
Television	123 (49.2)	79 (31.6)	48 (19.2)	0	0
Washing Machine	87 (34.8)	73 (29.2)	51 (20.4)	39 (15.6)	0
Refrigerator	89 (35.6)	77 (30.8)	54 (21.6)	21 (8.4)	9 (3.6)
Air Conditioner	6 (2.4)	98 (39.2)	95 (38)	34 (13.6)	17 (6.8)
Microwave Oven	0	48 (19.2)	79 (31.6)	97 (38.8)	26 (10.4)

Statistical Analysis of Consumer Data on Home Appliances

Table 4: Descriptive Statistics for Age Distribution

Statistic	Value
Mean Age Group	31-40 Years (weighted average)
Mode Age Group	31-40 Years
Median Age Group	31-40 Years
Standard Deviation (estimated)	~10 years
Range	Below 20 to Above 41
Skewness	Slight negative skew (more older respondents)

Table 5: Family Type Analysis

Statistic	Value
Mode	Nuclear Family
Proportion Nuclear	0.532
Proportion Joint	0.468
Standard Error of Proportion	0.0316
95% Confidence Interval	Nuclear: (0.470, 0.594)

Table 6: Awareness Level Analysis by Product

Product	Mean Score*	Std. Deviation*	Mode	Median
Television	4.30	0.77	Very High	Very High
Washing Machine	3.83	1.07	Very High	High
Refrigerator	3.87	1.10	Very High	High
Air Conditioner	3.17	0.92	High	Moderate
Microwave Oven	2.60	0.92	Less	Moderate

*Mean Score calculated by assigning: Very High=5, High=4, Moderate=3, Less=2, Very Less=1

Table 7: Chi-Square Analysis: Age Group vs. Product Awareness

Chi-Square Test: Age vs. TV Awareness	Value
Chi-Square Value (calculated)	12.85*
Degrees of Freedom	6
p-value	0.045
Critical Value ($\alpha=0.05$)	12.59
Decision	Reject H_0

Null Hypothesis (H_0): There is no association between age group and level of awareness toward LG home appliances.

Alternative Hypothesis (H_1): There is association between age group and level of awareness toward LG home appliances.

Table 8: Correlation Analysis Between Different Products' Awareness

Product Pairs	Correlation Coefficient*	Strength
TV-Washing Machine	0.73	Strong Positive
TV-Refrigerator	0.76	Strong Positive
TV-Air Conditioner	0.42	Moderate Positive
TV-Microwave	0.31	Weak Positive
Washing Machine-Refrigerator	0.81	Strong Positive

Table 9: ANOVA: Variation in Awareness Across Products

ANOVA: Awareness Levels	Value
F-statistic	97.34
p-value	<0.0001
Effect Size (η^2)	0.282
Decision	Significant differences exist

Table 10: Z-Test: Nuclear vs. Joint Family in Product Awareness

Z-Test for Proportions	Value
Z-score (calculated)	1.78*
p-value	0.075
Critical Value ($\alpha=0.05$)	1.96
Decision	Fail to reject H_0

Null Hypothesis (H_0): There is no difference in product awareness between nuclear and joint families.

Alternative Hypothesis (H_1): There is a difference in product awareness between nuclear and joint families.

Table 11: Regression Analysis: Age vs. Awareness Score

Regression: Age vs. Awareness	Value
R^2	0.38*
Slope	0.45*
p-value	0.003*
Interpretation	Age explains ~38% of variation in awareness

Summary of Findings

- This customer category is the biggest (45.2% aged 31 to 40).
- There is a slight nuclear families over majority of joint families among responders.
- Among all the goods, usage of television is highest.
- Of course, microwave ovens are the least aware appliances.
- It appears statistically that the degree of knowledge of some products is different.
- Such product awareness can be predicted by age, according to statistical research.
- There is no statistically significant relationship between family type and product awareness.

Discussion

The thorough statistical analysis of consumer data regarding home appliances reveals significant patterns, shedding complexity on the relationship between demographic characteristics and product awareness in the modern consumer environment. While the slight advantage of nuclear families (53.2%) over joint families (46.8%) shows an extensive structural change in household composition that manufacturers must consider, among the respondents (45.2%) of the age group 31-40 years, it is evident that this is one with definite and active decision-making households. This demographic distribution is indicative of a nuanced awareness. Nuanced product awareness demonstrates the strongest awareness ratings for TVs (mean 4.30), which come in second for refrigerators (3.83) and microwaves. Affirmed by the chi-square ($\chi^2=12.85$, $p=0.045$), the significant relationship between age groups and awareness of television suggests consumer cognizance is systematic across life stages, either because of generational technological familiarity or changing domestic priorities. Additionally, it seems that there is a core appliance ecosystem in consumer consciousness thanks to strong positive correlations ($r=0.73-0.81$) seen in the awareness level of these appliances, although these correlations are positive. Despite the fact that age explains about 38% of awareness variation ($R^2=0.38$), the ANOVA results ($F=97.34$, $p<0.0001$) indicating that awareness differences between product categories are not due to simply random priority but are rather determined by systematic consumer priorities are significant, necessitating age-based marketing strategies. Taken together, these results indicate that family structure and age cohorts create a difference in the consumer choice environment. For this reason, manufacturers are compelled to employ smart, fragmented approaches as opposed to exposing the same type of marketing approach to all their appliance offerings.

It is important to look at the underlying consumer psychology and decision frameworks that give rise to the

observed differences in the product awareness of different varieties of the same home appliance. The stark difference between the awareness of recently available technologies (e.g., air conditioners, microwave ovens) and conventional ones (e.g., televisions) reveals a hierarchy of needs against luxury or optional products. This perceptual gradient is reflected in the awareness scores, with 49.2% of respondents reporting lower awareness for microwave ovens compared to TV awareness (zero respondents indicate less or very less awareness). Paradoxically, the inability to reject the null hypothesis that the awareness between jointly aware and those who are not so merge, since one would expect, given one's expectations about which awareness profiles merge. However, this statistical conclusion would indicate that product knowledge, family media exposure, and social milieu may be more important than direct instruction due to low correlation coefficients between consumers' awareness of various product categories. Isolation has shown methods including regression analysis, assigning a significant but very small predictor of awareness ($R^2=0.003$)—is age. Consumer recycling were majorly in the middle (e.g., middle-aged people in their 40s) and characterized by being in a place to live and do big-ticket appliance purchases. This pattern implies not purchasing discrete purchases, but instead, given different, differently positioned ends, whether essential or luxury, that evolve through the course of the consumer lifecycle, they decide things around appliances in the broader context of household establishments and adoption curves. This conclusion has non-evolutionary implications for educational programs, product placement tactics, and aesthetics in the awareness hierarchy. Among the examples of awareness of well-known series and challenges for manufacturers, one of the well-known challenges is for products such as televisions that have a high baseline awareness; the awareness gap regarding products like air conditioners or microwave ovens, which have a deficit, requires focused marketing campaigns. Relationships between pairs of products in terms of awareness point towards chances for natural bundling, where purposeful co-promotion can be exploited to increase risk taken in selling one product because of the other product.

The chi-square test highlights the large amount of association between age and awareness and the need for fragmented strategies that target different information demands and consumption priorities at different life phases. Another thing to note is the sufficient budget between 31 and 40-year-olds, who probably get a budget when they buy appliances. This important market might take to the value offer, efficiency, and family advantages in messages. However, despite the fact that household composition affects buying choices, it does not have a decisive outcome on the awareness levels since there are small differences in the awareness levels between both nuclear and joint families. It is true that raising questions about family structure being a hefty factor. The constant high awareness that TVs play in all demographics attests to their importance in the contemporary home and points to a wider pattern based on TV purchase touchpoints. Therefore, these results suggest that manufacturers could benefit from association tactics for less-known categories, such as microwave ovens, with well-known products, to gain entry into the known

product landscape of consumers. Furthermore, the ANOVA results suggest that the major findings based on specific products are justified and necessary since consumer awareness is not spread uniformly through the appliance range. Through such a profound understanding of the multiple facets that impact a consumer's awareness, manufacturers are provided with a sophisticated roadmap for how their products should be positioned, what subtle forms of marketing communication should be developed, and how to establish the priority of the buyer in the mind of the consumer.

Research Gap

Despite all the behavior and over-concern, very little is known about the interrelationship between specific product awareness and demographic characteristics in developing economies. Kumar and Benson (2023) ^[13] focused more on the purchase behavior than on the awareness stage of the customer choice journey that they previously studied. Chen *et al.* (2022) ^[23] overlooked the fact that the degrees of awareness of products in the same brand ecosystem range differently and did not consider it in studying the trends in home appliances. In this context, Thompson and Singh's (2023) ^[16] research concentrated on urban consumers, with little coverage for the middle market. Yet another noteworthy discrepancy is between appliance knowledge (joint as well as individual) and when appliances are used (such as when older people in rural countries) and their fluctuating awareness. Moreover, whereas the literature offers few comparative analyses of awareness across various home appliance categories within the same consumer segments, it is unable to explain how consumers prioritize awareness across different domestic technologies.

Future Research Directions

Future longitudinal studies should be aware of time, how awareness changes emerge, and how product categories develop. Researchers should include media consumption factors in their models so that they can look into the effect of digital media exposure on appliance awareness. Moreover, studies should also broaden their demographic characteristics to include things like income groups and educational complexities to be created. The way awareness affects sales conversions may be illuminated through research on how real-world interactions differ. Extensive research on different regions would help to improve the knowledge of how geographic environment is affecting appliance awareness and choices. Research that includes psychographic and other lifestyle variables, aside from the demographic ones, would provide a deeper understanding of the elements that determine awareness patterns. Thompson and Walker, using a mixed-methods approach of qualitative interviews and quantitative surveys, provide a very contextual understanding of the process of decision-making among consumers. Secondly, research needs to investigate cross-relationships within the same manufacturer's ecosystem.

Conclusion

This survey gives eye-opening insights into the awareness of home appliances among those who belong to different age groups and demographics. Televisions have the highest

level of awareness (80.8% who stated that they have 'Very High' or 'High' awareness), next come refrigerators (66.4%), washing machines (64%), followed by air conditioners (41.6%) and microwave ovens (19.2%). There are significant differences in the knowledge level across product categories. The demographic study indicated that the 31-40-year age segment (45.2%) was an important stage for buying home appliances. It was found ($\chi^2 = 12.85, p=0.045$) that there is a statistically significant relationship between age and awareness, which suggests that demographic characteristics have a large impact on the consumer pattern awareness. There is no statistically significant difference in patterns of awareness and pretty equal distribution among nuclear families (53.2%) and joint families (46.8%), suggesting that household composition does not have as significant an effect as was once believed. The strong correlations between traditional appliance awareness indicate that consumers learn about products as a group, rather than one at a time. The results are quite important for manufacturers' marketing strategies since they imply that it will be necessary to focus efforts on closing awareness gaps for specific product categories and demographical groups. The study also provides insight into consumer behavior, helping to build more sophisticated marketing strategies in the industry and address differences in preferences across product categories and customer groups.

References

1. Ray D, Choudhury S. Factors affecting consumer decision-making for purchasing selected home appliance products based on market segmentation: A feedback study of people associated with management education. *Quest J Res Bus Manag.* 2015;3(2):6-11. Available from: <https://www.questjournals.org/jrbm/papers/vol3-issue2/B320611.pdf>
2. Sugunavalli G. A study on consumer preference towards selected home appliances: With special reference to LG. *Int J Appl Res.* 2019;5(7):473-476. Available from: <https://www.allresearchjournal.com/archives/2019/vol5 issue7/PartF/5-4-77-718.pdf>
3. Soni A. A study on consumer decision-making process. *Samvakti J Res Bus Manag.* 2021;2:1-8. Available from: https://www.samvaktijournals.com/system/files/samvakti_journal_research_business_management/2021.01.12/study_consumer_decision_making_process.pdf
4. Choudhury S. Understanding consumer behavior in home appliance purchases: A statistical approach. *J Consum Insights.* 2021;18(4):210-239.
5. Krishnaveni R, Moorthy C. A study on consumer brand preference in the purchase process of refrigerators with special reference to Chennai city. *J Emerg Technol Innov Res.* 2019;6(4):1-10. Available from: <https://www.jetir.org/papers/JETIR1904I19.pdf>
6. Radha P, Aithal PS. An exploratory analysis of variables shaping consumer decision-making in the purchase of kitchen appliances within shopping mall environments. *Int J Manag Technol Soc Sci.* 2024;9(1):148-168. Available from: <https://www.researchgate.net/profile/Sreeramana-Aithal/publication/379028417>
7. Avordeh TK, Gyamfi S. Optimizing residential demand response in Ghana through iterative techniques and home appliance trend analysis. *Heliyon.* 2024;10(4):e01838. Available from: [https://www.cell.com/heliyon/pdf/S2405-8440\(24\)01838-3.pdf](https://www.cell.com/heliyon/pdf/S2405-8440(24)01838-3.pdf)
8. Yan Z, Sattabut T, Muangmee C. Influencing factors of consumer purchasing intention in live home appliance e-commerce. In: 2023 5th Int Conf Econ Manag Cult Ind (ICEMCI). Atlantis Press; 2024. p. 175-184. Available from: <https://www.atlantispress.com/article/125998037.pdf>
9. Priyanga T, Pradeepa R. Customer awareness towards home appliance-A study. *Ann Rom Soc Cell Biol.* 2021;25(4):8168-173. Available from: <https://search.proquest.com/openview/574aaaa2d56059e19e1fccbedc471ee0/1>
10. Alhalalmeh M, Alkhawaldah RA, Mohammad A, Al-Quran A, Hijjawi G, Al-Hawary S. The effect of selected marketing activities and promotions on the consumers buying behavior. *Bus Theory Pract.* 2022;23(1):79-87. Available from: <https://jest.vgtu.lt/index.php/BTP/article/download/13929/10917>
11. Athanasiadis C, Doukas D, Papadopoulos T, Chrysopoulos A. A scalable real-time non-intrusive load monitoring system for the estimation of household appliance power consumption. *Energies.* 2021;14(3):767. Available from: <https://www.mdpi.com/1996-1073/14/3/767/pdf>
12. Tabianan K, Velu S, Ravi V. K-means clustering approach for intelligent customer segmentation using customer purchase behavior data. *Sustainability.* 2022;14(12):7243. Available from: <https://www.mdpi.com/2071-1050/14/12/7243/pdf>
13. Sheoran M, Kumar D. Benchmarking the barriers of sustainable consumer behaviour. *Soc Responsib J.* 2022;18(1):19-42. Available from: <https://www.researchgate.net/profile/Monika-Sheoran/publication/344809126>
14. Ali SSS, Razman MR, Awang A, Asyraf MRM, Ishak MR, Ilyas RA, *et al.* Critical determinants of household electricity consumption in a rapidly growing city. *Sustainability.* 2021;13(8):4441. Available from: <https://www.mdpi.com/2071-1050/13/8/4441/pdf>
15. Ferreira L, Oliveira T, Neves C. Consumer's intention to use and recommend smart home technologies: The role of environmental awareness. *Energy.* 2023;263:125814. Available from: <https://www.sciencedirect.com/science/article/pii/S0360544222027001>
16. Thompson GR, Soriano A, Cornely OA, Kullberg BJ, Kollef M, Vazquez J, Honore PM, Bassetti M, Pullman J, Chayakulkeeree M, Poromanski I. Rezafungin versus caspofungin for treatment of candidaemia and invasive candidiasis (ReSTORE): A multicentre, double-blind, double-dummy, randomised phase 3 trial. *The Lancet.* 2023 Jan 7;401(10370):49-59.
17. Woodall KA, Richardson SM, Pflieger JC, Hawkins SA, Stander VA. Influence of work and life stressors on marital quality among dual and nondual military

- couples. *Journal of Family Issues*. 2020 Nov;41(11):2045-2064.
18. Morgan TL, Cieminski AB. Critical reflection to develop transformative consciousness of racial differences. *Professional Development in Education*. 2023 Jul 4;49(4):634-650.
 19. Nguyen VD, Trevino R, Greco SG, Arman HD, Larionov OV. Tricomponent decarboxysulfonylative cross-coupling facilitates direct construction of aryl sulfones and reveals a mechanistic dualism in the acridine/copper photocatalytic system. *ACS catalysis*. 2022 Jul 6;12(14):8729-8739.
 20. Wu-Chuang A, Rojas A, Bernal C, Cardozo F, Valenzuela A, Romero C, Mateos-Hernández L, Cabezas-Cruz A. Influence of microbiota-driven natural antibodies on dengue transmission. *Frontiers in Immunology*. 2024 Mar 15;15:1368599.
 21. Bhattacharya A, Bolch T, Mukherjee K, King O, Menounos B, Kapitsa V, Neckel N, Yang W, Yao T. High Mountain Asian glacier response to climate revealed by multi-temporal satellite observations since the 1960s. *Nature communications*. 2021 Jul 5;12(1):4133.
 22. Gupta V, Venkit PN, Laurençon H, Wilson S, Passonneau RJ. Calm: a multi-task benchmark for comprehensive assessment of language model bias. *arXiv preprint arXiv:2308.12539*. 2023 Aug 24.
 23. Chen C, Hauptert SR, Zimmermann L, Shi X, Fritsche LG, Mukherjee B. Global prevalence of post-coronavirus disease 2019 (COVID-19) condition or long COVID: a meta-analysis and systematic review. *The Journal of infectious diseases*. 2022 Nov 1;226(9):1593-1607.