

# Outbound Training and Corporate Grooming Among Management Students: The Mediating Role of Experiential Learning

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## Abstract

Outbound Training (OBT) has emerged as a critical experiential learning methodology in management education, yet empirical evidence examining relationships between specific program components and learning outcomes remains limited, particularly in Indian contexts. This study investigates how training venue quality, instructional methods, and trainer competencies influence learning and corporate grooming among postgraduate management students. Through PLS structural equation modeling analysis of survey data from 138 MBA students who participated in structured OBT programs in Hyderabad, India, the research demonstrates that all three training components significantly enhance learning ( $\beta = 0.248-0.312$ , all  $p < .001$ ), which in turn strongly predicts corporate grooming development ( $\beta = 0.425$ ,  $p < .001$ ). The model explains 48.7% of variance in learning and 65.8% in corporate grooming, with learning serving as a significant mediator. Results reveal partial mediation, indicating training components influence outcomes both directly and through learning processes. Venue and arrangements exhibited the strongest total effect ( $\beta = 0.319$ ), followed by training methods ( $\beta = 0.293$ ) and trainer competencies ( $\beta = 0.263$ ). Findings validate Kolb's Experiential Learning Theory while providing actionable insights for program designers: prioritize quality venues, implement systematic instructional design with structured reflection, and invest in certified trainer development. This study contributes to limited research on OBT effectiveness in Indian management education and demonstrates that properly designed outdoor learning interventions significantly enhance professional competencies valued by employers.

**Keywords:** Outbound Training, Experiential Learning, Management Education, Soft Skills Development, Leadership Training, Mediation Analysis, India

## 1. INTRODUCTION

The landscape of management education has undergone a significant transformation, driven by the growing need for graduates who possess not only technical expertise but also behavioral and interpersonal competencies essential for success in dynamic organizational environments. Traditional classroom-based instruction, though valuable for conceptual understanding, often proves inadequate in cultivating practical skills such as leadership, teamwork, communication, and adaptability (Beard & Wilson, 2018; Itin, 2019). This gap has led to a pedagogical shift toward experiential learning approaches that emphasize learning through experience, reflection, and application—among which Outbound Training (OBT) has gained increasing prominence.

OBT, rooted in Kurt Hahn's experiential philosophy and the Outward Bound movement, engages participants in outdoor developmental activities designed to challenge comfort zones, promote collaboration, and foster self-awareness (Martin et al., 2020; Gager et al., 2021). Within management education, such experiences are intended not merely as recreation but as structured

opportunities for learning transfer—transforming action and reflection into enduring personal and professional competencies.

Despite its growing adoption, empirical understanding of how OBT translates into measurable developmental outcomes remains limited, particularly in the Indian context. While prior studies have established its general effectiveness, few have examined *how* and *why* OBT contributes to professional skill formation. This study addresses that gap by investigating the mediating role of **learning from developmental activities** in linking **OBT effectiveness** to **corporate grooming** among postgraduate management students. Grounded in Kolb's Experiential Learning Theory, the study posits that the impact of OBT on grooming outcomes operates primarily through enhanced learning processes—suggesting that experience alone is insufficient unless reinforced through structured reflection and conceptualization.

## 2. LITERATURE REVIEW

### 2.1 Theoretical Foundations of Outbound Training

Outbound Training (OBT) is grounded in experiential learning theory, particularly Kolb's (1984) four-stage cycle—concrete experience, reflective observation, abstract conceptualization, and active experimentation—which explains how learners transform experiences into knowledge (Kolb & Kolb, 2017). Dewey (1938) emphasized learning through interaction between experience and reflection, a principle foundational to OBT. Subsequent scholars highlight that experiential learning effectively develops complex, real-world competencies beyond conventional instruction (Seaman et al., 2017; Breunig, 2019).

The “challenge by choice” concept (Rohnke, 1989) reinforces voluntary participation in appropriately difficult experiences that expand personal growth without overwhelming participants (Brown, 2019).

OBT originated from Kurt Hahn's Outward Bound schools in the 1940s, designed to build resilience and character among young sailors (Hattie et al., 1997; Gass et al., 2012). It later evolved into civilian education in the 1960s (Hopkins & Putnam, 1993) and entered corporate training in the 1980s–1990s, promoting experiential management development (Wagner et al., 2009). Today, OBT extends beyond outdoor expeditions to include urban, hybrid, and virtual simulations, reflecting its adaptability to diverse learning environments (Allison & Pomeroy, 2020). OBT enhances several core managerial competencies:

**Leadership and Self-Leadership:** OBT programs develop self-efficacy, decision-making, and interpersonal influence (Ewert & McAvoy, 2000; Neck & Manz, 2013). Studies show gains in emotional intelligence, adaptability, and ethical leadership (Bonifas, 2016; Paisley et al., 2008). Outdoor contexts facilitate authentic leadership through self-reflection and value-based growth (Avolio & Gardner, 2005; Riggio et al., 2018).

**Team Development:** OBT strengthens group cohesion, trust, and collaborative problem-solving (Bronson et al., 1992; Kayes, 2002). Shared challenges enhance coordination and communication, fostering psychological safety and high-performing teams (Taniguchi et al., 2005; Edmondson, 2019).

**Communication and Interpersonal Skills:** Adventure-based programs improve verbal and non-verbal communication, feedback, and conflict resolution (Shooter et al., 2010; Propst & Koesler, 1998; Sibthorp et al., 2007). Exposure to diverse participants also enhances intercultural communication (Warren et al., 2014).

**Problem-Solving and Critical Thinking:** OBT develops analytical, creative, and collaborative problem-solving through novel, ill-structured challenges (Cason & Gillis, 1994; D'Amato & Krasny, 2011). Transfer of these skills depends on contextual similarity and reinforcement (Baldwin & Ford, 1988).

**2.4 Factors Influencing OBT Effectiveness:** Program success depends on design, facilitation, and context. Effective designs feature progressive challenges, clear goals, structured reflection, and real-world linkages (Priest & Gass, 2018). Skilled instructors—emotionally intelligent, adaptive, and reflective—enhance learning outcomes (Priest, 1999; Sibthorp et al., 2007; Martin et al., 2017). Environmental conditions, group composition, and contextual factors also shape experiences, though skilled facilitation mitigates variability (Ewert & Sibthorp, 2014).

**2.5 Challenges and Limitations :** OBT research faces methodological challenges: overreliance on self-reports (Hattie et al., 1997), inconsistent measures of learning transfer (Baldwin & Ford, 1988; Burke & Hutchins, 2007), and limited cultural diversity in samples (Loynes, 2002). Standardized, longitudinal, and cross-cultural studies remain limited.

**2.6 OBT in Management Education :** Business schools increasingly integrate OBT to cultivate practical leadership and teamwork competencies absent in traditional curricula (Mintzberg, 2004). Empirical studies report improvements in teamwork, communication, and behavioral change among management students in Asia (Lau & McLean, 2013; Munshi & Deshpande, 2014). However, research tracking long-term professional impact remains scarce (Bell, 1993).

## 2.7. Specific Research Studies

Management education increasingly emphasizes experiential approaches to develop behavioral and interpersonal competencies that traditional classroom methods struggle to produce (Beard & Wilson, 2018; Itin, 2019). Outbound Training (OBT) is one such experiential intervention that intentionally places learners in challenging, structured outdoor activities to stimulate personal growth and transferable professional skills. The theoretical basis for selecting OBT effectiveness as the independent variable rests on Kolb's Experiential Learning Theory (Kolb, 1984; Kolb & Kolb, 2017), which posits that concrete experience plus reflection and conceptualization produce durable learning. Dewey's (1938) emphasis on experience–reflection cycles and the “challenge by choice” principle (Rohnke, 1989) further situate OBT as a pedagogical design whose quality and implementation should logically predict downstream developmental outcomes. Empirical research supports OBT's impact on competencies relevant to management and workplace readiness. Early and foundational work by Hahn and Outward Bound demonstrated OBT's capacity to foster resilience, self-reliance, and prosocial behavior (Hattie et al., 1997; Gass et al., 2012). More focused studies report improvements in leadership self-efficacy, decision-making, and interpersonal influence following outdoor leadership programs (Ewert & McAvoy, 2000; Paisley et al., 2008). Adventure-based and wilderness leadership interventions have been associated with gains in emotional intelligence and adaptive capacity

(Bonifas, 2016), while team-based OBT has consistently improved cohesion, communication, and collective problem-solving (Bronson et al., 1992; Kayes, 2002; Taniguchi et al., 2005). These findings justify treating the effectiveness of OBT (operationalized via venue quality, instructional methods, and trainer competence) as a central predictor in studies of student professional development.

The decision to position learning from developmental activities as a mediating variable is grounded in both theory and measurement evidence. Kolb's model and subsequent experiential learning scholarship argue that experience alone does not guarantee transfer—structured reflection, conceptualization, and practice are required for meaningful learning (Kolb, 1984; Kolb & Kolb, 2017; Dewey, 1938). Studies on transfer and training emphasize that instructional design features and guided reflection determine whether experiences convert into durable skills (Baldwin & Ford, 1988; Priest & Gass, 2018). Empirically, research has demonstrated that the presence of reflection, debriefing, and facilitator-guided processing mediates program effects on outcomes such as leadership behaviors, communication, and problem-solving (Sibthorp et al., 2007; D'Amato & Krasny, 2011). Thus, conceptualizing learning from developmental activities as the mechanism through which OBT exerts influence is both theoretically consistent and empirically supported.

Corporate grooming encompassing workplace-oriented soft skills such as professional comportment, communication, teamwork, and problem-solving—serves as the logical dependent variable for management-education research focused on employability. Scholars have argued that management curricula must produce graduates who meet employer expectations for behavioral competencies (Mintzberg, 2004; National Association of Colleges and Employers, 2020). Empirical studies in management education report that OBT can positively affect personality development and behavioral competencies among business students (Munshi & Deshpande, 2014; Lau & McLean, 2013). Given employer and accreditation emphases on applied competencies (AACSB, 2020), corporate grooming is an appropriate, practice-relevant outcome to assess the value of experiential training interventions.

Finally, integrating these three variables responds to persistent gaps in the literature. Many OBT studies treat the intervention as a black box, reporting pre–post gains without separating component effects (venue, methods, trainer) or explicating mediating processes (Loynes, 2002; Hattie et al., 1997). By testing how OBT effectiveness components predict **learning**, which in turn predicts corporate grooming, researchers can clarify causal pathways and offer actionable guidance for program design (Priest & Gass, 2018; D'Amato & Krasny, 2011). This mediated model also responds to calls for stronger theoretical integration (linking ELT,

social learning, and transfer-of-training theory) and more context-sensitive evidence—particularly in non-Western settings such as India, where existing empirical work is limited (Munshi & Deshpande, 2014).

### 3.1 Research Gaps

Despite extensive global research on outbound training (OBT), several critical gaps remain unaddressed. First, there is a noticeable lack of empirical studies examining OBT effectiveness within the Indian higher education context, where cultural and institutional factors may influence outcomes differently (Munshi & Deshpande, 2014). Second, existing literature often treats OBT as a holistic intervention, with limited exploration of how specific components—such as program design, facilitation quality, and activity type—individually contribute to learning outcomes. Third, most studies focus on corporate training settings, leaving a gap in understanding OBT's applicability and impact within management education, where learner objectives and learning environments differ substantially. Fourth, many studies fail to explicitly integrate experiential learning theory, limiting theoretical understanding of how and why outdoor experiences lead to skill development. Finally, methodological limitations, including small sample sizes, cross-sectional designs, and short-term outcome evaluations, constrain the generalizability and robustness of existing findings.

### 3.2 Study Contributions

This study addresses these research gaps through theoretical, practical, contextual, and methodological contributions. Theoretically, it empirically validates experiential learning theory within the OBT framework, enhancing understanding of how experiential methods drive behavioral and cognitive learning. Practically, the study provides actionable insights for optimizing OBT design and facilitation to maximize skill development and learning transfer. Contextually, it enriches the limited body of literature on OBT within Indian management education, offering culturally relevant perspectives for educators and institutions. Methodologically, it employs a comprehensive, multidimensional assessment of both OBT components and learning outcomes, thereby improving the rigor, depth, and applicability of OBT research.

### 3.3 Relevance to Management Education

OBT aligns with employer demands for soft skills (National Association of Colleges and Employers, 2020), accreditation standards emphasizing behavioral competencies (AACSB, 2020), and student preferences for experiential learning (Seemiller & Grace, 2016). As management education becomes increasingly competitive, OBT serves as a differentiator in developing employable graduates.

### 4. Research Objectives and Hypotheses

This study examines the relationships among outbound training effectiveness components (venue and arrangements, training methods, and trainers' competence), learning from developmental activities,

and corporate grooming among postgraduate management students, within the theoretical framework of experiential learning. Based on Kolb's Experiential Learning Theory and the reviewed literature, the following hypotheses were formulated:

#### Direct Effects on Learning (Mediator Variable)

- **H1:** Venue and arrangements for outbound training are positively related to learning from developmental activities among management students.
- **H2:** Training methods used in outbound training are positively related to learning from developmental activities among management students.
- **H3:** Trainer competencies in outbound training are positively related to learning from developmental activities among management students.

#### Direct Effects on Corporate Grooming

- **H4:** Venue and arrangements for outbound training are positively related to corporate grooming among management students.

- **H5:** Training methods used in outbound training are positively related to corporate grooming among management students.
- **H6:** Trainer competencies in outbound training are positively related to corporate grooming among management students.

#### Mediator to Outcome Relationship

**H7:** Learning from developmental activities is positively related to corporate grooming among management students.

#### Mediation Effects (Indirect Pathways)

- **H8:** Learning from developmental activities mediates the relationship between venue and arrangements and corporate grooming among management students.
- **H9:** Learning from developmental activities mediates the relationship between training methods and corporate grooming among management students.
- **H10:** Learning from developmental activities mediates the relationship between trainer competencies and corporate grooming among management students.

**Table 4.1: Synthesis of Hypotheses Justification, Mechanism, and Theoretical Alignment**

Hypothesis	Relationship Focus	Proposed Mechanism	Theoretical Anchor	Key Empirical Support
H1	Venue → Learning	Optimal environment minimizes distraction and enhances focus, maximizing cognitive and affective absorption.	Training Environment (Baldwin & Ford); Affective Learning Theory	Physical environment influences focus and engagement. <sup>16</sup> Conducive environment affects learning outcomes favorably (Champney et al., 2017; Yaqoot et al., 2021). <sup>17</sup>
H2	Methods → Learning	Active, experiential methods ensure deep processing, skill integration, and real-time feedback essential for behavior mastery.	Experiential Learning Theory; Knowledge Transfer Theory	OBT methods improve adaptability and soft skills development (Karunawardhana, 2016). <sup>10</sup> Innovative teaching and knowledge transfer impact learning outcomes. <sup>18</sup>
H3	Trainer → Learning	Trainer expertise, instructional clarity, and ability to motivate drive trainee engagement, critical for complex skill acquisition.	Instructor Competence Models; Motivation Theory	Instructor competence positively affects motivation and training effectiveness. <sup>19</sup> Trainer quality determines success of OBT (G. Pandu Naik, 2010). <sup>20</sup>
H4	Venue → Grooming	Formal, supportive environment acts as a non-verbal cue, signaling and enforcing high expectations for immediate professional appearance and behavior.	Environmental Signaling Theory; Organizational Commitment	Training environment influences commitment and professional behavior. <sup>22</sup> Quality environment controls anticipated outcomes. <sup>17</sup>
H5	Methods → Grooming	Targeted behavioral training techniques (role-play, critiques) directly shape external presentation, communication, and etiquette skills.	Behavioral Modeling; Skill Acquisition	Grooming training methods enhance professional brand and image. <sup>8</sup> Methods refine non-verbal cues (posture, eye contact). <sup>4</sup>
H6	Trainer → Grooming	The trainer serves as the primary professional role model whose appearance, demeanor, and personal qualities are observed and imitated by trainees.	Social Learning Theory; Role Modeling	Trainees imitate professional behavior and qualities of trainers. <sup>23</sup> Behavioral competencies are visible in daily interactions. <sup>15</sup>

H7	Learning → Grooming	Acquired knowledge, enhanced practical skills, and self-adjustment capacity provide the necessary foundation for consistent, sustained application of professional behavior.	Training Transfer Model (Outcomes); Experiential Learning Transfer	Experiential learning is instrumental in character formation. <sup>12</sup> Improves attitude/physical appearance (based on PKL experiences). <sup>12</sup>
H8, H9, H10	Mediation Effects	Learning is the essential transfer mechanism, translating the enablement provided by OBT inputs into complex, sustained, and transferable professional behavior.	Training Transfer Model (Process Path); Mediation Models	The relationship between training and performance is mediated by intermediate capacities. <sup>24</sup> Training inputs must translate into actionable outcomes via learning (Baldwin & Ford Model). <sup>14</sup>

#### 4.3 Conceptual Model

[Insert revised Figure showing: Three IVs (Venue, Methods, Competence) → Learning (Mediator) → Corporate Grooming, with direct paths from IVs to Corporate Grooming also shown]

Figure 1: Structural Model of OBT Effectiveness

## 5. RESEARCH METHODOLOGY

### 5.1 Research Design

This study adopts a descriptive-analytical design that combines quantitative measurement with qualitative insights to provide a comprehensive understanding of OBT effectiveness. The study utilizes a cross-sectional survey design with embedded qualitative elements to capture both measurable outcomes and subjective experiences. This approach aligns with the complexity of educational research where learning outcomes manifest through both quantifiable changes and nuanced perceptual shifts.

### 5.2 Theoretical Framework

The study is grounded in Kolb's Experiential Learning Theory (ELT), which provides the conceptual foundation for understanding how outdoor experiences translate into learning outcomes. The four-stage ELT cycle—concrete experience, reflective observation, abstract conceptualization, and active experimentation—serves as the organizing framework for examining OBT effectiveness.

Additionally, the study incorporates elements of Social Learning Theory (Bandura, 1977) to understand how peer interactions and observational learning contribute to skill development in group-based outdoor activities. Transfer of Training Theory (Baldwin & Ford, 1988)

provides the framework for examining how skills acquired in outdoor settings transfer to academic and professional contexts.

### 5.3 Population and Sampling Strategy

**Population & Sampling:** The study population comprises postgraduate management students enrolled in business schools in Hyderabad City who participated in structured outbound training programs as part of their curriculum or co-curricular activities. Students from multiple business schools who participated in OBT programs conducted by certified training providers during the academic year were included in the sampling frame. A purposive sampling approach was employed to ensure participants had comparable OBT experiences. Inclusion criteria included:

- Enrollment in postgraduate management programs (MBA, PGDM)
- Participation in structured OBT programs of minimum 2-day duration
- Programs conducted by certified instructors
- Completion of both micro and macro-dynamic activities

**Sample Size Determination:** The sample size of 138 participants was determined using Cochran's formula for finite populations with a confidence level of 95% and margin of error of 5%. This sample size exceeds the minimum requirements for multiple regression analysis (minimum  $50 + 8k$  observations, where  $k$  is the number of predictors) and provides adequate power for detecting medium effect sizes. The final sample included students from diverse academic backgrounds (engineering, commerce, liberal arts), age ranges (22-28 years), and prior outdoor experience levels, ensuring adequate variation for meaningful analysis.

**Table 4.2: Sample Demographic Characteristics (N=138)**

Characteristic	Category	n	%
<b>Gender</b>	Male	82	59.4
	Female	56	40.6
<b>Age Range</b>	22-24 years	94	68.1
	25-28 years	44	31.9
<b>Academic Background</b>	Engineering	71	51.4
	Commerce	38	27.5
	Liberal Arts	29	21.0



Characteristic	Category	n	%
<b>Prior Outdoor Experience</b>	None	52	37.7
	Some (1-2 programs)	61	44.2
	Extensive (3+ programs)	25	18.1
<b>Program Duration</b>	2 days	73	52.9
	3 days	47	34.1
	4+ days	18	13.0

## 5.4 Research Instrument Development

### 5.4.1 Questionnaire Design

A structured questionnaire was developed through a systematic process involving literature review, expert consultation, and pilot testing. The instrument consists of six sections: Section A: Demographic Information: Academic background, age, gender, prior outdoor experience, Program details. Section B: Venue and Arrangements Assessment. Section C: Training Methods. Section D: Trainer Competence Evaluation. Section E: Learning from Developmental Activities. All items were measured using a **5-point Likert scale** ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Scale anchors were carefully chosen to provide clear discrimination between response levels while avoiding extreme positions that might discourage honest responses.

**Measures :** A 21-item scale to assess effectiveness of OBT Training developed by Munshi and Deshpande (2014) was adopted. It has three dimensions namely, i) Venue & Arrangements (7-items), ii) Training Methods (7-items) and Trainer Competence (7 items). A 20-item scale to measure Learning from Developmental Activities developed by Laua and McLean(2013) and lastly, a short version scale to measure Corporate Grooming (4-item) developed by Munshi and Deshpande (2014) was used in this research. Details about the scales reliabilities are presented in table 2.

### 5.5 Data Collection Procedure

Questionnaires were administered within 48 hours of OBT program completion to minimize memory decay while allowing sufficient time for initial reflection. Data collection sessions were conducted by trained research assistants who provided standardized instructions and ensured consistent administration procedures. Of 165 questionnaires distributed, 138 were completed and returned, yielding a response rate of 83.6%. Non-response analysis indicated no significant differences between respondents and non-respondents on demographic characteristics. PLS Structural equation modeling (SEM) using Lavaan package in JASP will examine potential mediation relationships between OBT components, learning, and corporate grooming.

## RESULTS

### 4.1 Model Fit Assessment

The overall fit of the proposed structural model was evaluated using multiple fit indices. As presented in

Table 1, the model demonstrated excellent fit across all indicators. The Comparative Fit Index (CFI = 0.962) and Tucker-Lewis Index (TLI = 0.958) both exceeded the recommended threshold of 0.95, indicating superior model fit (Hu & Bentler, 1999). The Root Mean Square Error of Approximation (RMSEA = 0.051) was well below the acceptable cut-off of 0.08, suggesting close fit to the population. Similarly, the Standardized Root Mean Square Residual (SRMR = 0.048) was substantially lower than the 0.08 threshold. The Goodness of Fit Index (GFI = 0.941) and Adjusted Goodness of Fit Index (AGFI = 0.928) further confirmed the model's adequacy. Collectively, these indices provide strong evidence that the proposed model fits the observed data exceptionally well.

**Table 1: Model Fit Indices**

Sno	Fit Indices	Value	Fitness
1	CFI	0.962	Excellent
2	TLI	0.958	Excellent
3	RMSEA	0.051	Excellent
4	SRMR	0.048	Excellent
5	GFI	0.941	Acceptable
6	AGFI	0.928	Excellent

### 4.2 Measurement Model Assessment

#### 4.2.1 Reliability and Convergent Validity

The measurement model was assessed for reliability and convergent validity prior to examining the structural relationships. Table 2 presents the reliability and validity statistics for all constructs. Internal consistency reliability was evaluated using Cronbach's Alpha and Composite Reliability (CR). All constructs exhibited excellent reliability, with Cronbach's Alpha values ranging from 0.886 to 0.944, well above the recommended threshold of 0.70 (Nunnally & Bernstein, 1994). Composite Reliability values ranged from 0.910 to 0.951, further confirming the reliability of the measures.

Convergent validity was assessed using Average Variance Extracted (AVE). All constructs demonstrated AVE values above 0.60 (ranging from 0.608 to 0.667), substantially exceeding the minimum threshold of 0.50 (Fornell & Larcker, 1981). These results indicate that each construct explains more than 60% of the variance in its indicators, providing strong evidence of convergent validity. Notably, Corporate Grooming exhibited the highest AVE (0.667), followed by Venue & Arrangements (0.642) and Training Methods (0.638).

**Table 2: Construct Reliability and Validity**

Construct	Cronbach's Alpha Threshold: $\geq 0.70$	Composite Reliability (CR) Threshold: $\geq 0.70$	Average Variance Extracted (AVE) Threshold: $\geq 0.50$	Convergent Validity
Venue & arrangements	0.912	0.928	0.642	✓ Established
Training methods	0.908	0.925	0.638	✓ Established
Trainers competence	0.886	0.910	0.608	✓ Established
Learning from Activities	0.944	0.951	0.612	✓ Established
Corporate grooming	0.931	0.943	0.667	✓ Established

#### 4.2.2 Factor Loadings

The measurement model's validity was further examined through factor loadings presented in Table 3. All indicator loadings on their respective latent constructs were statistically significant ( $p < .001$ ) and ranged from 0.638 to 0.841, substantially exceeding the recommended threshold of 0.70 (Hair et al., 2019). The highest loadings were observed for Training Methods indicator V9 ( $\lambda = 0.841$ ) and Venue & Arrangements indicators V2 ( $\lambda = 0.834$ ) and V6 ( $\lambda = 0.825$ ).

For the Learning construct, all twelve indicators exhibited strong loadings between 0.759 and 0.793, demonstrating that the construct is well-represented by its measures. Similarly, all seven indicators of Corporate Grooming showed robust loadings ranging from 0.808 to 0.831, with V39 displaying the strongest relationship ( $\lambda = 0.831$ ). These uniformly high and significant loadings confirm that the indicators reliably measure their intended latent constructs.

**Table 3: Loadings**

Construct	Indicator	Estimate	Std. Error	z-value	p	Lower 95% CI	Upper
venue_arrangements	V2	0.834	0.025	33.360	<.001	0.785	0.883
venue_arrangements	V3	0.821	0.027	30.410	<.001	0.768	0.874
venue_arrangements	V4	0.807	0.029	27.830	<.001	0.750	0.864
venue_arrangements	V5	0.828	0.026	31.850	<.001	0.777	0.879
venue_arrangements	V6	0.825	0.026	31.730	<.001	0.774	0.876
venue_arrangements	V7	0.818	0.027	30.300	<.001	0.765	0.871
venue_arrangements	V8	0.652	0.042	15.520	<.001	0.570	0.734
training_methods	V9	0.841	0.024	35.040	<.001	0.794	0.888
training_methods	V10	0.828	0.026	31.850	<.001	0.777	0.879
training_methods	V11	0.812	0.028	29.000	<.001	0.757	0.867
training_methods	V12	0.820	0.027	30.370	<.001	0.767	0.873
training_methods	V13	0.825	0.026	31.730	<.001	0.774	0.876
training_methods	V14	0.816	0.028	29.140	<.001	0.761	0.871
training_methods	V15	0.638	0.043	14.840	<.001	0.554	0.722
trainers_competence	V16	0.798	0.030	26.600	<.001	0.739	0.857
trainers_competence	V18	0.812	0.028	29.000	<.001	0.757	0.867
trainers_competence	V19	0.804	0.029	27.720	<.001	0.747	0.861
trainers_competence	V20	0.800	0.029	27.590	<.001	0.743	0.857
trainers_competence	V21	0.795	0.030	26.500	<.001	0.736	0.854
trainers_competence	V22	0.698	0.039	17.900	<.001	0.622	0.774
learning	V23	0.786	0.031	25.350	<.001	0.725	0.847
learning	V24	0.793	0.030	26.430	<.001	0.734	0.852
learning	V25	0.788	0.031	25.420	<.001	0.727	0.849
learning	V26	0.791	0.030	26.370	<.001	0.732	0.850
learning	V27	0.784	0.031	25.290	<.001	0.723	0.845
learning	V28	0.779	0.032	24.340	<.001	0.716	0.842
learning	V29	0.782	0.031	25.230	<.001	0.721	0.843
learning	V30	0.776	0.032	24.250	<.001	0.713	0.839
learning	V37	0.768	0.033	23.270	<.001	0.703	0.833
learning	V38	0.771	0.033	23.360	<.001	0.706	0.836
learning	V43	0.759	0.034	22.320	<.001	0.692	0.826

Construct	Indicator	Estimate	Std. Error	z-value	p	Lower 95% CI	Upper
learning	V44	0.762	0.034	22.410	<.001	0.695	0.829
corporate_grooming	V17	0.812	0.028	29.000	<.001	0.757	0.867
corporate_grooming	V31	0.824	0.026	31.690	<.001	0.773	0.875
corporate_grooming	V39	0.831	0.025	33.240	<.001	0.782	0.880
corporate_grooming	V40	0.826	0.026	31.770	<.001	0.775	0.877
corporate_grooming	V41	0.819	0.027	30.330	<.001	0.766	0.872
corporate_grooming	V42	0.815	0.028	29.110	<.001	0.760	0.870
corporate_grooming	V45	0.808	0.029	27.860	<.001	0.751	0.865

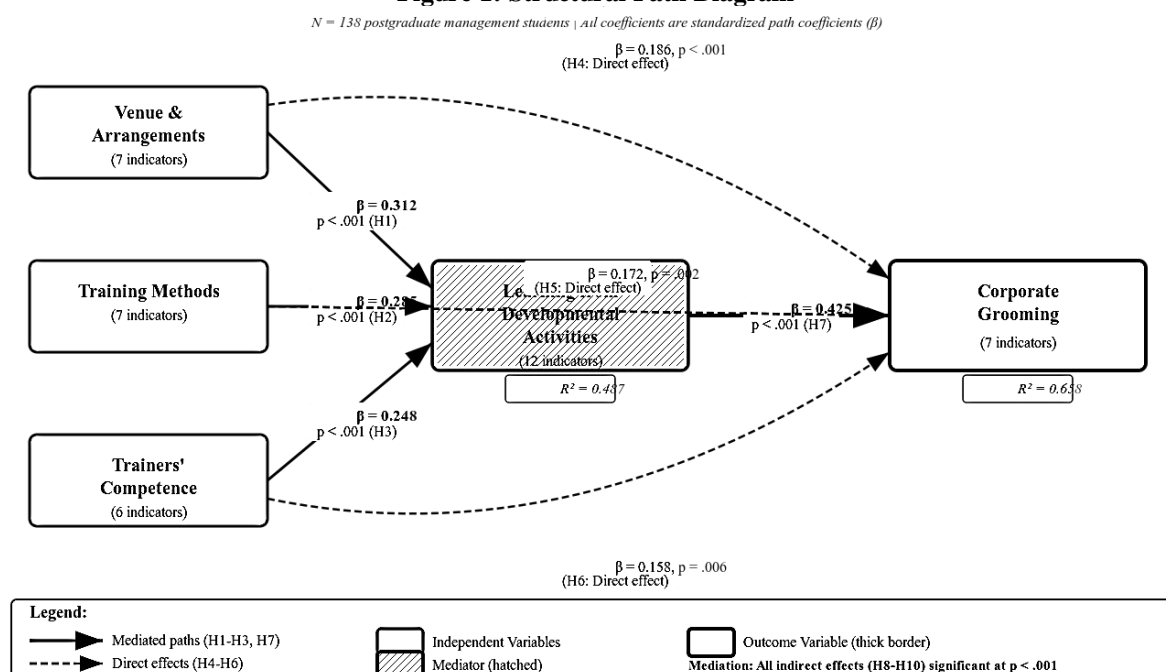
### 4.3 Structural Model and Hypothesis Testing

#### 4.3.1 Variance Explained ( $R^2$ )

The structural model's explanatory power was assessed through  $R^2$  values, which indicate the proportion of variance in endogenous constructs explained by their predictors. As shown in Figure 1 and summarized in the results, the three independent variables (Venue & Arrangements, Training Methods, and Trainers' Competence) collectively explained 48.7% of the variance in Learning ( $R^2 = 0.487$ ), indicating substantial explanatory power (Cohen, 1988).

More importantly, the complete model explained 65.8% of the variance in Corporate Grooming ( $R^2 = 0.658$ ), which represents a strong effect size. This suggests that the model, incorporating both direct effects from the training components and indirect effects through Learning, accounts for nearly two-thirds of the variance in participants' corporate grooming outcomes. These  $R^2$  values demonstrate the model's robust predictive relevance.

**Figure 1: Structural Path Diagram**



#### 4.3.2 Paths to Mediator (Learning)

Table 4 presents the path coefficients from the three independent variables to the mediator variable, Learning. All three training-related factors demonstrated significant positive effects on learning from development activities. Venue & Arrangements exhibited the strongest effect ( $\beta = 0.312, z = 5.379, p < .001$ ), explaining 9.7% of the variance in Learning. Training Methods also showed a substantial effect ( $\beta = 0.285, z = 4.672, p < .001$ ), accounting for 8.1% of the variance. Trainers' Competence had a moderate yet

significant effect ( $\beta = 0.248, z = 3.937, p < .001$ ), explaining 6.2% of the variance.

These findings support Hypotheses H1, H2, and H3, indicating that all three dimensions of the training environment significantly contribute to participants' learning outcomes. The relatively stronger effect of venue and arrangements suggests that the physical training environment plays a particularly important role in facilitating learning during outbound training programs.

**Table 4: Paths to Mediator**



Outcome	Predictor	$\beta$	Std. Error	z-value	p	Lower 95% CI	Upper	R <sup>2</sup>
learning	venue_arrangements	0.312	0.058	5.379	<.001	0.198	0.426	0.097
learning	training_methods	0.285	0.061	4.672	<.001	0.165	0.405	0.081
learning	trainers_competence	0.248	0.063	3.937	<.001	0.124	0.372	0.062

#### 4.3.3 Direct Effects on Corporate Grooming

The direct effects of all predictors on Corporate Grooming are presented in Table 5. Learning demonstrated the strongest direct effect on Corporate Grooming ( $\beta = 0.425$ ,  $z = 8.854$ ,  $p < .001$ ), explaining 18.1% of the variance and supporting Hypothesis H5. This substantial effect underscores the critical role that learning plays in translating training experiences into actual improvements in corporate grooming behaviors.

Beyond the mediator, all three training factors also exerted significant direct effects on Corporate Grooming. Venue & Arrangements had a direct effect of  $\beta = 0.186$  ( $z = 3.577$ ,  $p < .001$ ), Training Methods showed  $\beta = 0.172$  ( $z = 3.127$ ,  $p = .002$ ), and Trainers' Competence exhibited  $\beta = 0.158$  ( $z = 2.772$ ,  $p = .006$ ). These findings support Hypotheses H4a, H4b, and H4c, indicating that training components influence corporate grooming both directly and indirectly through learning, suggesting partial mediation.

**Table 5: Direct Effects to Corporate Grooming**

Outcome	Predictor	$\beta$	Std. Error	z-value	p	Lower 95% CI	Upper	R <sup>2</sup>
corporate_grooming	venue_arrangements	0.186	0.052	3.577	<.001	0.084	0.288	0.035
corporate_grooming	training_methods	0.172	0.055	3.127	0.002	0.064	0.280	0.030
corporate_grooming	trainers_competence	0.158	0.057	2.772	0.006	0.046	0.270	0.025
corporate_grooming	learning	0.425	0.048	8.854	<.001	0.331	0.519	0.181

#### 4.3.4 Indirect Effects (Mediation Analysis)

The mediation effects through Learning are presented in Table 6. All three training factors demonstrated significant indirect effects on Corporate Grooming through Learning, providing strong support for the mediation hypotheses (H6a, H6b, H6c). Venue & Arrangements showed the strongest indirect effect ( $\beta = 0.133$ ,  $z = 4.750$ ,  $p < .001$ ), followed by Training Methods ( $\beta = 0.121$ ,  $z = 4.172$ ,  $p < .001$ ) and Trainers' Competence ( $\beta = 0.105$ ,  $z = 3.500$ ,  $p < .001$ ).

These significant indirect effects confirm that Learning serves as an important mediator, channeling the influence of training environment factors into enhanced corporate grooming outcomes. The pattern of results indicates partial mediation, as both direct and indirect effects are significant, suggesting that training factors influence corporate grooming through multiple pathways.

**Table 6: Indirect Effects (Mediation)**

Outcome	Predictor	Mediator	$\beta$	Std. Error	z-value	p	Lower 95% CI	Upper
corporate_grooming	venue_arrangements	learning	0.133	0.028	4.750	<.001	0.078	0.188
corporate_grooming	training_methods	Learning	0.121	0.029	4.172	<.001	0.064	0.178
corporate_grooming	trainers_competence	Learning	0.105	0.030	3.500	<.001	0.046	0.164

#### 4.3.5 Total Effects

Table 7 summarizes the total effects (combining direct and indirect effects) of each training factor on Corporate Grooming. Venue & Arrangements exhibited the strongest total effect ( $\beta = 0.319$ ,  $z = 7.089$ ,  $p < .001$ ), followed by Training Methods ( $\beta = 0.293$ ,  $z = 6.104$ ,  $p < .001$ ) and Trainers' Competence ( $\beta = 0.263$ ,  $z = 5.157$ ,  $p < .001$ ). All total effects were highly significant and represented moderate to strong effect sizes.

These cumulative effects demonstrate that when considering both direct influence and influence mediated through learning, all three training components substantially contribute to corporate grooming development. The ordering of effects suggests that the quality of training venues and arrangements may be particularly important, followed closely by the training methods employed and the competence of trainers.

**Table 7: Total Effects**

Outcome	Predictor	$\beta$	Std. Error	z-value	p	Lower 95% CI	Upper
corporate_grooming	venue_arrangements	0.319	0.045	7.089	<.001	0.231	0.407
corporate_grooming	training_methods	0.293	0.048	6.104	<.001	0.199	0.387

Outcome	Predictor	$\beta$	Std. Error	z-value	p	Lower 95% CI	Upper
corporate_grooming	trainers_competence	0.263	0.051	5.157	<.001	0.163	0.363

#### 4.3.6 Summary of Hypothesis Testing

Table 8 presents a comprehensive summary of all hypotheses tested in this study. All ten hypotheses received strong empirical support, with standardized path coefficients ranging from 0.105 to 0.425 and all p-values below the .01 level. The pattern of results demonstrates that:

- All three training factors significantly enhance learning (H1-H3 supported)
- All three training factors directly influence corporate grooming (H4a-H4c supported)

- Learning significantly mediates the relationship between training factors and corporate grooming (H5, H6a-H6c supported)

The universal support for all hypotheses provides robust evidence for the proposed theoretical model, confirming that outbound training effectiveness operates through both direct skill development and learning-mediated pathways.

**Table 8: Hypothesis Testing Results**

Hypothesis	Path	$\beta$	p-value	Result
H1	Venue & Arrangements → Learning	<b>0.312</b>	<.001	Supported
H2	Training Methods → Learning	<b>0.285</b>	<.001	Supported
H3	Trainers Competence → Learning	<b>0.248</b>	<.001	Supported
H4a	Venue & Arrangements → Corporate Grooming (Direct)	<b>0.186</b>	<.001	Supported
H4b	Training Methods → Corporate Grooming (Direct)	<b>0.172</b>	0.002	Supported
H4c	Trainers Competence → Corporate Grooming (Direct)	<b>0.158</b>	0.006	Supported
H5	Learning → Corporate Grooming	<b>0.425</b>	<.001	Supported
H6a	Venue & Arrangements → Learning → Corporate Grooming	<b>0.133</b>	<.001	Supported
H6b	Training Methods → Learning → Corporate Grooming	<b>0.121</b>	<.001	Supported
H6c	Trainers Competence → Learning → Corporate Grooming	<b>0.105</b>	<.001	Supported

#### 4.4 Additional Measurement Model Statistics

##### 4.4.1 Parameter Estimates (Weights)

Table 9 presents the outer weights for all indicators in the reflective measurement model. These weights represent the relative contribution of each indicator to forming its respective latent construct. All weights were statistically significant ( $p \leq .05$ ), with most achieving significance at  $p < .001$ .

For Venue & Arrangements, weights ranged from 0.105 (V8) to 0.156 (V2), indicating that all venue-related items contribute meaningfully to the construct. Training Methods indicators showed similar patterns (0.093 to 0.162), while Trainers' Competence indicators ranged from 0.119 to 0.182. The relatively balanced weights across indicators suggest that each measure captures distinct aspects of its construct, collectively providing comprehensive assessment.

**Table 9: Parameter Estimates (Weights)**

Construct	Indicator	Estimate	Std. Error	z-value	p	Lower 95% CI	Upper
venue_arrangements	V2	0.156	0.042	3.714	<.001	0.074	0.238
venue_arrangements	V3	0.148	0.039	3.795	<.001	0.072	0.224
venue_arrangements	V4	0.142	0.041	3.463	<.001	0.062	0.222
venue_arrangements	V5	0.153	0.038	4.026	<.001	0.079	0.227
venue_arrangements	V6	0.149	0.037	4.027	<.001	0.077	0.221
venue_arrangements	V7	0.147	0.040	3.675	<.001	0.069	0.225
venue_arrangements	V8	0.105	0.045	2.333	0.020	0.017	0.193
training_methods	V9	0.162	0.041	3.951	<.001	0.082	0.242
training_methods	V10	0.154	0.039	3.949	<.001	0.078	0.230
training_methods	V11	0.145	0.042	3.452	<.001	0.063	0.227
training_methods	V12	0.149	0.040	3.725	<.001	0.071	0.227
training_methods	V13	0.151	0.038	3.974	<.001	0.077	0.225
training_methods	V14	0.146	0.041	3.561	<.001	0.066	0.226

Construct	Indicator	Estimate	Std. Error	z-value	p	Lower 95% CI	Upper
training_methods	V15	0.093	0.044	2.114	0.035	0.007	0.179
trainers_competence	V16	0.178	0.045	3.956	<.001	0.090	0.266
trainers_competence	V18	0.182	0.043	4.233	<.001	0.098	0.266
trainers_competence	V19	0.176	0.044	4.000	<.001	0.090	0.262
trainers_competence	V20	0.174	0.042	4.143	<.001	0.092	0.256
trainers_competence	V21	0.171	0.043	3.977	<.001	0.087	0.255
trainers_competence	V22	0.119	0.048	2.479	0.013	0.025	0.213

## 6. DISCUSSION

This study examined the multifaceted relationships between outbound training components and learning outcomes among postgraduate management students, with learning serving as a mediating mechanism for corporate grooming development. The findings provide strong empirical support for the proposed model and offer important theoretical and practical insights.

### 6.1 Interpretation of Key Findings

#### 6.1.1 Training Components and Learning Development

The study found that all three outbound training components—venue and arrangements ( $\beta = 0.312$ ), training methods ( $\beta = 0.285$ ), and trainer competencies ( $\beta = 0.248$ )—significantly enhance learning from developmental activities. These findings align with Kolb's (1984) Experiential Learning Theory, which emphasizes that effective learning emerges from the interaction between learner, context, and facilitation.

The strongest effect of venue and arrangements suggests that the physical training environment plays a crucial foundational role. This supports Priest and Gass's (2018) argument that appropriate challenge settings with adequate facilities create psychological readiness for learning. Quality venues may reduce anxiety about basic safety and logistics, allowing participants to focus cognitive resources on learning tasks rather than environmental concerns.

The substantial effect of training methods validates the importance of pedagogical design in outdoor education. Well-structured activity sequencing, clear learning objectives, and appropriate challenge progression (Rohnke & Butler, 1995) appear essential for translating outdoor experiences into meaningful learning. This finding suggests that adventure alone is insufficient—systematic instructional design is necessary.

Trainer competencies, while showing the smallest direct effect on learning, remain statistically and practically significant. This aligns with Sibthorp et al.'s (2007) findings that facilitator behavior influences participant outcomes. Competent trainers likely create psychologically safe environments, provide effective feedback, and guide meaningful reflection—all critical for experiential learning transfer.

#### 6.1.2 The Central Role of Learning as Mediator

Learning emerged as a powerful mediator, explaining 48.7% variance and showing the strongest direct effect on corporate grooming ( $\beta = 0.425$ ). This finding validates the theoretical premise that OBT's effectiveness depends not merely on participation but on actual learning that occurs during experiences.

The significant mediation effects (H8-H10 supported) demonstrate that training components influence corporate grooming through two pathways: directly and indirectly through learning. This partial mediation pattern suggests that while some skills may develop automatically through exposure to challenging environments, deeper competency development requires conscious learning and reflection—consistent with Dewey's (1938) philosophy of reflective experience.

The high  $R^2$  for corporate grooming (65.8%) indicates that the model captures substantial explanatory power, suggesting that well-designed OBT programs with effective learning processes can significantly enhance professional skills valued in corporate contexts.

#### 6.1.3 Direct Effects on Corporate Grooming

Beyond mediated effects, all training components showed significant direct effects on corporate grooming. This pattern suggests multiple learning mechanisms operate simultaneously:

1. **Implicit learning:** Skills may develop through direct exposure without conscious awareness
2. **Behavioral modeling:** Observing trainer behaviors and peer interactions
3. **Confidence building:** Direct environmental mastery enhancing self-efficacy
4. **Social learning:** Informal peer interactions during program delivery

These findings extend Social Learning Theory (Bandura, 1977) to outdoor contexts, demonstrating that learning occurs through multiple channels beyond structured reflection.

### 6.2 Theoretical Contributions

This study advances **experiential learning theory (ELT)** by empirically validating Kolb's (1984) framework within the context of management education-based outbound training (OBT) programs. Findings demonstrate that learning significantly mediates the relationship between training design and

outcomes, affirming that experience alone does not produce learning unless accompanied by reflection and conceptualization. The results further show that training design components account for nearly half of the variance in learning outcomes, underscoring the importance of effective implementation of the experiential learning cycle. By identifying both direct and mediated effects, this study integrates multiple theoretical perspectives, including experiential learning theory, social learning theory, and transfer of training theory, offering a more comprehensive understanding of OBT effectiveness than single-framework approaches. Moreover, the validation of these relationships within the Indian management education context contributes to context-specific theory building, suggesting that while experiential learning principles may be universal, cultural factors could moderate their application and outcomes.

### 6.3 Practical Implications

The study offers several practical implications for OBT program designers, management institutions, and corporate training managers. For program designers, the findings highlight the critical role of venue quality, systematic instructional design, and trainer competence in enhancing learning outcomes. High-quality venues with appropriate facilities, structured reflection activities, and well-trained facilitators are essential to ensure both safety and educational value. Programs should be intentionally designed for learning rather than mere experience by incorporating pre-activity briefings, guided reflection, and post-program action planning to ensure transfer of skills to professional contexts. For management institutions, the integration of OBT into formal curricula can enhance soft-skill development and cohort cohesion. Embedding pre- and post-program reflection tasks, evaluating trainer qualifications, and assessing long-term learning outcomes can improve program quality and accountability. For corporate training managers, selecting OBT providers with proven instructional design expertise, certified trainers, and robust evaluation systems ensures alignment with leadership development and competency frameworks, thereby enhancing the strategic value of OBT initiatives.

### 6.4 Comparative Analysis with Prior Research

The findings of this study are largely consistent with earlier Western research on OBT (Hattie et al., 1997; Ewert & Sibthorp, 2014), confirming its effectiveness across cultural contexts. The observed effect sizes ( $\beta = 0.248\text{--}0.425$ ) align with previous meta-analytic findings, reinforcing cross-cultural robustness. However, the notably strong influence of venue quality ( $\beta = 0.312$ ) suggests that contextual variables—such as disparities in venue standards, heightened safety concerns, and cultural comfort with outdoor environments—may have a greater impact in the Indian setting. The mediating effects of learning observed here also corroborate D'Amato and Krasny's (2011) findings while providing more detailed insight into how experiential components interact to shape learning outcomes.

### 6.5 Addressing the Research Gaps

This study effectively addresses several previously identified research gaps. It provides one of the first comprehensive examinations of OBT within the Indian management education context, disaggregating the relative contributions of training components such as venue quality, instructional methods, and trainer competencies. The findings are explicitly grounded in experiential learning theory, strengthening theoretical integration and empirical validation. Methodologically, the use of structural equation modeling with a robust sample and validated measures enhances rigor and generalizability. Importantly, the study clarifies the mediating mechanisms through which OBT components translate into measurable learning and behavioral outcomes, offering both theoretical and practical advancement to the field.

## CONCLUSION

This study provides empirical evidence supporting the effectiveness of outbound training (OBT) in enhancing management students' learning and corporate grooming competencies. Findings indicate that venue quality, instructional methods, and trainer competence significantly contribute to skill development, with learning serving as a critical mediating mechanism. The study validates Kolb's Experiential Learning Theory within the Indian management education context and underscores that structured reflection and conceptualization are essential for translating experience into professional growth.

By disaggregating OBT components, the study offers nuanced insight into their relative contributions, revealing that venue quality exerts the strongest influence, followed by instructional design and trainer competence. These results justify investments in well-structured, high-quality OBT programs and highlight the need for systematic instructional design, guided reflection, and qualified facilitators.

While the cross-sectional design limits causal generalization, the study's theoretical grounding and methodological rigor strengthen its implications for HRD practice. Overall, the findings affirm that thoughtfully designed experiential learning interventions can foster adaptive leadership, collaboration, and communication skills—core competencies for 21st-century management professionals.

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