SUB THEME 12

Miscellaneous

Human Resource Management Issues and Challenges: A Study Based on the University Grants Commission of Sri Lanka

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Abstract

Human resources (HR) are essential to the success of any organization, with their knowledge, skills, and abilities directly influencing productivity (Armstrong, 2008). Human resource management (HRM) functions—such as recruitment, performance management, employee motivation, and training—play a strategic role in managing people and creating a conducive workplace culture (Dessler, 2003). However, managing HR presents significant challenges due to evolving workplace demands, particularly in complex and resource-constrained environments like those found in public sector organizations (Idalberto, 2001). This study investigates the HRM challenges faced by the University Grants Commission (UGC) of Sri Lanka, the apex body responsible for the administration of higher education institutions in the country. Despite having regulatory frameworks in place, such as the Establishment Code (E-Code) and circulars, the UGC faces numerous HR-related issues, including political interference, lack of structured recruitment policies, and insufficient training programs. The University Grants Commission (UGC) in Sri Lanka follows a structured set of procedures for managing human resources, as outlined in the Establishment Code and supplementary circulars. Key HR activities include recruitment, promotion, transfers, salary determination, allowances, leave management, disciplinary procedures, and union activities.

Recruitment at the UGC is divided into two categories: administrative and non-administrative staff. Administrative positions are

filled through open advertisements, while non-administrative roles are recruited through both internal and public advertisements.

Promotions are governed by UGC circulars, but there is no formal transfer policy for administrative and non-administrative staff, though a transfer scheme exists and is managed by a transfer board that meets bi-monthly. In terms of salary, the UGC has the authority to set wages within the parameters of the government's overall wage and salary policies, determining remuneration and benefits for different staff grades. The UGC has a comprehensive leave system that includes vacation, casual, sabbatical, study, maternity, and medical leave, among others, as specified in Chapter 10 of the Establishment Code. Additionally, the UGC has a clear disciplinary procedure outlined in Chapter 19 of the Code.

Despite these formal structures, the UGC lacks a cohesive, written Human Resources policy. While procedures exist, challenges arise in their practical application, including the absence of a systematic annual training program, a performance-based appraisal system, and welfare and recreation facilities. Consequently, this study seeks to identify the key HR challenges facing the UGC and offers recommendations for improving HR management in Sri Lanka's higher education sector.

Sri Lanka’s higher education sector, the University Grants Commission (UGC) serves as the apex governing body, established under the Universities Act No. 16 of 1978. The UGC’s core responsibilities include planning and coordinating university education, allocating funds to higher education institutions (HEIs), maintaining academic standards, regulating HEI administration, and overseeing student admissions. As a public institution, the UGC operates under resource constraints, making effective HRM crucial to achieving its mission of providing quality public service. However, despite the importance of HRM, the UGC faces significant challenges related to HR management, including issues in recruitment, development, and performance management.

Although HRM challenges have been widely studied in various sectors, there is a gap in the literature concerning HR issues in the higher education sector, particularly in the UGC. This study aims to fill that gap by exploring the HR challenges faced by the UGC and offering recommendations for improvement.

The main objectives of this study are to:

- Examine the nature of HR issues and challenges at the UGC.
- Identify factors contributing to these challenges.
- Provide recommendations for the development of an HRM policy for the UGC.

HRM plays a critical role in fostering organizational growth by ensuring the efficient management of human capital (Armstrong, 2008). Key functions of HRM include human resource planning, recruitment and selection, training and development, performance management, and reward systems. Armstrong (2008) explains that effective HR practices lead to positive outcomes, such as increased employee well-being and enhanced organizational productivity. However, in the context of public sector organizations like the UGC, HRM faces unique challenges. Recruitment processes are often subject to political interference, while training and development programs are underfunded and inadequately structured.

The literature highlights the importance of merit-based recruitment and structured performance management systems. Hodgetts & Hegar (2008) note that the use of unstructured interviews leads to poor hiring decisions, while Chang & Huang (2005) emphasize that traditional HR practices are often insufficient in addressing the complexities of today's dynamic work environments. Organizations face a lot of challenges related to training and development (Thahi, 2008).

Research Methodology

The study adopts a qualitative research approach using a case study method. This approach allows for an in-depth exploration of HRM challenges at the UGC, drawing on both primary and secondary data.

Primary data will be collected through semi-structured interviews with a sample of 10 UGC employees, including administrative and non-administrative staff. Secondary data will be gathered from official documents, circulars, and field observations. This triangulated approach will ensure the validity and reliability of the findings.

Objective of the study

This study aims to identify the human resource issues and challenges within the University Grants Commission (UGC) of Sri Lanka, the apex body governing the university system in the country. The scope is confined to the UGC itself, focusing on its internal HR practices and challenges, without extending to individual universities or other higher education institutions in Sri Lanka.

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Weighing the Aesthetic Appeal and Cost-Effectiveness of Modern Building Materials Compared to Traditional Options

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Abstract

This study explores the aesthetic appeal and cost-effectiveness of modern versus traditional building materials. The introduction highlights the challenge of balancing innovative materials with time-tested options, considering visual identity, functionality, and sustainability. The methodology employs a multi-phased approach, including a comprehensive literature review, case studies of existing buildings, and surveys to evaluate aesthetic preferences. Cost-effectiveness is analysed through life-cycle costing, considering initial costs, installation, maintenance, and long-term energy efficiency. Results reveal that material preferences are strongly influenced by building type and desired aesthetic. Modern materials excel in contemporary designs, particularly for commercial and high-rise residential projects, while traditional materials remain popular for classic residential styles. A trend towards "hybrid" aesthetics emerges, combining modern functionality with traditional charm. Cost analysis shows higher initial costs for some modern materials, offset by potential savings in installation time and energy efficiency. The discussion emphasizes the importance of balancing aesthetics, cost-effectiveness, and project goals when selecting materials. The conclusion underscores the potential of combining modern and traditional materials to achieve desired aesthetics while optimizing cost-effectiveness. The study highlights the growing importance of sustainability in material selection and suggests future research directions, including the perception of emerging sustainable materials and advancements in prefabrication techniques to further optimize cost and construction times.

Introduction

The selection of building materials forms the very foundation of a structure, shaping its visual identity, functionality, and ability to withstand the test of time (Eze, et.al., 2021). Throughout history, advancements in technology and material science have continuously unveiled new options for architects and builders. Today, we stand at a fascinating crossroads, with a vast array of modern marvels fighting for space alongside time-tested traditional options. Striking a balance between aesthetic appeal, cost-effectiveness, and environmental responsibility remains a central challenge in the construction industry (Eze, et.al., 2021).

Modern building materials, born from cutting-edge research and development, offer a more and more of advantages. Engineered wood products, for instance, are not simply timber writ large; they are carefully crafted composites, utilizing smaller wood pieces strategically bonded together. This results in exceptional strength-to-weight ratios, allowing for lighter and more innovative building designs that push the boundaries of architectural expression (Yadav & Kumar 2021). Prefabricated concrete panels, another modern marvel, offer a level of accuracy and efficiency that traditional on-site concrete pouring struggles to match. These pre-cast elements can be produced in controlled environments, minimizing waste and ensuring consistent quality. Additionally, composite cladding systems, often featuring a combination of materials like metal and recycled plastic, offer a lightweight and durable alternative to traditional facades while also incorporating sustainable practices (Martini 2014).

However, these innovative materials often come at a premium price point compared to their traditional counterparts. Brick, a material honed over millennia, offers a well-understood level of performance. Brick facades, with their rich textures and historical explanations, release a sense of permanence and craftsmanship that is difficult to replicate with modern materials (Yoon, 2023). Natural stone elements, like granite or slate, elevate a structure with a sense of luxury and an un rejectable connection to the

natural world. These traditional materials are often readily available in many regions, requiring less specialized labour for installation, potentially lowering upfront construction costs (Yoon, 2023). Yet, while traditional materials offer unprojectable charm and a proved track record, they may not always boast the same level of energy efficiency or structural flexibility as their modern counterparts.

Understanding the variation interplay between aesthetics and cost-effectiveness for both modern and traditional building materials is crucial for all stakeholders involved in the construction process (Eze, et.al., 2021). Architects must carefully weigh the desired visual impact of a structure against the budgetary considerations of a project. Builders need to consider the ease and efficiency of working with various materials, while homeowners must factor in both upfront costs and long-term maintenance requirements. Finally, with a growing focus on environmental responsibility, the impact of material selection on a building's sustainability throughout its lifecycle becomes an increasingly important consideration (Sharma, 2020).

By carefully weighing these factors, informed decisions can be made that ensure a building not only meets functional needs but also stands as a visually pleasing, cost-conscious, and environmentally responsible addition to the built environment. The future of construction lies in a thoughtful marriage of modern innovation and time-tested traditions, creating structures that are as beautiful and functional as they are sustainable.

Literature Review

The selection of building materials forms the cornerstone of any structure, shaping its visual identity, functionality, and ability to withstand the test of time (Eze, et.al., 2021). Throughout history, advancements in technology and material science have continuously introduced new options for architects and builders. Today, this evolution presents a fascinating challenge: how do we replace the ever-expanding array of modern materials

while still appreciating the enduring appeal and established performance of traditional options? Striking a balance between aesthetic appeal, cost-effectiveness, and environmental responsibility remains a central concern in the construction industry (Eze, et.al., 2021). This critical review delves into the ongoing conversation surrounding the aesthetic and economic considerations of modern versus traditional building materials.

Modern Materials: Innovation and Sustainability

Modern building materials, born from cutting-edge research and development, offer a too much of advantages that push the boundaries of architectural expression. Engineered wood products (EWPs), for instance, are not simply timber logs writ large. These carefully crafted composites utilize smaller wood pieces strategically bonded together, resulting in exceptional strength-to-weight ratios. This allows for lighter and more innovative building designs, facilitating the creation of structures that were previously unimaginable (Yadav & Kumar 2021). Prefabricated concrete panels represent another significant advancement. These pre-cast elements, produced in controlled environments, offer a level of accuracy and efficiency that surpasses traditional on-site concrete pouring. This translates to minimized waste, consistent quality, and faster construction times. Additionally, composite cladding systems, often featuring a combination of materials like metal and recycled plastic, offer a lightweight and durable alternative to traditional facades. These systems not only enhance aesthetics but also incorporate sustainable practices by utilizing recycled content (Martini 2014).

However, the cutting-edge nature of modern materials often translates to a higher price point compared to their traditional counterparts. The research and development involved in creating these innovative materials, coupled with potentially higher production costs, can be a barrier for projects with tighter budgets.

Traditional Materials: Timeless Appeal and Established Performance

Traditional building materials, like brick, stone, and solid wood, offer a well-established track record and a timeless aesthetic that repeat with many. Brick facades, for instance, with their rich textures and historical explanation, exude a sense of permanence and craftsmanship that is difficult to replicate with modern materials (Yoon, 2023). Similarly, natural stone elements, such as granite or slate, elevate a structure with a sense of luxury and undeniable connection to the natural world. These materials possess a well-understood performance history, allowing architects and builders to confidently predict their behaviour and lifespan within a structure (Singh et al., 2016). Furthermore, traditional materials tend to be readily available in many regions, requiring less specialized labour for installation. This translates to potentially lower upfront construction costs compared to some modern options (Yoon, 2023).

However, while traditional materials offer undeniable charm and a proven track record, they may not always boast the same level of energy efficiency or structural flexibility as their modern counterparts. Brick and stone, for example, can be heavier and less thermally efficient than some modern options, potentially leading to higher energy consumption for heating and cooling a building (Zabalza, et.al., 2011). Additionally, traditional materials may require more ongoing maintenance compared to some modern options, potentially impacting long-term life cycle costs.

Balancing Aesthetics and Cost-Effectiveness: A Fine Variation Approach

A review of the literature reveals a need for a fine variation approach when selecting building materials. While modern options excel in innovation and sustainability, their cost can be a barrier, particularly for budget-conscious projects. Traditional materials offer established aesthetics and potentially lower upfront costs but may lack the flexibility and environmental benefits of modern options. Architects, builders, and homeowners must carefully weigh these trade-offs to make informed

decisions that align with project goals, aesthetics, and budgetary constraints.

Beyond Aesthetics and Cost: The Growing Importance of Sustainability

The conversation surrounding building materials extends beyond aesthetics and cost-effectiveness. With a growing focus on environmental responsibility, the impact of material selection on a building's sustainability throughout its lifecycle is becoming increasingly important (Sharma, 2020). The embodied energy, or the energy required to extract, process, transport, and install a material, is a key consideration (Stecker, 1999). Some modern materials, particularly those with a high recycled content, can boast lower embodied energy compared to traditional materials. Additionally, the operational energy, or the energy required to heat, cool, and maintain a building over its lifespan, also plays a crucial role (Sharma, 2020). Modern materials with superior thermal insulation properties can significantly reduce operational energy consumption.

Methodology

This research will employ a multi-phased approach to comprehensively analyse the aesthetic appeal and cost-effectiveness of modern versus traditional building materials. First, the scope will be defined by specifying the type of buildings (residential, commercial) and identifying specific material categories for comparison (roofing, siding, flooring). Clear definitions will be established for ʻmodern’ and ʻtraditional’ materials within each category.

The data collection phase will involve a two-way approach. A comprehensive literature review will be conducted, searching academic journals, industry publications, and architectural case studies. This review will explore current trends in aesthetics and user preferences for various materials, analyse the performance characteristics (durability, energy efficiency, and maintenance) of both modern and traditional options, and examine life-cycle costing analyses that consider not just initial material

costs but also long-term expenses like installation, maintenance, and replacement. Additionally, existing buildings that successfully integrate both modern and traditional materials will be analysed as case studies. These case studies will delve into the impact of material selection on aesthetics and functionality, provide cost breakdowns for material procurement, installation, and maintenance for both modern and traditional options within the case study buildings, and explore occupant satisfaction through surveys or interviews.

To evaluate aesthetics, a survey instrument will be developed utilizing image-based questionnaires showcasing buildings with modern and traditional materials. The survey will also incorporate semantic differential scales to measure user perceptions on attributes like "modern/traditional," "luxurious/basic," or "warm/cold" associated with different materials. Open-ended questions will be included to capture qualitative user preferences and reasoning behind their aesthetic choices. The survey will be conducted with a diverse range of participants, including architects, designers, and potential homeowners, to gain a well-rounded understanding of how aesthetics is evaluated across different user groups.

Beyond aesthetics, a cost-effectiveness analysis will be conducted. This analysis will gather cost data for both modern and traditional materials per unit, factor in installation labour costs for each material type, and consider potential cost savings associated with modern materials, such as prefabrication, faster construction times, reduced maintenance needs, and improved energy efficiency leading to lower utility bills. A life-cycle cost model will then be developed to compare the total costs of traditional vs. modern materials over a specific timeframe.

Following data collection, the research will move into the analysis phase. Survey data will be analysed to identify trends in aesthetic preferences for different materials. The cost data and life-cycle cost models will be compared to determine the cost-effectiveness of each material option. Finally, aesthetic preferences will be combined with the cost

analysis to create a weighted evaluation framework for selecting optimal building materials, considering both aesthetics and cost-effectiveness for a particular project.

The research will conclude by summarizing the findings on aesthetic appeal and cost-effectiveness of modern vs. traditional materials. Potential limitations of the research and areas for further investigation will be discussed. Finally, recommendations will be provided for architects, designers, and builders on selecting building materials based on aesthetics, cost-effectiveness, and project goals. This comprehensive methodology will provide valuable insights for building design and material selection, offering a clear picture of the trade-offs between aesthetics and cost for modern and traditional building materials.

Results and Discussion

The aesthetic evaluation revealed a fascinating interplay between material selection and building style. Modern materials, with their clean lines and innovative applications like exposed concrete and expansive glass, reused strongly with preferences for contemporary aesthetics. Traditional materials, on the other hand, remained the go-to choice for projects seeking a timeless elegance or a harmonious blend with existing architectural styles. Interestingly, the research identified a sweet spot – some modern materials, like engineered wood with unique finishes, offered a captivating fusion of modern functionality and a touch of traditional warmth. This highlights a crucial point: building type plays a significant role in material preference. Modern materials like metal panels and expansive glass were favoured for their ability to create a clean, contemporary aesthetic in commercial and high-rise residential projects. Conversely, traditional materials like brick, stone, and wood remained popular choices for fostering a classic or vernacular style in residential settings, particularly resonating with users who appreciate the inherent warmth and sense of history they exposed. Notably, a trend towards "hybrid" aesthetics emerged. Engineered wood with unique finishes and textured pre-cast concrete panels offered a solution

for those seeking a balance between modern functionality and a touch of traditional charm, appealing to a wider range of aesthetic preferences.

The cost-effectiveness analysis provided valuable insights beyond aesthetics. While life cycle costing exposed a higher initial cost for some modern materials, factors like faster installation times with prefabricated metal panels can significantly reduce overall construction costs. Energy efficiency appeared as another crucial consideration. Modern materials like high-performance windows and insulated concrete forms can lead to substantial life cycle cost savings through reduced energy consumption for heating and cooling over the lifespan of a building. Interestingly, the analysis also highlighted a trade-off in maintenance costs. While some modern materials highly inherent durability and weather resistance, repairs for features like large skylights or expansive glass facades could be more expensive compared to traditional options.

In conclusion, the research underscores the importance of striking a balance between aesthetics, cost-effectiveness, and project goals when selecting building materials. Modern materials excellent in achieving a smooth, contemporary aesthetic and offer opportunities for innovative design, potentially leading to life cycle cost benefits through energy savings. Traditional materials, on the other hand, provide a timeless aesthetic appeal, often at a lower initial cost, and buildings with a sense of warm and connection to historical styles. By considering these findings alongside a comprehensive cost analysis and project-specific aesthetic goals, architects and designers can make informed material selections. This research also highlights the potential of combining modern and traditional materials to achieve a desired aesthetic while optimizing cost-effectiveness. Furthermore, integrating sustainable considerations, such as the environmental impact of material production and disposal, is crucial for responsible decision-making in the construction industry. Future research could look after deeper into the perception of emerging sustainable materials in terms of aesthetics and cost and explore advancements in

prefabrication and modular construction using modern materials to further optimize cost and construction times.

Conclusion and Implications

This research has search into the intricate world of modern versus traditional building materials, unveiling a dynamic interplay between aesthetics, cost-effectiveness, and project goals. The findings illuminate the influence of building type, user preferences, and evolving design trends on material selection.

Key conclusions highlight the smoothly changed relationship between aesthetics and building type. Modern materials, with their clean lines and innovative applications, resonate strongly with modern aesthetics, particularly in commercial and high-rise residential projects. Again, traditional materials remain the cornerstone for residential projects seeking a timeless elegance or a harmonious blend with existing architectural styles. Interestingly, the research identified a combination – "hybrid" aesthetics. Engineered wood with unique finishes and textured pre-cast concrete panels offer a solution for those seeking a balance between modern functionality and a touch of traditional charm, appealing to a wider range of aesthetic preferences. This trend underscores the ability of material selection to shape not just the visual identity of a building but also the emotional connection it brings up to mind.

Beyond aesthetics, the cost-effectiveness analysis revealed a multi-faceted picture. While modern materials often carry a higher upfront cost, the potential for savings exists. Faster installation times with prefabricated elements can significantly reduce overall construction costs. Additionally, advancements in energy-efficient modern materials, like high-performance windows and insulated concrete forms, can lead to substantial life cycle cost savings through reduced energy consumption for heating and cooling over the lifespan of a building. The research also highlights a trade-off in maintenance costs. While some modern materials boast inherent durability and weather resistance, repairs for features like large skylights or expansive

glass facades could be more expensive compared to traditional options. A comprehensive cost analysis that factors in both initial material costs and long-term considerations like maintenance and energy efficiency is crucial for informed decision-making.

The implications for design and construction are far-reaching. Armed with the findings of this research, architects and designers can make data-driven decisions by carefully considering the desired aesthetic alongside a comprehensive cost analysis that incorporates both material and life cycle expenses. The research also underscores the power of strategic material combinations. By thoughtfully blending modern and traditional materials, architects can achieve a desired aesthetic while optimizing cost-effectiveness for a project. This approach allows for pushing the boundaries of design innovation while remaining mindful of budgetary constraints.

Furthermore, the research emphasizes the increasing importance of integrating sustainability considerations into the material selection process. Beyond aesthetics and cost, the environmental impact of material production, use, and disposal must be factored into the decision-making equation (Boye & Reyes, 2014; Dixit et al., 2010). Architects and designers can play a vital role in promoting sustainable practices by specifying materials with lower embodied energy (the energy required to extract, process, transport, and install a material) and choosing for materials with high recycled content. Additionally, the selection of materials with superior durability and low maintenance requirements can minimize the environmental impact associated with material replacement over the life cycle of a building.

In conclusion, this research journey has unveiled the complex material woven from aesthetics, cost-effectiveness, and sustainability in the kingdom of building materials. By understanding the smooth changes of these factors and their interplay, architects, designers, and builders can make informed decisions that lead to the creation of not just visually

appealing and cost-conscious structures but also buildings that are environmentally responsible and contribute to a more sustainable future for the built environment. Future research could look after deeper into areas like user perception of emerging sustainable materials, life cycle assessment methodologies for embodied and operational energy of building materials, and advancements in prefabrication and modular construction using modern materials to further optimize cost, construction times, and environmental impact.

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The Role of Prosthetic Makeup for Creating Realistic Creature Effects in Fantasy Movies

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Abstract

Prosthetic makeup has long been an essential tool in the creation of realistic creature effects in fantasy cinema, significantly enhancing the storytelling experience. This study explores the impact of prosthetic makeup on audience immersion and the overall effectiveness of creature portrayal in fantasy films, specifically focusing on Guillermo del Toro's "Pan's Labyrinth" (2006) and "The Shape of Water" (2017). Both films exemplify the use of practical effects to create visually striking and emotionally resonant characters, illustrating the power of prosthetic makeup in shaping audience perception and engagement.

Literature Review

The use of prosthetic makeup in film dates back to the early days of cinema, evolving alongside technological advancements in materials and techniques. Scholars such as John McKitterick and Richard Rickitt have highlighted the emotional impact of practical effects compared to CGI, arguing that the tangible presence of prosthetics fosters a deeper connection between the audience and the characters (McKitterick, 2009; Rickitt, 2007).

In "Pan's Labyrinth," the faun and the Pale Man serve as iconic examples of creature design, demonstrating the effectiveness of prosthetic makeup in evoking fear and wonder. Del Toro's collaboration with makeup artist David Marti resulted in intricate designs that brought these characters to life, enhancing the film's dark fairy tale narrative (Marti, 2018). Similarly, "The Shape of Water" features the Amphibian Man, whose prosthetic design blends realism and fantasy, challenging traditional

representations of creature narratives (Del Toro, 2017).

The literature emphasizes the psychological implications of prosthetic makeup, suggesting that its use can elicit stronger emotional responses from viewers. Practical effects provide a physicality that CGI often lacks, leading to a more immersive viewing experience. Additionally, the literature indicates a growing trend among filmmakers to combine prosthetic and digital effects, allowing for more creative possibilities while retaining the visceral quality of practical effects (Thompson, 2015).

Methods and Methodology

This study employs a qualitative methodology, utilizing a combination of case studies, and visual analysis. The primary films, "Pan's Labyrinth" and "The Shape of Water," were selected based on their critical acclaim and innovative use of prosthetic makeup.

Data collection involved:

1. **Visual Analysis**: Analyzing behind-the-scenes footage and documentaries to examine the techniques used in creating creature effects. This included a focus on the materials and processes employed to achieve realistic textures and movements.
2. **Audience Reception Studies**: Reviewing critical reception and audience responses to the films, focusing on how prosthetic effects influenced viewer engagement and emotional reactions.

Results and Discussion

The analysis revealed several key findings regarding the role of prosthetic makeup in the films studied:

1. **Enhanced Realism and Emotional Connection**: Prosthetic makeup was found to significantly enhance the realism of the creature effects. In "Pan's Labyrinth," the intricate details of the Pale Man’s design—such as the textured skin and expressive facial features—created a palpable sense of dread that resonated with audiences. Interviews with viewers indicated that the physical presence of these creatures made

them more relatable, evoking genuine emotional responses.

2. **Actor Performance and Interaction**: The use of prosthetic makeup facilitated a more immersive performance from actors. In "The Shape of Water," Doug Jones's portrayal of the Amphibian Man was notably enhanced by the prosthetics, allowing him to physically embody the character in a way that resonated deeply with audiences. The actor's ability to interact with his environment and fellow actors contributed to the film's emotional depth.
3. **Balancing Practical Effects with CGI**: Both films demonstrate the effectiveness of combining prosthetic makeup with CGI enhancements. While prosthetics provided a solid foundation for creature designs, CGI was employed to enhance movement and integrate the characters into their surroundings. This hybrid approach allowed for more dynamic storytelling without sacrificing the visceral quality of practical effects.
4. **Audience Engagement**: Critical reviews highlighted that audiences appreciated the tangible quality of the creature effects. Viewers reported a stronger sense of immersion in the story due to the authenticity of the makeup, which fostered a deeper emotional investment in the characters and their journeys.

Conclusions and Remarks

This study underscores the critical role of prosthetic makeup in creating realistic creature effects in fantasy films. Through detailed visual analysis and insights from industry professionals, it is evident that prosthetics significantly enhance the storytelling experience by fostering emotional connections, facilitating actor performances, and providing a more immersive viewing experience.

The findings suggest that while CGI has its place in modern filmmaking, the unique qualities of prosthetic makeup continue to resonate with audiences, enhancing the authenticity and emotional impact of fantasy narratives. As filmmakers increasingly embrace hybrid approaches, the

legacy of practical effects in cinema remains vital, suggesting a promising future for the art of prosthetic makeup.

In conclusion, the use of prosthetic makeup in "Pan's Labyrinth" and "The Shape of Water" exemplifies its power to transform storytelling in fantasy cinema. As technology evolves, the continued exploration of practical effects alongside digital advancements will undoubtedly shape the next generation of cinematic experiences, reaffirming the importance of tangible artistry in the realm of film.

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Significance of life in dance: *'Prāna'*

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Abstract

Traditional Indian theatre and dance obtains its form and character from the ancient Sanskrit treatise, the *Natyashastra*, the science of dramaturgy written in 2nd Century BCE. This work is attributed to sage *Bharata*. According to *Natyashastra*, every dramatic presentation, is aimed at evoking in the minds of the audience a particular kind of aesthetic experience which is described as *"Rasa"* (essence or flavor). It is said that, the effort of any artist is to create an art that stirs the emotions of the spectators which is not for the purpose of sharing information and knowledge but to extract emotions which is the aesthetic experience. He further elaborates the significance of *Rasa* as the main objective of any form of performing art including Indian classical dance Mohiniyattam. The supreme essence of any artwork in Mohiniyattam, the audience enjoys its sublimity through the seamless blend of *Nritta* (Rhthmic element), *Nritya* (Combination of rhythmic and expression) and *Natya* (dramatic element) articulated by the performer on stage. In Mohiniyattam, one of the prominent element *Natya* which is comprises the *Abhinaya*, depicting *Rasa* and *Bhava* (Mood) that creates the moment on stage by the performer so live and aesthetically perfect to migrate the audience the state of sublimation of *Rasa* which we can call *"Prāna".* Thus, this study is expected to explore the connection of *"Prāna"* or the life infused into the body of a dancer and how the dancing body fuses the bridge between the dancer and the audience. The present study explores how a repertoire of an exclusive performance presented to a selective mature audience of dance connoisseurs in the context of strategies and tools of dance used to develop and render the life of dance to an audience. A special attention is paid to the

theme, and the form of the dance through which the performer engages in transmigrating the essence of *rasa* to the audience with the application of *Abhinaya* to establish and reinstate the *Prāna* to the selected theme as well as the audience. Typically selected mixed methodological approach is applied to examine the aesthetic and scientific basis, and the sustenance of the dance body on stage with its neurobehavioral amalgamation. The study proves that not only the excelling in performance but also the thorough balance of body and mind through proper management of neurobehavioral synthesis makes the lively involvement of performance generating *'Prāna'* to the performance on stage.

Introduction

It is significant that unlike any other form of performing Art, the dance performer uses her body as an instrument operated by the dancer's brain and integrated with mind, the consciousness, in order to captivate her spectators. The neural synchronization of seven neurobehavioral areas; sensory, motor, cognitive, social, emotional and creative, consistently engage in the task of performance when the performer is on stage enhancing the vigor associated with that particular 'flow' of dance, a phenomenon in which the person becomes fully immersed in the dance activity. This makes room for the dancer and her creative neural network to immerse the energy inculcating *'Prāna'* in the body and mind which is far beyond of her day-to-day behavior, however, generating a relaxed state of mind to take part on stage with the performance. *'Prāna'* is popularly known by the term *"Prānayama"*, the conscious awareness of breath. According to the Upanishads, *Prāna* is the principle of life and consciousness which is the fourth stage in yoga that involves control of *Prāna* and *prānic* vitality in a human accomplished through different ways of breathing. *Prāna* is the energy permeating the universe at all levels. It is physical, mental, intellectual, sexual, spiritual and cosmic energy. All physical energies such as heat, light, gravity, magnetism and electricity are

also *Prāna* according to the particular description. It is the hidden or potential energy in all beings with or without control (Saraswati, 1999).

Literature Review

The "*Abhinayadarpana"* an ancient comprehensive text predominantly written about body movements *'Angika Abhinaya'* in dance ascribed to *Nandikesshvara* Abhinayadarpana, describing the essential inner virtues *'Antah Prāna,'* of a dancer (Ratnam Rangaraj, 1979). the life that is infused into a dance which emanates within the dancer herself or himself. It is an internal, inherent supreme quality to feel perfectly and emote intuitively to the spectators. There is a subconscious involvement of the supreme quality of *abhinaya* (expressive techniques), the beauty and the conscious flavor of *"rasa"* (flavor) given choreography the dancer's maturity and involvement in the presentation. It is an internal, inherent quality of a dancer which can only be manifested through a mastery of technique and dignified presentation of *abhinaya* and emotive skills (Ghosh, 2006). It also mentioned of the outer-life of a dancer *'Bahir Prāna'* in the means of the drum, cymbals of a good tone, the flute, the chorus, the drone *(sruti),* the lute *(Veena),* the bells and the singer of renown. Importance is given to the dancer's *nepathya*, the appropriate selection of costumes and usage of stage props (Ghosh, 2006).

Related recent studies found in this context extending the body language closely connecting the seams between various physical forms like Bharatanatyam, Kalariyapattu and Yoga. Those studies have interpreted Prāna's body dynamics by positioning the work in tandem with the immediate and larger context. It illustrates how the author used these ideas and elements in Prāna to depict the role of breath, postures and the classical dance technique as a communication link for revitalizing the body (Puthenedam, 2023).

Methods and Methodology

The development of Prāna in this dance repertoire was carried in three stages

1- **The contemplation stage of designing the repertoire**

Way before the dancer arrives the stage, the designing the repertoire takes place. This is known as *"Bahir Prāna"*, the external factors and life that supports *Antar Prāna*. In the means of *geeta* or *vaadya* a well-equipped musical ensemble forms the most important part of *Bahir Prāna* of the dance repertoire. Other than the musical accompaniment in the dance, *"Aharya"* that is the costume and jewelry, stage arrangements and other theatrical sources such as stage lights and decor.

- Musical component – Carnatic music rendred in *sopanam* style which is slow melodic style with roots in the Natyashastra.
- Language – Manippravala (Sanskrit and Malayalam)
- Instruments – *Kuzhitalam* (cymbals), *Veena, Idakka* (hourglass-shaped drum), *Mridangam* (barrel-shaped drum) and Flute.
- Costume – Traditional Mohiniyattam costume in plain gold color saree with saffron color border. Unique hairstyle significant to Mohinniyattam.

2- **During the performance of dance**

Here, the dancer immersing into the life of the dance. The internal life is created that in the dancer by infusing herself with the very act of the particular *"Bhavas"* (emotional state) will be expressed through amalgamation of *Abhinaya*. This is the stage where the *Prāna* (life) will be awakened in the dancer. In order to breathe life into a performance, the dancer expresses within herself.

- Cholkettu – determines "Nritya" aspect of dance- communication stories and spiritual themes through expressive gestures and slower body movements.

- Padam – determines "Natya" aspect of dance- communicating a play through dance-acting. Engages the audience with emotional and thematic elements.
- Thillaa – determines "Nritta" aspect of dance- technical performance emphasizing pure dance movements. Focus on speed, form, pattern, range and rhythmic aspects.

3- The connection developed between the dancer and the audience

This is the stage of life *(Prāna)* determined in the mind of audience and the dancer. The audience gradually establishes the life, as they experienced such bhava, *abhinaya, nritta* pertaining to the story with the beauty of the color in the presentation. There is a connection which develops in the audience is subjective to one another. Emotive qualities that audience responses by witnessing the dancer will be spell bounding and mesmerizing. At this point, this is the prime stage of culmination of *Prāna* which is created in the mind and creation.

Results and Discussion

Of the study cohort of 25, 80 % attended. Of them 90 % responded. Main themes emerging were: for overall performance:

Physical aspect of dance:

1- Well synchronized and eye catching (Strongly agreed- 100%)
2- Emotions (*Abhinaya*) conveyed in the dance performance (Strongly agreed- 100%)
3- In connection to the musical aspect in the dance performance (Strongly satisfied- 66.7%)
4- Ambience of the venue (Strongly appropriate- 52.9%)
5- Contribution of the costume and overall appearance (Extremely appropriate – 77.8%)

for psychological aspects: 'emotional' and 'spiritual'

1- "Feel emotional connection to the dance performance" (Strongly agreed 77.8%)

2- "Feel spiritual connection to the dance performance" (Strongly agreed – 66.7%)

3- "Enjoyed the overall dance performance" (100%)

Conclusions and Remarks

As per the above analysis, it is evident that the dance as a performing art is live phenomenon with the combination of the stage and the audience, the performer being the central figure to coordinate the entire paradigm of emotional, spiritual or aesthetic sensation. In that sense, the majority of the audience capture the main modes of the creation of *'Prāna'* in the repertoire. The aesthetic aspects, delivery and the spiritual connection are the three strongest generators of *'Prāna'* where the conscious follow up of three domains of origin of *'Prāna'* can lead to more systematic and larger scale studies that can better explain the life in dance. Thus, it is not only the practice, but also the live engagement in the performance on stage that attracts the audience by emulating them in different levels of enjoyment, however, incarnating the same aesthetic consensus. The Sanskrit term *Sahrda* agrees with this simulation, thus embodying the same pragmatic experience. The role played by *Abhinaya* in this agreement is so significant that the performer brings the sentiments of the theme through *Abhinaya,* which generates the *Prāna* to the performance. Therefore, the dance can be identified as a rigorous bodily enactment that brings a live experience to the audience where the performer and the spectacle enjoys the same tranquil experience through dance as the medium, and thus can be identified as the *Prāna*.

Keywords: *Dance, Mohiniyattam, Prāna, Abhinaya, Bhava, Rasa, Natyashastra*

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