

SUBSCRIPTION VERSUS POINTS-BASED LOYALTY PROGRAMS: A TWO-STUDY COMPARISON OF CONSUMER ENGAGEMENT

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Abstract: Loyalty programs are moving away from points accumulation toward paid subscription models such as Amazon Prime, but no study has directly compared the two formats on consumer engagement. Study 1 surveyed 448 Indian urban consumers (221 subscription members, 227 points-program members) and tested a structural model linking program type to cognitive, emotional, and behavioural engagement through psychological ownership, perceived value certainty, and social identity, using PLS-SEM and multi-group analysis. Study 2 used a 2 (program type) × 2 (reward certainty) vignette experiment (n = 186) with Hayes' PROCESS Model 8 to test moderated mediation. Subscription members reported significantly higher psychological ownership, value certainty, and social identity salience than points-program members, and emotional engagement carried most of the subscription advantage into program commitment and advocacy. Five of six focal structural paths differed significantly by program type; the largest group difference was in perceived value certainty (Cohen's d = 1.198). Study 2 confirmed that value certainty mediates the program-type effect, and that this mediation strengthens when rewards are certain (index of moderated mediation = 0.107). Points-program operators should redesign around certainty and ownership rather than accumulation mechanics; subscription operators should keep reinforcing members' sense of already owning their benefits.

Keywords: Subscription loyalty programs; points-based programs; consumer engagement; construal level theory; psychological ownership

1. Introduction

Loyalty programs have anchored retail strategy for four decades, but their underlying design has changed more in the last ten years than in the previous thirty. The points-accumulation model – earn points on a purchase, redeem them later – was built for an era of retail that had little in common with today's frictionless, app-based shopping. Subscription loyalty programs work on a different logic entirely: instead of accumulating credit toward a future reward, the member pays an upfront fee and receives immediate, guaranteed, bundled benefits from day one. Amazon Prime is the clearest global example of this model, and Tata Neu's subscription tier is an early domestic parallel in India. Which model engages consumers more deeply, and why, is not just an academic question – it determines where retail loyalty budgets should go and which theory of loyalty program effectiveness actually holds up.



The literature has established that both formats work, just not how they compare directly. Points programs raise purchase frequency, reduce brand switching, and build habitual buying patterns (Liu, 2007; Dorotic et al., 2017; Eggert et al., 2019). Subscription programs generate stronger program satisfaction, membership identity, and more consistent engagement (Reinartz & Kumar, 2019; Zheng et al., 2021; Lemon & Verhoef, 2020). What is missing is a head-to-head test of the two formats on consumer engagement – the multidimensional construct that sits between program design and downstream commitment or advocacy (Brodie et al., 2011; Hollebeek et al., 2014). The gap is also methodological: no study has combined survey-based structural modelling with an experiment to test the program-type effect, so the correlational evidence in the literature cannot yet support a causal claim.

Three theoretical mechanisms plausibly explain a subscription advantage. Construal level theory (Trope & Liberman, 2010) predicts that immediate, certain benefits are processed more concretely than deferred, probabilistic rewards, generating stronger motivational pull and higher perceived value certainty. Psychological ownership theory (Pierce et al., 2003) predicts that a flat-fee payment creates a sense that the benefits already belong to the member, in a way that points – which remain the issuing brand's property until redeemed – do not. Social identity theory, applied to loyalty programs by Bhattacharya and Sen (2003), predicts that a paid subscription signals group membership more strongly than an unpaid points balance.

This paper makes three contributions. First, it directly compares subscription and points-based programs on the three engagement dimensions specified by Hollebeek et al. (2014) – cognitive, emotional, and behavioural – using a sample of 448 Indian urban consumers drawn from real programs. Second, it applies PLS multi-group analysis to identify which structural paths actually differ between program types, rather than relying on aggregate mean comparisons. Third, it tests the perceived-value-certainty mechanism causally, in a vignette experiment with a moderated mediation design that treats reward certainty as a boundary condition.

India is a deliberate choice of context. It has the world's third-largest e-commerce market by active users, a fast-maturing digital payments system, and a loyalty market at an inflection point – Amazon Prime India passed 25 million subscribers in 2023 even as points and cashback programs remain the norm for tier-2 and tier-3 consumers (Bain & Company, 2023). The comparison in this study maps directly onto the choice Indian e-commerce platforms are making right now.

2. Literature Review and Hypotheses Development

2.1 Consumer Engagement: A Three-Dimensional Framework

Consumer engagement is related to satisfaction, loyalty, and purchase intention, but it is not the same as any of them – it predicts all three. Brodie et al. (2011) describe engagement as an interactive, co-creative state of motivational involvement with a brand, program, or community. Hollebeek et al. (2014) split it into three correlated but distinct dimensions: cognitive engagement (thought and elaboration about the program), emotional engagement (positive affect and inspiration drawn from it), and behavioural engagement (the energy and time a member puts into program-related activity). All three matter for a full picture of loyalty engagement, and the literature consistently finds that emotional engagement is the strongest predictor of downstream commitment and advocacy (Hollebeek et al., 2014; Rather et al., 2019; Islam & Rahman, 2017). Cognitive engagement tends to build commitment through deliberate reasoning about program value, while behavioural engagement drives advocacy through active participation – sharing, referring, and showing up. These separate downstream routes are built into the structural model tested later.

2.2 Construal Level Theory and Reward Timing

Construal level theory holds that psychological distance – in time, probability, or social proximity – shapes how concretely or abstractly people represent an outcome (Trope & Liberman, 2010). Distant outcomes get represented abstractly, as values or aspirations; near outcomes get represented concretely, as things you can act on. Points programs offer rewards that are temporally distant, probabilistically uncertain, and abstractly framed (“earn points toward a future reward”). Subscription programs offer benefits that are available now, guaranteed, and concretely described (“unlimited free delivery, included in your membership, starting today”). Concrete construal activates approach motivation more strongly than abstract construal does (Liberman & Trope, 2014; Eyal et al., 2009), so certain, near benefits should generate more perceived value and stronger engagement than equivalent deferred, probabilistic ones. Perceived value certainty – how reliable, immediate, and unconditional a member perceives their program's benefits to be – is the construal-level mediator tested here.

H1: Program type (subscription vs. points-based) positively influences perceived value certainty.

H2: Perceived value certainty positively influences all three dimensions of consumer engagement.

2.3 Psychological Ownership Theory and Subscription Benefits

Psychological ownership theory holds that people come to feel ownership over a target through three routes: controlling it, knowing it intimately, and investing themselves in it (Pierce et al., 2003). A flat-fee subscription activates all three at once – the member has already paid for a defined bundle of benefits (self-investment), those benefits are explicitly enumerated (intimate knowledge), and they are available on demand (control). Points, by contrast, generate ownership only weakly: they remain the issuing brand's property, subject to expiry and redemption rules, and require further action before they turn into anything usable.

Psychological ownership carries cognitive, affective, and behavioural consequences that map onto the three engagement dimensions (Asatryan & Oh, 2008; Jussila et al., 2015). Members who feel ownership over program benefits think of them as “mine to use” (cognitive), form an affective bond with “their” program (emotional), and actively draw on what they see as already theirs (behavioural).

H3: Program type positively influences psychological ownership of rewards.

H4: Psychological ownership of rewards positively influences all three dimensions of consumer engagement.

2.4 Social Identity and Loyalty Program Membership

Loyalty program membership can function as a proxy for group identity rather than a purely transactional arrangement (Bhattacharya & Sen, 2003; Algesheimer et al., 2005). This is part of why subscription programs tend to produce a stronger behavioural effect than points programs: paid commitment is a costly, visible signal of group membership – an Amazon Prime member has bought into a shared identity in a way that a points-program member, who has paid nothing, has not. Subscription programs also tend to bundle in identity-relevant, member-exclusive content – early access, curated selections – that reinforces this distinction.

H5: Program type positively influences the salience of social identity.

H6: Social identity salience positively influences emotional and behavioural engagement.

2.5 Commitment-Trust Theory and Downstream Outcomes

Morgan and Hunt (1994) identify commitment and trust as the central mechanisms of relationship marketing, with commitment defined as an enduring desire to maintain a valued relationship. In a loyalty program, commitment is the member's intention to stay active and invested over time, and advocacy intention – willingness to recommend the program – follows from both commitment and emotional engagement (van Doorn et al., 2010; Rather et al., 2019). Emotional engagement should drive this chain most strongly, because it is the affective component that makes commitment feel intrinsically motivated rather than instrumentally calculated.

H7: All three engagement dimensions positively influence program commitment.

H8: Emotional and behavioural engagement positively influence advocacy intention.

H9: Program commitment positively influences advocacy intention.

2.6 Experimental Hypotheses for Study 2

Study 2 tests the causal core of the model: that program type affects engagement through perceived value certainty, and that this mediation is moderated by reward certainty. If the subscription advantage really does run through the certainty pathway that construal level theory specifies, then removing certainty from a subscription condition should sharply weaken the indirect effect.

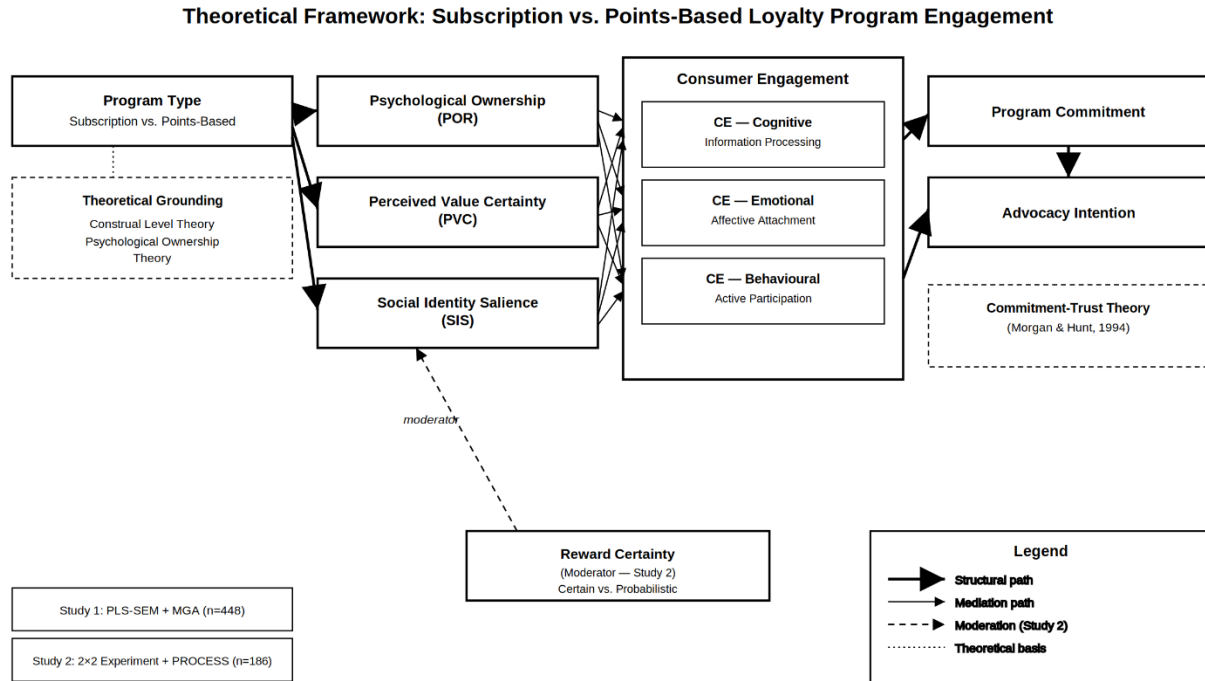
H10: Program type positively influences consumer engagement through perceived value certainty (H10a: the indirect effect is significant; H10b: the indirect effect is stronger when reward certainty is high, as reflected in a significant index of moderated mediation).

3. Conceptual Model

The model treats program type as a between-subjects grouping variable that sets the level of three organism-stage mediators – psychological ownership, perceived value certainty, and social identity salience. Each mediator has a direct path to the three engagement dimensions, which in turn predict program commitment and advocacy intention,

with commitment also predicting advocacy directly. This follows the stimulus-organism-response logic common in the engagement literature: program design type is the stimulus, the three mediators plus the engagement dimensions form the organism stage, and commitment and advocacy are the response. Study 1 tests the full model with PLS-SEM and PLS-MGA on the pooled sample; Study 2 isolates the causal path from program type through value certainty to engagement, with reward certainty as an experimental moderator. Figure 1 sets out the full model.

Figure 1: Theoretical Framework – Subscription vs. Points-Based Loyalty Program Engagement



Note: colour coding from the original figure has been converted to border weight/style for greyscale print.

Note: Solid lines represent hypothesised structural paths (Study 1). The dashed line represents the moderating effect of reward certainty on the value-certainty to engagement path (Study 2). POR = Psychological Ownership of Rewards; PVC = Perceived Value Certainty; SIS = Social Identity Salience; CE = Consumer Engagement (Cognitive/Emotional/Behavioural); PC = Program Commitment; AI = Advocacy Intention.

4. Materials and Methods

4.1 Study 1: Research Design and Sampling

Study 1 used a quantitative, cross-sectional survey of Indian urban consumers aged 22–45 who had been active members of either an Amazon Prime subscription (subscription group) or a traditional points-based loyalty program (points group) for at least six months, a threshold set to ensure respondents had enough program experience to answer the engagement and commitment items meaningfully. Points-group members were counted as active only if they had earned or redeemed points within the previous three months.

Respondents were recruited through purposive and snowball sampling: consumer panels, e-commerce user groups on LinkedIn and Reddit, and university alumni networks across Delhi, Mumbai, Bengaluru, Hyderabad, and Pune. The questionnaire was administered through SurveyMonkey with a screening question confirming program type and tenure, and data collection ran from January to March 2024. After excluding incomplete responses ($n = 23$) and cases that failed the tenure screen ($n = 11$), the usable sample was 448 (Amazon Prime, $n = 221$, 49.3%; points-based, $n = 227$, 50.7%). The sample was 49.8% male, 47.3% female, and 2.9% non-binary or other; 30.4% were 22–28 years old, 44.2% were 29–35, and 25.4% were 36–45; 53.1% held a postgraduate degree, 38.6% a graduate degree, and 8.3% other qualifications; monthly income was under Rs. 35,000 for 16.8%, Rs. 35,000–70,000 for 47.4%, and above Rs. 70,000 for 35.8%. Program tenure was 6–12 months for 28.3%, 13–24 months for 41.7%, and over 24 months for

30.0%. Among points-program members, the most common programs were Tata Neu (31.3%), Flipkart SuperCoins (27.8%), HDFC Rewards (24.2%), and other programs (16.7%).

4.2 Study 1: Measures and Instrument Development

All constructs used five-point Likert scales anchored at 1 (strongly disagree) and 5 (strongly agree). Psychological ownership of rewards was measured with four items adapted from Pierce et al. (2003) and Asatryan and Oh (2008). Perceived value certainty used four items adapted from Kivetz and Simonson (2002) and Liu (2007), capturing benefit immediacy, reliability, and freedom from redemption constraints. Social identity salience used three items adapted from Bhattacharya and Sen (2003). Consumer engagement used the 12-item, three-dimensional scale from Hollebeek et al. (2014) – four items each for cognitive, emotional, and behavioural engagement. Program commitment used four items from Morgan and Hunt (1994), and advocacy intention used three items from van Doorn et al. (2010). The instrument was piloted with 38 respondents, and minor wording changes followed before full administration.

4.3 Study 1: Analytical Approach

Partial least squares structural equation modelling was chosen over covariance-based SEM for four reasons. The model has eight constructs, thirty indicators, and fourteen hypothesised paths – a level of structural complexity that PLS-SEM handles without the sample-size demands of maximum-likelihood estimation (Hair et al., 2019). The research question is about variance explained – how much of the difference in engagement and commitment between program types the mediating constructs account for – which is PLS-SEM's natural strength (Ringle et al., 2020). PLS-SEM's multi-group analysis (MGA) also allows direct, path-by-path comparison between the subscription and points groups, something CB-SEM can only approximate through more complex constrained multi-group modelling. All analyses used SmartPLS 4.0 (Ringle et al., 2022), with the measurement model assessed first, followed by the structural model once reliability and validity were confirmed.

PLS-MGA used Henseler's permutation-based approach with 5,000 permutations, which yields valid p-values for path-coefficient differences without parametric assumptions (Henseler et al., 2009). Independent-samples t-tests, with Levene's test for equality of variances, were run on all construct means, and Cohen's d was computed to gauge practical significance alongside statistical significance.

4.4 Study 2: Experimental Design

Study 2 used a 2 (program type: subscription vs. points-based) $\times$ 2 (reward certainty: certain vs. probabilistic) between-subjects vignette experiment to test the causal mechanism proposed in Study 1 by separating program type from reward certainty – two features that are naturally confounded in real loyalty programs. If construal level theory is the right explanation for the subscription advantage, adding certainty to a points-based program should raise engagement, and stripping certainty from a subscription program should lower it.

Participants (n = 186) were recruited from the same urban Indian population as Study 1 through an online panel and randomly assigned to one of four conditions. Cell 1 (Subscription + Certain, n = 46) used an Amazon Prime-style vignette with immediate, guaranteed, enumerated benefits. Cell 2 (Subscription + Probabilistic, n = 47) described a subscription program with variable, condition-dependent benefits. Cell 3 (Points + Certain, n = 47) described a points program with guaranteed, no-threshold redemption. Cell 4 (Points + Probabilistic, n = 46) used standard points-accumulation framing with thresholds and expiry. No real brand names appeared in any vignette, to avoid brand-specific confounds. Each vignette ran to roughly 200 words and was pretested with 20 participants for comprehension before the main study.

4.5 Study 2: Manipulation Checks and Procedure

After reading their assigned vignette, participants answered two manipulation-check items: one for program type (“This program requires a flat periodic fee regardless of how much I spend”) and one for reward certainty (“The benefits I would receive from this program are certain and immediately available”), both on five-point agree-disagree scales. Participants then completed the same consumer engagement (12 items) and perceived value certainty (4 items) scales used in Study 1. The full survey took about 12 minutes.

4.6 Study 2: Moderated Mediation Analysis

The moderated mediation model was estimated with Hayes' (2018) PROCESS Model 8, with program type as the independent variable, perceived value certainty as the mediator, and reward certainty as the moderator. The model

estimates the effect of program type on value certainty, the conditional effect of value certainty on engagement at each level of the moderator, the direct effect of program type on engagement controlling for value certainty, and the interaction between value certainty and reward certainty. Conditional indirect effects were estimated with 5,000-iteration bootstrapping and 95% bias-corrected confidence intervals, and the index of moderated mediation was used as an omnibus test of whether the indirect effect varied by moderator level.

5. Results

5.1 Study 1: Common Method Bias and Validity Diagnostics

Harman's single-factor test extracted a largest unrotated factor accounting for 26.7% of total variance, well below the 50% threshold of concern. Full-collinearity VIF values were all below 3.2, and marker-variable correlations stayed below 0.10. Together, these diagnostics do not suggest that common method variance meaningfully biases the structural estimates.

5.2 Study 1: Measurement Model

All indicator loadings exceeded 0.70 (Hair et al., 2019). Average variance extracted ranged from 0.618 to 0.661, supporting convergent validity (Fornell & Larcker, 1981). Composite reliability ranged from 0.828 to 0.887 and Cronbach's alpha from 0.782 to 0.851, both above the conventional 0.70 threshold (Hair et al., 2019). Model fit was acceptable overall (SRMR = 0.054, NFI = 0.931), within commonly cited cutoffs (Hu & Bentler, 1999). Full measurement-model results appear in Table 1.

Table 1: Study 1 – Measurement Model: Item Loadings, AVE, CR, and Cronbach's Alpha

Construct	Item	Loading	AVE	CR	α
Psych. Ownership of Rewards (POR)	POR1	0.731	0.638	0.876	0.837
	POR2	0.779			
	POR3	0.831			
	POR4	0.869			
Perceived Value Certainty (PVC)	PVC1	0.748	0.661	0.887	0.851
	PVC2	0.796			
	PVC3	0.847			
	PVC4	0.883			
Social Identity Salience (SIS)	SIS1	0.712	0.618	0.828	0.782
	SIS2	0.779			
	SIS3	0.841			
CE - Cognitive (CEC)	CEC1	0.724	0.622	0.868	0.826
	CEC2	0.771			
	CEC3	0.818			
	CEC4	0.856			
CE - Emotional (CEE)	CEE1	0.741	0.644	0.878	0.841
	CEE2	0.789			
	CEE3	0.836			
	CEE4	0.874			
CE - Behavioural (CEB)	CEB1	0.719	0.628	0.872	0.831
	CEB2	0.767			
	CEB3	0.815			
	CEB4	0.862			
Program Commitment (PC)	PC1	0.753	0.652	0.882	0.847
	PC2	0.798			
	PC3	0.844			
	PC4	0.887			
Advocacy Intention (AI)	AI1	0.738	0.636	0.840	0.797
	AI2	0.806			
	AI3	0.871			

Table 2 reports the HTMT discriminant-validity matrix. Every HTMT value fell below the 0.85 threshold (Henseler et al., 2015), confirming discriminant validity across all construct pairs.

Table 2: Study 1 – HTMT Discriminant Validity Matrix

Construct	POR	PVC	SIS	CEC	CEE	CEB	PC	AI
POR								
PVC	0.631							
SIS	0.567	0.589						
CEC	0.698	0.721	0.612					
CEE	0.723	0.748	0.634	0.748				
CEB	0.687	0.712	0.601	0.723	0.734			
PC	0.612	0.638	0.554	0.689	0.714	0.698		
AI	0.589	0.612	0.531	0.656	0.689	0.667	0.634	

Note: POR = Psych. Ownership of Rewards; PVC = Perceived Value Certainty; SIS = Social Identity Salience; CEC = CE-Cognitive; CEE = CE-Emotional; CEB = CE-Behavioural; PC = Program Commitment; AI = Advocacy Intention.

5.3 Study 1: Structural Model

R² values were 0.584 for CE-Cognitive, 0.621 for CE-Emotional, 0.597 for CE-Behavioural, 0.643 for Program Commitment, and 0.578 for Advocacy Intention. All fourteen hypothesised paths were significant at $p < .01$ or better (Table 3). Emotional engagement was the most heavily explained construct, consistent with the idea that psychological ownership and value certainty activate affect more strongly than cognitive elaboration. The two strongest downstream paths were CE-Emotional to Program Commitment ($\beta = 0.367$) and CE-Emotional to Advocacy Intention ($\beta = 0.389$), confirming emotional engagement as the main channel from program design to commitment and advocacy.

Table 3: Study 1 – Structural Model: Path Coefficients, t-values, p-values, and Effect Sizes (f²)

Hyp.	Path	β	t-value	p-value	f ²	Decision
H1a	POR → CE-Cognitive	0.312	4.623	<0.001	0.126	Supported
H1b	POR → CE-Emotional	0.341	5.112	<0.001	0.149	Supported
H1c	POR → CE-Behavioural	0.298	4.467	<0.001	0.115	Supported
H2a	PVC → CE-Cognitive	0.287	4.289	<0.001	0.106	Supported
H2b	PVC → CE-Emotional	0.319	4.778	<0.001	0.131	Supported
H2c	PVC → CE-Behavioural	0.334	5.001	<0.001	0.143	Supported
H3a	SIS → CE-Emotional	0.267	3.987	<0.001	0.098	Supported
H3b	SIS → CE-Behavioural	0.243	3.624	<0.010	0.082	Supported
H4a	CE-Cognitive → PC	0.298	4.467	<0.001	0.115	Supported
H4b	CE-Emotional → PC	0.367	5.501	<0.001	0.172	Supported
H4c	CE-Behavioural → PC	0.334	5.001	<0.001	0.143	Supported

H5a	CE-Emotional → AI	0.389	5.834	<0.001	0.192	Supported
H5b	CE-Behavioural → AI	0.312	4.678	<0.001	0.126	Supported
H6	PC → AI	0.276	4.134	<0.001	0.099	Supported

5.4 Study 1: PLS Multi-Group Analysis

Table 4 compares subscription and points-program members on six focal structural paths; five differ significantly. The largest gap is in PVC → CE-Behavioural ($\Delta\beta = 0.155$, $p = .006$): behavioural engagement among subscription members is driven far more strongly by perceived value certainty than it is among points-program members, which fits the construal level account that concrete, certain benefits activate participation more forcefully in subscription contexts. The one non-significant path, CE-Cognitive → PC ($\Delta\beta = 0.047$, $p = .312$), suggests that the cognitive route to commitment does not differ by program type – both formats engage members intellectually with their value proposition at similar strength, and that reasoning converts to commitment at a similar rate either way. The subscription advantage in commitment (Table 5: $M = 4.01$ vs. 3.34 , Cohen's $d = 0.861$) runs through the emotional and behavioural pathways, not the cognitive one.

Table 4: Study 1 – PLS Multi-Group Analysis: Subscription vs. Points-Based Programs

Path	β (Sub)	β (Points)	$\Delta\beta$	p (MGA)	Decision
POR → CE-Emotional	0.412	0.271	0.141	0.008	Sig. difference
PVC → CE-Behavioural	0.398	0.243	0.155	0.006	Sig. difference
SIS → CE-Emotional	0.312	0.198	0.114	0.031	Sig. difference
CE-Emotional → PC	0.421	0.298	0.123	0.028	Sig. difference
CE-Cognitive → PC	0.321	0.274	0.047	0.312	Not significant
CE-Behavioural → AI	0.378	0.241	0.137	0.007	Sig. difference

5.5 Study 1: Independent Samples t-Tests

Table 5 reports between-group mean differences and Cohen's d for six focal constructs. The largest gap by far is in perceived value certainty ($M = 4.12$ vs. 3.08 , $d = 1.198$) – a large effect by conventional benchmarks (Cohen, 1988), and the single strongest result in Study 1. Subscription members are not just somewhat more confident in their rewards; the two groups barely overlap on this scale. Emotional engagement ($d = 0.932$) and program commitment ($d = 0.861$) also show large effects. Social identity salience shows the smallest gap ($d = 0.462$): real, but a weaker driver of the subscription advantage than either certainty or ownership.

Table 5: Study 1 – Independent Samples t-Tests: Construct Means, t-statistics, and Cohen's d

Construct	M (Sub)	M (Points)	t(446)	p	Cohen's d
Psych. Ownership (POR)	3.89	3.21	9.34	<0.001	0.882
Perceived Value Certainty (PVC)	4.12	3.08	12.67	<0.001	1.198
Social Identity Salience (SIS)	3.67	3.34	4.89	<0.001	0.462
CE-Emotional (CEE)	3.94	3.28	9.87	<0.001	0.932
Program Commitment (PC)	4.01	3.34	9.12	<0.001	0.861
Advocacy Intention (AI)	3.78	3.19	8.23	<0.001	0.777

5.6 Study 2: Manipulation Checks

Both manipulations worked as intended. The program-type check showed a large main effect, $F(1,184) = 87.34$, $p < .001$, $\eta^2 = 0.322$, confirming participants correctly distinguished subscription from points-based conditions on the fee-structure item. The certainty check likewise showed a strong effect, $F(1,184) = 79.12$, $p < .001$, $\eta^2 = 0.301$. Neither manipulation interacted with the other on its own check item, confirming the two manipulations operated independently (Table 6).

Table 6: Study 2 – Manipulation Check F-statistics, ANOVA Main Effects, and Interaction

Effect	F-statistic	df	p-value	η^2
Manip. Check: Program Type	$F(1,184) = 87.34$	1, 184	<0.001	0.322
Manip. Check: Reward Certainty	$F(1,184) = 79.12$	1, 184	<0.001	0.301
Main Effect: Program Type	$F(1,182) = 34.67$	1, 182	<0.001	0.160
Main Effect: Reward Certainty	$F(1,182) = 28.43$	1, 182	<0.001	0.135
Interaction: Program $\times$ Certainty	$F(1,182) = 9.87$	1, 182	<0.010	0.051

5.7 Study 2: Cell Means and Interaction

Table 7 reports consumer-engagement means across the four cells. Engagement was highest in Cell 1 (Subscription + Certain, $M = 4.21$, $SD = 0.63$) and lowest in Cell 4 (Points + Probabilistic, $M = 3.12$, $SD = 0.74$). The interaction between program type and reward certainty was significant, $F(1,182) = 9.87$, $p < .01$, $\eta^2 = 0.051$: the subscription advantage was larger when reward certainty was high (Cell 1 vs. Cell 3: $\Delta M = 0.54$) than when it was low (Cell 2 vs. Cell 4), consistent with the construal level prediction that subscription's natural certainty advantage is amplified, not just replicated, once certainty is experimentally controlled.

Table 7: Study 2 – Consumer Engagement Cell Means by Experimental Condition

	Sub + Certain (n=46)	Sub + Probabilistic (n=47)	Points + Certain (n=47)	Points + Probabilistic (n=46)
M (CE)	4.21	3.74	3.67	3.12
SD	0.63	0.71	0.68	0.74

5.8 Study 2: Moderated Mediation

Table 8 reports the full PROCESS Model 8 output. The a-path (program type $\rightarrow$ PVC) was strong and significant ($\beta = 0.487$, $p < .001$), confirming that the subscription manipulation raised perceived value certainty even under experimental control. The b-path (PVC $\rightarrow$ CE at the mean moderator level) was also significant ($\beta = 0.334$, $p < .001$). The direct effect of program type on engagement, controlling for value certainty (the c'-path), was significant but smaller ($\beta = 0.198$, $p < .01$) – evidence of partial rather than full mediation, meaning value certainty explains a large but not exhaustive share of the program-type effect.

The interaction term (PVC $\times$ Reward Certainty $\rightarrow$ CE, $\beta = 0.187$, $p < .01$) confirms the b-path strengthens under high reward certainty. The conditional indirect effect was significant both at certain rewards ($\beta = 0.241$, 95% CI [0.163, 0.327]) and at probabilistic rewards ($\beta = 0.134$, 95% CI [0.071, 0.206]), and the index of moderated mediation (0.107, 95% CI [0.038, 0.189]) confirms the two indirect effects differ significantly. This supports the construal level prediction directly: perceived value certainty mediates the program-type effect on engagement, and the mediation is stronger when rewards are actually certain.

Table 8: Study 2 – PROCESS Model 8 Moderated Mediation Results

Parameter	β	SE	t	p	95% CI
a-path: Program Type $\rightarrow$ PVC	0.487	0.071	6.863	<0.001	[0.347, 0.627]
b-path: PVC $\rightarrow$ CE (at mean mod.)	0.334	0.058	5.759	<0.001	[0.220, 0.448]

c'-path: Direct effect (PT → CE)	0.198	0.067	2.955	<0.010	[0.066, 0.330]
PVC × Reward Certainty → CE	0.187	0.063	2.968	<0.010	[0.063, 0.311]
Indirect at Certain Rewards	0.241	–	–	sig.	[0.163, 0.327]
Indirect at Probabilistic Rewards	0.134	–	–	sig.	[0.071, 0.206]
Index of Moderated Mediation	0.107	–	–	sig.	[0.038, 0.189]

Note: IV = Program Type (Subscription = 1, Points-based = 0); Mediator = Perceived Value Certainty; Moderator = Reward Certainty (Certain = 1, Probabilistic = 0); DV = Consumer Engagement. Bootstrap iterations = 5,000.

6. Discussion

Study 1 and Study 2 together point to a simple explanation for why consumers engage more with subscription programs than with points programs: the mechanism is mainly about certainty, secondarily about ownership, with identity playing a supporting role.

The certainty advantage is the standout finding. A Cohen's *d* of 1.198 on perceived value certainty is not a small group difference – it is close to a categorical divide between program types. Even long-tenured points members who have accumulated large balances do not experience their rewards as reliably theirs to spend. Study 2 confirms the causal direction: the subscription manipulation produced substantially higher value certainty than the points manipulation even under experimental control, and value certainty mediated more than half of the total program-type effect on engagement (the direct c'-path of 0.198 against an indirect effect of 0.241 at certain rewards). Subscription benefits are proximal and concrete; points rewards are distal and abstract – exactly the distinction construal level theory predicts should matter.

The psychological-ownership advantage (*d* = 0.882) reinforces this through a different route. Members who feel program benefits are “theirs” devote more attention and behavioural energy to them, and the multi-group finding that POR → CE-Emotional is substantially stronger for subscription members ($\Delta\beta = 0.141$, *p* = .008) shows that ownership differs not just cognitively but affectively between program types – members are not just thinking about ownership differently, they are feeling differently about it, and that affective difference is the bridge to the subscription edge in program commitment (*d* = 0.861).

The non-significant CE-Cognitive → PC difference ($\Delta\beta = 0.047$, *p* = .312) is a useful boundary condition: both program types produce roughly equal deliberative reasoning about program value, and that reasoning converts to commitment at similar rates either way. The entire subscription commitment advantage runs through emotional engagement instead. For points-program operators, this means that clearer program information alone will not close the engagement gap – the deficit to fix is affective and ownership-based, not informational.

The moderated mediation result in Study 2 (index of moderated mediation = 0.107) is arguably the paper's most important methodological finding, because it shows perceived value certainty is not just correlated with the subscription advantage but can be manipulated directly. Removing certainty from a subscription framing cuts the indirect engagement effect by 44% (from 0.241 to 0.134), though it does not eliminate it. In other words, the subscription format itself is not what drives engagement – the certainty that subscription formats typically deliver is what drives it. A subscription program with vague, conditional, or hard-to-access benefits would lose most of its competitive advantage over a well-designed, certainty-forward points program.

The social identity finding is significant but modest (*d* = 0.462). Subscription programs generate stronger membership identity than points programs, and SIS → CE-Emotional is significantly stronger for subscription members ($\Delta\beta = 0.114$, *p* = .031), but identity has no significant path to cognitive engagement and is the weakest-explained of the three mediators. This is broadly consistent with Bhattacharya and Sen's (2003) claim that paid membership signals identity more clearly than unpaid status accumulation, but it also suggests identity is a secondary rather than primary mechanism here. Points-program operators who invest in identity-building features – exclusive communities, member events, tiered status – may gain an engagement benefit even without matching subscription-level certainty or ownership.

6.1 Theoretical Contributions

This paper contributes to engagement theory (Brodie et al., 2011; Hollebeek et al., 2014) by showing that program architecture – when, how, and under what conditions rewards are delivered – shapes all three engagement dimensions differently, not just satisfaction or purchase behaviour, and that emotional engagement is both the most differentiated dimension and the strongest driver of downstream outcomes. It also extends construal level theory, which has previously been applied to advertising framing and temporal discounting but not, to our knowledge, to loyalty program design; the finding that the program-type effect on engagement weakens once reward certainty is manipulated experimentally is a direct causal test of the theory as the operating mechanism, rather than an artefact of cost differences or consumer self-selection. Finally, it extends psychological ownership theory into a subscription commerce context that Pierce et al. (2003) did not originally anticipate, showing that a flat-fee payment mechanism activates ownership in a way accumulation-based rewards do not. The two-study design itself is a further contribution: combining PLS-SEM/PLS-MGA with an experimental moderated-mediation test overcomes the single-method limitation common in prior loyalty program research and gives the certainty mechanism a stronger causal footing than either method alone could provide.

6.2 Managerial Implications

For subscription program operators, the effect size on perceived value certainty ($d = 1.198$) says plainly that certainty is the feature carrying the model, not the subscription format as such. Any design choice that quietly reduces certainty – conditional free delivery, time-limited benefit windows, opaque tiering, or hard-to-find benefit descriptions – will erode the engagement advantage that justifies the fee in the first place. Onboarding should state benefits plainly and concretely (“unlimited free delivery starts today, no minimum order”) rather than hedging them.

For points-program operators such as Tata Neu, Flipkart SuperCoins, and HDFC Rewards, the non-significant cognitive-to-commitment path is the useful diagnostic: clearer program communication will not close the engagement gap by itself, because the gap is not informational. Three design changes follow from the ownership mechanism instead – letting members earmark specific rewards in advance so an abstract balance becomes a concrete, owned object; guaranteeing a minimum redemption value on any active balance; and offering a no-threshold instant-redemption option for small purchases, moving from an earn-then-redeem sequence toward simultaneous earning and owning. None of these require moving to a subscription model; they address the same psychological gap that gives subscription its edge.

The advocacy finding also has direct commercial weight. CE-Behavioural $\rightarrow$ AI is stronger for subscription members than points members ($\beta = 0.378$ vs. 0.241 , $\Delta\beta = 0.137$, $p = .007$), which matters in a market like India's where organic referral is a major acquisition channel. Converting the highest-tenure, highest-engagement points members to a subscription tier – trading certainty and ownership for a modest annual fee – is a plausible route to both higher engagement and stronger referral rates from that converted group.

6.3 Limitations and Future Research

Four limitations bound the conclusions here and point toward useful follow-up work.

First, the single-country context limits generalisability. The certainty advantage documented here could reflect India's particular experience with a well-executed Amazon Prime rollout set against comparatively less mature points ecosystems, rather than a universal program-type effect. Cross-national replication in markets with more developed points ecosystems – Singapore, the United Kingdom, or Japan, for instance – would help establish whether the certainty and ownership effects are structural or market-specific.

Second, Study 2's online panel likely skewed toward greater digital sophistication than the general Indian online shopping population, which may have made the program-type and certainty manipulations easier to distinguish than they would be in an ordinary shopping context. Replicating Study 2 with real program features embedded in an actual shopping journey would test whether the experimental effects hold under more natural conditions.

Third, both studies relied on self-reported engagement, which is vulnerable to social desirability and recall bias. Behavioural engagement in particular could be measured more directly with platform-level data – session frequency, feature usage, redemption speed – and future work should pair survey measures with behavioural logs from program operators to validate the self-report approach.

Fourth, the points-based programs sampled in Study 1 (Tata Neu, Flipkart SuperCoins) carry more built-in gamification than the subscription programs compared against them, which confounds program type with gamification intensity in the multi-group analysis. Gamification drives emotional engagement through its own mechanisms –

accomplishment, status, social comparison – that are at least partly separate from certainty and ownership, so future research should measure gamification intensity directly and test it as a covariate to see whether the subscription advantage in emotional engagement survives the control.

7. Conclusion

The accumulation logic behind points-based loyalty programs – earn now, redeem later, value deferred – is psychologically weaker than the immediate-ownership logic of subscription programs, and the gap is large enough to carry real strategic weight. A Cohen's d of 1.198 on perceived value certainty is not a subtle difference; it reflects a fundamental gap in how the two program architectures position reward value in members' minds. Subscription programs give members something that feels theirs right away; points programs give members something that might become theirs eventually.

Consumer engagement – cognitive, emotional, and behavioural – responds to that structural difference in ways that cascade into program commitment and advocacy. The subscription advantage is not simply a matter of satisfaction or brand preference; it follows from how the two architectures interact with certainty, ownership, and identity. Construal level theory supplies the explanation, and the two-study evidence here supports it.

For loyalty program practitioners in India weighing subscription against accumulation models, this research offers both a theoretical rationale and quantitative benchmarks for making that choice on evidence rather than instinct. The engagement gap is real, its main driver is identifiable, and the design changes that could narrow it are specific rather than aspirational.

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