



**THE SPIRITUAL LANGUAGE OF COLOUR: EXPLORATION OF  
COLOUR SYMBOLISM IN HINDU COMMUNITY IN eTHEKWINI,  
SOUTH AFRICA**

Submitted in fulfilment of the requirements of the Degree of Master of Applied Arts  
in the Faculty of Arts and Design at Durban University of Technology

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## **DECLARATION**

I, Elena Vladimirovna Kudrya-Marais, declare that the work compiled in this dissertation is my work, that all sources have been precisely detailed and recognised and that I have not submitted this work, entirely or in part, at any higher education institution to acquire an academic qualification.

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Date

## **DEDICATION**

This study is wholeheartedly dedicated to the Hindus who taught me to see the world from a spiritual perspective and instilled in me a love for nature and all living things. The core values shared by Hindu communities have brought a new dimension to my life and contributed significantly to the understanding of my entire existence.

## ABSTRACT

The study aimed to investigate the symbolism of colour in Hinduism and intended to create awareness and promote its application in any design practices such as photography, fashion, advertising, graphic and interior design. The study also takes into account Western influence and the process of globalisation which has brought many changes into the lives of the Hindu community. Literature review has indicated the absence of any similar studies that have developed a colour guide based on colour symbolism in Hinduism. Although a few studies were conducted investigating the general meaning of colour in Hinduism, there was not one which could be applicable in the design field for the Indian audiences.

With a specific focus on the Hindu community in eThekweni, South Africa, this case study employed a qualitative research method to investigate the symbolism of colour in Hinduism and how it has been adopted and integrated into the cultural practices. Two samples of population were selected using purposive sampling: namely, 10 religious leaders from 10 eThekweni Temples and 10 senior citizens in the Hindu communities visiting such Temples and practising Hinduism on a regular basis. The participants were interviewed using open-ended questions and the data was analysed using thematic analysis.

Guided by the conceptual framework, the study revealed five themes that emerged from the data: Colours in Hinduism, Psychological Healing Properties of Colours, Differences in Colour Use between South Africa and India, Impact of Globalisation on Colour Use in Hinduism and Western Influence on Young Hindus. The results showed that colour symbolism in Hinduism is still widely used in all Hindu communities, but the process of globalisation has changed the way colours are interpreted and used, especially for younger generations of Hindus. All participants selected for the study were aware of the topic and this contributed greatly to the study. Participants shared their knowledge and experiences as religious leaders and senior members of the community and revealed insights into colour symbolism in Hinduism; for example, red, blue and yellow are the most widely used colours and black is the most avoided colour. The participants explained the challenges faced by the Hindu community and emphasised the negative impact of Western influence on the younger members of the community. An interesting finding of the study revealed that the limited presence of Hindu educational organisations is considered to be one of the reasons why the younger generation of Hindus is more interested in Western practices, rather than learning and understanding their own culture and religion.

The findings from the analysed data were used in developing a visual colour guide intended for anyone in the design field who wishes to learn, understand and apply the important meanings behind colours in Hindu culture. Wedding photography for the Hindu audience is used as an example to show how the colour guide can be used.

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# **CHAPTER 1: INTRODUCTION**

## **1.1 INTRODUCTION**

Colours have a great influence on people all around the world. They evoke different emotions and hold meaning in any given religion and culture. The symbolism of colour suggests the application of colour as a symbol in various religions and cultural societies (Pavey 2009: 11). Colours also play a crucial part in establishing an emotional climate and influence one's mindset (Soundar & Fee 2013: 75).

Each culture has its own colour associations which can also change over time. The same colour may have different meanings throughout the history of any selected community. Such change occurs in colour symbolism due to individual, cultural and universal values which are never constant. The meaning of colour also depends on the environment in which it exists and is strongly influenced by time and events which take place continuously (Kremers, Baraas & Marshall 2016: 109). Symbolic representations of religious concepts of colour incorporate a particular tone to which the idea or item is related.

The correct use of colour in Hinduism is said to keep people happy and positive. As colours depict important messages in the Hindu community, artists use colour when depicting the deities to represent their fundamental characteristics. The use of colour in Hindu religion has a very deep meaning and is widely used in religious practices (Olson 2007: 42). As Hinduism has a very strong connection with nature, the symbolic meanings of colour are adopted into religion and represent their respective natural elements such as earth, sun, sky and water (Olson 2007: 43).

The Hindu community of Kwa-Zulu Natal, which was the main area of research, can be described as the second most authentic area of Indian population in the world (Maharaj 2013: 95). The colour symbolism and its meanings of this particular culture and religion served as the most influential factor of this research. Martin (2006: 261), as cited in Bennett (2006: 261), describes culture as a system so complete and detailed that it serves as a sustaining medium for everyday life with its own set of values, traditions and social norms.



The following chapter provides information about the study by explaining its context and highlighting problems and objectives. It also includes an overview of the methodology and conceptual framework of the study. The following sections outline the background of the study and discuss the relevant literature and existing research on the topic. It also explains the use of a particular research methodology that is appropriate for this research framework.

## **1.2 THE CONTEXT OF THE STUDY**

Over the past ten years, the researcher has been deeply involved in the life of the Hindu community in Durban, where she was an Indian wedding photographer who has captured over 300 traditional Indian weddings in the eThekwinini district. Being Russian, this world was very new to the researcher, and she fell in love with the beauty of Indian culture, religion and traditions. For the past decade she has learned many cultural and religious practices and as a result has noticed that many of the younger generation of Hindus were losing the knowledge of their local traditions and rituals. This served as the main reason for conducting the research to highlight and promote a meaningful use of colour in Hinduism.

Colour is one of the most important properties of any material object and is perceived as a conscious visual sensation. During visual interaction with any given object, a human's brain automatically assigns a particular colour to that object. In most cases, the colour sensation is produced because of electro-magnetic radioactive streams from a range of visible wavelengths absorbed by the eye.

The perception of colour depends on a number of individual qualities of a person, as well as the spectral composition, luminance and contrast of surrounding objects. Pavey (2009: 7) writes that from a physiological point of view the meaning of colour is something that is not always evident, even to the visual artist; thus, it has an unconscious colour symbolism. The physiology and psychology of a person also play a significant role in their colour perception. Light of the same wavelength can be perceived as different shades of colour.

Colour symbolism has its roots dating back to the beginning of human civilisations. According to Pavey (2009: 7), it is important to recognise that the ancient artists and their public reacted positively towards colour for its decorative or naturalistic values and with the help of anthropological and even archaeological clues it is possible to piece together the structure of

ancient colour lore. It is more satisfying to be aware that the colours had significance beyond their aesthetic value without fully understanding their original purpose.

In many cases, colour is used to convey the beliefs and values of the world's major religions. Hinduism, being one of the prominent religions, is the world's oldest religion still being practised today (Soundar & Fee 2013: 75). This religion uses elements from nature – namely, water, sun and earth – causing the colours to become the representations of these elements and adopting the symbolic meanings of these colours into religion. Particular colours are used to create specific meanings, such as the orange robes of holy priests, the blue skin of deities and the white clothing worn by the widows (Soundar & Fee 2013: 125).

Another good example of colour symbolism in Hinduism is the association of colour with the godhead forming the Trinity. Because the godhead embraces all things and all things emanate from this being, the godhead embraces white light. The creative power of Brahman<sup>1</sup> manifests in the blue ray. The preserving and sustaining power of Vishnu<sup>2</sup> manifests in the yellow ray and Shiva<sup>3</sup> is manifested in the red ray (Olson 2007: 127). South Africa is a multicultural country with the second largest Indian population in the world, where the majority of Hindu Indians live in KwaZulu-Natal's largest city, Durban (Kumar 2000: 21). This serves as an ideal environment for this research.

The researcher gained insights to the colour symbolism in Hinduism, where a spiritual meaning is attached to almost every colour. This study has compiled the functions and characteristics of colours, including their traditional and religious historical aspects, adaptations and application.

In researching how colour serves as a language of visual communication, a qualitative methodology and thematic analysis was used. This method was the most appropriate one for this type of study as it involved a qualitative gathering of data which later evolved in the development of the colour guide. Such data was systematically collected and analysed, resulting in a series of graphic representations which explains the main concern of this study.

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<sup>1</sup> Brahmin - A member of the highest caste or Varna in Hinduism. The Brahmins are the caste from which Hindu priests come and who are responsible for imparting and preserving sacred knowledge.

<sup>2</sup> Vishnu is the second god in the Hindu triumvirate and is the sustainer of the world.

<sup>3</sup> Shiva is the third god in the Hindu triumvirate and is responsible for the destruction of the world.

### **1.3 PROBLEM STATEMENT AND RATIONALE FOR THE STUDY**

Religion can be described as a social consciousness that expresses values and regulates social value, communications and relations. It ‘exists in the form of a system highlighting the norms and prescriptions of human behaviour in society’ (Ebaugh & Chafetz 2000: 137). Globalisation and religion have consistently been co-dependant and firmly related, with the spread of religion being one of the main purposes behind the migration and interaction of different societies (Beyer 2000: 39). Several scholars, including Strenski and Robinson, have criticised the narrow understanding of globalisation as only an economic or political process and have stressed the need for theorising globalisation in a religious context. Strenski (2004: 10) states that ‘the process of globalisation began in ancient or modern times, the role of religion in the dissemination of ideologies and practices cannot be ignored’. Robinson (2007: 89) suggests that ‘local and global cultures interact with, and are shaped by each other, rather than viewing them as opposites.’

The ongoing process of globalisation in recent decades, combined with a strong influence of Western culture in many parts of the world, has caused a partial loss of cultural identity among several cultures (Overgaard 2010: 73). Through changing times, regimes and practices, young Hindus are being more exposed to the adoption of Western values and beliefs. They form part of the new trend and prefer to be a part of the global community rather than following their native culture (Turner 2010: 39). As religious ideology is closely connected to cultural practices (Kumar 2000: 37), young Hindus' knowledge of religious institutions is slowly fading away and being replaced by uniformity caused by globalisation (Ritzer 2009: 81). This uniformity led to the disappearance of great knowledge of culture and identity among young Hindus (Tetreault & Denmark 2004: 86) and also the viewing of Indian communities through a Western lens – not only by the West, but by Indians themselves (Kumar 2000: 97). The impact of globalisation on the Hindu community has also affected the way colour symbolism is applied in Hindu culture, especially referring to dress code in the Western corporate environment (Ritzer 2009: 91).

Against this backdrop, this study focused on an exploration of the symbolism of colour in Hinduism with the intention of creating awareness and promoting its application in any design practice (such as fashion, advertising, graphic and interior design) for Indian audiences as a tool to sustain cultural practices of Hinduism. One of the areas addressed by the study was showing how scientific and religious colour symbolism is connected. A part of this study was

to understand the eThekwinI Hindu community's associations and beliefs about the healing properties of colour. This study focuses on developing a comprehensive colour guide for easy understanding of colour meaning in Hindu culture and religion. The colour guide is intended for anyone in the design field who wishes to learn, understand and apply the important meanings of colours in Hindu culture (such as fashion and graphic designers and brand developers), especially those involved in marketing campaigns intended for Indian audiences.

## **1.4 AIM AND OBJECTIVES OF THE STUDY**

The aim of this study was to investigate colour symbolism in Hinduism with the intention of creating awareness and promoting its application in design practices.

The specific objectives of the study are:

- to explore the roles of colour in Hindu religion and its cultural associations in the Hindu community.
- to explore the connection between scientific and religious colour symbolism
- to investigate the impact of globalisation on the application of colour symbolism in the Hindu community.
- to develop a series of graphical representations which explain the various colours, their symbolism and application in Hindu religion intended for anyone in the design field who wishes to learn, understand and apply the important meanings behind colours in Hindu culture.

## **1.5 RESEARCH QUESTIONS**

1. What are the roles and cultural associations of colour in the Hindu community?
2. What is the connection between scientific and religious colour symbolism?
3. How has the process of globalisation affected the use of colour in Hindu community?
4. How can the colour symbolism in Hindu religion be graphically represented to promote its application in design practices?

## **1.6 SIGNIFICANCE OF THE STUDY**

This study has confirmed the important role and cultural association of colour in the Hindu community as well as the effect of globalisation on the use of colour in Hindu religion. The analysed data served as the main source for creating the colour theory which will serve as a visual colour guide intended for anyone in the design field who wishes to learn, understand and apply the important meaning of colour in Hindu culture. The research also includes a graphical representation of the colour theory which emerged from the findings. According to South Africa classification of educational Subject matter, (Department of Education 2008: 50) photography is a discipline that falls within the design field; thus, the study also discusses the example of how the findings can be applied in Hindu wedding photography using the colour guide. The results of this study provide readers with a deep understanding of the colour language of the Hindu community, highlighting the most interesting colour choices and their meanings.

## **1.7 STRUCTURE OF THE DISSERTATION**

### **Chapter 1: Introduction**

This chapter introduces the general concept of colour and its meaning in the life of humans. This section sets out the context, problems and rationale for the study. It also highlights the aims and presents the research questions of the study. The chapter concludes with a discussion of the significance of the study and a brief explanation of the structure of the dissertation.

### **Chapter 2: Literature review**

This chapter includes an in-depth discussion of scientific, religious and cultural norms of colour highlighting the colour symbolism in Hindu religion. By briefly introducing the spirituality of Hinduism and the impact of globalisation on Hindu religion, it also discusses the Hindu community in Durban by exploring historical factors which led to the establishment of their current lifestyle. The chapter highlights the visual perception of colour from a scientific point of view and the concept of ‘chakras’. It then explores the symbolism of colour in Hinduism with the emphasis on the literature gap which now exists. It concludes with an introduction of the conceptual framework which was used for this study.

### **Chapter 3: Research methodology**

This chapter explains the research methods and design used to conduct the study. It covers all aspects of the research methodology that was used to conduct the study. The chapter begins with an introduction to the research instruments and design, including sample selection, location of the study and inclusion and exclusion criteria. Later, the recruitment process, data collection, and analysis are discussed. The chapter also focuses on ethical considerations, reliability and validity of the research. It concludes with a discussion of the process of Thematic Analysis that was used.

### **Chapter 4: Analysis and discussion of findings**

In this chapter, the results are presented, informing the reader what has been identified in the research. It discusses the relationship between the objectives and interview questions while highlighting the process of analysing and validating interview responses of the participants. It further covers the themes which emerged during the analysis of the findings and their relation to the interview answers. It later shows the graphical models created by the researcher presenting colour symbolism in Hindu religion which is applicable in any design field. The chapter concludes with a discussion of the relationships between themes, development assets and elements of the colour guide models created in this study.

### **Chapter 5: Conclusion and recommendation**

This last chapter discusses the results and draws the conclusion about the findings of the research. It also outlines the main themes found in the research, as well as the impact of globalisation on the colour symbolism in Hindu religion. It further highlights the role of colour in the Hindu community and the colour geode models presented in the study. The chapter concludes with a discussion of recommendations and limitations of the research.

## **1.8 CONCLUSION**

The introductory chapter provides a summary of the study conducted. The background, problem and rationale of the study have been discussed. It also discussed the South African context of Hindu Community and the role of the globalisation process of Hinduism. The chapter also includes the significance of the study and the aims and objectives. An overview of the research methodology and the conceptual framework that will guide this study was also

presented. In Chapter 2, an in-depth review of the literature related to the objectives of the study is presented.

## **CHAPTER 2: LITERATURE REVIEW**

### **2.1 INTRODUCTION**

The purpose of the literature review is to provide a base of knowledge on a particular topic and to identify the relationship of works in a particular context. It identifies the need for additional research, prevents duplication and acknowledges other researchers. It also focuses on inconsistencies and conflicts in studies that have already been conducted and places one's research in context with the existing literature, highlighting the need for further study (Hart 1998: 26).

A thorough analysis of literature was undertaken to inform this study. It provided a context and foundation for analysing what is known and what is still missing in this area of research. It allowed the researcher to gain meaningful insights into the symbolism of colours in Hinduism and its position in the context of globalisation. The analysis of many diverse sources has enabled the researcher to explore and understand the philosophy of colour in Hinduism and to understand the impact of globalisation on the colour symbolism in Hindu religion.

The areas covered in this chapter are quite diverse, ranging from technical physical science of colour to areas that rely on belief systems rather than empirical science. Therefore, this chapter as well as other parts of the study cover two epistemological approaches, namely the empirical study and the belief system. Epistemology is the study of knowledge and is concerned with validity, scope and methods of acquiring knowledge (Pritchard 2016: 5). Empirical research is defined as any research where conclusions are based solely on specific empirical and therefore testable evidence (Pritchard 2016: 5). This empirical evidence can be obtained using quantitative and qualitative research methods (Pritchard 2016: 5). On the other hand, a belief system is an ideology or set of principles that help interpret everyday reality (Garrod & Jones 2009: 5). It can be religion, political affiliation, philosophy or spirituality, and much more (Garrod & Jones 2009: 5).. These beliefs are shaped by a number of different factors (Garrod and Jones 2009: 5). Knowledge of a particular subject, parenting, and even pressure from others can help create and even change belief systems (Garrod & Jones 2009: 6). Such systems are usually associated with religions and are based on a moral code, belief in one or more deities,



and the ability of the supernatural to influence us and the universe in which we exist (Garrod and Jones 2009: 6).

The subject of epistemology is knowledge, its types, methods and objects, as well as faith as the opposite of knowledge (Pritchard 2016: 7). Epistemology tries to find out what the truth is and how it differs from the opinion of one person (Pritchard 2016: 7). Epistemology identifies the criteria of truth and the ways of its logical establishment (Pritchard 2016: 7). One of the main debates in epistemology is the difference between knowledge and belief. Hinduism is a religion and thus uses symbols, traditions and sacred texts to give meaning to life and to explain the origin of life and the laws of nature in the universe (Garrod & Jones 2009: 8). The physical nature of colour, on the other hand, falls under an empirical study based exclusively on scientific evidence (Pritchard 2016: 7). Visual perception of colour is another empirical study that forms a part of the science of physiology (Pritchard 2016: 8).

## **2.2 HINDUISM AND SPIRITUALITY**

### **2.2.1 History of Hinduism**

Hinduism is considered the oldest religion in the world, with origins dating back to the time of the existence of Proto-Indian civilisation (Lipner 1998: 20). At the same time, Hinduism preserves the laws and foundations of life originating from ancient times. By its own account, Hinduism is one of the most widespread religions in the world and accounts for about 80 percent of India's population. (Lipner 1998: 38). In recent years, Hinduism has transcended national boundaries and become popular in several countries in Europe and America, claiming to be recognised as one of the world's religions. (Lipner 1998: 48). 'As a religious phenomenon, Hinduism is complex and contradictory. A serious historical and cultural problem is the very definition of Hinduism' (Cobb 2008: 58).

In terms of the content and boundaries of its concept, there is no satisfactory definition or explanation of what to attribute to Hinduism. According to Cobb (2008: 46), throughout history Hinduism has developed as a synthesis of social organisation, religious and philosophical doctrine and theological views. It covers all spheres of life, such as ideological, social, legal and behavioural aspects. Hinduism is not only a religion but a way of life and an integral behavioural standard (Cobb 2008: 49).

The complex religious system of Hinduism combines the most opposite extremes and adapts itself to a variety of social and political conditions, while retaining an extraordinary variety, brightness and vitality. Hinduism can also be interpreted as a system of signs and symbols of culture that carry ancient traditions and develop and preserve them under different historical conditions. This feature of Hinduism is evident in many ancient philosophical writings as well as in religious instructions for the most important ceremonies in the life of a Hindu, such as birth, marriage and death.

### **2.2.2 Impact of globalisation on Hinduism**

Globalisation has always had its effects on culture and religion. Throughout history, religion has been one of the main reasons for the global interaction among different communities and cultures. The impact of culture and religion in the context of globalisation cannot be ignored (Golebiewski 2014: 79). Interactions between different communities and cultures have created co-dependent relationships between globalisation and religion, causing a further dissemination of religious ideologies and practices. Globalisation was never isolated and was always accompanied by a spread of cultural and social ideologies and practice (Khaled 2007: 36).

Hinduism, being the most dominant religion in India and which is also considered to be ‘a way of life’, has found a way to adapt to globalisation while retaining its unique character by trying to develop its own cultural and religious identity (Kumar 2000: 87). The interaction between Hinduism and globalisation in recent decades has resulted in a trend such as cosmopolitanism which refers to the exposure and adoption of ‘Western’ values and beliefs, as younger Hindu generation prefers to be a part of the new global community rather than following their native ideologies and practices (Turner 2010: 57). Khaled (2007: 77) states that ‘the degree of fusion of the two cultures is unique to each individual and can be classified as “glocalization”’.

The globalisation effect on Hinduism has created a conflicting reality of the young generation of Hindu community where individuals are torn between two choices; namely, the desire to be a part of the global culture while retaining their individual cultural and religious identities (Khaled 2007: 79).

According to Khaled (2007: 83), Hindu religion, which also means Hindu way of life, is under a big threat of globalisation. It can be compared to colonisation as it has the same negative effect on the Hindu community (Khaled 2007: 83). The increasing development of Western

world along with the process of globalization has caused a great decline in Hindu communal life, religion, art, literature and customs (Khaled 2007: 85). Khaled (2007: 85) writes that the negative side of globalisation is carefully hidden behind big labels like democracy, humanitarian rights, gender equality, internationalism, free trade and humanism. In the name of modernisation and globalisation, it pretends to inspire the people or communities that it abuses (Khaled 2007: 86). This is not very different in one expectation or another from an old British colonialism in the Indian setting which boasted itself as the amiable bearer of civilisation and culture (Khaled 2007: 86).

In the colonial era in India, from 1700 to 1875, British pioneer extension worked through military, financial and strict strategies (Singh & Aktor 2015: 1920). Alongside military power, which was the essential and starting technique, there was also a coordinated banditry, taking the gold, gems and different fortunes of India (Singh & Aktor 2015: 1920). As monetary abuse was connected to military triumph, it later stooped so low in its techniques as to include medication and opiate exchanges (Singh & Aktor 2015: 1921). As stated by Singh and Aktor (2015: 1921), the later financial abuse formed into a compelling artwork, bringing about the activity of absolute command over the regular assets and controlling the economy of India for long-term gains.

Religion gave the required reasoning for this coldblooded loot. All local Hindus were dismissed as barbarians who did not need to be dealt with as individuals until they chose to accept Christianity (Robertson 1992: 92). According to missionaries who came to India to assume a supporting role to the British Imperial rulers, Christianity was the only genuine religion (Robertson 1992: 92). Jesus Christ was the only genuine God and different religions like Hinduism, Jainism, Buddhism, Sikhism – and numerous other customary beliefs and religions in India – had to be disposed of to save the spirits of India and Indians (Robertson 1992: 93). To advance the noble Christian pursuit, all features and parts of Hindu religion and Hindu society were dismissed as worshipful admiration and odd notions (Robertson 1992: 93).

Alongside the Christian religion came the remnants of British or Western culture, the habits of thought and the progressive end of the Hindus' customary way of life (Turner 2010: 59). Traditional religions and societies were continuously undermined or disposed of as the new Indian proselytes of Christianity were pushed not only to abandon their religion, but also their way of life (Turner 2010: 59). According to Turner (2019: 60), a decent Indian Christian

convert would dress like an Englishman and copy English habits in everything that the Hindu community encouraged.

After the foundation of the powers of colonialism came a scholarly structure that was less obvious but more perilous and dangerous (Golebiewski 2014: 38). The British rulers endeavoured to colonise the brains of Indians by dispensing with all customary schools through a reformist arrangement of Western training (Golebiewski 2014: 38). Educated Indians, having advanced education in the schools opened by the outsider rulers in the last part of the nineteenth century, were forced to accept that it was not colonial abuse that the Englishmen were bringing to India, but reformist Western qualities in science, workmanship and innovation (Golebiewski 2014: 38). Local Indian people were assisted with acquiring the skills of English civilization by becoming modern (Golebiewski 2014: 39).

Although all types of colonial empire, from a geographical point of view, came to an end after World War II, many similar types of colonisations continue to this day in all parts of Asia, Africa and Latin America due to the process of globalisation (Khaled 2007: 89). Despite all the claims about diversity, Western civilisation promotes only one universal culture with a set of standardised values, institutions and views for all, called globalisation (Khaled 2007: 89). The truth is that Western culture, with its bid for universal business, eliminates any true culture based on quality rather than quantity (Khaled 2007: 91). The monoculture it created has taken all the morals and values away while promoting consumerism and lust for money as the main pursuits, where everything can be purchased, sold or exploited (Khaled 2007: 93). Every one of the industrialists and financial specialists in India today boast about the steadily rising tide of commercialisation and consumerism brought into Hindu society by the means of Globalisation (Khaled 2007: 93).

Globalisation is seen as rather gentle and good natured by the people of India – more like a breeze, which blows in quietly, tops off the mental air, makes a psychological mind-set and settles down as a social environment (Kumar 2000 :28). It is not out to utilise a particular segment of Indian culture as a vehicle of its harmfulness. Simultaneously, it is slowly crawling through communities and consuming the spirit of the Hindu culture. It slowly poisons well-established social frameworks while targeting each segment of Indian culture (Kumar 2000: 30).

How has globalisation affected culture in India? Every informed Indian seems to accept that nothing in Hindu India, past or present, is to be supported unless it is perceived and suggested by an appropriate expert in the West (Golebiewski 2014: 48). There is a pervasive presence of an uplifting view towards everything in Western society and culture, for the sake of progress, reason and science, where nothing from the West is to be rejected unless it has first been found necessary by a Western assessment (Golebiewski 2014: 49).

Swami Vivekananda prophesied the negative effects of globalisation in 1893 when he addressed the Parliament of the World's Religions in Chicago (Golebiewski 2014: 52). To quote his spirit-filled words: 'Shall India die? At that point, all spirituality will die out of the world, all sweet-soul compassion towards religion will die out, all ideality will die out. And in its place will reign the duality of lust and luxury, as the male and female deities, with money as their priest, fraud, violence and competition as their ceremonies, and the human soul as their sacrifice. Such a thing can never be' (Golebiewski 2014: 52).

### **2.2.3 The Hindu community in Durban**

The primary gathering of Indian workers, generally Hindus, arrived in South Africa in 1860. The majority settled in Durban, Kwa-Zulu Natal since they were initially requested by the local farmers (Desai & Vahed 2010: 25). The nineteenth century migration of Indian workers brought two kinds of migrants: namely, labourers and normal travellers. The Indian travellers came at their own cost and were generally merchants; over time, they became a financial power (Desai & Vahed 2010: 27).

Hinduism was mostly educated at home, while temples were used as the main areas for social bonding (Desai & Vahed 2010: 29). Religion was at first educated within families while elderly members of the community were telling religious stories from Indian writings (Desai & Vahed 2010: 29). From the mid-1900s, books on prayers, histories of saints and praise poems were sold by Moothoosamy Bros in Gray Street (Desai & Vahed 2010: 31). Hindus perform 'pujas' which are prayers performed by a pandit for each special occasion – a custom which is still practised today (Desai & Vahed 2010: 27). Prayer flags called 'jhandi' were placed in a special area in front of the house of every Hindu (Desai & Vahed 2010: 27). These were produced using bamboo posts with a red flag and stayed there until the following puja was performed.

Hindu reform associations endeavoured to make Hinduism more appealing to their own supporters (Diesel & Maxwell 1993: 35). A considerable number of associations, such as the

Arya Samaj, the Ramakrishna Centre and the Divine Life Society, have emphasised the departure from old custom frameworks to a more philosophical comprehension of Hinduism (Diesel & Maxwell 1993: 36). These Hindu movements accepted that customary 'Hindus lacked the enlightened understanding of Hindu philosophy' which was only present in the sacred texts of Hinduism (Diesel & Maxwell 1993: 36). They also dismissed worshipping of different gods in Temples, believing it was based on ignorance (Diesel & Maxwell 1993: 35).

In research directed by J H Hofmeyr and G C Oosthuizen in 1981, a shift towards a more philosophical way to deal with Hinduism was apparent (Hofmeyr & Oosthuizen 1981: 26). Over 88% of Hindus asserted a monotheistic comprehension of God in Hinduism, with about 11% conceding to polytheistic thoughts (Hofmeyr & Oosthuizen 1981: 28). Still, the Hindu strict life based on ceremonies in Temples and places of worship kept on prospering (Hofmeyr & Oosthuizen 1981: 36). It continues to be apparent during the celebrations of fire-strolling customs at which a few Hindus show insistence of their confidence in their divinities (Hofmeyr & Oosthuizen 1981: 36). In later occasions, the South African Hindu, Maha Sabha, presently the authority organ under which all Hindu relationships in the nation fall, has held gatherings on Hinduism to educate the youth (Hofmeyr & Oosthuizen 1981: 26).

However, in 2004 Landy (2004: 205) and Maharaj (2013: 98) contended that 'Indian' character was alive in Durban; it was divided by religion, language, age and class, where India was a key referent 'supernaturally' since it has a theoretical presence, which is talked about, longed for and now and again visited. Along these lines, Desai and Vahed (2007: 56) conclude that people of Indian origin have lost much of their heritage as they turned out to be 'South Africans', with English being the predominant language for the 1.2 million Indians.

Sooklal (1991: 35), in his work on Hinduism and legislative issues in South Africa, writes that the Hindu confidence was created in a non-Indian setting in which its followers adjusted to South African conditions. Sooklal's key question is: 'In a nation comprising African greater parts, how might it affect a Hindu to recognize himself as a South African?' The work of Chetty (1991: 57) addresses this inquiry by writing that religion is perhaps the most unavoidable means by which individuals of Indian descent in South Africa distinguish themselves. Despite the practically natural assimilation measure that Hindus have gone through, they keep on drawing upon Hindu lessons and use the examples from India (Chetty 1999: 79). India is seen as a definitive source of experts for strict practices and personality (Sooklal 1991: 85).

## **2.3 VISUAL PERCEPTION OF COLOURS**

The colour perception of the viewer can be divided into two parts: physical, being objective; and physiological, being subjective (Burton 2009: 95). The colour red has the longest wavelength and affects the human eye the least as it does not carry a lot of energy (Burton 2009: 95). Orange and yellow colours have a moderate effect, while green is the most neutral colour situated in the middle of the spectrum (Burton 2009: 96). Blue colour has a shorter wavelength and is considered a calming colour, while dark blue and violet, situated on the opposite side of the spectrum and being the closest to the invisible ultraviolet radiation, affects the human eye the most as it has a high amount of energy (Burton 2009: 96).

Colours play a very important role in Hindu religion and culture (Olson 2007: 44). Each colour has a very deep meaning associated with it and does not serve a purely decorative purpose. The correct colours or combination thereof can create a particular pleasant environment for a person. Many Hindu deities have specific colours associated with their attire signifying their qualities (Olson 2007: 44). Over time, colour in India has become closely related to religion, representing the expression of faiths and beliefs. In India, simple colour expression holds together the multitudes of costumes and traditions. The symbolism of colour is very noticeable and controls every aspect of life including religion, politics, social life and celebrations. India is a country where colour properties of religious and cultural aspects are interconnected and cannot be viewed separately from each other (Olson 2007: 44).

When light is emitted from natural or artificial sources and reflected by various objects of the scene, it reaches a human's eye causing the creation of a visual perception. The perception of colour as such refers to the actual image of an object formed in the brain with the help of an eye. Subjective perception is based on personal experience, internal representation of the object and individual aesthetic preferences. The synthesis of these two phenomena determines an objective perception, which is characterised by the subjective (mental) images and human perception. Colour is not only determined by radiation physics or psychology of perception separately, but is determined in conjunction with them (Kremers, Baraas & Marshall 2016: 78).

Colour symbolism forms a part of the relation between colour and the human psyche (Kremers, Baraas & Marshall 2016: 139). The objective laws of colour effects on humans explain the fundamental similarity of symbolic meanings of colour in different cultures and religions (Kremers, Baraas & Marshall 2016: 139). The history of the development of colour representations shows that colour can acquire a steady value, denoting special objects or

phenomena (Kremers, Baraas & Marshall 2016: 139). The associative nature of thinking allows humans to assess the stability of these relationships, with the ability of colours to act as a sign of a certain situation and recognise certain semantic functions (Kremers, Baraas & Marshall 2016: 139).

The semantics of colour is the main cultural characteristic which unites people by the natural semiotic principle of colour exposure and understanding. Despite considerable changes throughout human history, the content of colour symbols that form the core of colour symbolism remained unchanged (Kremers, Baraas & Marshall 2016: 167). In the human world, colour causes certain specific changes mentally – the interpretation of which gives rise to what humans call ‘the colour’ – and creates general associations and symbols impressions of colour (Kremers, Baraas & Marshall 2016: 167). Colours have independent values that are not reducible to the influence of an object. The colour value therefore acts as a reflection in the consciousness of a particular person and the direct effects of colour on him/her (Kremers, Baraas & Marshall 2016: 167).

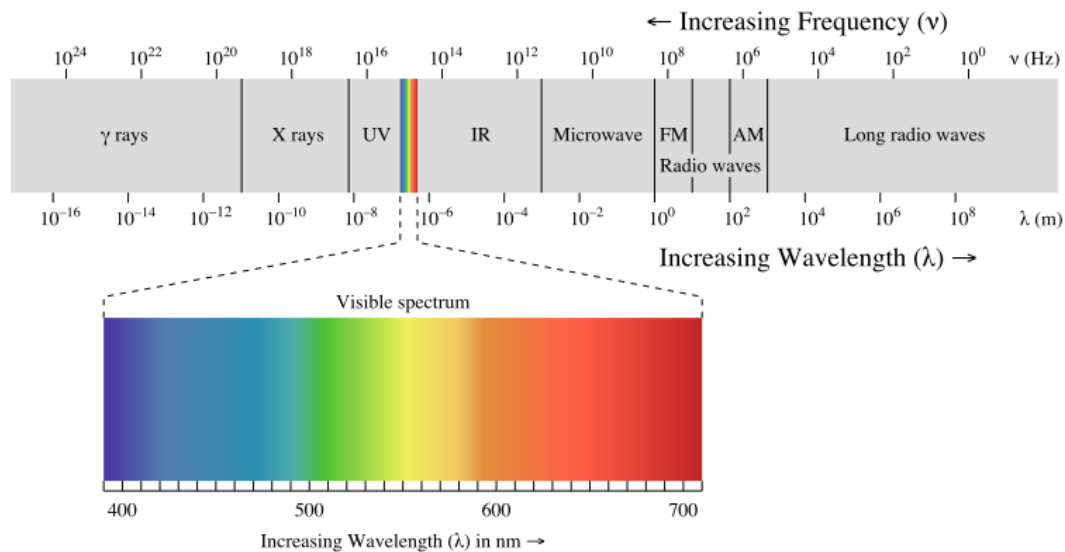
### **2.3.1 The physical nature of colour**

Colour is a sensation that arises in a person’s organ of vision when in contact with light (namely, light + vision = colour). Light can be considered either an electromagnetic wave, the speed of which is constant in a vacuum, or as a stream of photons, which are particles giving a zero mass and able to exist only by moving with the speed of light. In colour science, light is usually regarded as electromagnetic wave motion (Shevell 2003: 167). From the standpoint of physics (optics), colour has a light nature. Colour sensation is impossible without light; therefore, the concept ‘light’ and ‘colour’ are inseparable. Colour sensations only occur when light affects a human eye. Rays of light hitting on the retina cause impulses, which produce signals in the brain of a particular colour or combination thereof (Shevell 2003: 167).

Shevell (2003: 187) writes that in nature there are many types of electromagnetic radiation, which are not perceived by a human’s eye, such as radio waves, infrared, UV, X-ray and gamma radiation. Humans have a relatively narrow visible range of electromagnetic radiation, called optical radiation (visible light). Shevell (2003: 188) concludes that the length of the electromagnetic wave (the distance from the peak of one wave to the peak of another) is usually expressed in nanometres, nm, and is denoted by the Greek letter  $\lambda$ . The wavelength range of optical radiation is in the range of 380 to 760 nm. Optical radiation is adjacent to



electromagnetic radiation – ultraviolet (380 -10 nm) and infrared (760 nm - 0.01 cm) (Shevell 2003: 188).



**Figure 2.1: Electromagnetic Spectrum**

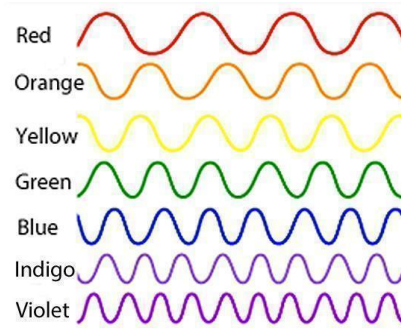
Margolin (1998: 39)

Margolin (1998: 37) writes that in the field of optical radiation, each wavelength corresponds to the sensation of a certain colour (Figure 2.1). White light is an optical mixing of waves of various lengths and is composite. Skipped through a glass prism, a white light beam is decomposed into simple components of colour, creating bands of colours which fade into each other in a specific order: red, orange, yellow, green, blue, dark blue and violet (Margolin 1998: 37). When light strikes an object, it can be transmitted, absorbed or reflected. In most cases, there are all three ways of interoperability (Margolin 1998: 54). These are spectral colours, which make up the solar spectrum such as the rainbow (Margolin 1998: 39).

Each colour consists of three main elements, namely hue, value and saturation. The hue of colour is determined by the most dominant wavelength of the spectrum and refers only to the pure spectrum colour names on the colour wheel such as red, orange, yellow, green, blue, dark blue and violet (Davis 2015: 7). Every colour always has one dominant hue (Davis 2015: 8). The value of colour describes the lightness or darkness of any given colour and indicates the quality of the reflected light (Davis 2015: 15). Saturation is the intensity of any given colour

and refers to the dominance of hue in the colour (Davis 2015: 23). It defines a range starting from pure colour to no colour at all such as grey (Davis 2015: 23).

Absolutely all objects in the world emit electromagnetic waves. When heated, the object emits relatively shorter waves of electromagnetic radiation. This particular property of the object allows one to measure the colour temperature of light using a calorimeter (Margolin 1998: 54).



**Figure 2.2: Optical Radiation**

Shevell (2003: 271)

As seen in Figure 2.2, for the convenience of marking colours, the spectrum of optical radiation is divided into three areas:

Long wave - 760 to 600 nm (from red to orange)

Medium wave - 600 to 500 nm (from orange to blue)

Short wave - 500 to 380 nm (from blue to violet)

Shevell (2003: 273) tells us that this division is determined by the qualitative differences between the colours belonging to different regions of the visible spectrum. All colours are divided into chromatic and achromatic (Shevell 2003: 273). Achromatic colours are white, black and all shades of grey (Shevell 2003: 273). Their spectrum includes rays of all wavelengths in equal amounts (Shevell 2003: 273). Chromatic colours are all spectrum colours as well as other natural colours with the predominance of any one wavelength (Shevell 2003: 273). A system of psychophysical characteristics is always used for understanding colour and its qualities (Shevell 2003: 273).

Another interesting aspect of colour is the temperature produced by any light source, which is measured in Kelvin on a scale from 1000K to 10 000K and has a wide range from warm to cool (Ward 2013: 52). It is important to note that in such scale the colour red has the lowest

temperature such as 1000K while the blue and violet colours have the highest temperatures, reaching 10 000K (Ward 2013: 52). When a piece of iron is heated it first glows red, and as its temperature increases, it changes to yellow and then to blue (Ward 2013: 52). Although the red colour light is normally associated with warmth and blue with cold, in Kelvin scale it works in an opposite way (Ward 2013: 53). For example, a match flame emits the coolest temperature of 1700K, the early morning light has the colour temperature of 4300K and the blue skylight can have a wide range of high temperature of 9500-1000K (Ward 2013: 53).

### **2.3.2 Colour space and colorimetry**

Colour space is a colour representation model based on the use of colour coordinates (Kuehni 2003: 13). The colour space is constructed in such a way that any colour is represented by a point having certain coordinates (Kuehni 2003: 13). Colour spaces are described by a set of colour coordinates and rules for constructing colours (Kuehni 2003: 14). For example, RGB is a three-dimensional colour space, where each colour is described by a set of three coordinates - each of them corresponds to a colour component decomposed into red, green and blue colours (Kuehni 2003: 14). The number of coordinates sets the dimension of the space (Kuehni 2003: 14). There are many colour spaces of various dimensions such as one-dimensional, which can describe an exclusively monochrome image, to six- and ten-dimensional, such as the CMYKLcLm space (Kuehni 2003: 15). High-dimensional spaces are most commonly used for printing on plotters or proofing machines (Kuehni 2003: 15).

Colorimetry is the science of colour and colour measurement which explores methods of measuring and expressing the amount of colour and colour differences. It originated in the 19th century (Ohta and Robertson 2006: 140). Isaac Newton laid the scientific basis for colourimetry based on the combination of several primary colours (Ohta and Robertson 2006: 140). When measuring colour, the main task is to determine the colour coordinates, since all other quantities are calculated from their values (Ohta and Robertson 2006: 141). Colour coordinates can either be determined directly using tricolour colorimeters or colour comparators, or calculated from diffuse reflectance or transmission spectra (Ohta and Robertson 2006: 141). When the radiation flux falls on the surface of an object, part of the flux can pass through the object, part of it can be reflected from the surface, and part can be absorbed (Ohta and Robertson 2006: 141). The ratios of the reflected, transmitted and absorbed parts of the radiation flux to the entire flux incident on the object are called, respectively, the coefficients of reflection, transmission and

absorption (Ohta and Robertson 2006: 142). Spectrophotometers are used to measure reflectance and transmittance (Ohta and Robertson 2006: 142).

## **2.4 COLOUR SYMBOLISM IN HINDUISM**

The meaning of colours in Indian culture has its roots in Hindu religion and has a great influence on people's decision-making in their everyday life. One of the most prominent representations of colour in Indian culture is an annual festival Holi, also referred to as 'The festival of colour', which celebrates the end of winter. During Holi, people crowd the streets by splashing brilliantly coloured dyes on each other. Another iconic representation of colour can be found in Indian cuisine and its many species of vibrant colours. From red paprika to yellow turmeric, from orange saffron to golden masala, Indian cuisine is an explosion of flavours, smells and colours. Spices are used in the same way as artists use paint. A well-cooked dish should represent a perfect balance of all ingredients, with no single spice or colour ever dominant over the others (Olson 2007: 48).

The image of the world's significant forces, the constituent pieces of the universe, was a triadic tone in antiquated India. This positively influences shading imagery: Tama is constantly connected with the dark tone, the shade of refusal; Raja is related with the red tone, the most seasoned throughout the entire existence of humankind; an individual is related with blood, fire and love; Sattva is related to white, communicating help from any obstruction, addressing the exact opposite of dark. The Indian practice of communicating with colours corresponding to the emotional state gives white colour the properties of goodness, as it is described by a caste of priests (Brahmins). This has stayed the unchanged tradition for centuries (Olson 2007: 48).

The same principle can be traced in the Upanishads triad. In 'Chandogya Upanishad' it is said: 'Red colour is the colour of fire. White colour is the colour of water; and black is the original colour of the earth. So, in the fire disappears all that is usually called the fire modification. This is just the name appearing in the speech, and only three colours (form) are true'. According to the Chandogya Upanishad, the whole world is three-coloured (Olson 2007: 49).

Research of colour exemplified the highlights of Indian culture throughout the entire existence of India because of its unique status. Colours in Indian culture are consistent and long-lasting. In this way, the most popular embellishments such as yellow or red spots are available in regular culture. These include Tilak, which ladies put on their brows and adornments made

with red paint which they put on the palms and on their feet (Olson 2007: 49). Burton (2009: 110) argues that attention has been paid to culture differences in perception of colour and these can result in visual communication failures. Colour does not only evoke physical, physiological and aesthetic reactions, but also causes a series of particular intellectual reflexes and responses. Colour can also be perceived as a message and have associations with a particular event, an object and an emotion while being perceived on a subconscious level. Colour semantics and its effects on perception and persuasion are widely used in visual communication across the world.

Hinduism uses the art of symbolism with an amazing effect. No other religion in the world can be compared to this ancient religion, which is overflowing with symbols, colours and rituals. (Khaled 2007: 26). All Hindus are subjugated by this symbolism that is spreading in one way or another throughout life. The main Hindu symbolism is presented in the Dharma Chakra. The main Hindu symbols are AUM, which represents the universal name of the Lord and surrounds its creation; SWASTIKA, which symbolises the eternal nature of Brahman throughout Eternity; Lotus Flower, which represents the true soul of the worshipper; Purnakumba, which refers to the mother earth or the gracious goddess of fertility, and Lakshmi, and Saffron Colour, the colour of the deity Agni or fire, symbolising the Highest Grace that has descended upon man (Khaled 2007: 27).

#### **2.4.1 Chakras, Colours and Hindu Gods**

The work of Harding (2018: 8) provides a detailed guide to chakras used in practice of yoga and the principles of Ayurveda from India. When applied, the appropriate colours enable the body to restore its harmony and well-being (Harding 2018: 30). Just as our physical bodies require a variety of foods for healthy balance and function, our bodies require a continuous balanced energy flow to facilitate harmonious development (Harding 2018: 30). This energy originates within light, which is separated into the colour spectrum. The colour spectrum frequencies are associated with 'Consciousness' which in turn can help balance and bring harmony to subtle levels within our system (Harding 2018: 30). The application of colour helps bring about harmony within our subtle and physical levels, affecting our cells' consciousness.

Each of the seven main chakra centres in our body is represented by a colour (Harding 2018: 30). Around this connection, one can assign a whole world of meaning to each colour based on the chakra to which it is tied (Harding 2018: 30). The energy centres correspond with certain

emotions and physical body parts. Recognising each colour's meaning is useful when it comes to channelling colour in everyday life to manifest emotions and healing (Harding 2018: 30).



**Figure 2.3: Hindu Chakras**

Harding (2018: 8)

The word 'chakra' is derived from Sanskrit and means 'wheel' or 'circle of life' (Harding 2018: 31). Referring to Figure 2.3 above, they comprise seven basic energy locations found in the body and are associated with a range of sounds, images and Hindu gods. In Hinduism, the constant flow of energy through all the chakras is referred to as 'Shakti'. Harding (2018: 8) writes that the idea of chakras was first mentioned in the ancient Hindu sacred texts, the Vedas, and plays an important role in Tibetan Buddhism. Chakras are located along the spine and influence various nervous systems and organs with their energy. These energy vortices emanate from Brahman according to Hindu beliefs. Shakti currents are believed to emanate from one chakra point and then move to the next as they empty the body and soul (Harding 2018: 31). The energy stored in the foundation of the spine (root chakra) is called Kundalini. The spiritual goal is to release the Kundalini to achieve a more pronounced consciousness and union with the infinite consciousness of Brahman. Through meditation and Kundalini Yoga, the energy can rise back up the spine until it arrives at the highest point of the head (crown chakra), creating a supernatural encounter (Harding 2018: 31).

#### **2.4.2 Chakras and Colours**

**Muladhara:** The root chakra - located at the base of the spine. It is associated with the colour red. It influences confidence, trust in life and self-esteem. The baser instincts arise from here –

the need to survive or fight. This chakra represents Lords Ganesha and Brahman (Harding 2018: 32).

**Swadhisthana:** The sacral chakra - located below the navel. It is associated with orange. It influences sexual desires, attraction and the need to procreate. Other emotions such as anger, fear and hatred originate in this chakra. This chakra represents Lord Vishnu (Harding 2018: 44).

**Manipura:** The solar plexus chakra - located on the underside of the sternum. This is associated with bright yellow. It influences the lower back, digestive system, liver and gallbladder. Feelings associated with this chakra include determination, self-acceptance and willpower. This is where instinctual feelings are transformed into more complex emotions. This chakra represents Lord Shiva (Harding 2018: 56).

**Anahata:** The heart chakra - located in the centre of the chest. It is associated with green. Emotions associated with this location are love, compassion, emotional security, forgiveness and loving kindness. This chakra represents Lord Ishvara (Harding 2018: 68).

**Vishuddha:** The Throat Chakra - located at the throat, above the larynx. It is associated with blue. It is the source of the ability to communicate and express creativity and individuality. This chakra is associated with Lord Sadashiva (Harding 2018: 80).

**Ajna:** The Third Eye Chakra - located at the front of the head between the eyebrows. This is associated with indigo. The mind as an organ of sense and action is associated with this chakra. Feelings associated with this chakra are spirituality, consciousness and sense of time. This chakra is associated with the god, Ardhanarishvara (Harding 2018: 92).

**Sahasrara:** The crown chakra - located at the top of the head. It is associated with violet or gold. All others emanate from this chakra. It relates to pure consciousness. and is known as the highest centre of contact with God (Harding 2018: 104).

In the seventeenth century, ideas about the nature of colour were changing. The basics of modern scientific concepts about colour were introduced to the public by Isaac Newton in his work *New Theory of Light and Colour*, published in 1672. (Seiler-Hugova 2011: 101). For the first time, Newton divided the science of colour into two parts; namely, the objective, referring to the physical perception, and the subjective, related to the sensory perception. He discovered that light has a complex composition and consists of radiations with various indices. Having understood the solar spectrum and explaining its nature, Newton laid the beginning of the linear

theory of colour arrangement (Seiler-Hugova 2011: 101). He divided the colours into primary and derivatives and was the first one to introduce experiments in optical mixing of colours. His colour classification system laid the basis for the colour system in our time.

Gage (1999: 26) writes that from the middle of the twentieth century applied colour sciences received great development in the studies of psychologists, physiologists and ergonomists. At this time, it was proven that colour is an essential component of the habitat and human environment. These studies have spurred a huge amount of research and experiments in this area (Gage 1999: 26).

With the design and success of the humanities in the twentieth century, colour became the object of study in various areas of humanitarian thought, such as linguistics, psychology, cultural studies and art. In linguistics the issues related to word formation were investigated – names of colours, features of colour semantics and the vocabulary of colour values were introduced, as was the categorisation of colours (Gage 1999: 75). In the psycholinguistic aspect of study, different questions related to the symbolic and sub-textual nature of colour were researched in relation to language (Gage 1999: 77). In cultural studies, special attention was paid to the issues of semantics and the symbolism of colour in different cultures. In aesthetics, colour was seen as a concept of harmony and beauty. In psychology studies, the effects of colour on physiological and emotional states were analysed, along with the psycho diagnostics of colour and its possibilities (Gage 1999: 79).

The emerging trends in the use of colour in recent decades allowed the shaping of the manifestation of an international colour culture. Achievements of colour culture, creative experience and the results of scientific research increasingly targeted different countries with regard to the colour design of the surrounding subject-spatial environment.

### **2.4.3 Theory of Rasa in Hindu Arts**

The fundamental text of Indian aesthetic theory, on which further theoretical constructions and practical art guides are based, is called *Natyashastra* (Marchand 2006: 5). It examines and systematizes the issue of transferring emotional states, which is relevant for any type of fine art (Marchand 2006: 6). Architects, sculptors and artists of India have always relied on the system outlined in *Natyashastra* (Marchand 2006: 6). Such an aesthetic system is based on the concepts of *bhava* and *rasa* (Marchand 2006: 7). Generally speaking, *bhava* refers to the various emotional states and their individual physiological manifestations (Marchand 2006: 7). *Rasa* is the essence or taste of such states and manifestations, transmitted from actor to viewer



(Marchand 2006: 7). According to Marchand (2006: 8), this universal "aesthetic code" manifests itself in all areas of Indian art (Marchand 2006: 8). The effect produced by bhava is called rasa - "extract, main result, fullness of manifestation."

The rasas described in Natyashastra correspond to the nine "permanent senses" (Plamper: 2017: 110).

**1. Srīngaram** [śrīṅgāraṃ] (amorous, erotic) comes from the basic feeling of rati [rati] (passion, desire) and has two types namely samyoga (union of lovers) and viyoga (separation from a loved one) (Plamper: 2017: 110). This rasa is called rasa-raja, "king-rasa." Vishnu is the deity of this mood, and he corresponds to the blue (sometimes green) color of his body (Plamper: 2017: 110).

**2. Hasyam** [hāsyam] (laughing) - "laughter." Usually expressed in ridiculous, strange movements, voice changes, funny gestures. The deities of this rasa are Pramatha (a class of beings from the retinue of Shiva) or Shiva, the corresponding color is white (Plamper: 2017: 110).

**3. Karunyam** [kāruṇyam] (sad) - sorrow. It is expressed through crying, sobbing, ragged breathing, a stone face, etc. The deity of the rasa is Yama, the god of death, the color is gray (Plamper: 2017: 110).

**4. Rudram** [raudraṃ] (angry) - anger. Men express it with abrupt movements, irritation, unnecessary gestures; women usually use this rasa only in relation to an unfaithful husband or a late come lover. The deity of the rasa is Rudra, the colour is red.

**5. Viram** [vīraṃ] (courageous) - courage. Vira is a feeling of strength, but very restrained, calm, completely under control. The deity of this rasa is Indra, the color is yellow-gold (Plamper: 2017: 110).

**6. Bhayanakam** [bhayānakaṃ] (fearful) - fear. The deity for this rasa is Kali. Black is the colour (Plamper: 2017: 110).

**7. Bibhatsam** [bībhatsam] (disgusting) - disgust. It arises when contemplating something unclean, unpleasant, vile, associated with evil. The deity of this rasa is Mahakala, the color is blue (Plamper: 2017: 110).

**8. Adbhutam** [adbhutam] (astonishing) comes from the feeling of vismaya, wonderful, magical, unexpected. It is associated with the Mayan divine illusion. She may be inspired by something strange, some sudden event or creature. The effect of this feeling is daze, enlargement of the eyes, loss, etc. The deity of this rasa is Brahma, the color is yellow.

**9. Shantam** [śāntam] (pacification, calmness) arises from the feeling of calmness. Peace, silence, self-control reflect this spiritual state (Plamper: 2017: 110). Buddha (or Vishnu) is believed to be the deity of this rasa, but Acharya Vishvanath names instead Gandharvas - celestial musicians. The colour is white (Plamper: 2017: 110).

Rasa is the result of a constant, dominant feeling that fills an entire work of any form of art, whether it is a design, fashion, poetry, performing arts and so on, and infects the listener or viewer (Marchand 2006: 7). The viewer / listener is called rasika ("one who eats"). The viewer / listener actively participates in the creation of a performance, be it music, dance, drama or visual arts (Marchand 2006: 7). According to Lipner (2017: 177) "colour is vital to the depictions and appreciation of rasa". As colour plays a dynamic role in any art form, it serves as an important tool in any design to release the imagination and is also considered to be an essential part of self-expression (Lipner 2017: 177). Lipner (2017: 177) writes that "in traditional Hinduism, colour is seen as an intrinsic part of being and is associated with objects as a sign of hidden essences and effects". In traditional Hinduism colour marks the tangible and forms a part of the process of identifying objects with respect to each other and is considered to be a provider of meaning (Lipner 2017: 178). It creates order and identity for any design and is said to be a sign of freedom and self-expression (Lipner 2017: 178). In this sense, "colour becomes an essence of rasa" and often involves "the magnification of artistic expression" (Lipner 2017:178). As rasa represents the sensations - then in this context "colouration is also associated with intensity and vividness" (Lipner 2017: 178).

The connection between rasas and Chakras can be noticed in the process of Yoga training (Marchand 2006: 18). Manifestation of particular Rasas depends on the domineering functions of particular psychic-energy centers — Chakras. Therefore, there is a principle in the Tradition

of Yoga that one should first master principal rasas pertinent to a particular Chakra (Marchand 2006: 18). This position is based on the following analogy: the three primary colours (red, blue and yellow) serve as the basis of all colours, the rest being the combination of these basic colours in various proportions (Marchand 2006: 18). So, various Rasas are manifestations of the mixture of psychic-energy dominants of the seven principal Chakra (Marchand 2006: 19). At the same time, the primary and secondary colours, including white colour, represent positive emotions in both Rasas and Chakras, black are associated with negative experiences, thus being the avoided colour (Marchand 2006: 19).

#### **2.4.4 Colours in Hindu Attire**

Numerous studies have been directed featuring the significance of colour in Indian culture with the emphasis on magnificence and style. In India, colour is not simply a method for ornamenting the body, antiques or architecture (Olson 2007: 42). It is a fundamental piece of all features of life joined into the ordinary texture of Indian culture (Olson 2007: 42). This wonder is most obvious in the customary pieces of clothing worn by the ladies of different societies where the use of a specific colour is generally viewed as a marker of a social character (Olson 2007: 42).

White came to be related with purity and light and was saved for the use of the highest castes, for example the Brahmins (Olson 2007: 43). Across India, white is broadly worn by men, albeit generally structured with other colour shading as an embellishment (Olson 2007: 43). Married ladies never wear any white-shaded pieces of clothing. In certain instances, they frequently wear a mix of red and white which is illustrative of both their manly and ladylike parts (Olson 2007: 43). White is likewise seen as a refutation of quality and along these lines connotes effortlessness. Thus, Hindu priests frequently wear white, as depicted in figure 2.4. For example, the members of the Jain Svetambara organisation sect wear sveta or white attire (Olson 2007: 43).



**Figure 2.4: Hindu Priest during wedding ceremony**

Kudrya-Marais (2018)

Red was generally connected with the Kshatriya champion position but is also viewed as a favourable colour, referred to in Vedic sacred texts as ‘captivating’ to the divine beings and goddesses (Olson 2007: 45). Generally acquired from the manjith or madder plant, the colour red is related to blood or the existence of power (Olson 2007: 45). It is normally used for the bridal attire as shown in Figure 2.5. It is additionally emphatically associated with an image of fruitfulness because of its relationship with the Goddess Lakshmi (Olson 2007: 45). Married ladies in many areas of India apply red turmeric powder on their temples or on their hair as an image of their marital status (Olson 2007: 45).



**Figure 2.5: Traditional Hindu bride**

Kudrya-Marais (2019)

Viewed as the shade of religion and asceticism, saffron yellow or orange are broadly worn by Hindu priests and mendicants as well as by other individuals (Olson 2007: 46). In Figure 2.6, Lord Ganesha is wearing a saffron outfit for the matrimonial ceremony as his presence is very important at any Hindu wedding (Olson 2007: 46). In North India, saffron means thriving because of its relationship with great harvests of wheat and mustard (Olson 2007: 46). Thus, in Bihar and eastern Uttar Pradesh, the maternal grandmother of the bride typically gifts a piri or orange sari to the bride for the wedding while the lucky man wears a brilliant yellow dhoti (Olson 2007: 47). In the Kangra area, the maternal aunt used to wear a yellow full-length ling-chola or tunic during matrimonial function (Olson 2007: 47).





**Figure 2.6: Lord Ganesha during wedding ceremony**

Kudrya-Marais (2019)

Yellow was additionally viewed as a highly auspicious colour, thus Hindu gods are regularly wearing the golden pitambaram. Head covers of a similar colour are hung on the bride or groom in different communities. For example, a yellow odhni or wrap is put on the groom's shoulders during the wedding function in Uttar Pradesh while extravagantly weaved phulkari wraps are given to the bride in Punjab. In the eastern areas of the Indian subcontinent, on the main day of the Hindu wedding, the bride is washed in turmeric during a customary ceremony, during and after which she wears a yellow sari. Yellow saris are usually worn during the peak of Tamil and Telugu wedding services among non-Brahmin people (Olson 2007: 52). Figure 2.7 depicts a wedding Thali which the groom places around the bride's neck at the end of the wedding ceremony. The Thali is always placed on a yellow string which is later replaced by a golden chain (Olson 2007: 58).



**Figure 2.7: Wedding Thali (string) placed on a yellow string**

Kudrya-Marais (2017)

Blue colour, truly acquired by maturing indigo, was considered impure for the ceremonies and was associated with the Sudras and outcasts (Olson 2007: 47). Black colour, made by darkening the indigo blend, was also viewed as auspicious (Olson 2007: 47). Initially, both these colours represented sadness and sickness and were worn by certain communities during grieving times (Olson 2007: 47). In later years, this affiliation grew dim, making blue and black designs on white saris to be commonly worn by older married ladies (Olson 2007: 47).

## **2.5 SEMIOTICS IN HINDUISM**

### **2.5.1 Semiotics of Colour**

Colours provide information, create a lasting effect and have a symbolic value associated with them (Hynes 2009: 545). Semiotics is a study of how meaning of signs and symbols is created and communicated (Hynes 2009: 545). Like symbols, each colour represents something and

they can even have different meanings from one culture to another. Gunther Kress and Theo van Leeuwen (2002: 228), the authors of the textbook on the grammar of colour, write that colour has developed into a systematically organized mode of communication with colours being the basic elements of such a system, similar to the phonetics.

Colour exists both inside and outside of the viewer, which creates a duality in perception (Kress & Van Leeuwen 2002: 347). The outer colour is the perceptual colour and it represents the actual colour image including the characteristics of colour value, saturation and hue (Kress & Van Leeuwen 2002: 347). The inner colour, on the other hand, is the psychic colour and it is based on experience rather than perception (Kress & Van Leeuwen 2002: 347). The relationship between physical colour and psychic colours is isomorphic, which follows from experiments on multidimensional scaling and colour attribution and the distinction of emotional states (Kress & Van Leeuwen 2002: 348). While the structure of the colour analyzer is fixed anatomically, the structure of potential semantic features of color is equally deeply rooted. Thus, all semiotic aspects of colour are interconnected by isomorphic relationships determined by the anatomical and physiological structure of the colour analyzer (Kress & Van Leeuwen 2002: 349). This means that colour remains a holistic phenomenon, even when presented in many of its psychological aspects (Kress & Van Leeuwen 2002: 349). It is important to note that verbal designations of colours are in one way or another connected with all of the above aspects of colour (Kress & Van Leeuwen 2002: 349). Emotional reactions are more directly related to physical color, while nonemotional and culturally determined associations are associated with the name of colour (Kress & Van Leeuwen 2002: 350).

It is said that colour semiotics has three distinct origins, namely emotional, socio-economic and cultural. Firstly, colours can have a strong emotional effect and influence an individual's physiological state, such as red increasing blood pressure and affecting physical strength (Kress 2002: 352). Secondly, the colours have a socio-economic meaning attached to them such as colour violet which was associated with wealth and happiness in Western society, due to the violet dye being more expensive than gold and only available to rich people and a few selected organisations such as the Christian Church. Lastly, the cultural origin of colour meaning can be seen in the example of Indian Bridal outfit which is red as opposed to the Western white wedding gown.



The importance of colour semiotics has been highlighted by authors in various disciplines, such as in visual corporate identities (Hynes 2009: 546), in human-computer interaction (Bourges-Waldegg & Scrivener 1998: 289), in political communication (Archer 2006: 451) and as markers of gender and sexuality (Koller 2008: 48). Hynes (2009: 546) examined the relationship between colour, design and evoked meanings of logos and its effect on the corporate image. The results have indicated that consumers make clear judgements about the company based on the logo design and have a specific interpretation of the corporate image. Bourges-Waldegg & Scrivener (1998: 289) focused on the design of the computer system which is shared among multicultural audiences in order to determine possible usability problems related to understanding of graphical meanings which are rooted in a culturally specific context. Lastly, Koller (2008: 48) argued that the colours used as social markers of gender and sexuality have different meanings across cultures.

Although black is usually associated with death, it can have other meanings, such as power or evil. The meaning of a colour should rather be considered in a particular situation, as its meaning depends directly on the context in which it is depicted and used. The meaning of a colour also depends on other aspects of visual appearance, such as the texture, shape and reflective quality of a particular surface or object (Lucassen, Gevers & Gijsenij 2010: 347). The meaning of a colour is not constant and universal, but rather depends on the culture and varies throughout history and time. For example, black does not represent death in some countries, while it is used as a mourning colour in others. The knowledge and understanding of colour semiotics is crucial to the success of any design, especially in branding and marketing. Thus, colour meanings and associations can vary in many ways in different communities around the world.

On the one hand, the association of meaning and colour seems to be very natural and widely accepted but, on the other hand, it is rather unpredictable and chaotic (Kress & Van Leeuwen 2002: 360). ‘Social groups that share common purposes around colour are often relatively small and specialized compared to groups that share language or visual communication’ (Kress & Van Leeuwen 2002: 369). Kress and Van Leeuwen (2002: 369) point out that colour does not elicit the same response from everyone but is interpreted in a particular way depending on the context in which the message is conveyed. Colour can be seen as a group of components and features, or semiotic resources such as hue, saturation and value of colour (Kress and Van

Leeuwen 2002: 351). Such elements regulate how the colour is viewed and interpreted in a particular context (Kress and Van Leeuwen 2002: 361).

As colours denote social, personal and textual meaning, they can be considered multifunctional (Kress and Van Leeuwen 2002: 351). However the resources of colour are not fully specified in semiotic theory and are often combined with other modes of communication (Kress and Van Leeuwen 2002: 351). Kress and van Leeuwen (2002: 361) discuss the features of colour and its communicative functions in advertising, home décor, and fashion and approach colour as a mode. They move away from the idea of a colour having one fixed meaning and move towards understanding colour as having many different features that shape the meaning to colour (Kress and Van Leeuwen 2002: 361).

### **2.5.2 Colour Semiotics in Hinduism**

There are many ways of relating to other cultures. Such concepts in their modern meaning may be considered as something that naturally exists; therefore, the problem of understanding it is eliminated as a special task. Hodge and Kress (1988: 68) address the applied challenges that have restricted its development as a field of request and exhibit how it may be coordinated with the social examination of force, philosophy, sex and class. Social Semiotics investigates the numerous opportunities for semiotic examination that are made by the suspicion that signs and messages should consistently be arranged inside the setting of social relations and cycles (Hodge & Kress 1988: 74). Semiotic as an independent discipline must be recognised as a coordinated scholastic endeavour which became noticeable in the second part of twentieth century, but as a hypothetical theory, its starting points might be followed in old India. As brought up by Ducrot and Todorov (1979: 84), in nations like India a semiotic theory is implicit in the ‘linguistic speculation bequeathed to us by antiquity’. It is not recognised that in India this semiotic support was pervasive and that numerous significant semiotic topics had arisen and grown freely in the Indian way of thinking (Ducrot & Todorov 1979: 85).

In Hindu astrology, the planets are said to have an influence on the life of man according to the position they are in when a man is born. Each planet has its period of influence (Seva 2017: 86). Thus, colours became an effective tool in worshipping and the planets, named in Hindu, Navagrahas. Sun, Moon, Mars, Mercury, Jupiter, Venus, Saturn, Rahu (Neptune) and Ketu (Pluto), are invoked before the important prayers in ceremonies and weddings. These planets are also depicted in Rangolis with certain colours assigned to them (Seva 2017: 86).

### **2.5.3 Studies on Semiotics of Colour**

In their recent study on colour semiotics, Kauppinen-Raisanen and Jauffret (2018: 105) explore the influence of colour in marketing, discover knowledge about the meaning of colour and propose an alternative view to understanding visual communication. The study took a conceptual approach by proposing Peircean semiotics to understand colour relationships. The proposed framework is applied to 'analyse the colour meaning recognised by previous research'. The results of their research show the underlying mechanism of how colour in advertising is read and interpreted in different ways and how the message is created and interpreted. The study also analysed the existing system by identifying the symbolic, iconic and indexical signs of colour. Their research contributed to the scientific knowledge of colour in marketing. It helps to understand how 'consumers interpret representations as single visual signs in the context of products, brands and brand packaging to make informed product decisions' (Kauppinen-Raisanen & Jauffret 2018: 107).

Ramanathan, Alwis and Murali (2020: 289) have conducted an empirical study of the meanings of colours among the youth of India. The focus of the study was to discover the relationships which exist between colour associations in a multidimensional context. The researchers used a descriptive design research and incorporated questionnaires to obtain the valuable data. The chosen population for the study consisted of 120 young Indians from 20 to 25 years old. The participants were presented with six different colours in a two-dimensional space. The results of the studies have shown different attributes of colours based on the responses of the participants; namely, royal blue representing trustworthiness, green associated with nature and safety, and warm and white colours related to faith. This signifies the different impact of colours on consumers.

An evident dependence on colour semiotics forms an important part in the colour science community of designers and visual artists. When viewed as single individual patches without any given context, the meanings produced by the colours are considered abstract and can be changed when applied to a particular space or situation. The term 'colour emotion' is used more often than the semiotics of colour in the design community. Gao et al. (2006: 415) note 'the semantic words describing words like warm-cool, light-dark, soft-hard'. Colour science also tends to study the pairs of opposites of colours represented as 'soft-hard'. Under these circumstances, the cultural background of the viewer plays an important role in interpreting colour meaning. However, its impact is limited (Lucassen et al. 2010: 32). The medium used

to present the colour to the audience has little impact on colour interpretation whether a paper or a digital display (Suk & Irtel 2010: 86). This highly contradicts the view of Grieve (1991: 1320) that colour does not elicit a response. Most formal studies in the last decade have investigated whether there are cultural-, gender- or age-related effects in terms of the meanings that observers associate with colours when viewing colours without context and using different square patches presented on a computer screen.

One study (Gao et al. 2006: 416) examined observers from seven countries (Hong Kong, Japan, Thailand, Taiwan, Italy, Spain and Sweden); they were asked to rate 214 colour samples, each in relation to 12 bipolar word pairs such as soft-hard. The study found little difference in interpretations between different nationality groups with different cultural backgrounds. In another study (Ou et al. 2004a: 238), 14 British and 17 Chinese observers were presented with 20 colours. The participants' responses were similar, apart from personal likes or dislikes of particular colours. Chinese observers tended to prefer colours that were clean, fresh or modern, while British participants did not seem to have such preferences. British observers showed their associations with active colours to be intense, while Chinese tended to associate excitement with heavier and more muscular colours.

In a second study (Ou et al. 2004b: 239), 8 British and 11 Chinese observers rated 190 colour pairs in relation to 11 bipolar word pairs. This study showed only gender differences. When male-female word pairs were examined, female observers preferred bright, soft and relaxed colours. Such an association did not occur in male participants. Each colour has a meaning, but this meaning is not consistent across cultures, ages and genders. As Gage (1999: 38) writes: 'The extent to which different colours, such as red or black, have meaning across cultures is a far more difficult question'. The above studies were not able to provide definitive answers to the question of whether the meaning of colours and emotions depended on culture, as the number of participants was too small to represent a full community. Because special laboratories with carefully controlled and calibrated equipment were required to conduct the experiments, these studies could not include large numbers of participants. One way to include a much larger number of observers was to use a web-based experiment, such as the one conducted in the research by Westland and Mohammadzadeh (2012: 73). Web-based experiments have many advantages, because they allow access to a large number of participants and cause minimal disruption to the observer and the experiment. Such studies have some

disadvantages, such as colour variations of different screens, ambient light levels and operating software.

## **2.6 COLOURS IN PHOTOGRAPHY**

Colour plays an important role in any photograph and gives the photo authenticity (Peterson & Schellenberg 2017: 10). Any colour distortion in a photograph must have an aesthetic justification that is understandable to the viewer (Peterson & Schellenberg 2017: 74). Colour helps to accentuate the semantic and visual centers of the image (Peterson & Schellenberg 2017: 75). The brighter the object, the more attention it attracts to itself, thus, colour can help or hinder the composition (Peterson & Schellenberg 2017: 10). Colour also helps to build the volume and geometry of the frame (Peterson & Schellenberg 2017: 60). The closer the subject is, the brighter the colour (Peterson & Schellenberg 2017: 32). The saturation of distant subjects is always lower than that of nearby subjects (Peterson & Schellenberg 2017: 34). Exceptions can be in landscape, or vice versa, in macro photography, but the rule remains the same: air haze reduces the colour saturation of distant subjects (Peterson & Schellenberg 2017: 32). The colour tone, the general temperature of the colour range help the viewer understand the conditions in which the object is captured (winter-summer, nature-room, morning-evening) (Peterson & Schellenberg 2017: 23).

Colour carries a great semantic, emotional and aesthetic load in the art of photography (Peterson & Schellenberg 2017: 74). The correct placement of colour accents, their tasteful combination allows you to create a unique compositional solution (Peterson & Schellenberg 2017: 35). Colours, being in harmonious unity with each other, must also be consistent with other components of the composition - light, movement and space (Peterson & Schellenberg 2017: 35). The colour composition can be built in two ways: according to the principle of subordination or according to the principle of coordination (Peterson & Schellenberg 2017: 52). In the first case, any colour spot is assumed to be the main or dominant one, and all other colours correlate with it, harmonizing or contrasting (Peterson & Schellenberg 2017: 52). On the contrary, coordination is realized in images containing many gradations of the same colour, which are interconnected and coordinated with each other (Peterson & Schellenberg 2017: 53). The colour construction of an image can be obtained by choosing an object and a shooting point, using the required spectrum of illumination (for example, shooting at a certain time of the day) (Peterson & Schellenberg 2017: 35). The colour composition is also built taking into account colour spots and the location of colour across the image field (Peterson & Schellenberg

2017: 36). The use of light filters in the shooting process allows for great artistic opportunities (Peterson & Schellenberg 2017: 126). Filters can not only correct colour rendition but also influence colour rendition for artistic purposes (Peterson & Schellenberg 2017: 127).

The primary colours in photography are red, green, and blue (Peterson & Schellenberg 2017: 14). When all three are added together the white light is produced (Peterson & Schellenberg 2017: 14). Complementary colours are placed on the light circle opposite each other - cyan and red, magenta and green, yellow and blue (Peterson & Schellenberg 2017: 42). Secondary colours are obtained by adding two others to each other (Peterson & Schellenberg 2017: 42). When a photograph is taken, colours are formed by the colour layers that make up the emulsion (Peterson & Schellenberg 2017: 42). These layers include cyan, magenta, and yellow dyes (Peterson & Schellenberg 2017: 43). Each of them reacts to the brightness of the corresponding colour (Peterson & Schellenberg 2017: 43).

Colours also have the power to evoke various reactions and psychological emotions in the viewer (Peterson & Schellenberg 2017: 74). For example, blue is associated with the free sky and sea, as well as with cold and loneliness, and red with blood, revolution, love or hate (Peterson & Schellenberg 2017: 75). Light and colour are among the most important components of modern photography and allow the photographer to create images that draw attention to themselves (Peterson & Schellenberg 2017: 34). Light and colour often help to generalize the image, to give free rein to the imagination and fantasy of the viewer (Peterson & Schellenberg 2017: 34).

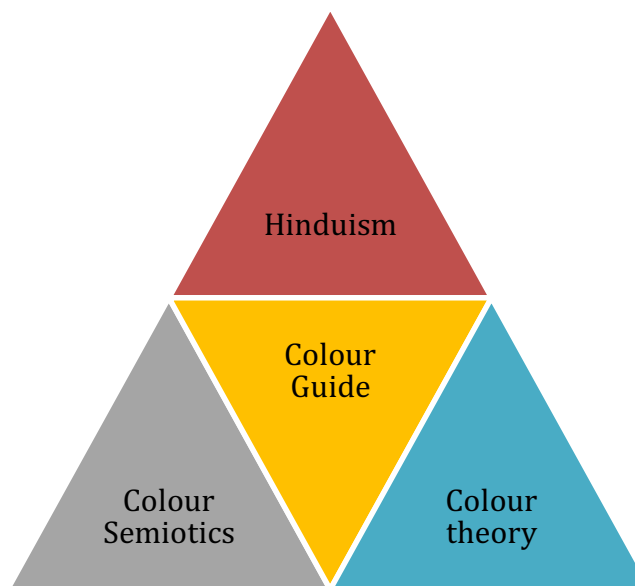
## **2.7 LITERATURE GAP**

Aspects of colour in Hinduism have been highlighted in the works of a few researchers. Mumtaz (2004: 87), in his book, *Deeper aspects of Hinduism*, highlights the strong relationships that exist between scientific properties of light and colour and the relation to the use of colour in Hindu culture and religious practices. Edith Feisner, in her book, *Colour*, investigates the symbolic use of colour in Hinduism and its application in social life among Hindu communities (Feisner 2006: 98). Dr Shiv Sharma conducted a study of the significance of colour in Hinduism used in politics and medicine. In his book, *The Brilliance of Hinduism*, he has also highlighted the importance of specific use of colours in a national flag (Sharma 2009: 88). However, the above-mentioned studies used a generic approach with no inquiry into its professional application. Besides, a thorough research revealed that there is apparently no existing study that has developed a colour guide based on colour symbolism in Hinduism that

is applicable in the design field for the Indian audiences. There were several studies conducted, all highlighting the colour meanings in Hinduism in a general form, but not for a particular field of work such as design. Hence, the outcome of this research will fill these literature gaps through the development of a visual colour guide intended for the use in any design field.

## 2.8 CONCEPTUAL FRAMEWORK

The conceptual framework represents theories relevant to the topic and the theory-based collection of principles that are relevant to this particular study method and data analysis (Camp 2001: 73). This conceptual framework uses three main elements as the basis for this study: namely, the Colour Theory, Colour Philosophy in Hinduism and Semiotics of colour. The visual representation of the conceptual framework model is presented in Figure 2.4.



**Figure 2.8: Conceptual Framework**

Kudrya-Marais (2020)

As depicted in Figure 2.8, three main elements served as a starting point in creating the visual colour guide representing the relationships which exist between traditional Colour Theory, Hinduism and Semiotics of Colour. By analysing these distinctive disciplines, many connections and relationships have emerged. Relevantly, the study focuses on analysing, planning and confirming the important links between the above-mentioned disciplines and highlighting many shared attributes and qualities among them. It is important to note that the

base of colour science, semiotic theory and Hindu colour meanings have the same guidelines and principles on which they rely. This study focuses on identifying the important similarities which can contribute to one another and lead to a new way in which colour symbolism can be perceived and interpreted.

The reviewed literature highlights the important studies around the scientific qualities of colour, its healing properties, semiotics of colour and colour symbolism in Hinduism. The conceptual framework facilitates the researcher's perspective regarding the 'compilation of the research variables in a mechanism that better describes the logical and natural development of the observed phenomena' (Camp 2001: 73). The conceptual framework is linked to the 'principles of the empirical analysis used to advance and systemise the researcher's awareness' (Peshkin 1993: 35). The developed framework for this study provides an overview of three different theories and highlights the mechanism between the elements of each to show the important links which exist between them.

As mentioned in the literature review, the study of the symbolism of colour has professional status and has been highlighted in the works of many researchers across different disciplines. The process of globalisation has played a vital role in how colours are viewed and interpreted. The influence of Western culture has contributed to the change of colour use in Hinduism and has had a social impact on the Hindu communities around the world (Golebiewski 2014: 78). This framework intends to link the relationships between the above concepts in the context of South Africa and to create an awareness in the design field.

Theory is designed to 'describe, anticipate and interpret phenomena, and it is often challenged and extends beyond its current limitations' (Tashakkori & Teddlie 2003: 74). The conceptual framework is the mechanism that can support or confirm the research study. It illustrates and outlines the belief that shows 'why the question exists and how it is related' (Tashakkori & Teddlie 2003: 75). The conceptual framework adopted for this study aims to support the implied relationships between colour semiotics, colour science and symbolism of colour in Hinduism. It suggests the important connections and similarities which exist between the two contradictory disciplines – namely, science and religion. Such similarities exist because Hinduism is strongly based on nature, similar to science which also derives its principles from nature (Khaled 2007: 29). At the same time semiotics form an important part in Hindu community, thus allowing these three disciplines to be related to each other in terms of colour meaning and interpretation.



### **2.8.1 Colour Theory**

There are three primary colours – red, yellow and blue. These primary colours also correspond to the main colours used in religious Hindu practices. As any new colour can be produced by mixing the primary colours in specific combinations, the same principle applies in colours used in Hinduism, where secondary colours used in a traditional colour theory correspond to the second hierarchy of colours mainly used in Hinduism. A colour system has a set of specific principles by which the colours are created and reproduced. Such principles are also widely used in Hindu religion. In Hinduism, the colour is based on the reflective light from the trinity of colours such as red, blue and yellow. When applied together they produce pure white light which represents the creator of the universe.

To see the relationship between different colours, the modern colour wheel was used as a base for this research to represent the hierarchical structure of colours and their relationships in Hinduism. Such a colour wheel simplifies the understanding of different colours and allows one to see in detail the important relationships between different colours and understand their connection based on respective positions. In Hindu religion, colours also have their corresponding chakras, days of the week and planetary names associated with one particular colour presented in a colour wheel (Kumar 2000: 86). Such colour combinations also refer to different deities with their respective qualities and meanings based on the colours they represent.

### **2.8.2 Colour philosophy in Hinduism**

In Hinduism colours form an important part of religious practices and rituals and are also associated with particular events or situations. Colour significance could also be seen in the drawing of the mandala, which is a circular figure representing the universe in Hindu symbolism. The use of colour in Hinduism is strongly based on the physical qualities of colour itself which is also related to colour science. Wavelengths can also be interpreted as vibrations as they vary depending on the colour. As each colour produces different lengths of wavelengths, they can be grouped according to the quantities they represent and the way they are used in religious Hindu practices and everyday life of Hindu people. The most widely used colour is red (Khaled 2007: 29) and has the longest wavelengths. It is considered the warmest colour, followed by the invisible infrared in the light spectrum. At the opposite end, violet represents the coolest colour, having the shortest wavelength – followed by invisible

ultraviolet light – and is considered the coldest colour. The colour violet also has the shortest wavelengths according to its physical qualities.

### **2.8.3 Semiotics of Colour**

Colour can be treated as a language representing an alternative communication system consisting of visual and natural language signs which are unique to the society or culture in which they exist. Advancements in colour theory in recent years have led to the discussion whether colour can be considered a means for communication. As semiotics play an important part in Hinduism, it is important to introduce the Semiotics Theory in this study and apply its principles in the conceptual framework. In many instances, the Hindu religion passes messages using colours rather than words (Khaled 2007: 99). For example, a widow always wears white to convey a message of sorrow and mourning, while priests dress in orange robes to convey a message of spirituality.

The conceptual framework for this study intends to discover the underlying relationship that exists between the physical qualities of any given colour and colour symbolism in Hinduism. Colour also has a semiotic expression attached to it where each colour conveys a specific meaning. In Hinduism, each colour always has a particular message attached to it. The colours convey the essence of Hindu culture highlighting political, cultural and social norms of a community they represent. In such a context, colour can also be identified as a sign and it becomes a symbol with an attached meaning.

The conceptual framework starts from the view that there are a number of activities that, if logically organised, can create the awareness of colour meaning in Hinduism that can contribute to anyone in the design field wishing to produce anything for the Hindu audience. As the literature review has shown, the meaning and role of colours can be viewed from scientific, cultural and religious perspectives. Due to the impact of globalisation and the changing role of colours and their meanings, this conceptual framework emphasises the importance for anyone in the design field to recognise and incorporate the symbolism of colour to create visual work with the correct messages. At the same time, there is little research on the symbolism of colour in Hinduism in the design field, especially in a South African context. The researcher believes that through the engagement with other scientific fields and traditional theories of colour, as indicated in Figure 2.4, the designers will be able to pass the right messages to the Hindu audience, thus creating greater social value.

## **2.9 CONCLUSION**

The literature analysis provided an opportunity to look at the role of colour in two distinctive disciplines namely science and religion. This chapter reviewed the colour symbolism in Hindu religion and the impact of globalization on colour symbolism in Hindu community. In addition, the chapter showed the role of semiotics in Hinduism and the relationship which exists between chakras and colours . This chapter has also highlighted the visual perception of colours and the use of colour in photography. The literature gap was provided at the end of the chapter followed by the discussion of the conceptual framework for this research. The next chapter contains the research methodology used for this study in order to achieve the objectives and the main aims of the current research.

## **CHAPTER 3: RESEARCH METHODOLOGY**

### **3.1 INTRODUCTION**

The previous chapter provided a review of the existing literature, the current state of knowledge and the basic findings of the published work in relation to the present study. Chapter 3 focuses on the methodology adopted to conduct this research study. The chapter provides a detailed account of the research methodology and the specific methods used in obtaining the data. The methods employed in collecting and analysing the data are highlighted and issues of trustworthiness and ethical considerations are discussed.

The main aim of this study was to investigate colour symbolism found in Hinduism with the intention of creating awareness and promoting its application in any design practices. This work focused on exploring the role of colour in Hindu religion and its cultural associations in the Hindu community. The study has also investigated the impact of globalisation on the application of colour symbolism in Hindu community. The main outcome of this work was a colour guide in the form of a catalogue intended for anyone in the design field who wishes to learn, understand and apply the important meanings behind colours in Hindu culture.

The study followed a qualitative research methodology and aimed to explore colour symbolism and theoretically explain the various colours and their symbolic meanings in Hindu culture. Hence, an exploratory study design was chosen, as it involved an understanding of what types of colours Hindu people are exposed to daily and what their respective meanings and associations are. Through the lens of members of the Hindu community, the researcher also sought to understand which spiritual healing properties of colours used by families and communities could be beneficial in a broader context of the design field.

### **3.2 OVERVIEW OF RESEARCH METHODOLOGY**

The research methodology chosen for this study is the qualitative research methodology, as it is more common in the social science field and asks questions such as, ‘how and why’ rather than ‘how many’ (Strauss & Corbin 1998: 11). Steven et al. (2015: 7) wrote that qualitative research methodology is ‘research that produces descriptive data-people's own written or

spoken words and observable behaviour'. It is 'characterised by its aims, which relate to understanding some aspects of social life, and its methods which generate words, rather than numbers as data for analysis' (Strauss & Corbin 1998: 11). Qualitative research methodology complements this study, as the researcher is interested in gaining detailed insight into the experiences, feelings and thought processes regarding colour of the Hindu community in the Durban area.

According to Unrou, Gabor and Grinnell (in De Vos et al. 2011: 223-224), a research sample includes 'components or a subset of the population considered for actual inclusion in the study, or it can be considered a subset of estimates drawn from a population in which the researcher is interested'. For this study, the population is a term that defines the boundaries of the units of study. It refers to individuals who 'possess certain characteristics and have explicit attributes' (Strydom 2011: 223). Therefore, for the purpose of this research, the population is the Durban Hindu Community within a 30 km radius of eThekweni Metropolitan Municipality, South Africa.

This population has been specifically selected in order to produce rich and detailed data from the participants and provide detailed insights for the questions asked. The population chosen was practising Hindu religion daily and the researcher was therefore able to understand the collective experiences with colour experienced by those associated with Religious Hindu organisations.

### **3.3 RESEARCH DESIGN**

A qualitative research methodology was used for this research, as it plays a vital role in understanding the cultural and social contexts to which people belong to through the words and records of the participants (Creswell et al. 2007: 87). The researcher was able to explore the contexts of communities and individuals through meaningful interviews with religious leaders and senior members of Hindu community. Hence, valuable information was obtained regarding the traditions that are commonly practised, the religious rituals performed and what the actual Hindu lifestyle involves. According to Willis et al. (Cohen 2018: 28), qualitative researchers can construct a social phenomenon and further provide insights that the qualitative approach is flexible (Cohen 2018: 28). The flexibility of this approach allowed for probing during the interviews to obtain a richer understanding of the contexts of different colours applications and

their meanings in religious practices and everyday life of Hindu people. The data collected is qualitative in nature and is derived primarily from conducting interviews and observations to gain understanding (Cohen 2018: 28).

‘Qualitative research also allows for exploration, discovery and induction’ (Creswell 2013: 69). One of the main benefits of this research method is that it is ‘useful in generating insights for understanding the underlying factors that influence behaviour’ (Creswell 2013: 69). Cohen (2018: 32) highlighted that qualitative research involves a substantial degree of flexibility, indicating that this ‘allows for a more solid grasp on the subjects being studied’. Using this method has enabled the researcher to extract more probable answers to questions that are presented to the participants. The data collected through interviews is most desired by the researcher, as valuable insights emerge that could possibly be missed by other research methods. Using interviews as the data collection method allowed the researcher to collect detailed data that participants were able to provide in their capacities and from their experiences. In this case, data was collected from 10 spiritual leaders and 10 senior citizens of the Hindu community.

After carefully developing the research questions, the researcher worked on a research design. This is a fundamental component of any research project which serves as a plan that details how the data will be collected and analysed in order to reach the main aim outlined in the introductory chapter. For this study, an exploratory study design was used because it entailed exploring the following:

- The role of colour in Hindu religion and its cultural associations in the Hindu community.
- The impact of globalisation on the application of colour symbolism in the Hindu community.
- The application of colour in the Hindu community.

De Vos et al. (2011) indicated that ‘exploratory research is most often used in a study about which little information exists and will therefore form a foundational background for further studies’. Through the review of literature, the current study has identified that there is apparently no existing study that has developed a colour guide based on colour symbolism in Hinduism that is applicable in the design field for the Indian audiences. There were several

studies conducted which all highlighted the colour meanings in Hinduism in a general form, but not for a particular field of work such as design.

For this research, the case study was selected as the most appropriate method, taking into account both the aims of the study and the context for the research. Due to the lack of large samples of similar participants and the need to collect many details not usually easily obtained through other research designs, the information obtained was much richer and more detailed than could be found through other methods. By selecting two specific samples of the population – namely, elderly members and religious leaders of the Hindu community – the researcher was able to get important information which is shared among the entire community and represents the values and norms of the context under research.

The collected data provided by the participants is highly valuable, as religious leaders and elderly members of the community possess the greatest knowledge of the religious practices and their respective colour representations which was the main objective of the study. They also are the most involved ones in community life and have a better understanding of the colour norms and their associated meanings among Hindu people. They have provided a great insight into the information needed to conduct this study and have contributed to a great extent to answer the main question of this research.

### **3.4 RESEARCH TOOL**

‘Qualitative data is derived from many sources, for example, interviews; observations; documents and reports, field notes, etc.’ (Cohen 2018: 32). Interviews are a more prominent method in qualitative research and this tool is described as a ‘social relationship designed to exchange information between the participant and the researcher’ (De Vos et al. 2011). Therefore, for the purposes of data collection in this study, semi-structured and open-ended questions were used in the interviews with spiritual leaders and senior citizens of the Hindu community. Due to the situation with COVID-19, as an alternative method – and to practice social distancing – all interviews were conducted via video calls using available platforms such as Skype and Whatsapp at a convenient time for each participant. The data was not recorded in a way that connects the identifying information of participants to their response, but uses a code only known to the researcher instead. As the participants cannot be identified by their true

identities, but rather by using a set of data combinations about them, the researcher only revealed total discoveries, without highlighting the individual-level data to the public.

### **3.5 SAMPLE**

According to Unrou, Gabor and Grinnell (in De Vos et al. 2011: 223-224), a research sample ‘comprises elements or a subset of the population considered for actual inclusion in the study, or it can be viewed as a subset of measurements drawn from a population in which the researcher is interested’. For this study, population is a term that delimits the units of study. It refers to individuals who possess certain characteristics (Strydom 2011: 223). Therefore, for the purpose of this research the population is the Durban Hindu Community within a 30 km radius of eThekweni Metropolitan Municipality, South Africa. This population has been specifically selected as it produced rich and detailed data from the participants and provided detailed insights for the questions asked. The population chosen was practising Hindu religion daily; therefore, the researcher was able to understand, from those associated with religious Hindu organisations, the collective experiences with colour.

Purposive sampling was used in this study. According to Unrau et al. (De Vos et al. 2011: 231), in the non-probability paradigm, not every unit in a sampling frame has the same chance of being selected for a particular study. Those who held the position of resident priests at the temples, conducting wedding and religious practices daily, and senior members of the Hindu community who attend these temples and continuously practice Hindu religion were selected to provide rich data. The researcher was in contact with them every weekend and has worked with many Hindu priests and Hindu customers in the Durban area over the last decade. There were also limitations such as time. If the whole community had participated, it would be a long, drawn-out process that could have taken many years, and would have required too much time, effort and money.

#### **3.5.1 Purposive Sampling**

According to Unrau et al. (De Vos et al. 2011: 235), a sample is a small number of the population selected to participate in research, being a representative of the larger population. Since the total population is too large, a sample is drawn. ‘In homogeneous populations where members are similar with respect to variables important to the study, smaller samples may



adequately represent the population’ (De Vos et al. 2011: 235). Strydom (2011: 225) states that ‘the advantage of purposive sampling is that it allows the researcher to select the sample based on knowledge about the phenomena under study’, while Cohen (2018: 34) states that ‘purposive sampling is used in specific situations where sampling is conducted with a specific purpose in mind’.

According to Cohen (2018: 35) , ‘in many cases purposive sampling is used in order to access knowledgeable people’ and ‘researchers handpick the cases to be included in the sample based on their judgment of their typicality or possession of the particular characteristics being sought’. Purposive sampling was used by the researcher because the sample selected is knowledgeable about the study area and would contribute appropriately. These elements refer to the deep knowledge of Hindu culture and religion, as older members of the Hindu community and temple Priests have education, experience and knowledge of rituals and traditions. Participants chosen for this research were more knowledgeable about Hindu religion and how the colour symbolism impacts on their lives than other people in the community who did not possess such deep knowledge. Resident priests of the 10 most popular eThekwini temples (Prozesky 2000: 172) and 10 members of the Hindu community who attend these temples were selected, as they are continuously practising Hindu religion and conducting wedding and religious practices daily.

**Table 3.1: Population and sample size**

Population	Sample size
1. Resident priests of different temples within 30 km within eThekwini district.	10 Resident priests. However, data was collected until saturation. Minimum sample size is 7. Maximum sample size is 15.

2. Senior members of the Durban Hindu community within 30 km within eThekweni district.	10 Senior members. However, data was collected until saturation. Minimum sample size is 7. Maximum sample size is 15.
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### 3.5.2. Location of Study

This study took place within a 30 km radius around eThekweni. eThekweni is one of the 11 districts of the province Kwa-Zulu Natal, South Africa. It includes the city of Durban and surrounding towns. The majority of the Hindu population in South Africa lives in Durban and its surrounding areas making it one of the largest ‘Hindu’ cities outside of India (Prozesky 2000: 175). Figure 3.1 represents the area of coverage for this research.



**Figure 3.1: Selected Hindu Temples**  
eThekweni Municipality (2019)

### **3.5.3 Inclusion criteria**

- English-speaking resident priests between 35 and 75 years old from 10 different Temples within a 30 km radius around the eThekwin area who have given their consent to participate in the study: Clairwood Temple, SA Hindu Maha Sabha, Durban Hindu Temple, Mobeni Temple, Shree Santhan Dharma, Vishwa Shakti Temple, Shree Emperumal Temple, Umbilo Temple, Ottawa Temple and Siva Soobramonair Temple in Tongaat. These temples were selected using the criteria of being both the oldest and most popular temples around the eThekwin district (Prozesky 2000: 178).
- Ten English-speaking senior members of the Hindu Community within a 30 km radius around the Durban area between 65 and 75 years old with religious dedication to Hinduism, practising cultural and religious life daily and who have given their consent to participate in the study.

### **3.5.4 Exclusion criteria**

- Non-English-speaking resident priests
- Priests who have not given their consent to participate in the study
- Resident priests of the newer and less popular temples within a 30 km radius of eThekwin
- All Temples which fall outside the 30 km radius of the Durban area
- Younger generation of Hindus in the Durban community
- Community members who do not practice Hinduism daily
- Community members who have not given their consent to participate in the study
- Community members who fall outside of the 30 km radius of eThekwin

### **3.5.5 Recruitment process**

The main strategy used to recruit participants relied on professional connections. As the researcher was a professional Hindu wedding photographer in the eThekwin area for the past 10 years, she has come to know many people in the Hindu community. This involved looking for recommendations for potential participants from known others. Gatekeepers of the Hindu community in eThekwin, such as administrative persons of religious organisations, were contacted to gain access to particular members of the community or organisation.

Ethical approval (Appendix A) was obtained from the Faculty Research Committee of Durban University of Technology to conduct the study and a Permission Letter (Appendix B) was

requested. These were sent to the 10 selected religious Hindu organisations as well as senior members of Hindu community around the eThekweni municipality to request permission to conduct the interviews. Once permission was obtained, all potential participants were informed of the proposed research and were also assured that their participation was voluntary and that they could withdraw from the study at any time. Once this was secured, participants were asked for their contact details and then given a Letter of Information (Appendix C) and a Letter of Consent (Appendix D) to sign to confirm their voluntary participation.

The data collection began with the 10 religious leaders of the Hindu community and 10 senior members who had confirmed their participation and duly signed the consent form. The letter also stated the purpose of the study and its objectives. The 20 willing participants were contacted telephonically. Interview times and dates were set up according to their individual availability. In addition, participants were informed of the confidentiality of their participation and contribution and reassured once again that they could withdraw from the study at any time.

### **3.6 DATA COLLECTION**

‘Data collection is undertaken in a research project to obtain first-hand information from participants’ (Taylor, Bogdan & DeVault 2015: 29). Data collection allows for obtaining specific information relevant to the research study and ‘collected by means of attitudes/opinions, awareness/knowledge, intentions, motivations and behaviour; (Taylor, Bogdan & DeVault 2015: 30). De Vos et al. (2011: 360) state that ‘interviews have particular strengths, and they are a useful way of getting large amounts of data quickly and are an especially effective way of obtaining in-depth data’. Semi-structured interviews have been chosen for this study, as the researcher aimed to provide a relaxing environment which is flexible and allowed the researcher to understand the experiences, thoughts and emotions of the participants.

Data collection took place using semi-structured interviews. The researcher conducted each interview personally. According to De Vos et al. (2011: 370), it is important that ‘the researcher knows the limits when developing questions’. According to De Vos et al. (2011: 351), a popular format for in-depth interviewing is a ‘funnel structure’ where the researcher starts with an expansive and less organised set of questions to introduce the participants to the situation. The aim is to ‘hear the participants’ points of view and lead them into a process of discussing the

topic effectively' (De Vos et al. 2011: 351). As the connection was established, the questioning became more structured, and the questions covered the points relevant to the research.

In-depth interviews were conducted with resident Priests of different temples and senior members of the Hindu community around the Durban district. According to De Vos et al. (2011: 351), researchers use in-depth interviews to obtain a detailed picture of a participant's beliefs, perceptions or representations about a particular topic. This method gives much more flexibility to the researcher and the participants. These interviews were guided by a list of questions prepared by the researcher (Appendix E). De Vos et al (2011: 351) point out that during in-depth interviews the researcher has a set of predetermined questions during an interview schedule, but the interview is guided rather than dictated by the schedule. To practice social distancing, all interviews were conducted via video calls at a convenient time for each participant. Each interview took approximately one hour and included all the questions highlighted in Appendix E. The participants also had an option to skip any question they did not wish to answer. Confidentiality and anonymity were ensured by the researcher before, during and after the interview process was complete. The researcher was keeping the records secure using a set of strong passwords and protection files with encryption when sending information over the Internet.

Data provided by participants was recorded via video calls and by taking notes. De Vos et al. (2011: 351) indicate that audio or video recordings are frequently used to capture the one-on-one as well as the non-verbal elements that may slip the attention of the moderator. Non-verbal cues are an important aspect which should not be ignored as they add flair to the data being received.

### **3.6.1 The interview schedule**

The interview process was guided by semi-structured interviews with open-ended questions. De Vos et al. (2011: 351) and Cohen (2018: 34) conceded that 'semi-structured interviews allow for the emergence of rich data, as it allows participants to express themselves and to talk freely' and reflectively on experiences and ideas, which they 'may not have thought of in a structured interview'. This allows for a more recent and greater depth of the study phenomenon. It also allows the researcher to 'further explore comments from a variety of participants' (Cohen 2018: 34).

According to De Vos et al. (2011: 352), a pre-designed interview schedule brings many advantages to the data collection process. It enables researchers to have a clear mind about what they wish the interview to cover. Furthermore, the researcher is able to consider difficulties that might be encountered in terms of ‘question wording’ or ‘sensitive areas’. A semi-structured interview schedule also allows the researcher to carefully arrange questions in a logical sequence and further ensures that they cover the topic entirely.

The predetermined questions allowed participants to reflect on their experiences as members of Hindu community and allowed the researcher to gain a deeper understanding of the common experiences of people in similar settings. In addition, an interview schedule allowed the researcher to think carefully about what they hope the interview might cover (De Vos et al. 2011: 352).

### **3.6.2 The interview setting**

Due to the situation with COVID-19, as an alternative method to practise social distancing, all interviews were conducted via video calls using available platforms and a convenient time for each participant. These included WhatsApp video calls and Skype conference calls to get as close as possible to the real-life interview experience. It also allowed the researcher to observe the participants during the interview process and not to miss any important details.

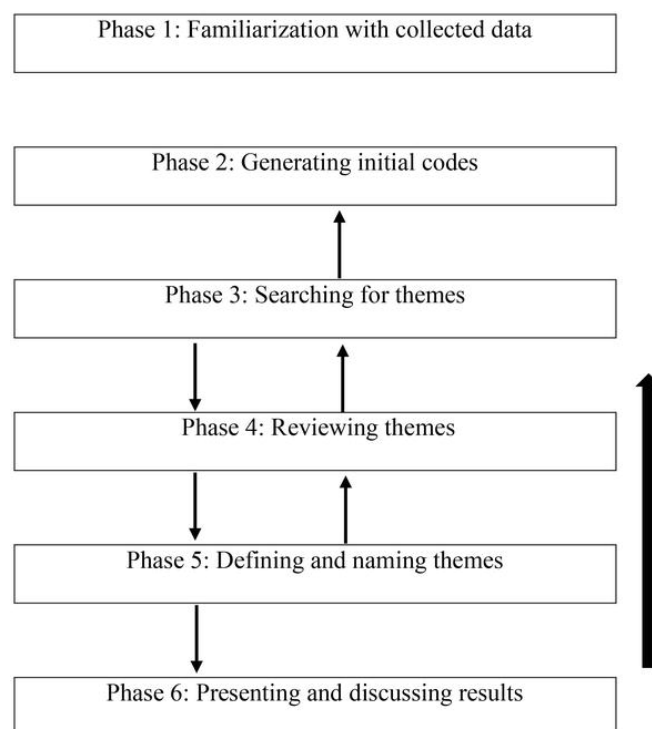
### **3.6.3 The interview process**

At the time of the interviews, participants were respectfully greeted and informed that the interview would be recorded and used purposefully by the researchers to capture important information that could be analysed later. The interview sessions explored traditional and religious uses of colour among individuals, families and communities and lasted between 45 minutes to an hour. Religious leaders and senior citizens also narrated their individual experiences of being Hindu and further provided their perceptions of the experiences of living in a world heavily influenced by globalisation. During the interview process, the researcher shared with participants her own experiences of working as an Indian wedding photographer in a Hindu community for more than 10 years. Although interviews were digitally recorded, the researcher also took notes occasionally to record emotions, expressions and tone of the participants.

### 3.7 DATA ANALYSIS

Data was analysed using the Thematic Analysis approach for the results of the interviews. Davies and Hughes (2014: 33) described Thematic data analysis as a ‘continuous and iterative (non-linear) process that entails data organisation and explanation’. This refers to the process of data interpretation including answers of participants, writing down category’s notes, identifying patterns and emerging themes (Creswell 2013: 38). In this study, data analysis was conducted using digital recordings and note-taking during the interviews.

The interviews were digitally voice recorded. This allowed the researcher to focus on the process of the interview and not on just taking notes to avoid losing important information revealed by the interviewee (de Vos 2011). This also helped the researcher to transcribe the interview verbatim for analysis purposes. ‘For analysis to take place, the data must first be transcribed’ (Bailey 2008: 39). As the researcher needs to identify the important areas of relevance to the study, the entire data must be transcribed. Figure 3.2 represents the thematic analysis process for this study.



**Figure 3.2: Thematic Analysis Process**

Davies and Hughes (2014)

### **3.7.1 Becoming familiar with the data**

The first step in the process of thematic analysis is to become familiar with the entire dataset, discovering the repetitions and finding thresholds for the amount of data that makes up a theme. ‘Researchers can even create a “miscellaneous” theme to incorporate orphan codes that do not fit well within one’s existing thematic scheme’ (Braun & Clarke 2006: 38). The themes identified as important are representative of the valuable connections between the data and the answers to the research questions. This means that the researcher is continually reviewing the themes in Step 4, as they cannot be sure which themes will be used, modified or discarded in the final stages of the analysis. The researcher became familiar with the entire body of data by reading and re-reading all the information collected, including all the interviews and any other data being used, such as notes taken during the interviews. At this stage, the researcher made notes and wrote down early impressions.

### **3.7.2 Generating the initial codes**

Coding, as the analytical step of the process, helps organise the data at a detailed level. After becoming familiar with Step 1, the researcher can begin to take notes on potentially interesting data, questions, connections between data and other preliminary ideas. This is the beginning of the coding process of Step 2. In this phase of work, codes, not themes, are generated. Braun and Clarke (2006: 45) define a code as ‘the most basic segment or element of raw data or information that can be meaningfully evaluated in relation to the phenomenon’. By recording how codes have developed from observations and ideas, the researcher can begin to establish an audit trail that supports the trustworthiness of the researcher's interpretations and analyses (Braun & Clarke 2006: 45).

Once the coding framework or template is defined, researchers apply the same codes to the entire dataset, labelling the data extracts with the relevant codes and noting any potential patterns or connections between items that may be relevant to subsequent theme development (Braun & Clarke 2006: 45). Coding can be done manually or using a computer programme. Coded data extracts should contain a large enough section of text to provide context for the extract. In addition, a single extract may be given multiple codes if relevant (Braun & Clarke 2006: 45).

At this stage, the researcher began to organise the data in a meaningful and systematic way. Coding reduces a large amount of data into small chunks of meaning. There are different ways



to code and the method was determined by the research questions. Thematic analysis was used, coding each segment of data that was relevant to the research questions or that contained something of interest. The researcher did not code each segment of text but used open coding. There were no predefined codes before the study began, but codes were developed and modified during the coding process. The researcher worked through each transcript and coded each text segment that seemed relevant to or specifically addressed the research question. At the end of the process, the codes were compared and modified before she moved on to the rest of the transcripts. As the researcher worked through them, she generated new codes and sometimes modified existing ones. Initially, she did this manually, working through the printouts of the transcripts with pens and highlighters.

### **3.7.3 Searching for themes**

The third step is to examine the coded and collected data extracts for possible themes of overarching significance (Braun & Clarke 2006: 42). Braun and Clarke (2012: 96) offer the analogy that if the whole analysis is viewed as a house, the individual codes are the tiles and the roof tiles, and the themes are the walls and the roof. The process of finding themes is fundamentally an active and interpretive process. ‘Themes do not simply emerge from the data’ (DeVos et al. 2017: 21); instead, themes are constructed by the researcher by analysing, combining, comparing and even graphing how the codes relate to each other. In inductive analysis, researchers explicitly derive themes from the coded data so that the identified themes are more closely related to the original data and reflect the whole dataset (Braun & Clarke 2006: 43). Conversely, deductive analysis uses predefined theories and/or theoretical frameworks to develop themes, so that ‘these themes are often more focused on a particular aspect of the data set or a specific question of interest’ (Braun & Clarke 2006: 44).

As defined earlier, a theme is a pattern that captures something significant or interesting about the data and/or the research question. As Braun and Clarke (2006: 24) explain, ‘there are no set rules for what constitutes a theme’. A theme is characterised by its significance. In this case, the researcher examined the codes and some of them clearly matched a theme. For example, there were several codes that related to the perception of red colour in religious practices and how the participants related to it. These were grouped together into a first theme called ‘Colour Red’. By the end of this step, the codes had been organised into broader themes that seemed to say something specific about this research question. The themes were predominantly descriptive in that they revealed patterns in the data that were relevant to the research question.

### **3.7.4 Reviewing themes**

Braun and Clarke (2006: 43) describe Step 4 as a two-stage process of analysis. In the first stage of analysis, the researcher looks at the coded data placed within each topic to ensure that it fits correctly. He or she reviews all relevant codes and data excerpts under each theme and asks: Is there adequate supporting data for each theme? Is the data included coherent to support that theme? Are some topics too broad or diverse? At this point, data extracts can be re-sorted, and themes modified to better reflect and capture the coded data. Themes can be added, combined, split or even discarded.

In this phase, the researcher reviews, modifies and develops the preliminary themes identified in the previous phase. Do they make sense? At this stage it was useful to collect all the data relevant to each theme. Access to qualitative data analysis software made this process much faster and easier. The researcher read the data associated with each theme and considered whether the data really supported that theme. The next step was to think about whether the themes worked in the context of the entire data set. The themes should be coherent and distinguishable from one another. The following checklist represents important questions that were asked to ensure that the themes were coherent:

- Do the themes make sense?
- Does the data support the themes?
- If topics overlap, are they really separate topics?
- Are there themes within themes (subthemes)?
- Are there other themes in the data?

### **3.7.5 Defining themes**

Once the thematic map has been refined, in Step 5 the researcher creates a definition and narrative description of each theme, including ‘why it is important to the broader study questions’ (Braun & Clarke 2006: 48). The names of the themes to be included in the final report are reviewed to ensure ‘they are brief and appropriately descriptive’ (Braun & Clarke 2006: 49). The researcher then focuses on the most important aspect of each theme and what aspects of the data set it covers by ‘creating a coherent narrative of how and why the coded data within each theme provides unique insights, contributes to the overall understanding of

larger questions, and interacts with other themes' (Braun & Clarke 2006: 49). While working through these questions, the researcher looks for overlaps between themes, identifies emerging subthemes (which can be used both for more detailed representations of themes and for describing hierarchies within the data), and 'clearly delineates the scope of what each theme includes or encompasses' (Braun & Clarke 2006: 51). This is a good time to select data extracts to present in the final report that illustrate key features of the themes and to create narratives that surround them and provide context to explain their relevance to the broader story that each theme tells (Braun & Clarke 2012: 59).

In this phase, a detailed analysis of each theme was developed and the scope and focus of each theme was described. It was also a matter of finding a meaningful name for each subject. This was the final refinement of the themes with the goal of identifying the essence of what each theme was about. The important questions asked at this point were:

- What does the subject say?
- If there are sub-themes, how do they interact and relate to the main theme?
- How do the themes relate to each other?

### **3.7.6 Writing Up**

This last phase interwove the analytical narrative and the data extracts. It also focused on contextualising the analysis in relation to the existing literature. Elements of the writing process have already begun through the processes of taking notes, describing themes and selecting representative data extracts in the previous stages. Indeed, Braun and Clarke (2006: 78) describe the final step of presenting findings as a 'continuation of the analysis and interpretation that has already taken place, rather than a separate stage'. The final report should 'go beyond the mere description of codes and themes' (Braun & Clarke 2006: 78). Using both narrative descriptions and representative data extracts (for example, direct quotes from participants), the analysis should describe the data and provide an argument for why the researcher's explanation 'richly and fully answers the research question' (Braun & Clarke 2006: 78). All direct data extracts should include appropriate context to understand their meaning and be supported by an interwoven textual description that explains their significance (Braun & Clarke 2012: 53).

### 3.7.7 Colour Guide Development

The colour guide was developed based on the existing colour theory, including scientific and artistic colour systems and the findings from the data collection process. The results of the research, such as the meaning of colour and its application in a Hindu context, were systematically arranged and fitted into the existing colour model, taking into account its relationships and corresponding qualities. The development of the colour guide can be divided into five distinctive steps:

- Using the existing colour theory such as the scientific model of seven main colours of the colour spectrum.
- using the existing colour wheel model and placing the respective colours and their associations in the Hindu community.
- Creating a Hindu colour wheel representing the relationship which exists between colours, planets and emotions.
- Creating a colour representation of chakras and their corresponding properties based on the scientific colour wheel.
- Creating the graphical representation of colours and their corresponding powers in Hinduism based on the existing colour spectrum model highlighting the interconnections between colour and its application in religious Hindu practices.

After the colour guide was created, important information and new interesting connections have emerged which also correspond to the scientific connections that colours have between each other, such as opposite or complementary colours. It is important to note the difference between physics and psychology of colours. The way our brain processes a signal about a specific colour depends on associations and experiences while the physical quality of colour is based on the energy levels they produce. The colour red is traditionally associated with fire, sun and blood and thus is considered to be “warm”, although physically it has a low energy. The colour violet, on the other hand, is traditionally associated with sky and water in the evening and thus is seen as cool, although physically having the highest energy. For example, red, having the lowest frequency, which is one of the most used colours in Hinduism, also corresponds to the first colour of the colour spectrum which is psychologically considered to be the warmest (the next following non-visible spectrum is infra-red). The violet colour on the opposite end of the colour spectrum with the highest frequency of wavelength also corresponds to the least used colour in Hinduism and is psychologically considered to be the coolest or even

aggressive due to its dangerous radiation quality (following the ultra-violet non-visible rays). In relation to the colour wheel, the colours in Hinduism also have a strong relationship between them. The main colours of Hinduism are red, yellow and blue, which are the same as the three primary colours in the colour wheel. One can notice that the use of colour in Hinduism has a strong reference to the scientific colour model as the meaning of colours in Hinduism strongly corresponds to the use of colours and their placements in the existing colour wheel model. Hinduism also uses the primary and secondary colours which are highly saturated.

### **3.8 VALIDITY AND RELIABILITY**

Reliability exists when an 'instrument measures the same thing more than once and produces the same results' (Golafshani 2003: 600). Thus, the reliability of a measurement procedure is the 'stability or consistency of the measurement' (Golafshani 2003: 600). Golafshani (2003: 600) states that 'qualitative research in terms of validation relies on the presentation of solid descriptive data in order for the researcher to lead the reader to an understanding of the meaning of the experience being studied'. In essence, 'validation is an interpretive understanding of truth' (Golafshani 2003: 600).

The implementation of measurement instruments at many separate times for each subject such as each priest or an elderly member of Hindu community and analysis of the correlation between separate measurements with no change in underlying condition (for example, same interview questions for each participant of the study) ensured the reliability of this study.

A transparent approach to data collection from the sources while maintaining a clear documentation of data ensured the validity of the study. Each participant was carefully selected, and each interview was carefully analysed to ensure that data in this research represents what it is supposed to. The research instrument in the form of interview questions presented to participants was measuring the concepts of the study. The research has established whether the results obtained meet all the requirements of the research method. All requirements of the scientific research were followed during the process of generation research findings. As this methodology uses the qualitative approach, 'instruments' scores and their interpretations were used to ensure evidence was collected to support the proposed inferences' (Creswell, 2014: 88).

### **3.9 ESTABLISHING TRUSTWORTHINESS AND CREDIBILITY**

According to Creswell (2014: 88), 'trustworthiness is described as the extent to which qualitative researchers want to reflect the truth'. Nieuwenhuis (2016: 123) states that 'trustworthiness is an essential ingredient in qualitative research, as the results should truly reflect the experiences of the participants from their perspective'. While reliability and validity are the most important measures in quantitative research, trustworthiness is of utmost importance in qualitative research. The assessment of trustworthiness is the litmus test for data analysis, results and conclusions (Nieuwenhuis 2016: 123). Accordingly, the researcher must constantly keep in mind the procedures that can be used to assess the trustworthiness of the data analysis. Nieuwenhuis (2016: 123) suggests four criteria that he believes qualitative researchers should consider when striving for a trustworthy study: Credibility, Transferability, Reliability and Confirmability.

Credibility is the confidence of the qualitative researcher in the truthfulness of the findings of the research study (Nieuwenhuis, 2016: 123). The researcher will use triangulation to show that the findings of the research study are credible. Transferability refers to how a qualitative researcher indicates that the results of the research study are transferable to other contexts. In this case, 'other contexts may mean similar situations, similar populations and similar phenomena' (Creswell 2014: 88) . The researcher will use this description to show that the results of the research study are applicable to other contexts. Confirmability is the degree to which 'the results of the research study are neutral as they are based on the participants' responses and not on any possible bias or personal motivation of the researcher' (Nieuwenhuis 2016: 123).

The researcher ensured that the interpretation of what the research participants said was not biased to fit a particular narrative. To ensure confirmability, the researcher created an audit trail that highlighted each step of the data analysis to provide a rationale for the decisions made. This ensured that the results of the research study accurately reflected the participants' responses. Reliability is the extent to which the study could be repeated by other researchers and the results would be consistent. In other words, if a person wanted to replicate your study, they should have enough information from your research report to do so and get similar results to the study (Creswell 2014: 89). A researcher uses a research audit to establish reliability. This requires an outside person to review and examine the research process and data analysis to ensure that the results are consistent and can be repeated.

The research demonstrated the true picture of the phenomenon under study with findings which emerged from the data to provide sufficient detail of the context for the reader and being able to apply findings in other settings.

### **3.10 ETHICAL CONSIDERATIONS**

Creswell (2014: 88) writes that ‘gatekeepers are those people who enable researchers to gain entry into an organisation or community to conduct research’. The researcher obtained gatekeeper permission from the selected Durban priests and their respective temples and senior members of the Hindu community to conduct the interviews (see Appendix 1). The researcher was in contact with this selected group on a weekly basis due to the nature of her work (being an Indian wedding photographer) and she had arranged permission from the selected group to set up the required interviews. The researcher also ensured that all the selected participants were aware that the participation was voluntary.

### **3.11 CONCLUSION**

This chapter provided a discussion on the design that was used to collect data supported by the works of other distinguished researchers. The design was described in detail and showed how data was collected to achieve the aims mentioned in the introductory chapter. The rationale for using the qualitative research paradigm has also been provided in this chapter. The following chapter offers the presentation of the findings and a discussion of the same.

## CHAPTER 4: ANALYSIS AND DISCUSSION OF FINDINGS

### 4.1 INTRODUCTION

The following chapter contains the data collected during the study. The aim of the study was to explore the use of colour symbolism in Hinduism to promote its application in design practices. The study also focused on identifying the impact of globalisation on the use of colour in Hindu religion. This research also intended to develop a colour theory highlighting the symbolism and application of various colours in Hindu religion.

This was revealed through the lens of the Hindu community in Durban. By approaching religious leaders and senior members of the Hindu community, the researcher was able to identify their deep knowledge and experience. This chapter therefore presents the analysis of the data collected through the interviews and discusses the findings.

### 4.2 DEMOGRAPHIC DATA OF PARTICIPANTS

Table 4.1 below summarises demographic data of participants including status and religious knowledge. It serves as an important part of the study to make sure the findings are trustworthy and can be used to produce the correct answers to the research questions.

**Table 4.1 Demographic data of participants**

Pseudonym	Status	Religious Knowledge
Participant 1 (P1)	Priest	Excellent
Participant 2 (P2)	Senior Citizen	Good
Participant 3 (P3)	Senior Citizen	Excellent



Participant 4 (P4)	Priest	Excellent
Participant 5 (P5)	Senior Citizen	Good
Participant 6 (P6)	Priest	Good
Participant 7 (P7)	Priest	Excellent
Participant 8 (P8)	Senior Citizen	Good
Participant 9 (P9)	Senior Citizen	Good
Participant 10 (P10)	Priest	Excellent
Participant 11 (P11)	Priest	Excellent
Participant 12 (P12)	Priest	Excellent
Participant 13 (P13)	Senior Citizen	Good
Participant 14 (P14)	Priest	Excellent
Participant 15 (P15)	Priest	Excellent
Participant 16 (P16)	Senior Citizen	Good
Participant 17 (P17)	Senior Citizen	Good

Participant 18 (P18)	Priest	Excellent
Participant 19 (P19)	Priest	Excellent
Participant 20 (P20)	Senior Citizen	Excellent

#### 4.3 RELATIONSHIP BETWEEN THE OBJECTIVES AND INTERVIEW QUESTIONS

To collect all the detailed information and to get the insights of the subject under research, the interview questions were carefully designed to enable the researcher to achieve the main aim of the study and to develop a colour guide based on the important findings. The two research questions listed in Table 4.2 were used as the basis for formulating the interview questions for the participants in order to answer the third research question of this study, which is to graphically represent colour symbolism in Hindu religion and promote its application in design practices.

**Table 4.2 Research and interview questions**

Research questions	Interview questions
1. What are the roles and cultural associations of colour in Hindu religion?	<ul style="list-style-type: none"> <li>• What are the main colours in Hindu religion and their meanings?</li> <li>• What are their traditional and religious aspects?</li> <li>• What are the adaptations and applications of these colours?</li> <li>• What are the most avoided colours in Hinduism?</li> <li>• Would you please describe the cultural norms of colour in the Hindu community in the Durban area?</li> <li>• Are there psychological healing properties associated with each colour? What are those properties?</li> <li>• Are there any preferences in colours?</li> </ul>

	<p>among the Hindu community?</p> <ul style="list-style-type: none"> <li>• What is your personal subjective attitude towards each colour, your preferences and reasons?</li> <li>• Are there any differences in colour symbolism among the different castes or ethnic groups or between Hindus in South Africa and India? If yes, could you please name them?</li> </ul>
2. How has the process of globalisation affected the use of colour in Hindu religion?	<ul style="list-style-type: none"> <li>• Explain how globalisation has affected the use of colour symbolism in Hindu cultural practices like wedding or traditional attires?</li> <li>• In your opinion, how has globalisation affected younger generations' interest in Hindu cultural and religious practices?</li> </ul>

Table 4.2 represents the main interview questions presented to the participants during the interview. Where necessary, the researcher asked some follow-up questions to clarify participants' responses. It confirms that the data collection met the objectives of the study and assisted in achieving the main aim of the study. This valuable information also enabled the researcher to develop a colour guide that theoretically explains the various colours, their symbolism and application in Hindu religion. The interviews and data collection thus enabled the researcher to explore the role of colour in Hindu religion and cultural associations. It also allowed the researcher to discover the level of impact globalisation has created on the application of colour in Hindu community.

#### 4.4 ANALYSIS AND VALIDATION OF INTERVIEW RESPONSES

The process of analysing the interview responses involved carefully evaluating the responses of participants and then formulating themes based on their answers. This was possible through the researcher using a voice recording device and taking notes during the interview sessions. The recorded interviews were later transcribed and read and categories were then identified.

Detailed discussion of the subject allowed the researcher to obtain insight on the topic under research from the religious leaders and enabled her to validate the responses from the interviews by comparing those with the experiences shared by the senior members of Hindu community.

The researcher validated the responses by comparing the data collected during the interviews with religious leaders to the data collected during the interviews with the senior citizens. The discussions enabled the researcher to discover the important meaning associated with colour symbolism in Hindu community, as well as the effect of globalisation on the life of ordinary Hindu people. The next section presents the analysis and findings gathered from the data collected during the interview sessions.

#### 4.5 THEMES AND SUB-THEMES DERIVED FROM THE INTERVIEWS

Table 4.3 represents a summary of themes and sub-themes derived from the interviews. They are structured to cover the research questions of this study. The patterns in the collected data were identified and five main themes were generated. These themes were later reviewed and divided into a series of sub-themes.

**Table 4.3: Themes and sub-themes**

Themes	Sub-Themes
Colours In Hinduism	<ul style="list-style-type: none"> <li>● Main colours in Hindu religion</li> <li>● Avoided Colours</li> <li>● Cultural norms of colour in the Hindu community</li> <li>● Personal attitude toward colours</li> </ul>
Psychological healing properties of colour	<ul style="list-style-type: none"> <li>● Benefits of colour therapy</li> <li>● Use of chakras</li> <li>● Personal use of healing properties of colours</li> </ul>

Colour use differences between South Africa and India	<ul style="list-style-type: none"> <li>● Use of colours in India</li> <li>● Differences among linguistic groups</li> <li>● Colour preferences in the eThekweni Hindu community</li> </ul>
Impact of globalisation on colour use in Hinduism	<ul style="list-style-type: none"> <li>● Impact of globalisation</li> <li>● Western Influence</li> <li>● Change in colour traditions</li> </ul>
Western influence on young Hindus	<ul style="list-style-type: none"> <li>● Global propaganda (media/Internet)</li> <li>● Problems with education</li> <li>● Lack of interest in own culture and religion</li> </ul>

#### 4.5.1 Theme 1: Colours in Hinduism Sub-themes:

- Main colours in Hindu religion
- Avoided Colours
- Cultural norms of colour in the Hindu community
- Personal attitude toward colours

Theme 1 related to the application of colours in Hindu religion. The sub-themes were identified by participants through their experiences as either religious leaders or senior members of a community. They indicated specifically the uses of different colours in Hindu religion. The participants identified the main colours associated with religious Hindu practices and their symbolic meanings in Hindu religion. They also highlighted the most avoided colours in Hinduism and the cultural colour norms in their communities. They later discussed their personal attitude to each colour and personal choices of colours in their everyday lives. The sub-themes were captured in the following responses of some participants.

Within each sub-theme, the excerpts shown below indicate that there are particular colour norms which exist in the Hindu community. The use of colour in Hindu religion follows a specific set of norms based on the meanings associated with them. According to (Olson 2007: 42), on one side there is a strict colour protocol in place regarding the use of colour in religious

practices and dress code for auspicious occasions and religious gatherings. On the other hand, the colour choices in everyday life are not restricted to a particular set of colours and become personal free choice of community members. The main colours used in Hindu religion – red, yellow and blue – were identified as the most widely used colours. The responses below reflected the views of several participants.

***(i) Main colours in Hindu religion***

Nature forms the core of Hindu religion and is interwoven in all the rituals and beliefs. Many Hindus follow a lifestyle which is fully in tune with nature and have a great respect for Mother Earth (Olson 2007: 42). As Hinduism is closely connected to nature and uses many natural elements in religious practices, many colours mentioned by participants represent the essence of nature and symbolise all the elements of planet Earth, such as green for trees and vegetation, yellow for the sand, blue for the sky and red for the Sun (Olson 2007: 42). ‘Reverence for life, awareness of the forces of nature such as earth, sky, air, water and fire and awareness of the various orders of life such as plants, trees, forests and animals are the beliefs embedded in the Hindu view of nature. Nature is seen by Hindus as a gift from God that can heal the soul’ (Olson 2007: 42).

Colours play an important part in the life of Hindus and, apart from decorative values, every colour has its significance in Hinduism. The main colours used in Hinduism are red, yellow and blue. Hindu deities are also coloured and dressed according to their attributes. According to Khaled (2007: 46), red is seen in most religious and sacred occasions, such as weddings, births and religious festivals. During ceremonies, a red mark or tilak is placed on the forehead. This colour also represents fertility. Goddess Durga is often associated with the colour red. Yellow is the colour of sunshine and has a healing power. This colour activates the mind, energy and intelligence. It symbolises happiness, peace, meditation, competence and spiritual development. Lord Vishnu's dress is yellow and symbolises his representation of knowledge (Khaled 2007: 51). Lords Krishna and Ganesha also wear yellow dresses. Blue represents power and life, such as the sky, oceans, rivers and lakes. It resembles the qualities of bravery, manliness, determination, the ability to cope in difficult situations, a stable mind and depth of character (Khaled 2007: 57). Lords Rama and Krishna spend their lives protecting humanity and destroying evil; hence they are blue in colour.

Out of 20 participants, 17 (P3-P11, P13-P20) identified red, yellow and blue as the main colours used in Hindu practices. Three participants mentioned other colours such as green,

orange and white and 18 participants highlighted that red represents the Sun, while Moon represents the balance such as yellow. According to 15 participants the colour blue was the colour mostly found in nature such as water and sky. Red was found to be the most widely used colour among different linguistic groups and was also associated with many religious practices and traditional ceremonies mentioned by all 20 participants. White colour was mentioned by 5 out of 20 participants as one of the main colours in Hindu religion.

The main colours are blue, which if you look at some of the moerties in the temple, you will see that Vishnu Bagwan (god) is a light hue of blue. Lord Ram is also blue in colour and the same for Shiva Bagwan who is blue. Blue is like the sea or sky, that should fill you with peace and serenity, it is not an aggressive colour, but a soft colour. Then you have red, like our flags. Red for Hanuman. When we raise a red flag with his insignia on it, we raise it in honour of his victory. Red denotes wholesomeness, something that enhances life. Then we have yellow for Shiva Bagwan. Vishnu Bagwan statue is put on a raised platform, draped in red. Like Hanuman and Lakshmi who is his console can be red, which is a sign of prosperity, wholesomeness of life. Ganesh is also yellow. (P3)

Yellow is the colour of enlightenment. Red is a lush colour, the colour of richness. Blue is also enlightenment, growth & the predominant colour. (P11)

I think your most widely used colours are Bright colours such as red, yellow and green. Some of these colours reference to energy, the energy you can attract when dressing up, the goddesses and gods, who use the colours, certain colours are associated with different Gods. (P15)

Table 4.4 below represents the summary of answers regarding the main colours used in Hindu religion based on the answers of the participants.

**Table 4.4 Summary of main colours used in Hinduism**

<b>Main colours in Hindu religion</b>	<b>Red</b>	<b>Yellow</b>	<b>Blue</b>	<b>Orange</b>	<b>Green</b>	<b>White</b>
Number of participants	17 of 20	17 of 20	17 of 20	3 of 20	4 of 20	5 of 20

Participants' names	P3-P11, P13-P20	P3-P11, P13-P20	P3-P11, P13-P20	P1, P2, P12	P1, P2, P12	P4, P7, P9, P13, P18
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### ***(ii) Avoided Colours***

The colour black in India has connotations of undesirability, evil, negativity and inertia. It represents anger and darkness and is associated with lack of energy, barrenness and death. Black is used as a representation of evil and is often used to ward off evil. For example, an infant is traditionally blessed with a small black dot on the chin or under the ear to ward off the evil eye. And while white in the West stands for all that is desirable, in India it has a more sinister connotation. Many participants (P4, P5, P8, P9, P10, P13, P6, and P20) identified black as the most avoided colour as it represents death or evil as shown in the responses of P4, P6, P13, and P20 below:

P4: 'All colours are good, except plain black when a prayer is conducted'.

P6: 'Black and navy blue is avoided, symbolic of death & negativity'.

P13: 'Black signifies death and darkness. Black outfits are deemed bad, especially for Weddings'.

P20: 'I would say black, it is associated with evil'.

However, the black colour is still a widely used colour among Hindus in their everyday lives: For example, the colour of clothing for work, decor elements of their house and choice of the car colour, purely for practical purposes. Many have mentioned that black was also used as a blending colour as well as breaking up other colours to make the matching outfit more attractive.

### ***(iii) Cultural norms of colour in Hindu community***

The meanings of colours in Hindu religion have their differences and similarities when compared to the Western world. For example, the colour white is mostly used in Western wedding ceremonies, while in Hinduism it is used for funerals and is considered a mourning colour. The colour red is considered the most religious colour in Hinduism, while in the Western world it is considered to be the colour of danger or anger. The colour blue has the



same meaning in both contexts and represents calmness and peace. Cultural norms of colour use in the Hindu community were also documented in some of the participants' responses. Of 20 participants, 15 (P1-P9, P12, P14-P15, P18-P20) spoke about the slow merge of Eastern and Western cultural norms regarding the cultural norms of colour use in the Hindu community. According to P2:

The symbolism of colour must be reflected in all aspects of our life. Not everybody follows these norms, because of Westernisation. For each day you have different colours, depending on what occasion it is. Sunday is associated with Surya (Sun god). Tuesday is associated with Mars (Red). (P2)

In a historical context, many Hindus always used bright colours in religious practices and everyday life. According to P7:

If you go to a religious function/festival, you will dress appropriately. You will be disrespectful if you dress in western attire to a religious function. You normally wear specific attire for that specific function, whereas for weddings, people just go lavish in different colours. (P7)

P20 stated that:

Red is used for Lakshmi day. Yellow for the porridge prayer. They hoist the flags which are yellow and I think some are green, as well.

In recent years, there has also been a trend where Hindus prefer to choose more subtle colours for their home interiors and also their colour choices when selecting an outfit. However, the religious use of colour remained the same and bright vibrant colours are still used for rituals and prayers. According to P9:

For prayer, I would wear a red sari, or punjabi. If the prayer is devoted to Mother Durgah, or Mother Kali I would wear red. I dress both mother Durgah and Kali accordingly, the yellow goes for Mother Durgah, who symbolises those things and Mother Kali symbolises the red. When going to a funeral, we will wear white, as to Christians, who will wear black. A widow who is sitting by the coffin will wear a white sari, or punjabi". According to P12, "Natural white, or highly saturated colours, closer to nature. Unless a specific ritual, then that colour will dominate. Red flag for power, honour & courage. For spiritual meditation they will go for saffron. White dominates the life of students. It depends on what the occasion is, red for weddings represents passion, which is the starting level. One colour may not be appropriate at one function, but it will be appropriate at another. (P9)

#### ***(iv) Personal attitude towards colours***

During the interview process all 20 participants mentioned their favourite colours. An interesting finding has emerged during data analysis – there were many similarities of colour choices among participants. Although participants were both male and female, 14 out of 20 participants (P2-P8, P10-P13, P18-P20) mentioned similar favourite colours. Like females, all males have their favourite colours in the bright family of colours. Hindu people seem to have a preference in their everyday life, similar if not the same as the main colours used in religious practices. The most favourite colours were yellow, blue and red mentioned by 14 participants (P2-P8, P10-P13, P18-P20), as represented in the responses of P2, P13, P18 and P 10 below.

**P2:** ‘I love all the colours of the rainbow. Especially if you look at the Holy ceremony (festival of colours)’.

**P13:** ‘Mine is normally blue, but when it comes to cars, silver’.

**P18:** ‘I like white, blue, red and vibrating colours’.

**P10:** ‘Blue. Otherwise, red for courage’.

#### **4.5.2 Theme 2: Psychological Healing Properties of Colour Sub-themes:**

- Benefits of colour therapy
- Use of chakras
- Personal use of healing properties of colours

Theme 2 related to the use of healing properties of colour in the context of chakras. All 20 participants identified the above sub-themes as colours having specific psychological effects on their mood, feelings and emotions. They also mentioned important healing techniques which benefit one’s emotional health based on the concept of chakras.

##### ***(i) Benefits of colour therapy***

Since the main purpose of becoming aware of the chakra system is to help the individual achieve a state of harmony within himself, chakras play an important role in decision making and correspond to the conditions in people’s lives. All seven chakras each have their own colour, which together represent the colours of the rainbow – violet, indigo, green, yellow,

orange, blue and red. Seven participants (P1, P3, P11, P13, P12, P18 and P20) identified the importance of chakras in their lives. They spoke about their meanings and their application in everyday life. Many participants have highlighted that colour has a direct effect on their behaviour and emotional state. Some colours, such as blue and green, have a calming effect, while red and orange stimulate mental and physical activity. As colours are perceived on a more subconscious level, one does not realise the full impact of colours on lives. As revealed by participants, colours influence body and mind and have specific healing properties associated with them. Many participants mentioned using colours for healing purposes as alternative treatments to traditional medical practices. According to P13:

Chakras represent the power centres in the body. The chakras and colours are linked. There are seven chakras and they are given different colours to denote actual feelings. Muladhara Chakra - Root chakra - Red Colour - Spine the physical needs. Svadhisthana chakra - Sacral chakra - Yellow - Centre of emotions, feelings & stimulates pleasure Manipura chakra - Naval chakra - Yellow - Provides a source of personal power & self-esteem. Anahata chakra - Heart chakra - Green - Opens the heart (love, forgiveness and compassion). Vishuddha Chakra - Throat chakra - Light blue - Responsible for communication, self-expression, and speaking. Ajan/Agnya chakra - Bowl chakra - Violet colour - spiritual 3rd eye (intuition, awareness, etc). Sahasrara Chakra - Crown chakra - Lilac colour (highest level) - individuals center of spirit, enlightenment, wisdom, etc. (P13)

Of the participants, 12 (P1-P5, P11-P14, P17-P19) also mentioned the relationships which exist between chakras and planets. According to Vedic Astrology, each chakra has a corresponding planet with its unique nature and characteristics of the ruling planet. Seven chakras, when placed together in the body, are viewed as something similar to the Solar system. The energies found in the universe are symbolised with those of the system of the body. According to P1:

The 9 planets are also part of the entire chakra as well and we use certain colours for the 9 planets. Certain colours represent certain fortunes. Like the colour shaming, meaning the lady of Shukran. There we use the colour black, when black comes in there is darkness and negativity in life. The colour orange is also part of the chakra, for surya “the god of sun”. Various other colours also fall in, but I am not sure as to what each one follows. (P1)

## ***(ii) Use of chakras***

Chakras and colours have formed an important healing practice since ancient times and were widely used in Asia, Europe and the Middle East. It combines the use of light and colour to treat physical and mental conditions. Each of these seven chakras vibrates at a specific

frequency related to its colour. The choices one makes and how those colours are perceived and interpreted are controlled by the vibrations of the chakras. Chakras can be considered as the subtle energy points that get charged when the internal energy synchronises with the natural energy around us. Five participants (P5, P9, P10, P17 and P19) highlighted the examples of the use of chakras and colours. These examples include using a particular colour to either suppress or evoke a particular emotion, such as calming or rejuvenating, not using black colour at all due to its negative aspect and using nature as a guidance for selecting a specific colour for a desired environment at home. These examples are shown in the responses of P5 and P10 below:

Yes, Red gives you wholesomeness which affects you psychologically. Blue is the colour of the ocean, the sky etc. which denotes peace and serenity. Black is negativity which is used as a destructive aspect. Kali Mata is dressed in black to inform you to send all your negativity onto her, so that you can fill yourself with positivity. (P5)

You see sometimes you get a cut on your skin, or hand somewhere, you paint with orange powder. It heals and does not get septic. Let's say you are poked by a rusty nail and it turns septic. You quickly put some paraffin, some whole hardi and smash it up, you take chilly powder, put some oil and heat it up and make a paste, with turmeric. Double hot means, the heat from the stove and the other hot, from the chilly. It burns the area. It was even used for fractures in ancient days. The throbbingness will pull the pain, and guaranteed, it won't get septic. We use sandalwood which is creamy, as a dot on the forehead. That is the eye of intuition, the 3rd eye is there. Sandalwood is used for medicine use, you put it on your skin. It is very calm, soothing, cooling, and protective...better than lotion, it protects the skin. (P10)

Light is said to have healing properties attached to it, including the seven main colours contained in the visible colour spectrum. The presence or absence of light can influence physical and mental health. The use of chakras' healing properties has a few of the various benefits, such as being safe and pain-free, restoring the natural balance in the body, having a positive influence on the mental and spiritual levels and helping with relaxation and emotional blockages. Among its many benefits, the proper use of colours can also improve awareness and help individuals understand the necessity of incorporating certain colours into their lives, which promotes overall well-being.

### ***(iii) Personal use of healing properties of colours***

The seven chakras play a crucial role in everyone's lives. A few participants (P8, P19, P14 and

P19) explained their personal use of chakras and colours in everyday life. According to P14, 'Yellow is a soothing colour which is associated with the sun. Yellow, cream and white as well - Peaceful. Blue - cooling. Red is not advised, as it is not calming, a soothing colour'.

According to P19, there are emotional healing properties associated with colour:

I look at the colour blue because it is the symbol of water, the sea that washes away your problems. Green for healing & balance in nature. Turmeric is of a yellow colour, which we use for healing and cleansing. You make a paste out of the Turmeric powder and put it on the cut to prevent infection. Turmeric is also used to smear on the bride and groom on the day before the wedding to cleanse them. (P19)

The excerpts above represent colour healing practices commonly used by members of the Hindu community. They use the concept of colour and associated meaning to evoke particular responses and to reach a desired emotional state. The concept of chakras is widely known around the world and is also widely used by Western people. By using a particular colour or a combination of thereof one can reach calmness or gain the needed energy. As chakras also represent a particular part of a human's body, the correct use of colour can improve one's health in a particular body part which is reached through the process of meditation (Harding 2018: 31). The associated colours of chakras have the same meanings as colours in Hinduism. Red, the most widely used colour in Hinduism, is represented by the lowest part of the body and its respective chakra, while violet is considered the most sacred one and is depicted in the highest chakra. According to Harding (2018: 32), chakras also represent the seven main colours of the rainbow and follow the scientific representation of the colour spectrum where the longest wavelengths are positioned at the bottom and are represented by the colour red and the highest frequency wavelengths are presented in the violet colour.

#### **4.5.3 Theme 3: Colour use Differences Between South Africa and India Sub-themes:**

- Use of colours in India
- Differences among linguistic groups
- Colour preferences in the eThekwinini Hindu community

According to the data collected, the use of colours in the eThekwinini Hindu community did not differ to the community in India. A total of 16 participants (P2-P11, P13, P15, P17-P20) have agreed that India was still the example for all Hindu communities around the world and is seen

as the main region of reference when it comes to colour symbolism. Participants have also indicated that there are slight differences in colour choices among different casts and linguistic groups. The data also revealed that the colour difference in the Durban community is slightly influenced by the Western lifestyle in South Africa and has a few differences when it comes to choosing colours for everyday lifestyle. However, the religious aspect of colour use is exactly the same as in India where most Hindus follow the traditional way of colour application in religious practices and auspicious rituals.

#### ***(i) Use of colour in India***

The responses of all 20 participants suggest that richness of Hindu culture is strongly associated with the importance of colour. The colours are integrated into religion to such an extent that they hold important cultural, religious and traditional meaning. As colours have a great significance in Hindu religion, it can be said that this religion is represented by symbolic colours which form a large part of Hindu consciousness. The symbolism of colour in Hinduism controls all aspects of life such as festivals and celebrations.

Most participants (P2-P11, P16-P20) mentioned many similarities regarding the use of colour in the Indian community to the one in South Africa. According to P4, 'It is basically the same, the scripture originated in India, but it is all around the world. Whatever is in the scriptures, will be practised in different countries. The colours are specific to the religion, not of the country'. A few participants (P13, P16 and P19) mentioned that the colours used in India follow a stricter way when it comes to choosing the attire for religious occasions. According to P16:

In India, when it comes to a funeral or sick people they are covered in white, to show they are mourning. In SA they do not give preference on wearing white. When conducting prayers in both countries the colours are very colourful. (P16)

Five participants (P2, P7, P12, P17 and P18) mentioned differences in colour choices between communities. According to P12:

It will depend on different communities, linguistic groups, etc. The dominant colour for Lakshmi Puja is red, because Lakshmi, because it is about living with the world and attaining the highest possible prosperity. In India, I notice more spiritual disciplines and they tend to use white when they attend programs, to denote their scholarly, student attitude. (P12)

#### ***(ii) Differences among linguistic groups***

While examining different linguistic groups presented in the Hindu population, the data has

revealed that there are differences in colour choices between South and North Hindu communities. Five participants (P1, P7, P11, P12 and P20) mentioned that the Southern Indian Hindus prefer to use the brightest colours for festivals and celebrations such as weddings, while the Northern Indians tend to choose more subtle colours. Historically, there were also differences among different castes, but with time these have mostly faded away and in modern times everyone follows the same principles when using colour for religious practices and auspicious occasions (Olson 2007: 44). All the participants explained the important differences and similarity in colour choices which exist among Hindu communities in India and South Africa. This includes a difference between Hindi and Tamil communities, as well as caste differences which were formed historically. However, a few participants (P2 and P5) also mentioned that the caste system was no longer applicable in India, where there were no important differences in colour choices among different communities. Two participants (P8 and P19) highlighted the important differences based on the language groups to which individuals belong, with a special mention of Hindi and Tamil language communities. These examples are shown in the responses of P2, P8, P5 and P19 below:

Originally there were different castes in India that used to wear different colours. But no more, in SA there is not. There is not a colour differentiation, cast is not a bad thing. The way it was interpreted was the division of labour. When the British took over, they over emphasised the cast and slowly made them feel divided. (P2)

There is no major difference between North & South India, but the choice of colours is a big difference. The Tamils from the south like bright clothing, with bright borders. Whereas the Hindi speaking, from the north, does not go too deep into that. A Tamil bride does the full work on her hair to the bottom, whereas a Hindi bride uses a veil (Red) to cover her hair as a mark of respect . (P8)

Really there was no caste, it was just your nature and you lived and worked according to your nature. In SA there is no caste, colour did not divide people. I do not think there is any different colour division between SA and India. You might still have that caste thing hanging on in India. Different tribes will have different head gear and colour, like in Africa. In India you will find different head gear to differentiate different clans. You will not find that with Indians here in SA. (P5)

For cast, it is a no, but in the linguistic groups, like South and North India. Those that came from the south had different colours and different shiny material, according to the texture manufactured. So whatever was available, became trendy and fashionable. (P19)

### ***(iii) Colour preferences in eThekwini Hindu community***

The eThekwini Hindu community follows the same colour choices as India for their religious practices and everyday life. Based on the language spoken and the community to which they belong, people select a particular colour for an occasion. Most of the participants (P1-8, P10-P15, P18 and P20) described colour preferences in the eThekwini Hindu community as being the same as those in India. According to the answers by these participants, people in the eThekwini Hindu community prefer bright colours and still follow the cultural and religious colour norms when it comes to religious practices and auspicious gatherings.

Ten participants (P2-P7, P11, P13-P14, P19,) also said that there are not many differences between the Hindu community in Durban and the community in India. New Hindu communities formed around the world due to global migration still use India as the main source of reference when it comes to the symbolic use of colour and its application in religious practices (Desai & Vahed 2010: 26). Many Hindus still follow the traditions and information from the ancient scriptures as a guideline for the use of colour in their everyday life and their respective associations.

According to P1, 'From a priest's point of view... People wear colourful kurtas. A priest generally sticks to white, or cream colours. The sache they use is yellow, and mentally it has a soothing effect. Ladies wear bright colours to weddings, associated with our deities and avoid dark negative colours'. P10 highlighted a few examples of colour used in the community:

With Hinduism being so bright and vibrant. Colours make the entire function exciting; it is open to the individual to use any colour to make the occasion exciting, graceful and beautiful. Gold is used in the outflanks, to bring out great brightness. Red is used for Lakshmi day. Yellow for the porridge prayer. They hoist the flags which are yellow and I think some are green, as well. (P10)

According to P3, the religious use of colour in Hindu communities is still very important and follows the same guidelines as in India:

Another God they pray to is Hanuman the monkey looking god. His colour is red, and you will see at many homes they put up a red flag, which is associated with that particular diatie. It is not common to see a white flag, but we do put a white flag for homes for the ones that want to. Colours are also identified with certain deities. We have other distant planets, but they have minor effects on us, as they are not significant for earth. (P3)



#### **4.5.4 Theme 4: Impact of Globalisation on Colour Use in Hinduism Sub-themes:**

- Impact of globalisation
- Western influence
- Change in colour traditions

Most participants (P1-P5, P11, P13-P17, P19, P20) viewed the process of globalisation as a negative factor which has affected the lifestyle of Hindu communities around the world, especially the ones based in Western countries. Different responses of all 20 participants revealed that globalisation has resulted in the development of new norms in a community, while traditional practices were pushed back in the process. The latest technological development has also affected every sphere of life in Hindu community. A few of the participants (P6-P10, P12 and P18) have argued that the process of globalisation could be viewed as a positive aspect as it opens up opportunities for educated and skilled Hindus. At the same time, the process of globalisation has created a cultural shock for Hindu culture. During data analyses it was found that many of the members of Hindu community do not follow the 'Hindu way of life' as it was practised by previous generations, thus creating a slow fade of culture and an integration into the new Western culture.

##### ***(i) Impact of globalisation***

According to Khaled (2007: 81), globalisation has led people to an intense struggle between local values and global culture. The value system of the local colour tradition which has been used as a reference by society has changed due to the influence of globalisation. According to Khaled (2007: 82), this was strongly affected by the advancement of information technology that accelerated the process of such changes. According to Singh and Aktor (2015: 1921), the process of globalisation has also penetrated sacred religious life, which can cause tension for one's faith.

The main characteristic of globalisation is the rapid change in all forms of order and values of life. It was concluded that one who does not follow the change will be left behind, even crushed by the times. Such influence has caused communities to embrace the change and adapt to a new way that colour is viewed and applied in their everyday life. Five participants (P5, P8, P11, P17 and P19) reported the important effects of globalisation and Westernisation on the life of Hindu communities around the world, with a particular mention of colour use and its change in recent time.

Many participants (P2-P10, P13, P17 and P20) spoke about the change in colour choices among Hindus that was brought about by the process of globalisation. Such change was mentioned in a negative way, where many Hindus are influenced by the colour norms of the Western world. According to P13:

In the past Indians would wear light colours, but nowadays, they have joined the Western world, wearing low value and low saturation colours. In the past men would wear white Kurt's & ladies would wear light coloured saris. Nowadays less people are wearing Kurt's & saris. Carrying your culture defines who you are. One does not have to get outlandish about it. (P13)

A few participants (P2, P7-9, P13 and P19) spoke about consumerism as the main driving force behind such change. P2 stated:

Yes, there is a big influence of the Western culture on the Eastern culture. People are persuaded to control materialistic things, but not to keep your soul happy. You have great nights for your material pursuit, but have not come to know your inner self. You want to conquer the world, but you do not know who you are. (P2)

According to P11, the process of globalisation has caused black colour, which is the most avoided colour in Hindu culture, to become the norm for the corporate environment, which completely contradicts the use of colour in Hindu communities. P11 states:

All cultures influence each other and if any Hindu says they are not influenced, I will not agree with them. Black has influenced everybody, especially for work, that seems to be a dominant colour. Black is normally worn to ward off negativity in Eastern cultures. If you look at the Navagrahas, we have 9 influences (planets), at least three of them have a leaning towards black. Particularly with Saturn, and we wear black clothing for that prayer, to ward off any negativity influences from the planetary side of the world. In the ancient eastern community, colour played a very big role, today we have developed into a monotone culture. There definitely is an influence of other cultures on the idea of the East. (P11)

## **(ii) Western influence**

The effect of Western culture can be seen in the customs, tradition, social and moral behaviour related to the use of colour (Khaled 2007: 86). 'Western culture has brought with it the seeds of selfishness in the minds of Indians' (Khaled, 2007: 86). Westernisation was also seen as a curse by a few participants. Mounting Western culture was seen as degrading the Hindu culture itself (Khaled 2007: 86). Much of traditional Hindu attire that is no longer worn by Hindus are considered outdated; thus, it is becoming more extinct and can only be found in museums.

There was an important difference mentioned by a few participants (P2, P15 and P20) between the effect globalisation and Westernisation have had on the Hindu community. While the process of globalisation was seen by these participants as the positive aspect, Western influence was viewed by participants as a negative factor as shown in the responses below:

Globalisation has no impact on colours. Hinduism is a very old religion and what is embedded in us will never change. It has been transcended over the years, colours are a very vibrant thing amongst hindus. Globalisation will not change any of that. Westernisation has changed the generation that we are in, the current generation has become more westernised and more modern, they do not want to keep with their culture. As far as our culture is, we will continue to wear bright colours, as long as we live. Technology has changed, everything is virtual, online, you do not need to visit temples, cultural functions. People use electronic devices to check up on things. (P20)

It has changed, I do not know if it is because of status, progress in the sense of becoming more wealthy and can afford different clothes. It is just the whole Western influence on the Hindu people that has changed. Take me for example, I haven't worn a traditional dhoti, which looks like a skirt. But in India everybody wears that. (P15)

There are maybe a few people in India that will wear westernised clothing, such as a shirt and a pants, as opposed to the traditional dot, or vesī...the majority of people wear to a temple, or religious festival. In SA there are very few males that wear traditional outfits to religious functions. Whereas females will still wear saris, or punjabis. (P2)

Western culture has certainly had its positive impact on Hindu communities (Khaled 2007: 86). The development of technology has also made life faster, easier and more comfortable (Kumar 2000: 87). It is important to understand that the Hindu religion focuses on teaching one to live in peace and harmony with others and to have tolerance and patience for other cultures and religions (Khaled 2007: 86). Many people in different nations comprehend the significance of Indian heritage and value the advantages the Indian culture has to offer, including yoga and reflection, the ancient teachings and so on (Kumar 2000: 87). The knowledge of Indian wisdom helps people around the world to enrich their lives.

### ***(iii) Change in colour traditions***

Western influence is rising in Hindu society and intensifies as each year passes. According to Singh and Aktor (2015: 1921), Hindu culture is the oldest and the richest in the world, but it is now under a great threat as Western culture is establishing a strong base in Hindu communities around the world and partially replacing some of the ancient values and norms of Hindu culture.

According to the answers of five participants (P5, P8, P11, P17 and P19), the change of colour traditions in the Hindu community was caused by Western influence. P17 stated:

I do not think globalisation has affected it much, but westernisation has influenced it more. With globalisation, Hinduism has moved globally with Hindu communities and temples all over the western world following their traditions with some restrictions from those countries they are in. The main Hindu culture is surviving & practised. I find that the western attire is not so much associated with colours, as we are. (P17)

P8 mentioned that such influence can be seen best in a corporate environment where the dress code follows Western fashion when it comes to the choice of colours:

Eastern culture is very vibrant in colours for dressing. Except when it comes to dressing for work, they are more conservative when it comes to dressing for work. I have noticed that even the youngsters in India do not dress (Colourful) like their parents would. They are more conservative to western dress styles. (P8)

P5 mentioned that such influence of the Western world can be seen most in the younger generation of Hindus: ‘The new generation changes things, they do not stick to tradition. They wear the different colours, where it used to be red, gold, or cream. They do not wear traditional saris, but something that looks like a sari. They are moving away from tradition’.

#### **4.5.5 Theme 5: Western influence on young Hindus sub-themes:**

- Global propaganda (media/Internet)
- Problems with education
- Lack of interest in own culture and religion

All 20 participants identified several problems related to the lack of interest in their own culture and religion which exist among the Hindu community, especially affecting the young generations of Hindu people. Of the participants, 15 (P1, P3-P7, P10-P16, P18 and P20) highlighted the use of global propaganda via the Internet as the main cause of such influence. Seven of them (P1, P4, P11-P13, P7 and P20) argued that the lack of daily education has caused such a devastating effect, while 8 participants (P3, P5-6 P10-P16 and P18) identified the cause to be the absence of Indian language schools. As many religious Hindu books are written in traditional languages, it makes it almost impossible for someone to learn the culture and religion without speaking the native language. One of the participants (P4) mentioned Islamic

schools in Durban. They have a special curriculum for children where they learn their own language and religion as part of the school course. Unfortunately, the number of such schools in Hindu community is limited.

***(i) Global propaganda (media/Internet)***

Some recent studies have highlighted various areas of Hindu lifestyle that have been influenced by the process of Westernisation. Harrell et al. (2015) examine the relationship between 'Westernisation' and obesity among adolescents in India. The authors argue that India is changing rapidly; the process of Westernisation is difficult to ignore. As English language music, movies and TV shows are widely available in the country and promote Western lifestyles, many teenagers are struggling with their identity. The younger members of the community are typically the target of specific marketing efforts that increasingly focus on selling 'global brands', the vast majority of which are Western (for example, Nike and Coca Cola). These marketing efforts often reflect and exploit developmental tasks of adolescence, such as identity formation, especially when local role models (for example, Bollywood movie stars and cricket stars) are used to sell these global brands. This practice is widespread in India today.

The following extracts indicate the main reasons why younger generations of Hindus are more interested in Western practices and have little knowledge of their own religion and traditions. Most of the participants mentioned technology and lack of education as the main reason for such problems. They have argued that there is no harm in taking good things from other cultures and gaining knowledge from different traditions. However, according to participants, most of the Western influence has had a negative effect on the Hindu community by replacing its ancient traditions, values and religious guidelines with those of the modern world. According to participants P1, P3-P7, P10-P16, P18 and P20, global propaganda via media and the Internet was seen as one of the main causes why younger Hindus are more interested in Western practices, as shown in the responses of P5, P10 and P7 below:

Advertising, which is propaganda, ie. Coca Cola adds life...but coke does not add life, it can kill you. It is misleading the people. (P5)

I think they want to be like the West. Christian brides will always wear white. And because of mixed cultures getting married, Tamil marrying a Christian bride, or groom. It could be their choice, the younger generation does not stick to old traditions. I think they want to be different from the norm and do things, and to their own unique way of things'. (P10)

Our culture has changed quite a bit, because this generation of people do not want to follow the roots of their grandparents, ancestors. Technology has an impact on this as well. Unfortunately people are not interested in their own culture, they just want to live their way of life and no spirituality and that is it finished, their life is done. It is also the upbringing of the parents. (P7)

## ***(ii) Problems with education***

In his article 'Social media: Western Culture replacing traditional arts', Rajulapudi Srinivas highlights the big change in the traditional Hindu arts caused by Western influence. The author speaks about the fact that traditional Hindu arts are being replaced by social media, the Internet and flash mobs. He writes that 'The village and community heads used to organise burra kathas', street plays, puppet shows (Tholubommatala) and "janapada nrityams" (folk dances) to enlighten the people against superstitions, social evils, gender discrimination, literacy, health hazards and ill effects of alcohol consumption, but the ancient art forms appear to be getting shadowed by western culture'. He states: 'Now flash mobs (a group of people gathers suddenly in a public place, perform a show for a few minutes and dissolves into the crowd) replace "burra kathas" and "puppet shows" and students are seen dancing on the roads for one or other reason'.

Participants P1, P4-P6, P18 and P20 have also identified problems with education in the Hindu language and the absence of traditional Hindu schools as the main reasons why younger generations of Hindus are lacking interest in their own culture. According to P20:

This is purely down to education, and the influence the western influence has had on the Hindu community. If you compare the muslim community, where they teach their children from a very young age, about their culture. They have their own separate school for that. Unfortunately, in our industry community it is practically non-existent. For some reason we have not been teaching our own religion and it all starts with the language. If language is not taught from a very young age, then they would lose that and the same goes for our culture and religion. (P20)

As many younger Hindus do not speak Hindu languages, they have no way of learning the religious literature, causing them to be influenced by the Western values which are available in English. P1 states that:

In our hindu culture, the religious aspect is very complex, and has a lot to do with symbolisation. It is not just black and white. If you look at all the deities that are worshipped, who have different names and forms and if you do not understand all of that and what each symbolises to the westernised Hindu child, it is unfortunate that something like that can exist. If a child was not taught from a young age, about our religion, the meaning of each god, they

will find it difficult to believe. (P1)

As an example, P4 mentions one religious organisation which could be used to improve the situation with the lack of religious Hindu organisation and states:

They are not exposed to Hindu training and culture when they are young. In our organisation we teach you all the things about our deities. It is a lengthy program, you start when you are 6, until you are 16. When they come from there, they are knowledgeable, clever, doing the right things and very good kids. They like to do spiritual and voluntary works, instead of naughty things. It all depends on your circle of friends and the parents . (P4)

***(iii) Lack of interest in own culture***

Mishra (2017: 424) highlights the evidence that suggests that among Indian youth, traditional collectivist values coexist with modern individualist values that are seen as necessary for social development in the contemporary world. It is argued that traditional Hindu values can be seen as universally human values that can be usefully employed to promote positive and healthy youth development in the Indian context.

Some of the Western values brought by the process of globalisation can be seen as contradictory to some of the values of Hindu religion which has always taught people to live in harmony with each other and always love and respect everyone. Since there is no experience of basic religious education in the family, due to the absence of a grandfather and grandmother and the fact that both parents are working, a child does not learn ethical or moral values, except what little he sees and understands of the world and his teachers. In this way, the child is brought up with little religious knowledge and few ethical values and does not hesitate to engage in any unfair practices, because there is no one there to teach him good or bad or to stop him from doing anything bad.

Participants P3, P6, P8, P10, P12, P17, P18 and P20 identified the lack of interest in their own culture among young Hindus and mentioned that materialistic values brought by the process of globalisation were more important to them. Participants P3 and P18 have highlighted that the merge of Eastern and Western cultures in modern days is unavoidable, as shown in the responses below:

The younger generation wants to blend in and be part of them. The millennials will use the other groups colours to blend in, because hindu colours are bright, the younger generation would rather want to blend in with the modern world. At home they might do their traditional stuff, but not in public. We cannot insist anymore, but have to embrace their choices of colours,

dress, etc. (P6)

A lot of Hindus would rather be materialistically uplifted than spiritually. They are drifting away from the scriptures and what it teaches. Children of today are distracted by materialistic things, and they do not want to learn the real meaning of Hinduism. What has been written in our scriptures is already taking place, the east will embrace the west and vice versa. (P18)

I feel that people who feel different from other people have made them feel inferior about themselves. They feel, if they do something different to other people, they are going to laugh at them. Half of the time they do not know the meaning of the rituals that take place. If they knew all these rituals, they would not feel inferior. When looking at a wedding function, it is only the elders who pay attention to all the rituals. The youngsters are doing something else, or busy with their cellphones. Unfortunately, the younger generation will not sit with the elders and ask them about all the traditional things that need to take place. The younger generation depends too much on getting info from the internet. (P3)

#### **4.6 SUMMARY OF THE FINDINGS**

The data collected has shown that it is possible to integrate the scientific physical properties of colour and symbolic meanings of colour in Hindu religion. Such integration is presented in a series of graphical representations which explain the various colours, their symbolism and application in Hindu religion intended for anyone in the design field who wishes to learn, understand and apply the important meanings behind colours in Hindu culture. Whilst ancient traditions of Hinduism are used as the basis for this research, the concept of semiotics and traditional colour theory are also introduced.

Most participants emphasised that their beliefs in traditional Hindu customs and the use of colour symbolism remain firm for them. Participants also indicated that many young Hindu individuals have adapted to Western ways of life. Although they do not have a deep knowledge of Hinduism, most of them still respect their traditions. The use of colour for religious practices and the choice of coloured attire for auspicious gatherings seemed to be very important to most participants. Such findings indicate that there is a strong influence of the colour symbolism on Hindu culture and in the everyday lifestyle of ordinary Hindu people.

The conceptual framework for this study encourages the use of colours and their combination in a way that corresponds to their symbolic meanings in Hindu religion. As Western meanings



of colours differ from the ones in Hinduism, the colour guide is intended for use in any design field with the Hindu audience in mind. The series of graphical representations effectively present the meanings of colours, their respective qualities, associated emotions and symbolic values in the Hindu community. As Hindus' lifestyle is fully based on religion, the colour guide helps to make the correct colour choices when creating any design work for Hindu audiences.

As the participants selected for the study were religious leaders and senior citizens of the Hindu population in the eThekweni district, it can be said that each of them represents their respective communities. There are two views which were expressed in this study: The spiritual view by the priests and gurus and the internal view from the senior members. Both categories of participants have a great knowledge of Hinduism and are deeply involved in the life of the community to which they belong. This has allowed the researcher to obtain valuable insights and great knowledge and understanding of the use of colour symbolism in Hinduism.

The study has revealed the most favoured colours associated with Hinduism and their respective meanings. Many participants have indicated three primary colours – red, yellow and blue – which correspond to primary colours of the traditional colour wheel represented by the subtractive system. Dark colours and black were the least favoured colours and, where possible, their use is always avoided. Almost all participants agreed on the same colour norms in terms of the colours used in the Hindu community and expressed their personal attitude to different colours. Almost all participants named the same colours as their favourite ones. The colour choices also differed slightly between the ones named by the spiritual leaders and those chosen by the senior citizens. Many participants indicated that the use of colour in India is almost the same as in South Africa and only mentioned a few minor differences, such as colour preferences of those belonging to different linguistic groups and the more subtle colour preferences in the eThekweni area.

The problem of globalisation and its impact on the life of the Hindu community was discussed with participants and the data collected produced interesting findings. The process of globalisation, as well as the rapid development of technology, has not only had its effect on the use of colour in Hindu religion, but has also affected the lifestyle of the Hindu community in general. Many members of the community are now more interested in Western practices – especially the younger generations of Hindus – in order to fit into the modern world's model. The integration of the Internet and social media into lifestyle has had a negative impact on the community. The questionable values of modern propaganda, such as materialist wealth,

consumerism and one unified global culture, go completely against the norms and morals of Hindu religion, which include peace, love and the simple lifestyle with minimum damage to nature.

The lack of education in a traditional language such as Hindi or Tamil was also revealed by many participants as one of the main reasons why younger generations of Hindus lack interest in their own culture and traditions. Limited number of Hindu schools where a child could learn the native language along with religion and traditions has forced the members of Hindu communities to use standard state schools for general education in South Africa. For the majority of Hindus, the only way for them to learn their own traditions was in-house education by family members. With the fast-paced modern lifestyle, it is almost impossible for parents to give extra lessons after work along with the homework of the main school. Thus, the child is educated according to the standard school curriculum where Hindu language, religions and traditions are absent. A few lucky children were taught by their grandparents who were looking after them and who introduced the Hindu culture and religion to the children from an early age.

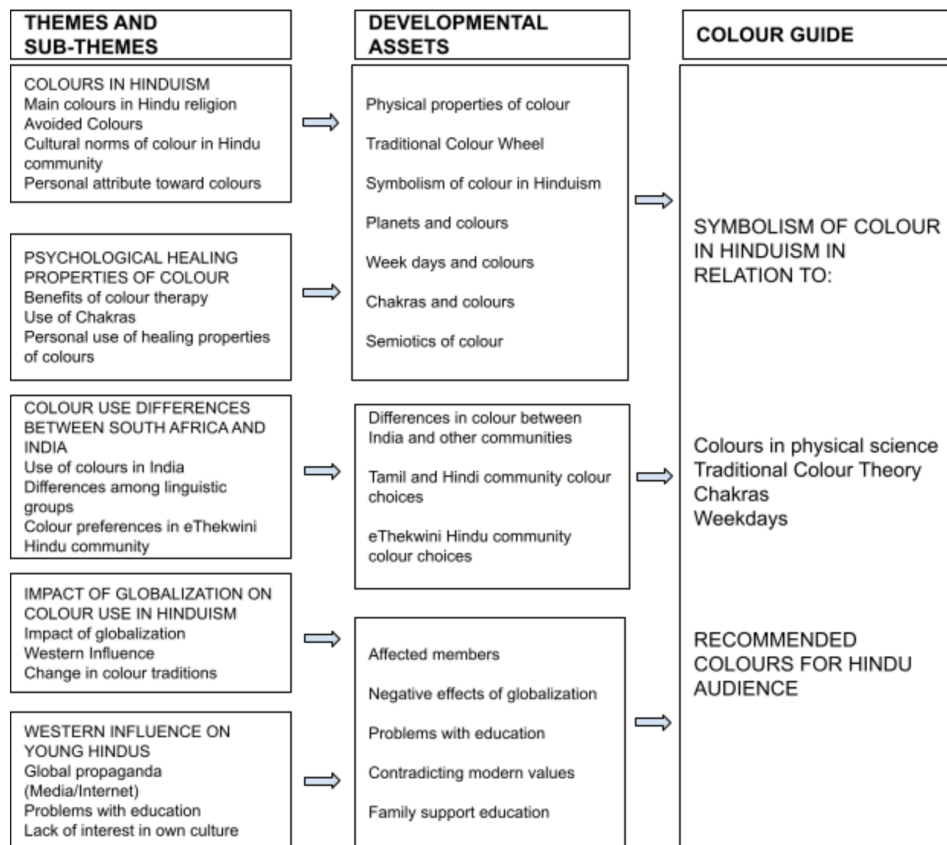
By being greatly exposed to the values and norms of Western culture, the younger generation of Hindus subconsciously follow the new way of life to be accepted by the rest of the world's society. A good example is a traditional Hindu wedding which includes many religious rituals and specific colour norms according to the scriptures. Many modern Hindu couples try to cut off some of the important rituals to make the wedding ceremony shorter to allow for a long, Westernized reception. The choice of white outfits for the wedding attire, which is considered in Hinduism a mourning colour for widows, has been adopted by couples to fit into the norms of the Western world. According to Hindu customs, the original wedding outfit for the bride is red and stands for prosperity and fertility. However, many brides now try to alter the tradition and wear different colour outfits to stand out from the rest.

The collected data has enabled the researcher to conceptualise a colour guide to meet the needs of designers who intend to create visual campaigns for Hindu communities and is presented below. The following section reflects the relationship between the themes and the assets within the conceptual framework and identifies a set of graphical representations depicting the use of colour in Hinduism.

#### **4.7 THEMES AND ELEMENTS OF THE COLOUR GUIDE**

Figure 4.1 depicts the various themes that emerged from the participants' responses as they:

spoke of their experiences of colours in Hinduism; highlighted psychological healing properties of colour; identified differences and similarities between the colour use in India as opposed to South Africa; revealed the impact of globalisation on Hinduism, and argued about different reasons behind Western influence on young Hindus. Moreover, the interviews revealed the important findings regarding the similarities which exist between the physical nature of colour and the logic behind colour meaning in Hinduism. The elements identified for colour were obtained to address and support the connections which exist between the physical science of colour and Hinduism. The proposed colour guide interlinks the science and Hindu religion to highlight the underlying colour philosophy in Hinduism and its conscious placement of colour application in every part of Hindu lifestyle.



**Figure 4.1: Themes, assets and Colour Guide**

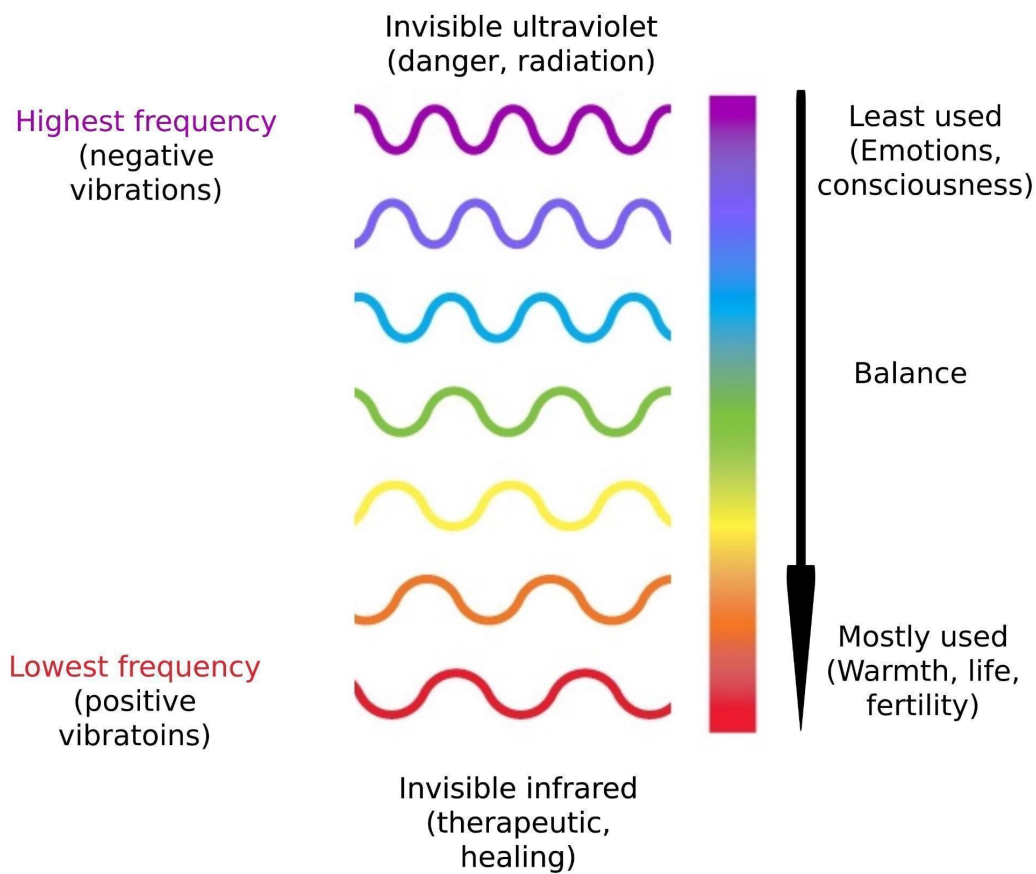
Kudrya-Marais (2021)

## 4.8 ELEMENTS OF THE COLOUR GUIDE

### 4.8.1 Colours in physical science and Hinduism colour meanings

The findings from this study indicate that there is a strong connection between scientific

physical properties of colours and colour symbolism in Hinduism. As shown in Figure 4.2, the set of colours with the lowest frequencies, such as reds, oranges and yellow, are considered to be the most favoured in Hinduism and are associated with warmth, fertility and life, while the set of colours with highest frequencies, such as indigo and violets, are associated with the spirit and the unknown. Based on the findings, it can be concluded that there is a tendency to reach for therapeutic and healing red colours and to move away from dangerous radiations produced by the invisible ultraviolet light preceded by the violet colour.



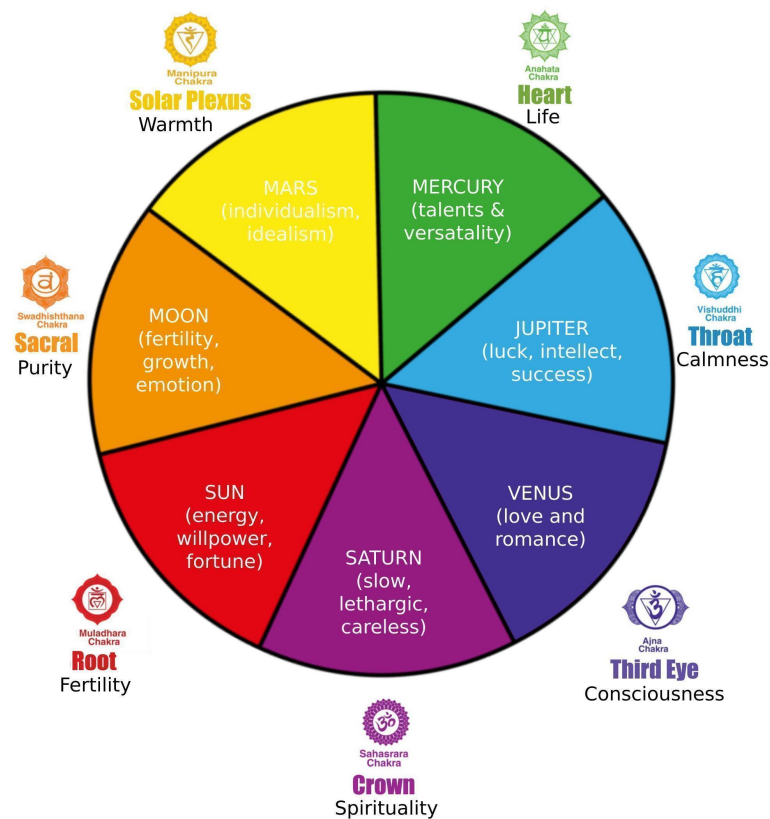
**Figure 4.2: Colours in physical science and Hinduism colour meanings**

Kudrya-Marais (2021)

#### **4.8.2 Traditional Colour Theory and Hindu colour logic**

In Hindu teachings, colours are closely connected to deities, planets and chakras. It can be said that this co-existence of colours and their meanings follow almost the same principles found in traditional Colour Theory. Figure 4.3 represents such relationships and combines the traditional colour wheel with the values associated with colours in Hinduism. By examining the wheel,

one can notice that the planetary placements and position of chakras follow a logical order. The main planets in Hinduism such as the Sun, Jupiter and Mars are depicted in primary colours, while the other planets represent the secondary colours of the wheel. The same principle is applied to chakras and their placement according to their positions in the human's body.

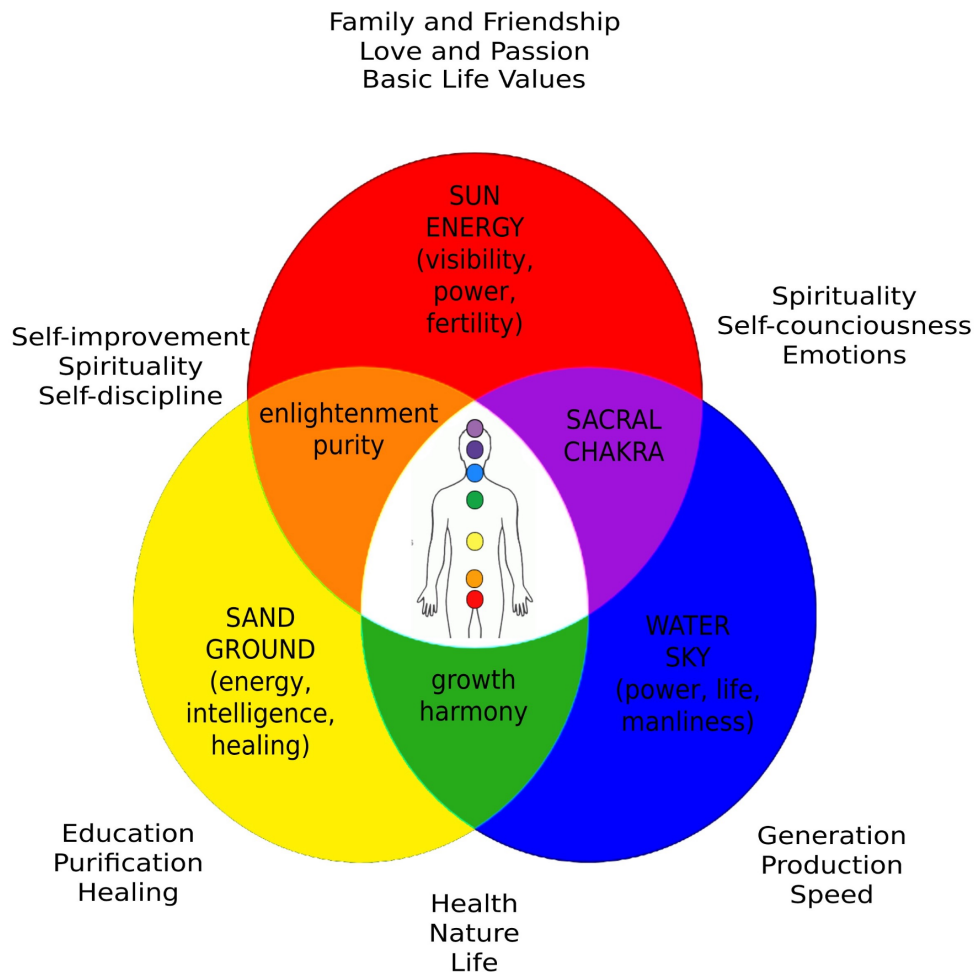


**Figure 4.3: Traditional Colour Theory and Hindu colour logic**

Kudrya-Marais (2021)

#### 4.8.3 Chakras and healing properties of colours in Hinduism

Each chakra vibrates at a particular frequency that impacts specific biological processes and organ systems in the body. The circulation of energy in each chakra then influences physical as well as mental well-being by way of stimulation. There are seven total chakras that run from the base of the spine to the crown of the head, and each has a specific meaning and is associated with a specific colour. The colours follow the same pattern as a rainbow. Figure 4.4 represents seven Chakras and their colour meanings.



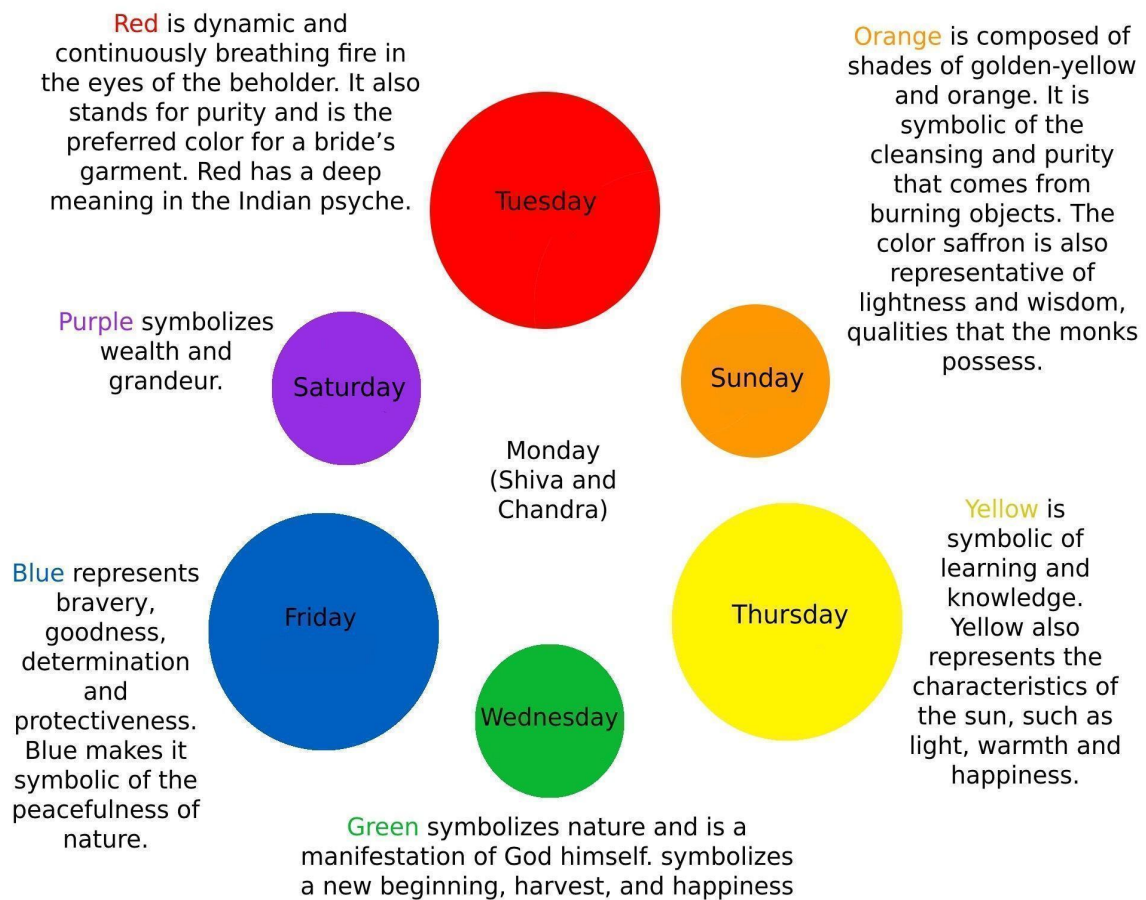
**Figure 4.4: Chakras and healing properties of colours in Hinduism**

Kudrya-Marais (2021)

#### 4.8.4 Weekdays and favourable colours in Hinduism

Many cultures believe that there are colours associated with each day of the week. In Hinduism, people strongly follow astrological beliefs that confirm which colour to wear for each day of the week. In Hindu beliefs, each day of the week is related to either a planet or a deity. By following the colour of the week that is associated with the planets, you essentially align yourself to harness the subtle power of the planetary influences and it is recommended to embrace the colour corresponding to that planet on the said day as depicted in Figure 4.5.

White is the absence of color and is the only color widows are allowed to wear. It is the acceptable color at funerals and ceremonies that mark death in the family. It reflects the essential quality of the color itself.

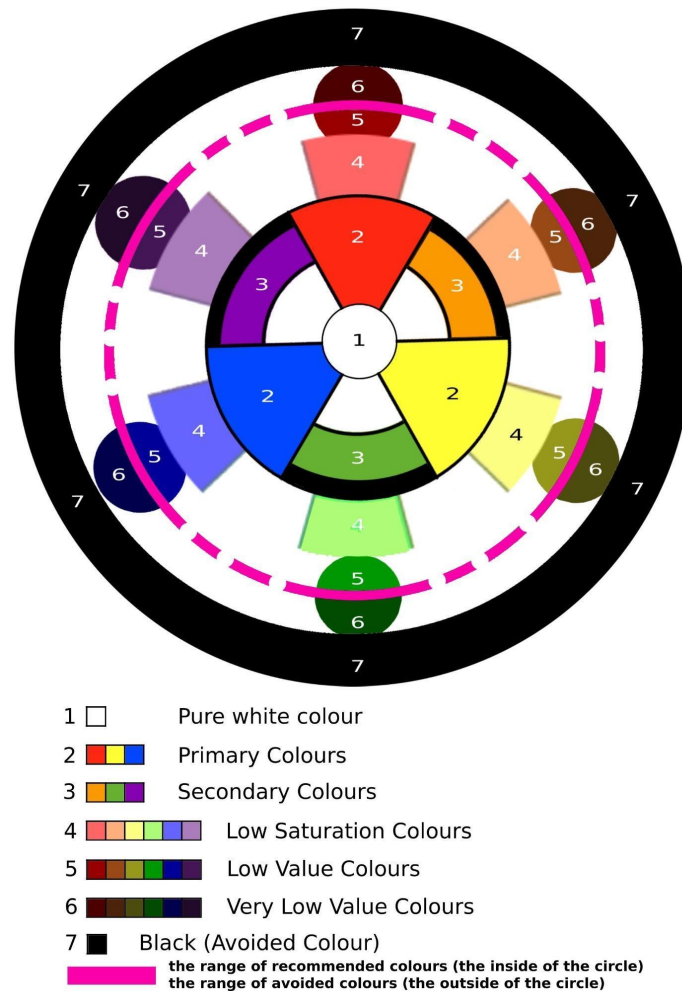


Black in India has connotations with lack of desirability, evil, negativity, and inertia. It represents anger and darkness and is associated with the absence of energy, barrenness, and death. Black is used as a representation of evil and is often used to ward off evil.

**Figure 4.5: Weekdays and favourable colour in Hinduism**

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#### 4.8.5 Colour wheel for Hindu audience



**Figure 4.6: Colour wheel for Hindu audience**

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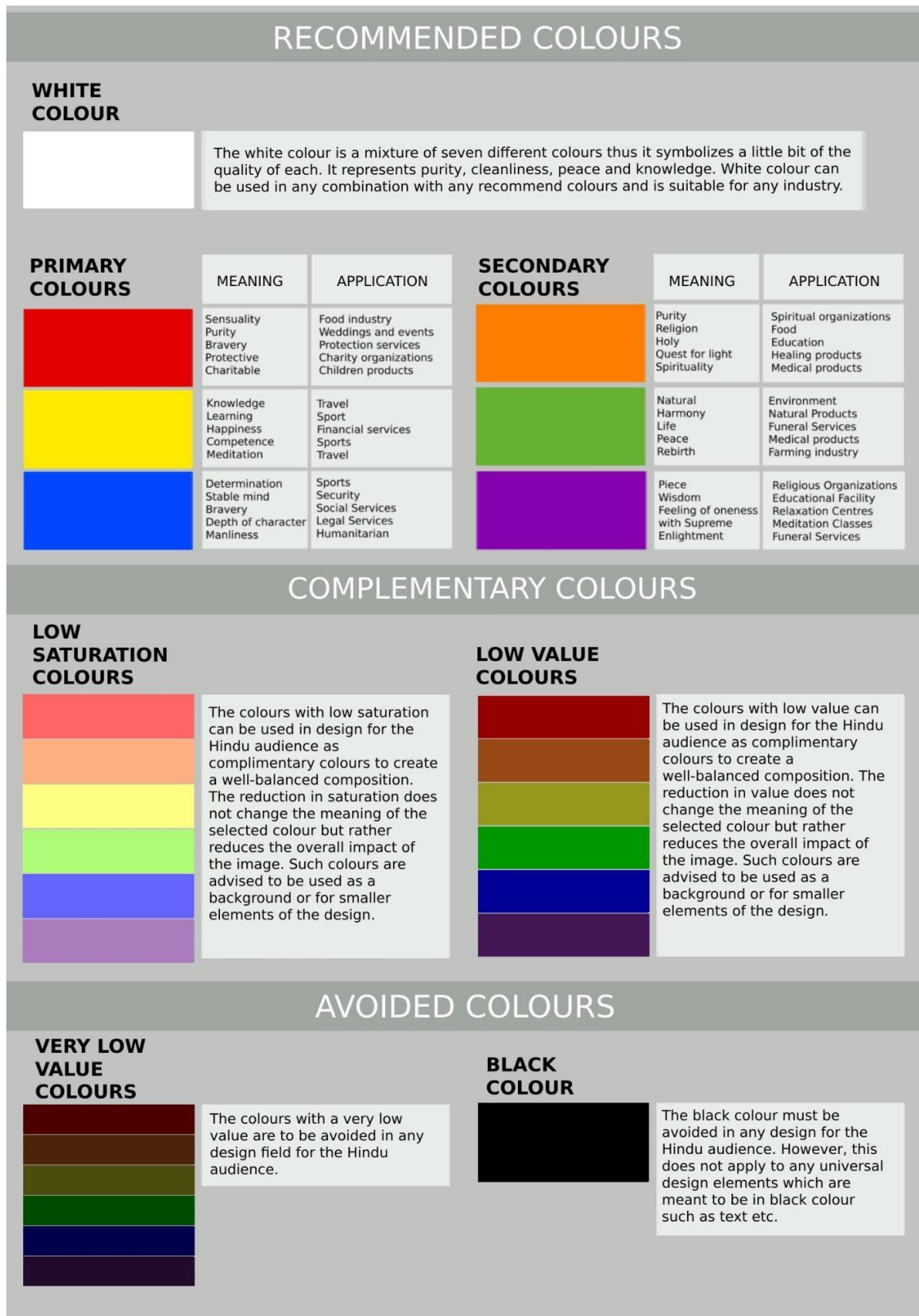
All the colours placed within the boundaries of this circle can be used, while the ones which fall outside of the circle should be avoided. Primary colours, such as red, blue and yellow are the most popular among Hindu audiences along with the secondary colours and can be used in any combination while designing for the Hindu audience. These colours are assigned number 2 and 3 accordingly. The next preferred set of colours are the colours with low saturation followed by the colours with a low value. Low saturation colours and low value colours can only be used as complementary colours and not as main colours in design for the Hindu community. For example, the colour red can be the main colour in design combined with low saturation yellow and green colours.



#### **4.8.6 Recommended colours for Hindu audience**

Based on the literature review and data analysis for this study, Figure 4.7 summarises the suggested use of colours intended for designers who wish to create products for the Hindu audience. Figure 4.7 is based on the meaning of colours in Hinduism, the traditional Colour Theory model and the Semiotics of Colour. It combines meaning and emotion for each of the six colours listed and suggests an application in industry while considering religious and cultural preferences of the Hindu community. As each colour has meanings and emotions attached to it, the application section also lists a few areas of application. The colour wheel listed in Figure 4.6 forms a part of the colour guide and must be used in order to select the correct colours and their combination.

The colour guide combines colours in groups starting from most widely used colours such as primary colours and ending with avoided colours such as low value colours and black. The middle section of the colour guide lists complementary colours which are suggested to be used along the primary and secondary colours in any design. It is important to note that low saturation colours are always preferred over low value colours among Hindu community. The guide can be used in a cross-reference nature to either select the correct colour for the application or to select the correct application if the intended colour is already known. It allows the designers to make the right choice by connecting the emotion the product or service is intended to convey with the correct colour in order to have a successful response from the Hindu audience.



**Figure 4.7: Colours for Hindu audience**

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#### 4.9 APPLICATION OF COLOUR GUIDE IN HINDU WEDDING PHOTOGRAPHY

In this section, wedding photography for the Hindu audience is used as an example in order to show how the colour guide can be applied in practical projects. It is important to note that the selection of background colours is of the utmost importance in Hindu wedding photography as it has to follow the rules of colour symbolism in Hindu culture. As each wedding has a particular colour theme attached to it, the photographer has to be very selective of the colours to be used to make up the photograph that conveys the correct message. Red is the most popular colour for traditional Hindu weddings often complemented by blue, green and yellow colours. Photos of wedding details as well as creative bridal and couple portraits form the parts of the wedding day which are fully controlled by the photographer, thus allowing him/her to make choices of colours to be presented in a photograph.

Figure 4.8 below shows an image of the wedding rings placed over the red flower. Red is a primary colour and is one of the most important colours to Hinduism. It is considered auspicious, denoting vitality, well-being and joy. This colour symbolizes the blood or the forces of human life. The colour red is also a sign of a woman's marital status. Red also denotes erotic connotations and is actively used both in wedding ceremonies and during marriage it is an ideal colour to be used as the background for the wedding rings. In this example, the colour red has a high colour value and is highly saturated, which is the preferred combination of colour attributes for the Hindu audience.

By using the Figure 4.6 above it is evident that the larger amount of the frame must be composed of primary colours (red, blue and yellow) or secondary colours (orange, green and violet) with high saturation and high colour values. The wedding rings are gold (yellow hue, high colour value and highly saturated) which is also a primary colour. The use of light for creating this image has created a few areas in the photograph which are of low colour values as well as low saturation colour but each occupying the smaller portion of the frame. These colours aid to create a correct light composition for the image. In the colour guide in Figure 4.7, the colour red is indicated as a recommended colour for Hindu wedding industry thus the photographer selected to use the red background to capture the wedding rings. Such an image passes a message of love and fertility to the Hindu audience.



**Figure 4.8: Wedding rings**

Kudrya-Marais (2021)

Figure 4.9 below shows a traditional Hindu bride captured during the bridal photo shoot at a natural location such as a park. The green environment was selected by the photographer in order to complement the bridal attire. Looking at Figure 4.7, one can see that the colour green is also a recommended colour for the Hindu audience. In this photograph most of the frame occupied by the green colour has high saturation and high value green hue, complemented by a few areas which have lower colour values and lower saturation. In Hinduism, the colour green means life and piece. The image denotes a message of new life, peace and harmony in marriage for the bride captured in a photo. As Hindu people have a great appreciation and respect for

nature, this photograph also passes a message to the Hindu audience that the couple will be living their new life together in tune with nature and all living things.



**Figure 4.9: Hindu bridal portrait**

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Figure 4.10 depicts a wedding couple captured at the beach during their creative photo shoot on a bright sunny day. The blue sky, occupying the majority of space in a photograph, was specifically chosen by the photographer to pass a special message with this image. By looking at the colour wheel in Figure 4.6 and the colour guide in Figure 4.7 one can see that colour blue with high saturation and high colour value are one of the most preferred colours among Hindu audiences, also being one of the primary colours. Blue colour also represents depth of character,



stable mind and determination which are considered to be among the most important qualities for a successful marriage. It can be said that this particular image consists almost of three primary colours (or their hues thereof) such as red (such as wedding attire design), blue (the colour of the sky and the ocean) and a low saturation yellow hue (such as sand).



**Figure 4.10: Hindu wedding couple**

Kudrya-Marais (2021)

When a Hindu wedding photographer is faced with a choice of which colour or a combination of colours to select for the background, it is important to keep in mind that colours change throughout the day and their appearance is also based on the available lighting such as day/night or sunny/ overcast weather conditions. As Hindu community members prefer high value and high saturation colours, it is advisable to use extra lighting equipment in order to illuminate the background areas during the dark, in a shade, in poorly lit indoor areas or in overcast weather conditions. The most important consideration related to colour in Hindu wedding photography is to create visually interesting images composed mainly of primary or secondary colours with high colour value and high saturation.

#### **4.10 CONCLUSION**

This chapter presented the findings from the data collected for this study. The interview responses were thematically organised and presented with similar thoughts of other researchers. Emerging from the themes, the concept of the colour guide was also discussed in this chapter. The data has reflected that there is great logic behind the use of colour in Hindu religion and it is strongly based on the laws of nature depicted in physical science. Hindus use particular colours that have strong connections to their physical qualities, are often used for healing techniques and are very beneficial for psychological health. Most participants spoke about the use of colour in India and South Africa, revealing differences and similarities. The problem of globalisation was widely explored and the main problems identified by participants, with special attention to the life of Hindus in a Westernised world. Global propaganda, the development of technology and limited traditional education were identified as one of the factors that cause young Hindus to lack interest in their own culture and religion.

The researcher also noted the relationship between the themes, the developmental assets and the elements of the proposed colour guide, highlighting the meanings of colour in Hinduism and their relationship with the physical properties of colour. The use of colour symbolism in Hinduism is compared to physical science where strong logical connections are established. A discussion of how the colour guide can be used was also shown using Hindu wedding photography as an example. The next chapter provides a discussion and recommendations and also includes a reference list.

## **CHAPTER 5: CONCLUSION AND RECOMMENDATIONS**

### **5.1 INTRODUCTION**

The focus of this study was to investigate the use of colour in Hinduism and to explore the impact of globalisation on the use of colour in the Hindu community. The aim of the study was to develop a colour guide that incorporates the symbolism and application of colour in Hindu religion that can be used in any design field intended for the Hindu audience. This colour guide was designed to assist anyone who wishes to learn, understand and apply the important meanings of colour in Hindu culture, such as fashion, design and brand development. The study focused on: (1) exploring the role of colour in Hindu religion and its cultural associations in the Hindu community; (2) investigating the impact of globalisation on the application of colour in Hindu community; and (3) developing a series of graphical representations which explain the various colours, their symbolism and application in Hindu religion intended for anyone who wishes to learn, understand and apply the important meanings behind colours in Hindu culture.

The findings in this study revealed the main colours used in Hindu religion and their meanings, psychological healing properties of colour and the differences in colour use between South Africa and India. The findings also highlighted the impact of globalisation on colour use in Hinduism and the Western influence on young Hindus. The rationale for this study was based on the fact that many young Hindus in the eThekweni Hindu community, with limited religious education resources, are strongly influenced by the Western value system and are slowly losing their cultural identity, which is also strongly affected by the process of globalisation. It was therefore important to explore and understand the use of colour in Hindu traditions and religious practices that would inform the development of a comprehensive colour guide for easy understanding of colour meaning in Hindu culture and religion.

The data presented in Chapter 4 reflected five major themes and sixteen sub-themes that emerged from the responses of participants. It corresponds with the literature reviewed in Chapter 2. Below is a summary of the findings made regarding the themes and sub-themes that were presented in Chapter 4.



## 5.2 SUMMARY OF THE FINDINGS

The five themes that emerged from the data were as follows:

- Colours in Hinduism
- Psychological healing properties of colour
- Colour use differences between South African and India
- Impact of globalisation on colour use in Hinduism
- Western influence on young Hindus

Sixteen sub-themes that emerged from the themes were as follows:

- Main colours in Hindu religion
- Avoided colours
- Cultural norms of colour in Hindu community
- Personal attitude toward colours
- Benefits of colour therapy
- Use of chakras
- Personal use of healing properties of colours
- Use of colours in India
- Differences among linguistic groups
- Colour preferences in the eThekweni Hindu community
- Impact of globalisation
- Western influence
- Change in colour traditions
- Global propaganda (media/Internet)
- Problems with education
- Lack of interest in own culture and religion

The above-mentioned themes emerged from the experiences and perceptions of the religious leaders and senior members of the eThekweni Hindu community and further assisted the researcher to develop a visual colour guide that incorporated the symbolism of colour in Hindu religion and its application in any design field intended for the Hindu audience.

The first objective of the study was to explore the roles of colour in Hindu religion and its cultural associations in the Hindu community. In line with this objective, the data revealed that

colours play an important role in Hindus' lives and that each colour has its significance and a particular application. The main colours are red, yellow and blue, while black is the most avoided colour and is associated with evil. As nature forms the core of Hindu religion and is strongly interwoven in all the rituals and beliefs, meanings of colour in Hinduism strongly correspond to the elements of nature such as earth, water, sky, fire and air (Olson 2007: 47). The meanings of colour in Hindu religion also have their differences and similarities when compared to the colour symbolism of the Western world. Furthermore, it seems that most members of the Hindu community still follow the religious guidance of colour use for their colour choices in everyday life. This research has also confirmed a few different colour uses between Indian and South Africa communities, as well as between different linguistic groups.

The study also revealed the benefits of using the healing properties of colours by exploring the concept of chakras. Based on a particular quality and the vibrations it produces, a specific colour is selected for a particular healing purpose. The data presented by the participants has confirmed that chakras play a crucial role in everyone's lives and have a great influence on the mental and spiritual level of an individual. It helps with relaxation and emotional blockages and enables a person's overall well-being.

A further finding from the views of several participants achieved the second objective of this study; namely, to investigate the impact of globalisation on the application of colour symbolism in the Hindu community. From their personal experience and from their experience of being members of the Hindu community, the participants revealed that they viewed the process of globalisation as unavoidable. The effects of globalisation have created a contradiction between their local values and global culture and indirectly forced the members of Hindu communities to adapt to a new way that colour is applied in their everyday lives. The study discovered that many senior members of the Hindu community still follow the cultural and religious colour norms, while the younger generation of Hindus tend to be highly influenced by colour values of the Western world.

The study also highlighted the Western influence on young Hindus which revealed an interesting and important finding. Through the suggestions from the participants, where they provided an insight into their community living, global propaganda and the lack of interest in their own culture and religion among young Hindus was caused by the limited amount of religious and cultural education with a special emphasis on the limited presence of Hindu language schools.

The third objective of this study focused on developing a series of graphical representations which explain the various colours, their symbolism and application in Hindu religion intended for anyone in the design field who wishes to learn, understand and apply the important meanings behind colours in Hindu culture. A series of graphical representations depicts important connections which exist between the symbolism of colour in Hinduism and the physical properties of colours presented by science. The colour guide also incorporates an important connection which exists between chakras and traditional colour theory, as well as weekdays and their corresponding planets. The colour guide compares the traditional colour theory with the one used in Hinduism and reveals an important logical connection which exists between these two disciplines. Lastly, it focuses on presenting the suggested colours and their respective application fields intended for the Hindu audience.

### **5.3 RECOMMENDED COLOURS FOR HINDU AUDIENCE**

Colours play an important role in any design field. They present information, create identity and suggest a specific symbolic value. Each colour, when carefully applied, does not only evoke physical, physiological and aesthetic reactions, but also causes a series of particular intellectual reflexes and responses based on a particular viewer or a context in which it is perceived. Colour can convey a specific message or have a reference to a particular event, an object or an emotion. Colours are often perceived on a subconscious level based on an individual's values, beliefs and culture. Such qualities of colours are widely used in visual communication across the world. When selecting a set of colours for a design campaign intended for a particular audience, one needs to have a careful approach to the selection, keeping in mind that colour symbolism differs among different religions and cultures. It can be said that there cannot be one universal colour guide which can be applied to any community, as different regions of the world have different associations with colours. By selecting the correct colours for the intended audience, one can deliver the correct message to the selected community. The choice of the correct colour or combination thereof can create a particular pleasant environment for a person.

Colours have a deep meaning in the Hindu community, especially in their religion and culture where every colour has a very deep meaning attached to it and does not serve a merely

decorative purpose. There is a set of particular colour norms which exist in the Hindu community. As religion forms a big part in Hindu lifestyle, the colours used for religious practices are often used in everyday life. The primary colours of the traditional Colour Wheel – red, yellow and blue – are the most used colours in the Hindu community, followed by the secondary colours such as green, orange and violet. White is considered a highly spiritual colour, while black is the most avoided one. A set of graphical representations in Chapter 4 summarised the use of colour in the everyday life of a Hindu person and suggested the correct choices based on the message one wishes to convey. As each colour in Hinduism has a distinct meaning, these meanings can be used as a starting point when deciding which particular industry or business it will represent. The colour guide is intended to serve as a base to create the designs which convey correct messages to the Hindu audience.

The recommended colours depicted in the colour guide are all primary and secondary colours. This is an important point to keep in mind as most Hindus prefer colour with high value and saturation, commonly known as bright and vibrant. The secondary set of colours based on the traditional colour wheel are the last colours Hindu audiences prefer; these colours correspond to the natural elements of the Earth which forms a great part of Hindu religion. Any variations of the main colours should be avoided as this would compromise the brightness of a particular tone. However, when intending the design for the younger generation of Hindus, one must also keep the process of globalisation in mind. Young Hindus are strongly affected by the Western world and might be more attracted by the colour values of the West as opposed to their own culture, while at the same time having local values associated with colours. While designing visual projects for the young Hindu audience, the designer can use a wider variation of colours, such as the softer tones of the main colours presented in the colour guide. A careful balance must be kept in cases when the design product is intended for any age group.

#### **5.4 SIGNIFICANCE OF THE FINDINGS**

The study extracted valuable information from participants on the important meanings of colours in Hinduism and how colour in Hindu religion can be graphically represented to promote its application in design practices. It further discovered the reasons why young members of Hindu communities are more interested in Western values and practices, as opposed to their own culture. Global propaganda, Western influence through the media and the

lack of religious education in their own language were among the main reasons mentioned by the participants.

The findings of this study will benefit society, taking into consideration the importance of the correct colour use in any design field so that the visual message can be successful for a selected target audience. Technological development and the process of globalisation have created the demand for creating designs which can be applicable on a global scale, justifying the need for an effective approach to understand the colour symbolism of different cultural and religious communities. Thus, the findings derived from this study recommend a simplified and accurate approach when selecting the colours to be used in design campaigns for the Hindu community. The designers will be guided on what colours would be emphasised and which should be avoided when applying colour symbolism for any selected industry. The important finding from the study also revealed that technological advancement and the process of globalisation in recent years has affected the Hindu community in a negative way due to the absence of Hindu schools in the eThekweni area and in South Africa as a whole. There is a great need for the establishment of Hindu cultural and religious schools where children can be taught their home language. This would serve as the basis for understanding and learning Hindu religion.

## **5.5 LIMITATIONS OF THE FINDINGS**

This study only focused on investigating colour symbolism within the Hindu community in eThekweni, South Africa. The findings reported in this research are qualitative, where the answers of participants represent what they know and feel rather than determining how many do so in this way. Although the participants were carefully selected based on their cultural and religious knowledge, such findings cannot be explicitly used as the basis for statistical generalisation. Instead, the findings must be viewed as a working model in a particular context and are subject to quantitative validation. The participants of this research represent a small portion of the Hindu community and do not necessarily constitute the statistical opinions of the entire context from which they have been drawn. The sample size for this study was small, consisting of only 20 participants. Time constraints have created limitations for the sample area, thus limiting the extent of the research. Using purposive sampling could have led to some bias because people with different backgrounds have different perceptions. The study was

confined to the eThekweni area; thus, the results may not be applicable to other communities as the collected data has its own limitations.

The COVID-19 pandemic has altered the way in which the interviews were conducted. Although all 20 participants were meant to be interviewed in person, it had to be done with the use of Internet communication such as Skype or Whatsapp video calls. This has prevented the researcher from having personal interaction with participants and this has led to shorter conversations than originally expected of a personal interview.

## **5.6 RECOMMENDATIONS**

As the conducted study had its limitations due to the small sample size and methods used, future studies should focus on finding differences and similarities in terms of colour meanings and application in other big Hindu communities around the world, for example, the United Kingdom, USA, Canada, Australia and New Zealand. Such research could lead to the colour guides directly representing a specific community and create the awareness of important differences and similarities. The effect of globalisation and the Western influence can also be explored in the above-mentioned countries and compared to the current study. With South Africa – particularly the eThekweni area – being the second largest Hindu community after India, it is important to note that Western influence can have a much stronger effect in countries which do not have such a large population of Hindus and thus no strong cultural context.

It is recommended that future studies make use of the same method used in this study and that the same members of the community, senior citizens and religious leaders, should be approached because they carry the important knowledge of Hindu culture and tradition. However, it is also advised to expand the sample size to include the youth and to investigate their level of knowledge compared to that of the older generations. This would give the researcher a clear indication whether there is a definite knowledge gap between young and old Hindus in terms of understanding their own culture and religion. Future researchers may want to explore the views of globalisation and Western influence from the perspective of young Hindus and to reveal whether they see it as a positive or a negative aspect. Furthermore, a more extensive research would allow the creation of an important colour map linking the symbolism of colour among different Hindu communities around the world.

The same approach can also be used for exploring the use of colour in other big cultural and religious communities around the world where the most knowledgeable members of the community could share experiences and provide the insights of the colour symbolism used in their culture and religion. It is recommended that the actual interview questions are sent to the participants in advance, so that they can prepare all the important answers as some of the questions might require a bit of preparation. If possible, the interviews should be done in person rather than on a video call. This would enable future researchers to spend more time with the participants and obtain more valuable data.

This research has confirmed important the healing properties of colours used among Hindus. Future study should focus on other colour therapy methods that exist and are widely used in other cultures. Such approaches can be compared and analysed against this study to find the differences and similarities. If many cultures are explored, one universal colour healing guide could be created representing the main colours used for healing by different cultures around the world. This is often the case when the same concept is interpreted in different ways in any given culture – it follows the same principles and has the same underlying structure. It is recommended that the research on the role of colour in different cultures is extensively investigated to find the important connections which exist in colour symbolism on a universal level.

Lastly, this study has revealed that the lack of interest among young members of the Hindu community was due to the absence of Hindu schools; thus, Hindu youth are not able to learn their home language, preventing interest in learning Hinduism. The objective of new research could focus on discovering the reasons the presence or absence of traditional languages of communities affect interest in one's culture. It is highly recommended that one of the objectives of future research should be approaching young members of any selected community and documenting the reasons why Western culture is more attractive than their own.

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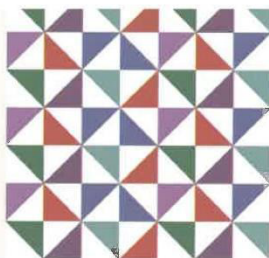
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## APPENDIX A: ETHICS CLEARANCE LETTER



Institutional Research Ethics Committee  
Research and Postgraduate Support Directorate  
2<sup>nd</sup> Floor, Berwyn Court  
Gate 1, Steve Biko Campus  
Durban University of Technology

P O Box 1334, Durban, South Africa, 4001

Tel: 031 373 2375

Email: [lavishad@dut.ac.za](mailto:lavishad@dut.ac.za)

[http://www.dut.ac.za/research/institutional\\_research\\_ethics](http://www.dut.ac.za/research/institutional_research_ethics)

[www.dut.ac.za](http://www.dut.ac.za)

11 January 2021

Mrs E V Kudrya-Marais  
6 Minerva Crescent  
St Winifreds  
Kingsburgh  
4126

Dear Mrs Kudrya-Marais

**THE SPIRITUAL LANGUAGE OF COLOUR: Exploration of colour symbolism in Hindu Culture and Religion in Durban, South Africa.**  
**Ethical Clearance number IREC 112/20**

The Institutional Research Ethics Committee acknowledges receipt of your gatekeeper permission letters.

Please note that FULL APPROVAL is granted to your research proposal. You may proceed with data collection.

Any adverse events [serious or minor] which occur in connection with this study and/or which may alter its ethical consideration must be reported to the IREC according to the IREC Standard Operating Procedures (SOP's).

Please note that any deviations from the approved proposal require the approval of the IREC as outlined in the IREC SOP's.

Yours Sincerely

Prof J K Adam  
Chairperson: IREC



2021-01-11

INSTITUTIONAL RESEARCH ETHICS COMMITTEE  
P O BOX 1334 DURBAN 4001 SOUTH AFRICA



## **APPENDIX B: REQUEST FOR PERMISSION TO CONDUCT RESEARCH**

[Date]

[Details of addressee]

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### **Request for Permission to Conduct Research**

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Dear XXX

My name is [insert name], a [insert degree registered for] student at the Durban University of Technology. The research I wish to conduct for my [e.g. Masters dissertation; Doctoral thesis] involves [insert title of study].

I am hereby seeking your consent to [what do you consent for?].

I have provided you with a copy of my proposal which includes copies of the data collection tools and consent and/ or assent forms to be used in the research process, as well as a copy of the approval letter which I received from the Institutional Research Ethics Committee (IREC).

If you require any further information, please do not hesitate to contact me [insert contact number, fax and email address]. Thank you for your time and consideration in this matter.

Yours sincerely,

[Insert name of researcher]  
Durban University of Technology

## APPENDIX C: LETTER OF INFORMATION



### LETTER OF INFORMATION

**Title of the Research Study:** THE SPIRITUAL LANGUAGE OF COLOUR: Exploration of colour symbolism in Hindu Culture and Religion in Durban, South Africa.

**Principal Investigator/s/researcher:** Elena Vladimirovna Kudrya-Marais: MAA Photography

**Co-Investigator/s/supervisor/s: Supervisor:** Dr Folasayo Enoch Olalere Senior Lecturer: Department of Visual Communication Design

#### **Brief Introduction and Purpose of the Study:**

Dear Sir/Madam. I hope you are well.

My name is Elena, and I am a Master student at DUT doing research for my Masters degree in Applied Arts. I would like to invite you to participate in the research titled “Symbolism of colour in Hindu culture and religion”.

This study seeks to explore the social colour norms and values associated with Hinduism and how they have been adopted and integrated into the religion. The aim of this research is to investigate the colour symbolism found in Hinduism with the intention of creating awareness and promoting its application in any design practices. The study will lead to the establishment of a visual colour language guide representing a comprehensive history and the meaning of colour in Hinduism.

#### **Outline of the Procedures:**

This study aims to explore the role of colour in Hindu religion and the impact of globalization on the colour symbolism in Hindu community.

English-speaking religious leaders of 10 eThekweni Temples and English-speaking senior citizens of Hindu communities visiting such Temples and practising Hinduism on a regular basis will be interviewed and data analysed. Such findings will be used in developing a colour theory that will serve as a visual language guide intended for anyone in the design field who wishes to learn, understand and apply the important meanings behind colours in Hindu culture.

The researcher will be conducting an in-depth semi-structured online interview with you in the form of a video call at a convenient time for you. The researcher will ensure that your participation is voluntary. The research sample size will range from 15-20 participants, and data collection will take place using semi-structured interviews. The researcher will be conducting each interview personally (via Skype, Whatsapp or any other video call platform convenient for you). Data provided by you will be recorded via voice recorder, as well as by taking down notes.

**Risks or Discomforts to the Participant:** There are no risks or discomforts to you in this study.

**Explain to the participant the reasons he/she may be withdrawn from the Study:** There will be no adverse consequences for you should you choose to withdraw.

**Benefits:** There will be no benefits to you in this study.

**Remuneration:** None

**Costs of the Study:** No cost

**Confidentiality:** All information provided by you will only be used by the researcher and will be stored in a safe place at all times with the password only known to the researcher. The information will be deleted once the research is complete.

**Results:** You will get a copy of the Colour Guide after the completion of research.

**Research-related Injury:** This research does not involve any activity which could lead to the injury; thus, this part is not applicable.

**Storage of all electronic and hard copies including tape recordings:** The data provided by you will be stored in a safe place at all times and destroyed after 5 years of completing the study to ensure complete confidentiality. Data collected during your interview will be used for the purposes of the research only.

**Persons to contact in the Event of Any Problems or Queries:**

Dr Folasayo Enoch Olalere, Senior Lecturer: Department of Visual Communication Design, FolasayoO@dut.ac.za | +27 (0) 31 373 6686 | www.dut.ac.za. Please contact the researcher on +27 (0) 82 467 3842, my supervisor Dr Folasayo Enoch Olalere on +27 (0) 31 373 6686 or the Institutional Research Ethics Administrator on 031 373 2375. Complaints can be reported to the Director: Research and Postgraduate Support Dr L Langaniso on 031 373 2577 or researchdirector@dut.ac.za.

## APPENDIX D: LETTER OF CONSENT TO PARTICIPATE IN THE STUDY



### CONSENT

**Full Title of the Study:** THE SPIRITUAL LANGUAGE OF COLOUR: Exploration of colour symbolism in Hindu Culture and Religion in Durban, South Africa.

**Names of Researcher/s:** Elena Vladimirovna Kudrya-Marais

**Statement of Agreement to Participate in the Research Study:**

· I hereby confirm that I have been informed by the researcher Elena Vladimirovna Kudrya-Marais about the nature, conduct, benefits and risks of this study.

Research Ethics Clearance

Number: \_\_\_\_\_,

· I have also received, read and understood the above written information (Participant Letter of

Information) regarding the study.

· I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.

· In view of the requirements of research, I agree that the data collected during this study can be processed in a computerised system by the researcher.

· I may, at any stage, without prejudice, withdraw my consent and participation in the study.

· I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.

· I understand that significant new findings developed during the course of this research which may relating to my participation will be made available to me.

\_\_\_\_\_  
**Full Name of Participant**

\_\_\_\_\_  
**Date**  
**Signature/Right**

\_\_\_\_\_  
**Time**

**Thumbprint**

**I, Elena Vladimirovna Kudrya-Marais** herewith confirm that the above participant has been fully informed about the nature, conduct and risks of the above study.

Elena Vladimirovna Kudrya-Marais

14/12/2020

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**Full Name of Researcher**

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**Date**

---

**Signature**

---

**Full Name of Witness**

---

**Date**

---

**Signature**

---

**Full Name of Legal Guardian**  
**(If applicable)**

---

**Date**

---

**Signature**

## APPENDIX E: INTERVIEW QUESTIONS



**Title of the Research Study:** THE SPIRITUAL LANGUAGE OF COLOUR: Exploration of colour symbolism in Hindu Culture and Religion in Durban, South Africa.

**Principal Investigator/s/researcher:**

**Researcher:** Elena Vladimirovna Kudrya-Marais

**Student Number:** 21347566

**Email:** [shlacky@gmail.com](mailto:shlacky@gmail.com)

**Mobile:** 0824673842

**Co-Investigator/s/supervisor/s:**

**Supervisor:** Dr Folasayo Enoch Olalere

**Co-Supervisor:**

**Questions To ask During Interview session:**

The following questions will be presented to the selected Priests and elders in Hindu community:

1. Could you kindly tell me how long you have been practising Hinduism?
2. Would you please describe your experience of being a religious leader/ elder in the community?
3. Please explain what level of religious education do you possess?
4. Please name the main colours associated to Hindu religion and their meanings?
5. What are their traditional and religious aspects?
6. What are the adaptations and applications of these colours?
7. Would you please describe the cultural norms of colour in the Hindu Community in the Durban area?
8. Are there psychological healing properties associated with each colour? What are those properties?
9. In your opinion, are there any preferences in colours among Hindu community?
10. What is your personal subjective attitude towards each colour, your preference and reasons?
11. Could you please tell me about the most avoided colours in the Hindu religion?
12. Are there any differences in colour symbolism among the different castes or ethnic groups or between Hindus in South Africa and India? If yes, could you please name them?

13. Explain how globalisation has affected the use of colour symbolism in Hindu cultural practices like wedding or traditional attires?

14. In your opinion, how has globalisation affected younger generations' interest in Hindu cultural and religious practices?

**Outline of the Procedures:** The following are the questions which will be asked to lead the interviews however the participants will also be allowed to express themselves. The same questions will be addressed to every single person to uncover the differences and similarities, in order to produce the most accurate results which will lead to authentic analysis. Each interview is set to be 45 minutes long to allow enough time to record the required data.

**Persons to Contact in the Event of Any Problems or Queries:**

Dr Folasayo Enoch Olalere, Senior Lecturer: Department of Visual Communication Design,  
FolasayoO@dut.ac.za | +27 (0) 31 373 6686 | [www.dut.ac.za](http://www.dut.ac.za) or the Institutional Research Ethics Administrator on 031 373 2375.

Complaints can be reported to the DVC: Research, Innovation and Engagement Prof S Moyo on 031 373 2577 or [moyos@dut.ac.za](mailto:moyos@dut.ac.za)