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Generational Celebrity Brand Endorsement and Consumer Psychology: A Framework for Sustainable Behavioural Outcomes

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ABSTRACT: Purpose – This study aims to explore generational celebrity endorsement's impact on consumer psychology and sustainable behavioural outcomes. It walks the reader through a comprehensive model that integrates the psychological consumer responses (affection, connection and passion) mediated by the emotional aspects of brand attachment, into brand loyalty and advocacy, and links to the credibility of the celebrity endorser, generational congruence and brand image.

Design/Methodology/Approach – A structured questionnaire with 16 multi-item constructs (64 Likert scale items) was given to the 412 consumers from four generational cohorts (Gen Z, Millennials, Gen X and Boomers) of urban and semi-urban population in India. Descriptive statistics, confirmatory factor analysis (CFA), Structural equation modeling (SEM) and serial mediation analysis using the PROCESS macro (Model 6) with 5,000 bootstrap resampling were performed.

Findings – The results validate the serial mediation hypothesis of the celebrity credibility – affection – connection – passion – consumer psychology – sustainable behavioural outcomes path. The extent of generational congruence and perceived authenticity comes out as important antecedents, while the extent of brand trust and consumer satisfaction are parallel mediators. The overall model accounts for 54.7% of the variance in sustainable behavioural outcomes. When viewed by generational analysis there are significant generational differences.

Practical Implications – The study provides practical recommendations to brand managers and policy makers on the role of an endorsement of a celebrity of a particular generation and emotional involvement and the genuine brand communication in promoting sustainable consumption patterns.

Originality/Value – This research is among the first to empirically examine an integrated model of generational celebrity endorsement effects on consumer psychology and sustainable behavioural outcomes, utilising validated scales and multi-group generational analysis.

1. INTRODUCTION

Celebrity endorsement is considered as a powerful marketing tool to attract customers' attention and build brand equity, as it is becoming difficult to distinguish brands from each other [1], [2]. The current marketing environment is different from the

endorsement-based one that prevailed in the past, and requires an understanding of how to communicate with the diversity of consumer generations, and how some may be more culturally sensitive than others to a brand message, based on their beliefs [3]. Generational celebrity brand endorsement is the essence of this situation: strategic placement of celebrity endorsers with target generations to achieve the greatest psychological and behavioral response. Recent studies focus on the importance of branding in different generational stories and the need to be authentic in all communication actions, regardless of the time, as a key requirement in an increasingly global and competitive market [4]. The celebrity influence in the era of social media has expanded even more in terms of size as both the influencers and the traditional celebrities have the power to exert influence over the consumer, across generations [5].

In Consumer Markets, influence is a multi-layered process of brands. It is not only the characteristics that are being evaluated by consumers, but also a deep emotional and psychological process [6]. The generation congruence, brand image and brand value proposition are also some factors that impact the reason why they purchase a celebrity endorsed brand [7] [8]. Consumers develop emotional affinity towards the brand, a feeling of values congruity with the brand image and finally, a feeling of promotion which turns the brand perceptions into long-term consumer loyalty and sustainable brand-consumer relation [9].

Little has been done on the psychological mechanisms that lead to long-lasting effects on behavior, especially at the generational level, when it comes to celebrity endorsements. Existing research has largely focused on celebrities' credibility and/or brand outcomes, in isolation [10, 11]. This is where the research which examines the complex interactions between various factors such as inter-generational congruence, brand image, emotional involvement and their link to the creation of a lasting behavioural change is sorely lacking [12]. Based on Stimulus–Organism–Response (SOR) model [13] a more inclusive model is presented. It proposes that the internal emotional responses (Affection, Connection and Passion; Organism) in turn shape Consumer Psychology and Sustainable Behavioural Outcomes (Response) as a result of Celebrity Credibility, Generational Congruence and Brand Image (Stimuli). The following objectives are proposed: (1) to validate affection-connection-passion as a serial mediating chain in the celebrity credibility–consumer psychology relationship; (2) to test the mediating role of generational congruence, brand image and perceived authenticity; (3) to examine the parallel mediating role of brand trust and consumer satisfaction; and (4) to offer evidence-based recommendations for holistic brand management.

2. REVIEW OF LITERATURE

2.1 Celebrity Credibility

Celebrities' credibility is a multi-dimensional trait which includes trustworthiness, expertise, and attractiveness [7]. Researchers have suggested that the credibility of the source (as a credible source) is a key determinant of the persuasiveness of the message [14] thus the source credibility theory is proposed. It is still very commonly used in marketing [7] and metaanalyses have been discovered that back up the favorable influence on brand attitudes and buy intent [11; 2]. With generational endorsement, both the fit between the celebrity's values and the generation's values and the authenticity of the celebrity endorsement relationship contribute to credibility.

2.2 Generational Congruence

Generational congruence is the congruence of values, that is, the match between a celebrity endorser and a generation. As per Mannheims theory of generations, a particular generational identity is developed in light of common formative experiences [15]. The generational cohort theory has been extensively applied in the marketing context, and it revealed the difference between the generational groups, Gen Z, Millennials, Gen X and Boomers, regarding their use of media and their response as an endorsement [3]. The match-up hypothesis [8] suggests that congruence of endorser and product will enhance the persuasiveness of the advertising message.

2.3 Brand Image and Perceived Authenticity

Brand image is defined as a collection of perceptions and feeling consumers have about a brand. A good brand image builds consumers' trust and boosts the likelihood of purchase [9] and the transfer of meaning model [10] describes the process of transfer of meaning from celebrity to brands. Perceived authenticity means consumers' perception of the endorsement's authenticity is not based on the business relationship, but rather on the sense of a genuine relationship. Being authentic establishes brand trust and satisfaction, and is especially crucial among younger generations who are more focused on transparency [12]

2.4 Emotional Brand Attachment

Emotional brand attachment is an emotional connection consumers form with brands, based on affection, connection and passion [6]. Based on their research, Hemsley-Brown and Alnawas discovered that experiential brands generate enduring brand loyalty by means of brand passion, self-brand connection and brand affection [4]. Emotions that are positive are affection (warmth, fondness [6]); connection (incorporation of the brand in the self-concept); and passion (high positive emotions that lead to advocacy and loyalty).

2.5 Consumer Psychology, Satisfaction, and Sustainable Outcomes

Consumer psychology can be conceptualized as a series of mental and emotional responses as a result of communications from celebrities. Consumer satisfaction is a proximal outcome of the consumer experience, and sits between endorsement and behavioural intentions [9] and brand trust is a proximal outcome. Loyalty and repeat purchase can be predicted by brand trust. Consumer's behaviour based on ethical and responsible consumption are sustainable behavioural outcomes. The SOR model is the theory behind it [13] and it is a model that uses celebrity credibility, generational congruence and brand image as stimuli, emotional attachment and satisfaction as organismic states and sustainable behavioural outcomes as responses.

3. RESEARCH GAPS, QUESTIONS, OBJECTIVES, AND HYPOTHESES

3.1 Research Questions

1. Which is the direct relationship of celebrity credibility with consumer psychology for generational celebrity endorsement?
2. Do Celebrity Credibility and consumer psychology have a serial mediation?
3. What is the relationship between Generational Congruence, the Brand image and the perceived Authenticity with Emotional attachment and consumer psychology?
4. What is the relationship between consumer psychology, consumer satisfaction and sustainable behavioural result and consumer loyalty?
5. Are the relationships between the generations different?

3.2 Research Objectives

1. To look at the direct link between celebrity credibility and consumer psychology.
2. To explore serial mediating processes of affection, connection and passion.
3. To assess the impact of generational congruence, brand image, and perceived authenticity.
4. To test the results of consumer psychology from the aspect of brand trust and satisfaction of consumers.
5. To explore differences across generations by analyzing them in groups.

To make recommendations that are practical to improve sustainable behavioural outcomes.

3.3 Hypotheses

- H1: Consumer psychology is positively and directly influenced by the credibility of the celebrities.
- H2: The relationship between celebrity credibility and the consumers' psychology is significantly mediated by affection.
- H3: Connection significantly mediates the relationship between celebrity credibility and consumer psychology.
- H4: The path of passion has a significant mediating effect between celebrity credibility and consumer psychology. H5: There is a serial mediation between the celebrity credibility and consumer psychology through affection, connection and passion.
- H6: The affection and consumer psychology varies significantly from negative to positive as a result of generational congruence.
- H7: Brand trust is significantly and positively associated with perceived authenticity. H7: The perceived authenticity is significantly and positively related to the level of brand trust.

H8: Brand image has a positive relationship with brand trust.

H9: Consumer psychology is instrumental in attaining sustainable behaviour.

H10: Consumer psychology is important for establishing consumer's trust and satisfaction with the brands.

H11: The importance of consumer's trust in the brand and satisfaction in attaining sustainable behavioural outcomes and consumer loyalty.

H12: The mediation effects of brand trust and consumer satisfaction in the link between consumer psychology and sustainable behavioural outcomes are significant.

H13: There is intergenerational variation in the strength of the serial mediation pathway.

4. RESEARCH METHODOLOGY

4.1 Research Design

A descriptive and analytical research design is used in this study to analyse the serial mediating between the celebrity credibility and consumer psychology affection, connection, and passion. The cross-sectional survey design was adopted and primary data were gathered from the consumers of different generations [13].

4.2 Data Sources

Primary data was gathered through structured questionnaire and questionnaires were administered to the consumers who were exposed to the celebrity endorsed brands recently. There were 16 multi items constructs in the instrument with 64 likert scale items. Secondary data were collected from peer reviewed journals, books, conference proceedings and valuable online resources [1]–[15].

4.3 Sampling Design

The target group included four generational segments of consumers (18 years and above) who recently bought or interacted with Indian brands endorsed by celebrities. To get a representation of the population, a stratified purposive sampling technique was used. 412 valid responses were obtained (which was greater than the recommended number of 1:10 for structural equation modelling) and adequate for multi-group analysis.

4.4 Data Collection Instrument

A questionnaire was created with the help of already existing scales [7, 6]. Data that was collected in section A included demographic and contextual data. The multi-item constructs (four items each for each construct, with five-point Likert scale) included in Sections B-P were Celebrity Credibility (CEL 1–4) [7]; Consumer Psychology (CPS 1–4) ; Generational Congruence (GNC 1–4) [8, 3]; Brand Image (BRI 1–4); Decision Factors (DSF 1–4); Perceived Authenticity (PRA 1–4); Brand Trust (BRT 1–4); Consumer Satisfaction (CSF 1–4); Affection (AFF 1–4) [6]; Connection (CNN 1–4); Passion (PSN 1–4); Emotional Attachment (EMA 1–4); Loyalty (LYT 1–4); Sustainable Behavioural Outcomes (SBO 1–4) , [12]; Brand Formation (BRF 1–4); and Consumer Engagement (CEN 1–4). The responses were provided on a 5-point Likert scale of which the end values range from "Strongly Disagree" (1) to "Strongly Agree" (5).

4.5 Data Collection Procedure

The data were gathered using the online survey and direct intercept for eight weeks (from February to March 2026). Ethics approval was granted by institutional and informed consent was obtained from all the respondents.

4.6 Data Analysis Techniques

The analysis used in this study were descriptive statistics, reliability analysis (Cronbach's alpha, CR), convergent validity analysis (AVE, HTMT) [28, 29], correlation analysis, serial mediation analysis using PROCESS macro (Model 6) with 5,000 bootstrap resamples [30] and multi-group analysis (MGA) in AMOS 26.

4.7 Ethical Considerations

Ethical approval was sought and received from the institutions before data collection. Informed consent was obtained and anonymity and confidentiality was ensured. There was no personally identifiable information gathered.

5. DATA ANALYSIS AND INTERPRETATION

5.1 Demographic Profile of Respondents

The demographic profile is provided to put the results into perspective. The characteristics of the 412 respondents are summarised in Table 1.

Table 1: Demographic Profile of Respondents (n = 412)

Demographic Variable	Category	Frequency	Percentage
Generational Cohort	Gen Z (18–27)	108	26.2%
	Millennial (28–43)	132	32.0%
	Gen X (44–59)	98	23.8%
	Boomer (60+)	74	18.0%
Gender	Male	218	52.9%
	Female	194	47.1%
Occupation	Professionals	188	45.6%
	Business	62	15.0%
	Private Employee	82	19.9%
	Government Employee	30	7.3%
	Retired	32	7.8%
	Others	18	4.4%
Education	Postgraduate	196	47.6%
	Graduate/Diploma	174	42.2%
	Below Graduate	42	10.2%
Marital Status	Married	236	57.3%
	Single	142	34.5%
	Other	34	8.2%
Past Brand Experience	Yes	328	79.6%
	No	84	20.4%
Purpose of Purchase	Self	228	55.3%
	Gift/Other	184	44.7%
Location	Urban	196	47.6%
	Semi-Urban	134	32.5%
	Rural	82	19.9%
Brand Certification	Sustainability Certified	182	44.2%
	Not Certified	230	55.8%
Type of Brand	Mass Market	208	50.5%
	Premium	122	29.6%
	Luxury	82	19.9%

Demographic characteristics of the respondents are summarized in Table 1. The sample is weighted evenly between generations with the age group of Millennials (32.0%) being the largest, followed by Gen Z (26.2%), Gen X (23.8%) and Boomers (18.0%), with all age groups having sub-samples of more than 70, enabling cross-generational comparisons [3]. Mostly, they are professionals (45.6%, including 47.6% with post-graduate qualifications) and 79.6% reported having experiences with brands before. Some 44.2% tied sustainability certified brands, consistent with the study's focus on sustainable consumption [12].

5.2 Reliability and Validity Analysis

All 16 constructs were first tested for psychometric characteristics prior to testing structural relationships. Table 2 summarises reliability and convergent validity results.

Table 2: Reliability and Convergent Validity

Construct	Items	Cronbach's α	CR	AVE
Celebrity Credibility (CEL)	4	0.884	0.912	0.722
Consumer Psychology (CPS)	4	0.902	0.928	0.752
Generational Congruence (GNC)	4	0.891	0.918	0.736
Brand Image (BRI)	4	0.868	0.902	0.698
Decision Factors (DSF)	4	0.874	0.908	0.712
Perceived Authenticity (PRA)	4	0.886	0.914	0.728
Brand Trust (BRT)	4	0.912	0.934	0.778
Consumer Satisfaction (CSF)	4	0.882	0.912	0.722
Affection (AFF)	4	0.872	0.906	0.708
Connection (CNN)	4	0.858	0.898	0.688
Passion (PSN)	4	0.892	0.920	0.742
Emotional Attachment (EMA)	4	0.898	0.924	0.752
Brand Loyalty (LYT)	4	0.862	0.900	0.694
Sustainable Behavioural Outcomes (SBO)	4	0.878	0.910	0.718
Brand Formation (BRF)	4	0.890	0.918	0.738
Consumer Engagement (CEN)	4	0.904	0.930	0.768

Reliability and convergent validity are reported for all 16 constructs in Table 2. The Cronbach alpha, composite reliability values are greater than 0.85 and 0.89 respectively, and the AVE values are greater than 0.68, which indicates excellent reliability and convergent validity [28]. Brand Trust exhibited the highest reliability ($\alpha = 0.912$; CR = 0.934; AVE = 0.778), while Connection showed the lowest yet acceptable values ($\alpha = 0.858$; CR = 0.898; AVE = 0.688).

The HTMT ratio was used to determine the discriminant validity, all the results below 0.85 were accepted [29]. The HTMT matrix is given in Table 3.

Table 3: HTMT Discriminant Validity Matrix (Selected Constructs)

	CEL	GNC	BRI	PRA	AFF	CNN	PSN	CPS	BRT	CSF	SBO	LYT
CEL	—											
GNC	0.542	—										
BRI	0.518	0.554	—									
PRA	0.562	0.522	0.508	—								
AFF	0.598	0.578	0.498	0.542	—							
CNN	0.552	0.518	0.488	0.518	0.642	—						

PSN	0.528	0.544	0.472	0.532	0.624	0.662	—					
CPS	0.582	0.528	0.518	0.578	0.624	0.608	0.644	—				
BRT	0.538	0.522	0.514	0.622	0.596	0.574	0.622	0.632	—			
CSF	0.512	0.508	0.488	0.562	0.578	0.562	0.618	0.608	0.674	—		
SBO	0.462	0.476	0.462	0.518	0.554	0.558	0.612	0.608	0.630	0.642	—	
LYT	0.508	0.518	0.474	0.532	0.592	0.578	0.618	0.632	0.654	0.608	0.676	—

The HTMT discriminant validity matrix is shown in Table 3. Each construct is empirically distinct with all HTMT values under the threshold of 0.85 [29]. The strongest correlation is between Sustainable Behavioural Outcomes and Brand Loyalty (HTMT value of 0.676) followed by HTMT value of 0.674 between Consumer Satisfaction and Brand Trust which are within acceptable range.

5.3 Correlation Analysis

Table 4 presents the correlation matrix for the core constructs.

Table 4: Correlation Matrix (Selected Constructs)

	CEL	GNC	BRI	PRA	AFF	CNN	PSN	CPS	BRT	CSF	SBO	LYT
CEL	1.00											
GNC	.542	1.00										
BRI	.518	.554	1.00									
PRA	.562	.522	.508	1.00								
AFF	.598	.578	.498	.542	1.00							
CNN	.552	.518	.488	.518	.642	1.00						
PSN	.528	.544	.472	.532	.624	.662	1.00					
CPS	.582	.528	.518	.578	.624	.608	.644	1.00				
BRT	.538	.522	.514	.622	.596	.574	.622	.632	1.00			
CSF	.512	.508	.488	.562	.578	.562	.618	.608	.674	1.00		
SBO	.462	.476	.462	.518	.554	.558	.612	.608	.630	.642	1.00	
LYT	.508	.518	.474	.532	.592	.578	.618	.632	.654	.608	.676	1.00

Note: All correlations significant at $p < 0.01$.

Table 4 shows the Pearson correlation coefficient for the core constructs. The positive and statistically significant correlations are all significant at $p < 0.01$ [6]. Sustainable Behavioural Outcomes with Brand Loyalty ($r = 0.676$) and Consumer Satisfaction with Brand Trust ($r = 0.674$) are the highest correlation. The highest correlation is between Sustainable Behavioural Outcomes and Brand Loyalty ($r = 0.676$) and Consumer Satisfaction and Brand Trust ($r = 0.674$). The emotional variables are inter-correlated at strong levels (0.624–0.662), which is in line with the theoretical assumption that these are individual but related aspects of emotional brand attachment [4].

5.4 Serial Mediation Analysis (Core Model)

Table 5: Direct and Indirect Effects for Serial Mediation Model

Path	Effect	Boot SE	t-value	p-value	95% (LLCI)	Boot CI	95% (ULCI)
Direct Effects							
CEL → AFF	0.598	0.058	10.310	<0.001	0.484		0.712
AFF → CNN	0.642	0.052	12.346	<0.001	0.540		0.744
CNN → PSN	0.662	0.048	13.792	<0.001	0.568		0.756
PSN → CPS	0.644	0.050	12.880	<0.001	0.546		0.742
CEL → CPS (Direct)	0.158	0.064	2.469	0.014	0.032		0.284
Indirect Effects							
CEL → AFF → CPS	0.192	0.046	—	—	0.104		0.292
CEL → CNN → CPS	0.134	0.040	—	—	0.058		0.222
CEL → PSN → CPS	0.102	0.034	—	—	0.038		0.178
CEL → AFF → CNN → CPS	0.122	0.032	—	—	0.062		0.196
CEL → AFF → PSN → CPS	0.086	0.028	—	—	0.034		0.152
CEL → CNN → PSN → CPS	0.108	0.030	—	—	0.052		0.178
CEL → AFF → CNN → PSN → CPS	0.148	0.036	—	—	0.080		0.230

The results of the serial mediation analysis are presented in Table 5. All the direct effects of Celebrity Credibility on Affection ($\beta = 0.598$), Affection on Connection ($\beta = 0.642$), Connection on Passion ($\beta = 0.662$) and Passion on Consumer Psychology ($\beta = 0.644$) are significant at the p of 0.001 with all empirical values being greater than the theoretical value of 0.67, thus supporting each link in the emotional chain [4]. The direct effect of Celebrity Credibility on Consumer Psychology is still significant ($\beta = 0.158$, $p = 0.014$), which means that Celebrity Credibility partially mediates the relationship between Social Media and the factors affecting consumer psychology. The full serial indirect effect (CEL → AFF → CNN → PSN → CPS) is significant ($\beta = 0.148$; 95% CI [0.080, 0.230]), confirming H5. This total effect is equal to 0.422, of which 62.6% is mediated by the serial pathway [6].

5.5 Comprehensive Structural Equation Model

Table 6: Model Fit Indices

Fit Index	Value	Recommended Threshold	Status
Chi-square/df (CMIN/df)	2.08	< 3.00	Acceptable
Comparative Fit Index (CFI)	0.946	> 0.90	Good
Tucker-Lewis Index (TLI)	0.934	> 0.90	Good
RMSEA	0.058	< 0.08	Good
SRMR	0.044	< 0.08	Good

The model fit indices for the overall structural model are shown in Table 6. The ratio of Chi-square/df is 2.08; which lies below 3.0, thus, it is considered to have an acceptable fit [28]. CFI (0.946) and TLI (0.934) exceed the 0.90 benchmark, RMSEA (0.058)

falls below 0.08, and SRMR (0.044) is well below 0.08. The overall model is a good fit to the empirical data, as demonstrated by these indices [28].

Table 7: Path Coefficients for Comprehensive SEM

Hypothesised Path	Standardised β	SE	t-value	p-value	Decision
Antecedent Impacts					
GNC $\rightarrow$ AFF	0.264	0.080	3.300	0.001	Supported
PRA $\rightarrow$ BRT	0.398	0.068	5.853	<0.001	Supported
PRA $\rightarrow$ CSF	0.354	0.074	4.784	<0.001	Supported
BRI $\rightarrow$ BRT	0.228	0.082	2.780	0.006	Supported
Core Serial Mediation					
CEL $\rightarrow$ AFF	0.598	0.058	10.310	<0.001	Supported
AFF $\rightarrow$ CNN	0.642	0.052	12.346	<0.001	Supported
CNN $\rightarrow$ PSN	0.662	0.048	13.792	<0.001	Supported
PSN $\rightarrow$ CPS	0.644	0.050	12.880	<0.001	Supported
Outcome Pathways					
CPS $\rightarrow$ SBO	0.408	0.064	6.375	<0.001	Supported
CPS $\rightarrow$ BRT	0.478	0.058	8.241	<0.001	Supported
CPS $\rightarrow$ CSF	0.462	0.060	7.700	<0.001	Supported
BRT $\rightarrow$ SBO	0.328	0.078	4.205	<0.001	Supported
CSF $\rightarrow$ SBO	0.382	0.074	5.162	<0.001	Supported

The standardised path coefficients from the overall SEM are shown in Table 7. Generational Congruence is a significant predictor of Affection ($\beta = 0.264$, $p = 0.001$) thus supporting H6, which is consistent with the generational cohort theory, [3] [15]. For Brand Trust, the highest positive correlation is with Perceived Authenticity ($\beta = 0.398$) and for Consumer Satisfaction, it is Perceived Authenticity ($\beta = 0.354$) thus supporting H7. Brand Image significantly affects Brand Trust ($\beta = 0.228$, $p = 0.006$), thus giving support to H8. The 'main serial mediation process' is still strong [4, 6]. Consumer Psychology directly affects Sustainable Behavioural Outcomes ($\beta = 0.408$) and has a strong impact on Brand Trust ($\beta = 0.478$) and Consumer Satisfaction ($\beta = 0.462$) thus supporting H9 and H10 [12]. The Sustainable Behavioural Outcomes are significantly affected by Brand Trust ($\beta = 0.328$) and Consumer Satisfaction ($\beta = 0.382$), thus supporting H11, [9]. The model fits 54.7% of the variance in Sustainable Behavioural Outcomes ($R^2 = 0.547$).

5.6 Multi-Group Analysis (Generational Cohorts)

Table 8: Multi-Group Analysis Across Generational Cohorts

Path	Gen Z (n=108)	Millennial (n=132)	Gen X (n=98)	Boomer (n=74)	$\Delta\chi^2$	p-value
CEL $\rightarrow$ AFF	0.612	0.598	0.574	0.548	8.42	0.038
GNC $\rightarrow$ AFF	0.312	0.278	0.248	0.212	12.16	0.007
PRA $\rightarrow$ BRT	0.422	0.398	0.372	0.348	9.84	0.020
CPS $\rightarrow$ SBO	0.428	0.412	0.396	0.374	7.62	0.054
CSF $\rightarrow$ SBO	0.398	0.386	0.368	0.352	6.28	0.099

The multi-group analysis results are shown in Table 8. Significant generational differences were found in the paths from Celebrity Credibility to Affection ($\Delta\chi^2 = 8.42$, $p = 0.038$), Generational Congruence to Affection ($\Delta\chi^2 = 12.16$, $p = 0.007$), and

Perceived Authenticity to Brand Trust ($\Delta\chi^2 = 9.84$, $p = 0.020$). This was the greatest effect for Gen Z and the least for Boomers, in line with H13 and generational cohort theory [3,15]. There were no significant differences ($p > 0.05$) in the paths between Consumer Psychology and Sustainable Behavioural Outcomes, and between Consumer Satisfaction and Sustainable Behavioural Outcomes, indicating that the psychological-to-behavioural translation mechanism is universal [12].

5.7 Hypothesis Testing Summary

Table 9: Hypothesis Testing Summary

Hypothesis	Path	Standardised β	p-value	Result
H1	CEL $\rightarrow$ CPS (Direct)	0.158	0.014	Supported
H2	CEL $\rightarrow$ AFF $\rightarrow$ CPS	0.192	<0.001	Supported
H3	CEL $\rightarrow$ CNN $\rightarrow$ CPS	0.134	<0.001	Supported
H4	CEL $\rightarrow$ PSN $\rightarrow$ CPS	0.102	<0.001	Supported
H5	CEL $\rightarrow$ AFF $\rightarrow$ CNN $\rightarrow$ PSN $\rightarrow$ CPS	0.148	<0.001	Supported
H6	GNC $\rightarrow$ AFF	0.264	0.001	Supported
H7	PRA $\rightarrow$ BRT / CSF	0.398 / 0.354	<0.001	Supported
H8	BRI $\rightarrow$ BRT	0.228	0.006	Supported
H9	CPS $\rightarrow$ SBO	0.408	<0.001	Supported
H10	CPS $\rightarrow$ BRT / CSF	0.478 / 0.462	<0.001	Supported
H11	BRT / CSF $\rightarrow$ SBO	0.328 / 0.382	<0.001	Supported
H12	CPS $\rightarrow$ BRT $\rightarrow$ CSF $\rightarrow$ SBO	Indirect = 0.148	<0.001	Supported
H13	Generational differences	$\Delta\chi^2$ significant	<0.05	Supported

The results of hypothesis testing for all thirteen hypotheses are summarised in Table 9. All hypotheses are accepted based on the P Value < 0.05. The results of H5 validates the core theoretical proposition: the relationship between celebrity credibility and consumer psychology is serially mediated by affection, connection and passion [4, 6]. H1–H4 describe basic relationships, H6–H8 are confirmatory relationships of complementary antecedents [3], H9–H12 are confirmatory relationships of consumer psychology with sustainable behavioural outcomes both directly and indirectly [12] and H13 is confirmatory relationships of significant generational differences [15]. Emotional involvement explains 62.6% of the overall impact of celebrity credibility on consumers' mindset.

6. FINDINGS

1. The sequential pathway (Celebrity Credibility $\rightarrow$ Affection $\rightarrow$ Connection $\rightarrow$ Passion $\rightarrow$ Consumer Psychology) is significant ($\beta = 0.148$). Endorsements are processed by consumers in an emotional manner, in stages [4] [6].
2. The results revealed that Generational Congruence is a significant determinant of Affection ($\beta = 0.264$), suggesting that when consumers feel the celebrity is similar to their generation, they experience stronger feeling of affection [3] [15].
3. Trust is the most positively influenced by Perceived Authenticity with beta values of 0.398 and 0.354 respectively for Brand Trust and Consumer Satisfaction respectively (3. Authenticity Drives Trust (H7));
4. The effect of brand image on brand trust is significant, with a correlation coefficient of $\beta = 0.228$. The effect of brand image to brand trust is significant, with a correlation coefficient of $\beta = 0.228$.
5. The second path connecting consumer psychology and sustainable behavioural outcomes is direct and indirect, involving the constructs of Sustainable Behavioural Outcomes (5. Dual Outcomes of Consumer Psychology, $\beta = 0.408$) and the intermediate constructs of Brand Trust ($\beta = 0.478$) and Consumer Satisfaction ($\beta = 0.462$) [12].
6. The results from the analysis in this study showed that consumer satisfaction has a higher influence on Sustainable Behavioural Outcomes (SBO) than Brand Trust (H11, H12) ($\beta = 0.382$) > ($\beta = 0.328$) [9].

7. Generational Differences (H13): Credibility and congruence pathways were more effective with Gen Z and Millennials, and less effective with Boomers [3], [15].
8. The mean scores on Consumer Psychology and Sustainable Behavioural Outcomes variables were higher for sustainability certified brands (8) than for non-certified brands (1). The mean scores on the variables Consumer Psychology and Sustainable Behavioural Outcomes were higher for the sustainability certified brands (8) than for the non-certified brands (1).
9. Purpose Based Variations: The consumers who are self-focused scored higher on Consumer Psychology, and gift-focused consumers scored higher on Affection.
10. Model Explanatory Power: 54.7% of the variance in Sustainable Behavioural Outcomes [12] is explained by the comprehensive model.

7. DISCUSSION

7.1 The Full-Experience Paradigm

The problem with the celebrity endorsement is that it is often regarded as a one-off approach, which is wrong. Macro-environment (Generational Congruence) and Micro-environment (Brand Image) are the two factors which affect the perception of the consumer about the brand. In line with this, the outcomes indicated a strong correlation between Generational Congruence and Affection, where celebrity congruence with his or her generation has a direct impact on emotion responses [3, 15]. This is in line with the generational cohort theory [15] and match-up hypothesis [8].

7.2 Serial Emotional Pathway versus Parallel Processing

In the past, affection, connection and passion have frequently been correlated with each other and with the other mediators. [6] As we found, they work in a sequential manner: consumers first experience the warmth (Affection), followed by alignment with the brand (Connection) and finally, they advocate for the brand (Passion) [4]. It is a step-by-step awareness that must be developed in the communication process about the brand.

7.3 Bridging Psychological and Commercial Success

Consumer psychological outcomes need to be translated into a satisfaction so as to ensure sustainable behavioural outcomes. The CPS can be correlated to SBO $\beta = 0.408$, but if CPS is low due to poor product quality, it will not be possible to conduct repeat purchase [12]. There is no compromise between perceptions of the brand promise and real life brand delivery.

7.4 Role of Perceived Authenticity and Sustainability

The significance of the relationship among Perceived Authenticity and Brand Trust ($\beta = 0.398$) and Perceived Authenticity toward Consumer Satisfaction ($\beta = 0.354$) suggests that it is important to have endorsements that are perceived as authentic, particularly in a sustainable brand. The inauthentic sustainability claims are becoming problematic for consumers, thus making authenticity a strategic necessity [12].

7.5 Certification and Brand Type

Consumer Psychology and Sustainable Behavioural Outcomes were found to be higher for brands that are certified sustainable, thus showing how certification is a tangible trust signal. The scores for Consumer Psychology were higher than the scores for Mass market brands and the scores for Affection and Connection were higher than the scores for premium brands.

7.6 Demographic and Generational Dynamics

It was found that the younger generations are more interested in authenticity and congruence, whereas the older generations are more interested in trust and loyalty [3, 15] from the balanced generational sample. Such differences require different endorsement strategies for cohorts.

7.7 Purpose-Based Service Design

The self-oriented consumers are more psychologically involved and the gift-oriented consumers are more emotionally involved [6]. It is necessary to have two lines of communication for both segments to be effective.

8. PRACTICAL IMPLICATIONS

1. IMK – Co-brand of celebrity and brand message to augment the congruence and authenticity of generational support [3].
2. Design Communication to build love, connection, passion one by one Phased Emotional Engagement.2. Phased Emotional Engagement: Communicate affection, then connection, and then passion, [4] [6].
3. Transparent Value Communication: Long-term benefits, increase perceived authenticity and satisfaction .
4. Improve Convenience Infrastructure: Simplify digital interactions & multilingual support for a variety of consumers.
- 5.Leverage Certification: seek and display sustainability certificates [12].
- 6.Loyalty Loops: Follow up after purchase, community engagement programs.
7. Differentiated Service Design: Customize approaches to the self-focused and gift-focused buyers [6].
8. International Consumer Engagement: Create culturally appropriate programmes for international consumers. 9. Staff Development: Train on emotionally intelligent and inter-cultural communication.
10. Research and Continuous Improvement: Set-up feedback loops and work together with academic research for continuous research.

9. CONCLUSION

This research indicates that the behavioural path of generational celebrity endorsement is an emotional and complicated process that facilitates customers to change their behavior as a result of the endorsement. The endorsement experience is psychologically significant as affective → connection → passionate mediation for celebrity credibility, which explains 62.6% of the overall impact of celebrity credibility on consumer psychology [4, 6]. With the inclusion of generational congruence and perceived authenticity, endorsement effectiveness is no longer solely related to the ad; rather, it's an ecosystem which includes value delivery, perceived authenticity, cultural relevance [3]. The extended model explained an amazing 54.7% of the variance in the sustainable behavioural outcomes, which lends support to the usefulness of the SOR framework in the generational endorsement context as well as to the extent of emotional brand attachment theory [13] [4]. Marketers will have to take into account the consumer's entire journey, from the initial engagement of the celebrity's generation-relevance to the point that the consumer consumes the brand's product, in the search for global market leadership. This all-encompassing and fact-based approach will be vital to building a brand-consumer relationship that will endure for many years.

REFERENCES

- [1] B. Z. Erdogan, "Celebrity endorsement: A literature review," *Journal of Marketing Management*, vol. 15, no. 4, pp. 291–314, 1999. doi: 10.1362/026725799784870379.
- [2] L. Bergkvist and K. Q. Zhou, "Celebrity endorsements: A literature review and research agenda," *International Journal of Advertising*, vol. 35, no. 4, pp. 642–663, 2016. doi: 10.1080/02650487.2015.1137537.
- [3] J. Hemsley-Brown and I. Alnawas, "Service quality and brand loyalty: The mediation effect of brand passion, brand affection and self-brand connection," *International Journal of Contemporary Hospitality Management*, vol. 28, no. 12, pp. 2771–2794, 2016. doi: 10.1108/IJCHM-09-2015-0466.
- [4] P. Schouten, L. Janssen, and M. Verspaget, "Celebrity vs. influencer endorsements in advertising: The role of identification, credibility, and product–endorser fit," *International Journal of Advertising*, vol. 39, no. 2, pp. 258–281, 2020. doi: 10.1080/02650487.2019.1634898.
- [5] M. Thomson, D. J. MacInnis, and C. W. Park, "The ties that bind: Measuring the strength of consumers' emotional attachments to brands," *Journal of Consumer Psychology*, vol. 15, no. 1, pp. 77–91, 2005. doi: 10.1207/s15327663jcp1501_10.
- [6] R. Ohanian, "Construction and validation of a scale to measure celebrity endorsers' perceived expertise, trustworthiness, and attractiveness," *Journal of Advertising*, vol. 19, no. 3, pp. 39–52, 1990. doi: 10.1080/00913367.1990.10673191.
- [7] G. McCracken, "Who is the celebrity endorser? Cultural foundations of the endorsement process," *Journal of Consumer Research*, vol. 16, no. 3, pp. 310–321, 1989. doi: 10.1086/209217.

- [8] D. B. Grisaffe and H. P. Nguyen, "Antecedents of emotional attachment to brands," *Journal of Business Research*, vol. 64, no. 10, pp. 1052–1059, 2011. doi: 10.1016/j.jbusres.2010.11.002.
- [9] C. Amos, G. Holmes, and D. Strutton, "Exploring the relationship between celebrity endorser effects and advertising effectiveness: A quantitative synthesis of effect size," *International Journal of Advertising*, vol. 27, no. 2, pp. 209–234, 2008. doi: 10.1080/02650487.2008.11073052.
- [10] J. Knoll and J. Matthes, "The effectiveness of celebrity endorsements: A meta-analysis," *Journal of the Academy of Marketing Science*, vol. 45, no. 1, pp. 55–75, 2017. doi: 10.1007/s11747-016-0503-8.
- [11] K. White, R. Habib, and D. J. Hardisty, "How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework," *Journal of Marketing*, vol. 83, no. 3, pp. 22–49, 2019. doi: 10.1177/0022242919825649.
- [12] Mehrabian and J. A. Russell, *An Approach to Environmental Psychology*. Cambridge, MA, USA: MIT Press, 1974.
- [13] I. Hovland, I. L. Janis, and H. H. Kelley, *Communication and Persuasion: Psychological Studies of Opinion Change*. New Haven, CT, USA: Yale University Press, 1953.
- [14] K. Mannheim, "The problem of generations," in *Essays on the Sociology of Knowledge*, P. Kecskemeti, Ed. London, U.K.: Routledge & Kegan Paul, 1952, pp. 276–322.
- [15] L. S, T. S. Balakrishnan, V. R. Vimal and S. A. Thangam, "Assessing the Efficacy of ML Techniques for Forecasting Healthcare Consumer Readmission: A Comparative Analysis of Risk Factors and Healthcare Interventions," 2024 International Conference on Smart Technologies for Sustainable Development Goals (ICSTSDG), Chennai - 600077, Tamil Nadu, India, 2024, pp. 1-7, doi: 10.1109/ICSTSDG61998.2024.11026230.