

An exploratory study of factors influencing mass hysteria in teenagers at high schools in the uThukela District

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Declaration

I, Shole Absolom Mthembu, hereby declare that the dissertation is my own original work, except where due references have been made. This dissertation has not previously been submitted to any other university, either in its entirety or in part, in order to obtain an academic qualification.

Signed: _____

Name: _____

As the candidate's supervisor I have / have not approved this thesis / dissertation for submission.

Signed: _____

Name: _____

Date: _____

Dedication

This thesis has been dedicated with love to my wife, Lindiwe, and my sons, Linda and Menzi; and lastly, but by no means least, to my daughter, Sindiswa, for their understanding when I could not be available when they needed me most because of my commitment to my studies.

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Abstract

The aim of this study was to explore factors which could influence the development of mass hysteria in the high schools within the UThukela District in Kwa Zulu Natal. Being exploratory in nature, the study generated or relied on hypotheses on the possible etiological factors that could lead to the development of mass hysteria. Quantitative research, in the form of subjective psychological well – being questionnaires (AFM, SWL & Fortitude scales) were used to collect data in order to determine whether or not mass hysteria was related or influenced by them. A total number of seven hundred and nineteen (719) participants – all high school teenagers of all races - answered questionnaires in the English language. Their age range was between 16 and 19 years. The smaller qualitative research section consisted of ten (10) randomly selected teenagers from the school community. The emphasis on qualitative research was placed on asking participants about their own experiences and/or meaning of mass hysteria and actions they took to heal or recover. The main findings were that there are statistically significant differences in the way different religious groups; gender and race contribute to the incidence of mass hysteria. The results of the subjective scales demonstrated a high level of psychological well – being of a large number of participants. In the literature review it was apparent that mass hysteria is a universal phenomenon, probably arising psycho dynamically from the mind/body interface without organic etiological factors. It is a symbolic relation between the pathological phenomenon and the precipitating psychological childhood traumas. Observations from mass hysteria victims are in keeping with various theories (for discussion), therefore the confirmatory hypotheses testing is not to be seen as an efficient means of unearthing a web of belief system in various communities. There are potential relationships among various theoretical dimensions of mass hysteria. Symptoms presented by victims of (mass) hysteria are almost similar, but are expressed differently by race, gender and religion. This research has tried to give some tentative answers to the question of mass hysteria.

Key words: Mass hysteria, exploration, mind-body inter-phase, psycho dynamic neurobiology

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Chapter 1: Orientation of the study

1.1 Introduction

The study on mass hysteria was prompted by a recent outbreak of mass hysteria in some of the local high schools in the Uthukela District as well as the reported incidents in other parts of the KwaZulu-Natal Province. In this document, the researcher attempts to describe the theoretical background, motivation, objectives and significance of the study for the community and possibly the decision making bodies in this district.

In the recent literature (Desenclos, Gardner, & Horan, 1992), mass hysteria is referred to as ‘somatization’ or ‘mass contagion’ and is also referred to as ‘mass socio-genic illness’. It tends to be coupled with other scary illnesses in the form of conversion-like symptoms and syncope attacks among school teenagers. From a community psychology point of view, there is an array of social mass hysteria problems that need research and interventions. The study therefore seeks to explore the relationship between psychosocial problems and individual’s psychological well-being of high school teenagers. The study focused on factors that could possibly influence mass hysteria. It therefore explored other theoretical underpinnings that relate to mass hysteria as a functional illness i.e. as distinct from organic illnesses.

1.2 Theoretical background

Psychological well-being is conceptualized by Edwards (1999,) as a positive component (part of a larger whole) of mental health. It therefore, refers to a particular theoretical and empirical construct measuring the integration of various psychological components of being well. On the one hand, Wissing and Van Eeden (2002) conceptualize psychological well-being as a person’s degree of happiness (affect balance) and satisfaction with life. According to Chapman (2007) teenagers with good mental health are in control of their thoughts and behaviours. Also, those with good relationships are believed to be in a position to can keep their problems in perspective and have both self-awareness and self-control.

In Greek medicine the term 'hysteria' was used to describe some of the more dramatic disturbances of movements and behaviours that were seen from time to time in young women. It was postulated that the womb (*hysteros*) wandered through the body disturbing functions of other organs. From a psychodynamic point of view, the disturbances were seen as symbolic representation of a frustrated sexual drive detaching itself from normal associations and disrupting other functions without conscious realization. Hysteria was therefore, seen as a cover up of many conditions, but there was no clear distinction drawn between those with an organic brain disease and those of psychological origin (Passmore & Robson, 1975, p. 35.26).

Mass hysteria or somatization disorder is perceived by Feldman and Feldman (2005) as collective behaviour of a mass without any obvious, direct, or personal communication or mutual influencing of afflicted individuals making up the mass. It causes great upheavals and concerns in schools in terms of its management as school managers often treat it as a crisis phenomenon. Feldman and Feldman (2005) described 'the cause of mass hysteria as often a baseless belief that begins small but, like a hurricane, travels and becomes more devastating as it picks up speed. It is a false idea gone berserk and panic spreads throughout the whole place within minutes'.

Mass hysteria is further characterized by the following enduring clinical features:-

- (i) Somatic complaints that suggest major medical maladies which have no associated serious demonstrable peripheral organic disorders.
- (ii) Psychological factors and conflicts that seem important in initiating, exacerbating and maintaining the disturbance. As a result of their intense bodily perception, restricted level of physical functioning and morbid beliefs, patients have become convinced that they harbour serious physical problems (Kaplan & Sadock, 2009).Whatever manifestations and problems they have, they are not malingerers or factitious.
- (iii) Medical staff and laboratory examinations persistently fail to indicate significant substantiating data about their physical infirmity save for their vigorous and sincere complaints (Kaplan & Sadock, 2009).

(iv) Mass hysteria seems to imply problems at the mind-body interface, but the question remains; what causes it? Or what are influential factors?

Numerous theories have been advanced to explain the psychosocial and medical mechanisms involved in mass hysteria, but few theories have accounted for hysteria's assumed biological basis. The act of mass hysteria can at one level be understood as a social communication strategy, that is, symptoms enable an affected person to express the need for special consideration and treatment, and at another level as an act of emotional communication which may function as a nonverbal means of manipulating or taking control of others. It can also be assumed as resulting from an intra-psychic dynamic phenomenon carried to the extreme.

In social communication, the use of bodily symptoms such as headache, dizziness, painful legs, vomiting, breathlessness, etc, can be understood as a manipulation or control of relationships, for example, an adolescent girl developing unexplained abdominal pains to prevent her parents from going away for the weekend (Kaplan & Sadock, 2009). In emotional communication, an adolescent or teenager may be unable to verbally express her emotions and therefore may use bodily symptoms to express her emotional state. Symptoms may therefore be used to symbolically communicate emotions as this occurs in conversion symptoms, for instance, paralysis of an arm which might otherwise strike an object. Some patients may use medical complaints as coping strategies to deal with stressful situations, for example, paralysis, mute state and blindness (Kaplan & Sadock, 2009). This prompted the motivation to explore and identify the possible etiology of mass hysteria.

Problems relating to mass hysteria have puzzled medical practitioners, laboratory technicians, priests, psychologists, educators, traditional healers and parents. None of these professionals have identified, if any, the specific etiological factors, but they described symptoms or they speculated on what mass hysteria entails through psychoanalytic theories, biological factors, behavioural perspectives or psychosocial formulations. It is known by now that mass hysteria symptoms involve almost all mental and body systems. According to Luria (2005), mass hysteria is a complex phenomenon resulting from the

activity of the whole brain rather than the product of the work of local areas of the cerebral cortex. One of the questions to be asked is: Why is mass hysteria so emotionally and behaviourally contagious? Luria, (2005) asserted that mass hysteria is spiritual in the sense that the multiple symptoms could be suggestive of the theory that the brain is the organ of the mind - which is the unconscious seat of human mental activity. The spirituality aspect may be addressed by the belief system which is mostly prevalent in the traditional and spiritual healers, mostly in the traditional African states.

Most of the literature written on mass hysteria is Euro-American and only a small portion of it comes from African countries. In South Africa, in particular, journalistic articles have been written mostly on symptoms and not on causative factors influencing the prevalence of hysteria. This study therefore seeks to explore the above shortcomings..

1.3 Statement of the problem

Mass hysteria tends to affect more black teenage females compared to other cultural /racial groups. It is also less prevalent in male teenagers within the same cultural /racial groupings.

The study seeks to explore the following research problems:

- Possible factors as to why black African schools have a higher prevalence of mass hysteria occurrence than other racial groups.
- What is the role of the belief system, if any, in these cultural groups?
- Are there any precipitating factors or precedents, for example, psychological well-being, religion or gender issues that are perhaps contributing to the occurrence?
- Can one find reasons as to why mass hysteria is so contagious?

1.4 Motivation

The researcher's clinical experience of working in a hospital and in the community settings witnessed bus-loads and ambulances ferrying afflicted teenagers from nearby schools, motivated the undertaking of the study.

The mass hysteria phenomenon seems to have been going on for centuries and symptoms have been known to be contagious. However, it has been difficult to explain the reasons for it (<http://www.newscientist.com>). It is envisaged that the research results may add value to the prevention (primary, secondary and tertiary) of mass hysteria incidence in high schools in the district.

1. 5 Objectives

1. To explore and identify possible factors leading to mass hysteria,
2. To suggest recommendations that could empower stakeholders in the community,
3. To enable or equip stake-holders in the community to understand and manage future outbreaks of mass hysteria in schools.

Chapter 2: Literature Review

2.1 Introduction

Hysteria as a condition or illness resembling a physical disease occurring in persons with healthy bodies has been known since antiquity. Mass hysteria as a mysterious phenomenon for over many years in different historical periods, different cultural groups and communities has also been described as conversion hysteria and dissociative reaction or neurosis, that is, a neurosis that occurs in response to emotional stress, involving a sudden loss or impairment of mental functions. Such reactions may arise from a causal role played by unconscious conflicts that evoke anxiety and lead to the use of defense mechanism that ultimately produce observable symptoms. Hysteria may be of the conversion type, in which the senses of the voluntary nervous system are involved, or of the dissociative type in which the person's state of consciousness is affected (Kaplan & Sadock, 2009). Mass hysteria will be described under different but related sub-headings: i.e., constitutional definitions, historical reviews, incident or prevalence, symptoms and theoretical reviews. Under the theoretical reviews sub-headings such as psychoanalytic perspectives, neuropsychological, medical, neurobiological, histrionic personality disorders, social learning theory, state dependent theory, and primary and secondary gain theories will be highlighted as possible contributing to etiological factors in this exploratory exercise.

2.2 Definition of hysteria

As a concept, hysteria acquired several meanings and interpretations. It was once considered to be a single entity in psychiatry (Witlock, 2010). The interpretations given were according to the nature of the symptoms and theories proposed to explain them, for instance:

- (i) The communication theory of hysteria as asserted by Szasz (1961) posits that hysteria symptoms are a form of communication which may be understood as (a) dialectical (b) rhetorical. Dialectical refers to the hysteric attempting to explain something; rhetorical refers to efforts to convince someone through bodily symptoms. This kind of communication could be seen as metaphorical through bodily symptoms presented. A hysteric adopts unconsciously a style of

communication which enables him / her to alarm and arouse interest to those around him, especially those who may be eager or willing to immediately assume sympathy, protection and control toward his affliction. It would seem that one or two hysteric symptoms, e.g. limb paralysis, convey more information than words. The communication theory ties up with the psychoanalytic theory that hysteria is a form of illness albeit without true physical etiology and that its language represents unconscious conversion of repressed ideas, feelings or conflicts.

- (ii) Hysteria as a personality disorder - e.g. histrionic personality or attention seeking person.
- (ii) Conversion hysteria - presenting a variety of neurological disturbances such as paralysis, convulsions, loss of sensation, blindness, speech abnormalities and ataxic gait.
- (iii) Hysteria as a dissociation phenomenon manifested as fugue state, i.e. the individual who enters into a fugue state is sometimes escaping from an intolerable situation or suffering from a severe depression.
- (iv) A person may even commit suicide seeking some state of nirvana (perfect bliss attained by the extinction of the self), amnesias and multiple personality.
- (v) Hysteria as a disease entity affecting woman. This has since been disputed and abandoned as the concept regarded hysteria as only affecting woman, nonetheless, a great variety of symptoms affect men as well.
- (vi) Hysteria as a term of abuse: for instance, a layman and sometimes a medical practitioner, (faced by tiresome, noisy and overdramatic behavior) may be inclined to react with “pull yourself together and don’t be so hysterical”. It arouses antipathy especially if it is a woman presenting the symptoms.

The explanation of the above concepts and their interpretations will be discussed in the paragraphs below:-

But first, since there is no organic changes – compared to organic diseases – hysteria could be regarded as a functional illness in the sense that the primary derangement occurs in the higher centers of the brain down to the spinal cord and the peripheral nervous system; also that this ailment is always temporary and transient in nature.

The definition of (mass) hysteria has therefore changed and became broader and more 'diffuse' over time more in the newer DSM 111(APA, 1980) and DSM 1V- TR (APA, 2000).

Some authors assert that mass hysteria is a social phenomenon whereby 'healthy' people suddenly believe that the illness is due to some external factors based on their belief system such as witchcraft (Jones, Craig, Hoy, Gunter & Ashley, 2000). Even in ancient times, during the middle ages demono-theologic cases were misinterpreted as manifestations relating to witchcraft; such beliefs are still being held in some sectors of our societies. An example, in the traditional Zulu culture such affliction may be attributed to the so-called *Ukufa kwabantu* whereby sorcery or psycho-spiritual and/or ancestral displeasures need to be investigated before conclusions can be drawn about the illness. On the one hand casting a misfortune to someone through the use of *umuthi* with the intention to do harm can have distressing psychological effects and sometimes paranoid feelings to some individuals.

Such beliefs, attributions and practices are not features of the Western civilization. (Mkhize, 2003; Ivey & Meyer, 2008; Ngubane, 1977). The above argument highlights the importance of understanding mass hysteria from a multicultural perspective or that affected individuals must be seen in context.

In the following paragraphs an attempt is made to answer questions like; is hysteria fundamentally a psychological disorder with physical manifestations; or an 'organic' disease with mental and emotional epiphenomena or some inseparable intermixture of the two? Or should it be theorized as an interface between the history of the body and history of the mind? (Luria, 2005). Studying hysteria through the ages has involved a continual, relational reconfiguring of the role of the psyche (mind) and soma (body) in human mental life (Mc Dougall, 1920).

In Henderson, Shephard and Sundararajan, (2000) (F45) (somatoform disorders) and (F44) (dissociative [conversion] disorders) bear testimony to the changes in terminology in the classification. Dissociative [conversion] disorder, itself, has subcategories of disorders e.g. dissociative amnesia, dissociative fugue, etc. Somatoform disorders also have subcategories e.g. somatization disorder, somatoform autonomic dysfunction which invariably affect the

heart, lungs or other organs. The summary of the above descriptions seems to simplify the broad definition of hysteria (APA, 2000). However, it should be noted that the above descriptions are based on the DSM1V-TR and ICD-10 CODE classification systems which may not necessarily be relevant to the African or local context or norms. They were compiled using norms from the Eurocentric or capitalistic societies, which apparently ignored or lacked local / African content. The labeling or stigmatization of mass hysteria victims may therefore be inappropriate for African victims, particularly blacks. However, the change in the definition of hysteria in the last century, particularly in the Western societies, could be due to the liberalization of gender norms, permitting freer social, emotional and sexual expression among women, partly by the feminist movements.

According to Escobar and Vega (2006) both classification manuals are Eurocentric, therefore they are inclined to view clients / patients as individualistic and having specific set of ideals and belief system toward hysteria, whereas Africans, particularly blacks, view hysteria as oriented to the collective or community.

It is with reference to the above controversy that hysteria should be described as a syndrome, since a 'Syndrome is generally described as a number of characteristics, features, events or behaviours that seem to go with each other or are believed to be coordinated or interrelated in some way. In medicine and clinical psychology specifically it is a cluster of symptoms that occur together and can be taken as indicative of a particular disease or other abnormality (Reber & Reber, 2001). As a result of this controversy there has been no agreeable definition.

The following African or local content vignettes and demonstrations of symptoms of how mass hysteria affects various individual societies, cultures and communities will be highlighted first to illustrate the above controversy. This effort will hopefully put the subject in a better perspective so that various theories may be easily followed.

2.3 Symptoms of mass hysteria

Over the centuries and in many different cultures, thinking and writing about hysteria as a subject has mirrored dominant attitudes about health and sickness; for instance, the natural and the supernatural; the sexual and spiritual; mind and body interface, masculinity and femininity (Gilman, King, Poster, Rousseau & Showalter, 1993).

In modern psychology and psychiatry, hysteria is a feature of hysterical disorders in which the victim experiences physical symptom that have no organic etiology. The typical symptoms may first present as anxiety with tremors, shaking, difficulty in breathing and feeling of suffocation, nausea, light headedness, dizziness and physical weakness (panic-like state). Often this type of hysteria begins with complaints by a single member who may experience an odd smell (olfactory hallucination) in the room; others then pick upon this perceived 'threat' and begin to exhibit almost similar symptoms as well. This may or may not necessarily be the same motor hysteria characterized by nervous twitching or spasms, trance-like state and histrionic outbursts. It may be slower in its manifestation than anxiety hysteria, which builds gradually over a few days or weeks or even months and subsides (Micale, 1995).

The dissociation type has symptoms whereby an affected person does not recognize where he or she is and may seem to be in a trance state, looks dazed and not responding appropriately to external verbal commands. In short, persons with hysterical disorders, such as conversion and somatization, experience physical symptoms that have no organic etiology. On the other hand, conversion disorder affects motor and sensory functions whereas somatization disorder affects the gastrointestinal tract, cardio-pulmonary or reproductive systems. Such affected persons are not "faking" their ailments as the symptoms are real to them.

Preceding the examples below it should be highlighted that in the South African context mass hysteria is not frequently or is not reported in mixed schools as it is in predominantly black schools. It may be asserted that in the mixed schools there is possibly intercultural dialogue between the indigenous and the western cultured pupils. Therefore in such schools

the self of a black child is probably reinventing itself in the light of mixing other cultures with new information. Put differently, in mixed schools there is a point of contact between socio-cultural and psychological epistemologies (that is, indigenous and western world) (Fanon, 1986 in Mkhize, 2003). It is possible that black pupils internalize and assimilate other realities which make them less susceptible to mass hysteria in such schools.

The following are examples of symptoms experienced in previous episodes of mass hysteria in South Africa and Zimbabwe in the recent past. Ortega (2009) wrote an article in the Pretoria News in South Africa illustrating the responses and comments on mass hysteria as follows:

- In a Pretoria High School dozens of children collapsed, screamed with unexplained convulsion and fits.
- Within moments various classes and grades were affected and started screaming hysterically as well. A possible precipitating factor for the hysteria was apparently after a pupil had committed suicide. Many more children collapsed or fainted with convulsions.

Many of them reported visions (i.e. auditory hallucinations) of ‘three green-four-legged men’ trying to kill them (this was possibly an illusion and visual hallucination) (see the neuropsychological view on illusions /hallucinations below).

- Teachers and pastors who were called to the scene alleged that the ‘cause’ was evil spirit; a supernatural scary experience and then they started praying.
- Allegation of Satanism and lack of discipline and suspicion of drugs at school were put forward as a sign of moral degeneration and possible causes of hysteria.
- Interventions were sought from various religious people, psychiatrists and counselors to come and help the affected children.
- One teacher stated major disciplinary problems in school as a solution to the problem.
- Paramedics who arrived at the school found several patients hyper- ventilating while others had ‘seizures-like features.
- Medical and drug tests were done and all yielded negative results (Rataemane & Mohlahle, 2000). In the Daily News of Zimbabwe in 2009, sixty two school

children reported seeing an alien craft land and extraterrestrial creatures emerge (illusions / hallucinations). Many dismissed the 1994 incident as mass hysteria affecting children who were found not to have much prior knowledge to UFO or popular UFO perceptions. (Ortega, 2009).

The outbreak of mass hysteria cannot be predicted with certainty. Its occurrence in one area alerts other communities to be on the lookout for a similar outbreak in their areas; hence the alert message spreads like wild fire to other areas. In some cases communities experience isolated and sporadic occurrences. Although most schools or affected communities 'rush' their victims to nearby clinics and hospital casualties for assistance, there is not much that is medically done except calming down and reassuring the victims.

In a study done by Rataemane and Mohlahle (2000) in the Bloemfontein township areas, it was found that mass hysteria had affected girl children; their symptoms were mainly itching. It was thought that they were infected (in mass numbers) by itch-mites. But entomologist found no organic cause for such 'mass itching'. Rataemane and Mohlahle (2000) are of the opinion that the diagnosis of hysteria is fraught with controversial arguments and speculations. Its description and treatment was based on the physical symptoms, e.g. antihistamine, calamine lotion, allergex and antiseptics. In this study itching was precipitated by a 'stressful environment' of watching others scratching themselves at the morning school assembly, in this observation itching was perceived as a contagious phenomenon.

Some people blamed Satanism for mass hysteria or thought it was preceded by the death of two boys at the school. The allegation was however never verified. The incidence lasted a few hours for most of the children. The confusion among the school authorities and pupils, as seen in the above vignettes, seems to illustrate that the view that, from an African perspective, the human being is never alone, but he / she is always in dialogue with the surrounding environment, meaning that he cannot be defined individually or their communication is between himself / herself and a much broader world and the self is not conceived independently of a social relationship (Mkhize, 2003).

2. 4 Historical review of hysteria

The Ancient Egyptians and Greeks had various differing and similar interpretations and understanding of hysteria. Interestingly enough, the manifestations of hysteria in various cultures are almost similar prompting the etiology to be argued from or construed to be the mind-body interface. The Ancient Egyptian and Greek interpretations of hysteria were that the cause of the abnormalities was the movement of the uterus (*hysteros*), an autonomous free floating organism that could move upward from its normal pelvic position, dislocate and apply pressure on the diaphragm thus giving rise to bizarre physical and mental symptoms. Consequent to the mysterious phenomenon, Egyptian doctors developed an array of medications to entice the errant womb back to its original anatomical position. Among the measures used was the vulva placement of aromatic substances to draw the womb downward or using foul tasting substances to repel the womb away from the diaphragm (Gilman, et al., 1993).

Other Ancient speculations were that the ‘animal’ within a woman was desirous of procreating children and when it remains unfruitful long beyond its proper time, the ‘animal’ became discontented, frustrated and starts wandering in all directions through the body closing air passages, obstructing respiration and causing a variety of mental and somatic disturbances, for instance, dizziness, motor paralysis sensory losses as well as various emotional behaviours. The symptoms described above are still being seen in present day hysteria. The above ancient speculations on hysteria were replaced by Christian attitudes.

2. 4. 1 Christian attitudes

Christian attitudes entertained supernatural formulations and belief systems whereby hysteria was perceived as a manifestation of innate evil spirits consequent upon the original sins of the victim. Or hysteria with its dramatic symptoms was viewed as sign of demoniacal possession by the devil, or alternatively female hysteria was interpreted as bewitchment and devilish (Gilman et al., 1993). Some of these ideologies are still being held by some people in the 21 century!

As hysteria was regarded as supernatural, it was treated by supernatural invocations, prayers, incantations, amulets, exorcisms or sometimes hysterics were persecuted (Gilman et al., 1993; Micale, 1993). Christian attitudes were themselves also replaced by medical theories which followed soon after the witchcraft and supernatural crazy phenomena (Micale, 1995; Veith, 1965).

2. 4. 2 Early medical theories

Medical theories advanced the understanding of the structure and function of the human nervous system. Such an approach provided a new model for many previously baffling 'nervous disorders' including hysteria. The gynaecological theory was disappearing and in its place neuro-centric theories emerged. The medical theory approach ranged from 'animal spirits' released from the brain and carried by the nerves to the spleen, abdomen and then circulated throughout the body to slow down the nervous fluid in the brain thus causing an imbalance in the distribution of 'animal spirits' between body and mind. It was assumed that the 'animal' spirits caused sudden and violent emotions, such as anger, grief and love (Micale, 1995).

The neuro-centric theory in the 1500s was replaced by the central nervous system dysfunction as was formulated by Jean-Martin Charcot. Jean's formulation was a comprehensive neurogenic model of 'the great neurosis' whereby hysteria was conceived as akin to epilepsy, syphilis and other neurological diseases. Hysteria could be understood from study methods of pathological anatomy and defective heredity. In short, Jean-Martin Charcot in the 1880s understood hysteria as strictly a dysfunction of the central nervous system. The medical model was thereafter followed by the psychological models such as psychoanalytical theory, neuropsychological and neurobiological theories.

2. 4. 3 The psychological model

The emergence of psychology, particularly the psychoanalytic theory came when hysteria understanding had reached an *impasse*, i.e. somatic bases of hysteria remained fruitless

such that the alternative was to conceptualize it as mysterious multiform disorder including psychological theories.

2. 4. 4 The psychoanalytic theory

Sigmund Freud's psychoanalytic theory and treatment (therapy) of hysteria asserted that hysteria was a psychological disease with quasi-physical symptoms. His emphasis was on the psychological mechanism of hysterical symptom formation. His contention was that the hystero-genesis rests in the repression of traumatic memories. According to Gilman et al. (1993), memories are thought to be in the remote past of the individual and are invariably libidinal or sexual in content. Because the remembering of such memories is hurting and unpleasant, they are unable to find conscious psychological expression; the negative emotional energy expression is associated with these memories which are then unconsciously converted into somatic manifestations as demonstrated in the mass hysteria vignettes earlier. Therefore, in the process of hysterical conversion, symptoms are not arbitrary and/or meaningless phenomena but complex symbolization of repressed psychological experiences. Through the repression mechanism part of the mind tries to keep itself away from consciousness of all unwanted impulses of the id, and this in anyway fosters the ego's growth. In short, in psychoanalytic psychology, the body (soma) is the physical field on which wishes anxieties and traumas of stresses and intrapersonal conflicts are dramatized (Sigmund Freud 1885 –1900 in Gilman, et al., 1993). So, symptoms are largely symbolic of and relieve patients from such mental strains and stresses. Therefore, the traditional Freudian model understands psychological disturbance as conflicts between instinctual demands and demands of reality. The phenomenon causes disturbance of reality testing whereby an individual cannot determine one's relationship with external physical and social environment. This results in psychotic-like disorder often seen in mass hysteria.

This phenomenon gives credit to psychoanalysis which has had reasonable success in helping patients suffering from conversion disorders (Roy, 1982). Sirois (1982) believes that mass hysteria can be a form of abreaction - a psychoanalytic term used to describe the weakening or elimination of anxiety by the 'reliving' of the original tension-evoking experience - or emotional catharsis, that is, a process whereby an affected person verbally

and physically releases tension and anxiety resulting from the process of bringing up repressed ideas, feelings, wishes and memories of the past into strong emotions while mentally re-living earlier traumatic experiences. The discharging of the strong emotions brings about the reduction of neurotic symptoms or is used to resolve intra-psychic conflicts (Breuer & Freud, 1966). Catharsis as a method of psychotherapy was used by these authors in patients who presented with hysteria. Catharsis would, however, not apply to mass hysteria but to individual treatment.

2. 5. Primary gain

Primary gain refers to a process by which a patient achieves his/her wishes by keeping internal conflicts outside his/her awareness. According to this view, symptoms have symbolic value in that they represent an unconscious psychological conflict, for instance, the afflicted person could be attempting to block out an unconscious wish, acts or urge by physical symptoms. This can be witnessed in conversion-like symptoms. There is no certainty as to whether hysteria is used as primary or secondary gain, however Puente and McCaffey (1992) proposed that it could be the case.

2. 6. Secondary gain

Secondary gain, closely corresponding to the psychoanalytic idea, is regarded as a compensatory neurosis in that a person believes he/she is ill, but careful examination may reveal a factor with a fore-conscious or unconscious desire for gain. Such behaviour is usually precipitated by environmental factors such as a prospect of compensation, avoidance of conflict or and lessening of anxiety. Secondary gain is therefore a conscious motive in which an afflicted person accrues tangible advantages or benefits as a result of his / her 'illnesses, a way of controlling other people's behaviours. This may be applicable to hysterical individuals.

St Clair and Wigren (2004) assert that when the ego defensively responds to threatening thoughts and libidinal feelings, a neurotic compromise is reached and manifests itself in neurotic symptoms. This has been seen in many affected children during the outbreak of mass hysteria. The absence of organic lesions and hysteria symptoms' tendency to

disappear (without a trace) as mysteriously as it came presented a provocative challenge to medicine and psychiatry (Britton, 1999).

2. 7 Modern medicine and psychiatry perspectives

Medical doctors and psychiatrists who have studied (mass) hysteria cases have so far fallen short of coming up with clear etiological factors influencing the occurrence of this mysterious phenomenon. Victims who have witnessed or experienced mass hysteria do not themselves find the modern psychological, psychiatric or medical explanation for it except only describing symptoms (Wittstock, Rozental & Henn, 1991). Experts in modern medicine and psychiatry have, in theory, abandoned or played down the use of the term 'hysteria' replacing it with more 'accurate' terms such as somatization disorder and conversion-like illness. In the 1980s the American Psychiatric Association (APA) officially changed the diagnosis of 'hysterical neurosis conversion type' to conversion disorder. This has, in a way, broken down the essential constitutive definition of hysteria into smaller separate but related definitions. The current psychiatric terminology, for instance, distinguishes two types of disorders that were previously labeled as hysteria i.e. (i) Somatization disorder whereby patients are mostly exhibiting physical symptoms such as low backache or limb paralysis without any organic or neurological cause.

(ii) Conversion disorder as characterized by a variety of neurological disturbances such as convulsion, loss of sensation, blindness, speech abnormalities and ataxic gait within the same context. Sometimes patients have dissociative fugue, twilight state and brief amnesia, all of which have no organic basis (APA, 2000).

2. 8 What of a histrionic personality disorder (hysterical personality)?

WHO, 1992 and WHO (2000), asserts that the histrionic personality disorder has a prevalence of about 2-3% of the general population. Histrionic personality usually begins in early adulthood and has been diagnosed more frequently in women than in men. Histrionic personality disorders are said to be prone to developing hysterical attacks than non-histrionics (Jones et al., 2000). A histrionic personality is usually an immature and dependent person who exhibits unstable, overactive and excitable behaviour that is aimed at gaining attention (primary gain), however the person may not be aware of this aim (Kaplan

& Sadock, 2009). From the psychoanalytic perspective, its manifestation usually is derived from unresolved conflicts in childhood which may continue unconsciously to emerge during teenage and early adult years, especially if one is in vulnerable and stressful environments/situations such as before school tests or before examinations. Histrionic actions focus more on dramatic appeals, immediate need gratification; and often a person alienates him/herself from others.

The neuropsychological perspective approaches the question of mass hysteria from a different aspect but relative to other theories (see below).

2. 9 Neuropsychological perspectives

The question to be addressed as well is how do neuro-psychological studies account for hallucinations and illusions during hysterical attacks in some patients? Some of the hallucinations and interpretive illusions prevalent during mass hysteria episodes are highlighted in the following vignettes by (Walsh, 1987; Ortega, 2009; Rataemane et al., 2000).

The neuropsychological approach to mass hysteria sheds some light since most of the manifestations experienced by victims tend to resemble those of the temporal lobe disturbances. This is commonly seen when addressing issues of convulsions or fit-like symptoms, hallucinations and illusions that patients experience. From this perspective it is suggestible that hysteria be understood as a temporary dissociation phenomenon (fugue, amnesia, trance and twilight states). A sufferer who enters into a fugue state for instance is thought to be trying to escape from an intolerable situation or is suffering from severe depression (Wessley, 1987; Festinger, 1952).

According to neuropsychological literature, the nature of seizures with sensory illusions or hallucinations varies with the region of the cortex which is the site of an electric discharge. Walsh (1987) posits that where the primary projection areas of the cortex are mainly affected, the phenomena are simpler sensory experiences or alteration of present stimuli, while excitation of the secondary association areas which surround the relevant projection

cortex appear to give rise to integrated perceptual experiences called hallucinations which may be visual and or auditory perceptions occurring in absence of an appropriate stimuli in the environment. The sufferer is often aware of the “unreal” nature of the hallucinated objects. Illusions (false perceptions and misinterpretations of actual sensory stimuli) on the one hand may be related to a specific sensory modality, i.e. visual, auditory, olfactory and somesthetic illusions (Walsh, 1987). When the discharge affects the borderland between the parietal, temporal and occipital areas, a combination of illusions may result. A special form of alteration in sensory experience occurs with more temporal lobe seizures such that the present experience is interpreted in a manner quite different from the usual. In illusions new situations or objects may be perceived as having been seen or heard before (*dej'a'-vu*, or *de'ja'entendu*) respectively, or familiar ones as not having been seen or experienced before (*jamais-vu*, or *jamais-entendu*) respectively; such experiences are illustrated in the examples of Zimbabwe mass hysteria reported earlier. Therefore disturbances of memory and thought process may occur during temporal lobe seizures as well. Some partial seizures may produce sudden alteration in emotional states usually in the form of extreme (Walsh, 1987). Patients who experience such states often cannot describe what happened when asked by helpers, i.e. there is temporary loss of memory.

During temporal lobe disturbances all or part of an object may be distorted, (perceptual disturbances) e.g. everything may appear visually larger or smaller (macropsia or micropsia, respectively) or the relative size of parts may appear distorted (metamorphopsia) or even sounds louder or softer than usual. Sometimes distortions are accompanied by a feeling that the person is somehow detached from his own body (depersonalization) or that things are unreal (derealization) (Walsh, 1987). Though these disorders are common in the visual modality they are by no means restricted to this sense. Furthermore, hallucinations may be accompanied by emotional experiences which are usually unpleasant, though some pleasurable feelings and even short periods of ecstasy have been described infrequently (Lehmann & D'Abrera, 1975; Lennox, 1960). Eysenck (1957) examined these emotional experiences in epileptic subjects and related them to specific location in the temporal lobe, for example, olfactory hallucinations, auras appear to be associated with the anterior and inferior portions of the temporal lobe including the *incus*. This explanation is *in tandem*

with the neuropsychological notion that memories are largely stored in the temporal lobe, thus with temporal lobe disturbances there is often fresh interpretations of current experiences as it occurs in (mass) hysteria. According to Simpson (1996), some of the experiences must have been unconsciously learned at some stage in one's earlier life; suggesting that for learning to take place or to decide whether an object or situation is 'familiar' one must unconsciously compare the present sensory input with the neural record of past experiences. This suggestion is sometimes experienced in post-traumatic stress disorder as flashbacks. Simpson (1996) interprets the data of temporal lobe disturbances as demonstrating the presence in the temporal lobe of what he terms 'coincidence detection circuits' which means that if the input (visual, auditory, etc. modalities) is compared with the record of the past it produces a coincidence or familiarity response, then the present stimulation will appear familiar even if nothing similar had occurred in the subject's prior experience (*jamais-vu*). This notion can be linked with the experiences of mass hysteria patients.

Penfield and Perot (1963) referred to these alterations in the perception of the present as 'interpretive illusions' e.g. a seeing three-legged green, man, etc. as it occurred in some hysteria subjects. (See article by Ortega in the Pretoria News (2009) and Rataemane & Mohlahle (2000)). Occasionally hallucinations can be shown to be quite clearly related to prior experiences. This has been shown by evidence in cortical stimulation, whereby the reactivation of a strip of the record of the stream of consciousness produced hallucinations. The activation was produced by Penfield in 1938 and he termed it experiential hallucination when the phenomenon occurred spontaneously; and termed it experiential response when it was elicited by different modality stimulations.

The experiments carried out by Penfield and Perot (1963) though relevant are beyond this literature review and will not be described further.

The experiential responses were evoked only in the temporal lobes of both hemispheres; other non-temporal areas produced no single experiential responses. Furthermore, the greatest concentration of the responses was in the superior temporal convolution of both

hemispheres with the frequency on the right side (emotional hemisphere) greater than that of the left side. Temporal lobe stimulation sometimes evoked visual experiences which are not uncommon in mass hysteria sufferers (Walsh, 1987).

Gender differences are also an issue in mass hysteria as was stated that it is more prevalent in women than in men. An attempt will be made to address such an observation.

2. 10 Neuro-biological theory to gender differences

It has been claimed several times, even in ancient history, that hysteria is more prevalent in women than in males (Jones et al., 2000; Wesley, 1987; Swogger, 1999). How does neuroscience account for such prevalent differences?

2. 10.1 Lateralization of functions

From the neurobiological and neuropsychological perspectives there are sex differences as to how the brain hemispheres process information. In the lateralization of functions the corpus callosum and the anterior commissure deserve to be highlighted as some of the major role players in gender differences. Springer and Deutsch (1985) accept that there are true gender differences, but are small in magnitude. With reference to lateralization, the findings are consistent with the hypothesis that the left hemisphere is involved in perceiving positive emotions and the right hemisphere is involved in perceiving negative emotions (Fox & Davidson, 1986). Anthes (2010) states that recent research in neuro-imaging has revealed that the hemispheres of the brain normally operate in concert, but there are subtle differences in their tasks, for instance, the right side is predominantly involved in processing emotion, whereas the left hemisphere is more logical, linear and verbal. Again in neuro-imaging, it has been shown that many people suffering from post-traumatic stress and other stress related disorders show increased activity of the right hemisphere of the brain and decreased activity in the left hemisphere (Anthes, 2010).

Kring and Gordon, (1998) state that several studies have shown that males and females process emotions differently and women have been found to be more emotionally expressive than men possibly as a result of differences in socialization. Women also show

stronger psycho-physiological responses to emotional stimuli. However, there is also evidence that lateralization of emotional activity is much more complex and region specific than predicted by previous theories of emotions and brain (Tor, Wagner, Luan, Israel & Tayler, 2003).

2.10.2 The corpus callosum

This is a nerve structure that connects the right and left hemispheres. There were research claims that the corpus callosum was larger overall in women relative to brain size; later there was a claim that the posterior portion, the splenium (nerve fibres) was larger (Springer & Deutsch, 1985). The result of differences in the bundle of nerves traversing the corpus callosum are said to result in a greater relative fluency of thought and speech. This results in greater communication between cerebral hemispheres of women. Behavioural evidence supports the theory that the right hemisphere is dominant for expressing and perceiving emotions (Achuff, 1993; Hellige, 1993). It is also suggested that women's greater sensitivity to emotional, non-verbal communication, even their intuition, comes from the greater connectivity in their brains. On the one hand men, for instance, are more purpose oriented and less easy to express their emotions. www.gender.org.uk/about/07neuro/77diff.htm). i.e. there are neuroanatomical differences.

2. 10. 3 The anterior commissure

This is another nerve bundle structure that connects the two cerebral hemispheres. It communicates visual, olfactory and auditory information. It is larger in women than in men. The asymmetry of hemispheric function could account for the differences in gender responses to emotional reactions. Hysteria is regarded as first emotional and then becomes physical. Walsh (1987) and Goldstein (1939b) noticed that catastrophic reaction, especially if one is confronted with failure, is particularly associated with dominant hemispheric 'lesion'. Goldstein (1939b) also noted that these reactions were not only inadequate, but also disordered, inconsistent and embedded in physical and mental shock. Such reactions are noticeable in mass hysteria as indicated in the above symptoms e.g. signs of incipient physical collapse such as pallor and sweating (anxiety- like attack) (Walsh, 1987).

One other theory that attempts to account for mass hysteria is the state dependent recall theory.

2. 11. The State Dependent Recall Theory

According to Rothschild (2000), the state-dependent recall theory is another important phenomenon related to traumatic memory. He asserts that when a current internal state replicates the internal state produced during previous events, detailed information and or other states associated to that event, such an event may be spontaneously recalled or set in motion. In other words, one event may trigger a series of other related recalls or acts as a conditioned response. This commonly happens in mass hysteria. Factors affecting state dependent learning may include the environment, intoxication, emotional state and the affected sensory modality. State dependent recall can also occur unbidden. It is not uncommon for trauma to be recalled into awareness by an internal condition (increased heart and respiration rates) that is reminiscent of the original response to the trauma. This process may be set in motion by a number of classically conditioned external triggers arising from various sensory modalities. It can also be incited by exercise, excitement and anything that is a reminder of the trauma response (Eich, 1980). Mass hysteria is known by its rapid spreading from one group or one person or school to the next (contagious).

2. 12. Contagiousness of mass hysteria

Eisenkraft and Hillary (2010) define emotional contagion as a common phenomenon in which people 'infect' each other with their moods of the moment. For instance, a person who feels cheerful buoys his/ her confederates, while one who is sad depresses them. This mystery explains the association between peoples' differences in experiencing and perceiving non-verbal cues. According to Sirois (1974), mass hysteria presents with a constellation of quickly spreading symptoms to groups of people who may not necessarily share the same belief system. Perhaps unconscious expressiveness and emotional contagion is a key to understanding why in mass hysteria there is an explosive spread lasting for a few hours (Sirois, 1974).

Authors have come up with other theories to explain the contagiousness of mass hysteria. The social learning, sympathetic induction, emotional exchange and ‘magical transmission’ are briefly described below.

2. 13. The Social learning theory

Perhaps contagiousness of mass hysteria could be explained by the social learning theory which claims that the role of observation and / or imitation of behaviours observed in others (models) occur in mass hysteria. According to Shaffer (2000), Watson – a behaviourist – believed that children’s behaviour and development largely depend on their rearing environment or the way their parents interact with them as well as how other people contribute to their lives. Some researchers Levine (1977) and Goldberg (1973) have found that relapses of fainting occur wherever girls assemble at school premises such as corridors, canteens, playground and in waiting areas (e.g. hospitals and schools). Mass hysteria also tends to occur in charismatic sects (i.e. when people are gathered for a particular purpose, e.g. religion (Rataemane & Mohlahle, 2002).

2.14 Sympathetic induction of emotion

The contagiousness nature of hysteria seems to work through the sympathetic induction of emotions “and the suggestibility of crowds” (Mc Dougall, 1920). Kerckhoff and Back (1968) point out that contagiousness is a quick dissemination within a collective of which no organic cause can be found. Wessely (1987), Small and Nicholi (1982) contend that mass hysteria appears suddenly among persons near one another but disappears within a few hours or few days.

As regards contagion, mass hysteria is higher among girls than boys (Jones et al., 2000; Wessely, 1987; Swogger 1999). On the one hand, Festinger (1950) found that it is more contagious in a collective of people who share similar beliefs, opinions and attitudes. Could this claim be supportive of explaining the differences between Blacks, Coloureds, Asiatics and Whites in manifesting hysteria symptoms?

2.15 Emotional exchange theory

Goleman, (2004) stated that emotions, especially in difficult times are contagious, but far more subtle as part of a tacit emotional and almost imperceptible exchange that happens in every human encounter. Human beings transmit and ‘catch’ moods from each other in what amounts to a subterranean economy of the psyche in which some encounters are toxic and some nourishing. Humans can catch feelings from one another as though they were some kind of ‘social virus’. They send emotional signals in every encounter and those signals affect those they are with, that is, developing symptoms when they see others doing it. However, the more adroit they are socially, the better they control the signal they send, for instance, the reserve of polite society is simply a means to ensure that no disturbing emotional leakage will unsettle the encounter (Goleman, 2004). Hence different cultures react somewhat differently to the mass hysteria triggering stimuli. (See data analysis below).

2. 16. Magical transmission theory

According to Goleman’s (2004) ‘magical transmission,’ people unconsciously imitate the emotions they see displayed by someone else, through an out-of- awareness motor mimicry of their facial expression, gestures, tone of voice and other non-verbal markers of emotions. A loud cry, for instance, in the commencement of hysteria can trigger other kids to become hysterical. Through this imitation people re-create in themselves the mood of other persons. The direction of transfer is usually from the person who is more forceful in expressing feelings to the one who is more passive. This strongly suggests that some people are particularly susceptible to emotional contagion and that their innate sensitivity makes their autonomic nervous system (a marker of emotional activity) more easily triggered. This lability seems to make them more impressionable and more empathic since they are more readily moved by someone else’s feelings (Goleman, 2004). Sometimes just seeing someone express an emotion can evoke that mood, (whether one realizes one mimics the facial expression or not); which could be seen as a synchrony or transmission of emotions.

With reference to the above theories one would contend that cultures differ tremendously as to how to show or express their emotions. This probably depends on the socialization

process. Goleman, (2004) uses the term 'display rules' for the social consensus about which feelings can be properly shown and when.

Basic kinds of display rules are:

- (i) One is minimizing the show of emotions. This occurs if or when one masks one's upset with a poker face.
- (ii) Exaggerating what one feels by magnifying the emotional expression (e.g. a 6 yr old may use this toward their mothers when teased).
- (iii) Substituting one feeling for another, this comes into play in some Asian cultures where it is impolite to say no, and positive (but false) assurances are given instead (Goleman, 2004). How well one employs these strategies and knows when to do it, is one factor in emotional intelligence. It comes from modeling as part of the social learning theory i.e. 'mask your feelings when they will hurt someone you care about.'

Chapter 3: Research design

3. 1 Introduction

The research design dictates procedures to be followed in conducting the study. The design consists of sampling, participants, procedure, instruments and ethical considerations of the study.

3. 2 Sampling

The research was conducted in high schools in the Uthukela District. Random selection of teenage participants was done in ten randomly selected high schools. Teenage participants of different cultural or racial groups was be given the same chance of being included in the study (Hysamen, 2006).

3. 3 Participants

For the purpose of this study the total sample of 719 teenage students in the uThukela District high schools were surveyed. Subject's ages ranged from 14 to 19 years with an overall mean of 16, 5 years. There were $n=109$ (15%) rural subjects, $n=180$ (25%) semi urban and $n=430$ (60%) urban subjects. Of the 719 subjects, $n =459$ (64%) were teenage girls and $n=259$ (36%) were teenage boys. Participants were taken from different areas of residence and from different ethnic and cultural groups.

In this study the term 'rural' is used to refer to those subjects living in remote areas characterized by minimal or absent municipal infrastructure such as roads, electricity, water, sanitation as well as important deficiencies in mental health practitioners such as psychologists, social workers and other community educational facilities. 'Semi- urban' areas are referred to as subjects who belong to the middle of both the urban and rural areas where less media, educational facilities and general social change. 'Urban area' subjects are referred to as those subjects who are city dwellers for most of their lives i.e. subjects who live in towns and nearby suburbs where most essential amenities are available. However, the category of semi-urban is not quite clear.

The relatively high number of urban teenage participants in the sample may be explained by the fact that urban teenagers were overrepresented in the samples.

3.4 Procedure

A random sampling technique was used to recruit a representative number of urban, semi-urban and rural high school subjects of different gender, racial, cultural and religious groups. Participants were informed that the research was an attempt to obtain their views about themselves expressed on the questionnaires. It was further emphasized that there were no correct or incorrect answers but their own personal views and beliefs were relevant to the study. Subjects were also reassured that their responses and names of the schools would remain anonymous and confidential. Subjects who consented to participate were given the self-report questionnaires. Subjects who experienced problems were assisted by their Life Orientation Subject Educator. The completion of scales or questionnaires took place in facilitated group settings during the Life Orientation class periods. The English language was used throughout the procedure; subjects were assisted where areas of translation and clarification of problems were needed.

3.5 Ethical considerations

It is obligatory for a researcher to preserve and abide by professional and ethical guidelines to avoid harming those involved in the research project. An application was made to the ethics committee of the district for permission to be granted before the study was undertaken. The application stated the purpose of the study, aspects of confidentiality to all participants (Terre Blanche, Durrheim & Painter, 2006). If participants felt uncomfortable about the study, they were allowed to terminate their participation at any point.

3. 6 Instruments (measuring tools)

3.6.1 Satisfaction with Life Scale (SWLS) (Diener, Emmons, Larson & Griffen, 1985).

The SWLS is a 5-item questionnaire measuring the cognitive judgment component of a person's evaluation of his or her quality of life, according to his or her own criteria (Diener, et al., 1985). This is done with the individual's constructed standard of well-being and not an externally imposed one (Diener, Pavot, Colvin & Sandvik, 1991). In the original study, a Cronbach alpha of 0.87 was found (Diener, et., al 1985). Wissing and Van Eeden (1998) found the SWLS reliable and valid for use in an African context.

3. 6. 2 The Fortitude Questionnaire (FORQ) (Pretorius, 1998).

The FORQ is a 20-item questionnaire measuring fortitude. Pretorius (1998) describes fortitude as the strength to manage stress and stay well. Fortitude is derived from three subscales: appraisal of the self, the family appraisal and support appraisal from others. The inter-correlations between the subscales were all moderate, ranging from 0,38 and 0,48, indicating that the three subscales though related were sufficiently independent. In South Africa it had coefficient alphas of 0, 74; 0, 82 and 0, 76 respectively, leading to a full scale coefficient of 0,85 (Wissing & Van Eeden, 2002). According to Pretorius (1998) an individual with positive appraisal of these aspects is said to be able to cope successfully with stress and would experience low levels of depression.

3. 6. 3 Affectometer 2 (AFM) Kammann & Flett, 1983

The AFM is a 20- item self-report scale indicating the quality of life as experienced on an affective level by measuring general feelings of happiness or sense of well-being. Psychological well-being is measured on an affective level by determining between positive and negative affect (Kammann & Flett, 1983).The scale is divided into two subscales, namely Positive Affect (PA) (10 items) and Negative Affect (NA) (10 items and Positive-Negative affect Balance (PNB) (PA-NA=PNB). The more positive affect predominates over negative affect, the higher the overall level of well-being. Wissing and Van Eeden (1998) indicated the reliability and validity of this scale for use in an African group. In the original study Kammann and Flett (1983) reported a reliability index of 0, 95 for this scale.

3.6. 4 Qualitative research questionnaire

This is an area that was treated as qualitative research analysis.

This open-ended and close-ended questionnaire was used to ascertain different views and personal experiences of each participant; each answer would be treated as objective and legitimate (see addendum, p. 62).

Chapter 4: Analysis of data

4. 1 Introduction

Data analysis was done to give meaning, structure and transformation of collected data into meaningful information before conclusions and recommendations were made. Data analysis in this study was done by employing the Statistical Package for Social Sciences (SPSS). Quantitative data analysis was done by the statistics department of the University. Qualitative data analysis was done using the thematic analysis of common themes. Findings were integrated and care was taken to ensure that results were consistent and accurate.

4. 2 Analysis of data and Interpretation

A systematic process of selecting, categorizing, comparing, systemizing and interpreting information has been undertaken to provide an explanations for the research on mass hysteria. Data analysis was done to transform raw data into the form that can be read by the computer (Durrheim, 1999). The information provided in the questionnaire was transformed into numerical codes and was entered into the computer. The quantitative data was analyzed using the Statistical Package for the Social Services (SPSS, 1999). For the purpose of this study, the researcher used descriptive analysis and Multivariate Analysis Of Variance (MANOVA) to analyze the data. The aim was to investigate the distribution of scores on each variable (Durrheim, 1999). This makes it easy to interpret the findings of the study.

MANOVA was run to analyze multiple dependent variables simultaneously (Howell, 2001; Lehmann & D'Abbrera, 1975). Multiple analysis of variance (MANOVA) is an Analysis of Variance (ANOVA) with several dependent variables. ANOVA tests for the differences in means between two or more groups, while MANOVA tests the difference in two or more vectors of means (French, Macedo, Poulsen, Waterson & Yu, 2005). To account for multiple dependent variables, MANOVA puts them together in a weighted linear combination or composite variable.

Within MANOVA, the test statistics that the researcher used are the Wilk's Lambda statistics, the Levene's test of homogeneity of variance and Benferroni Correction. The Wilk's Lambda Statistic is used to know the overall significance of the model (Durrheim, 1999). When the overall model is significant, then the individual significance of the variables can be predicted (Hair, Anderson, Tatham & Black, 2006). The Wilk's Lambda Statistic is also used (because) it is immune to violations of the assumption underlying MANOVA and it maintains the greatest power (Power shows the probability of correctly accepting the null hypothesis) (Hair et al., 2006). The Levene's test is used to know whether or not the variance between groups is equal. An insignificant value of the Levene's test shows equal variance between groups.

The Levene's test (Table 7) gives statistically significant results for 70% (14/20) of responses to the statements in the Fortitude Questionnaire (Table 2). This reflects equal variance in 30% of the participants' responses to all statements whose significant level (Sig.) is more than alpha (α) at 0.05 (i.e. $p > 0.05$). Table 2 displays the Levene's test statistically significant results for 55% (11/20) of responses to the statements in the Affectometer. There is equal variance in 45% of the participants' responses to all statements whose significant level (Sig.) is more than alpha (α) at 0.05 (i.e. $p > 0.05$).

The Levene's Test of Equality of Error Variances: SWLS (Table 5) shows an overall statistical significant result only for the statements: "In most ways my life is close to my ideal"; "So far I have gotten the important things I want in life"; and "If I could live my life over, I would change nothing" of the Satisfaction with Life Scale. This means that there is a statistical significant variance in 60% of the participants

The Benferroni correction is a multiple comparison correction used when several dependent or independent tests are being performed simultaneously (Bland & Altman, 1995). It assures that an overall confidence coefficient is maintained. The researcher chose to use the Benferroni correction because it is valid for equal and unequal samples. The Bonferroni (Table 1) correction shows statistically significant results where alpha (α) is less than 0.05 (i.e. $p < 0.05$).

However, the Bonferroni (4) correction results do not show precisely where the differences are in the data. The Levene's test results show for which variables those statistical significances do or do not lie in the data; and the Wilks' Lambda statistic shows which factors yield statistically significant results.

The Wilks' Lambda statistic shows an overall statistical significance (Table 8) for participants' responses disaggregated by religion, gender and race ($p < 0.05$). This means that there are statistically significant differences in the way different religious groups, gender, and race are contributing factors to the incidence of mass hysteria in participants.

4.3. Interpretation of data by each measurement tool (according to Gender, Race, Religion and Area of school)

Percentages are based on the total number of each respective grouping with reference to gender, race, religion and area of school. In other words in this research all the results are interpreted with the base rate in mind. According to Anastasi (1987) Base rate refers to the degree or frequency to which a pathological condition occurs among the normal or general population) For instance, mass hysteria symptoms have fairly high base rates among Black teenagers in schools and also high in female teenagers compared to other race groups.

The results of the scales described below should be seen as pointing that in the UThukela district the sample of different cultural groups were taken to reflect participants' own subjective experiences of representing illnesses. Furthermore, it should be noted that as culture is evolving and dynamic, especially with the younger generation in urban, rural and semi-urban areas, hysteria poses many challenges in terms of viewing it traditionally and or in modern ways; for instance, teenagers in racially mixed schools compared to rural non-mixed schools are less likely to view hysteria from the same point. Hysteria is seen as less prevalent in urban mixed schools or is less reported. However, this assertion does not mean that mass hysteria should not be viewed as a cross-cultural generation diagnosis.

4.3. 1 Satisfaction with life scale (SWLS)

4.3.1.1 .Gender

On the gender domain for the SWLS females (64%) were more satisfied with life than their male counterparts (62%). However, it has to be observed that almost 45% of females would change their lives since they have not gotten important ‘things’ in their lives, whereas of the males 43% would change their lives as well. The overall picture though indicates that 80% of all the participants were satisfied with life. Others (12%) neither agreed nor disagreed.

4.3.1.2 Race

On the race cross tabulation domain, Asiatics (75%), Coloureds (63%), Whites (63%) and Blacks (62%) all expressed their satisfaction with life in general. However, Coloureds (10%), Whites (13%) Asiatics (13%) and Blacks (14%) were neither agreeable nor disagreeable. With reference to question 5 (i.e. if I could live my life over, I would change almost nothing Whites (45%), Blacks (41%), Asiatics (30%) and Coloureds (18%) disagreed – meaning they would change their lives; this could mean that the smaller percentage was not satisfied.

4.3.1.3 Religion

On the religion domain, 63% of the participants were satisfied with their lives but 23% were not satisfied with their lives. However, on the last two questions, “if I could live my life over, I would change nothing” 43% agree and 45% disagree. Fourteen percent (14%) of the participants remained unsure as to their satisfaction with life.

4.3.1.4 Area of school

In the domain of area of the school, 29% of the urban schools, participants were dissatisfied with life, but 63% of them are satisfied.

In the domain of area of the school, urban (29%), semi-urban (19%) and rural (31%) participants were dissatisfied with life. On the other hand urban (63%), semi-urban (68%) and rural (59%) participants were satisfied with life.

It is to be noted that 33% of the rural students indicated that they have not gotten things they want in life. On the questions of changing their lives, 45% of the total number would change their lives and 44% would not change it. Twelve percent (12%) remain undecided. Also the rural school participants were the least satisfied with life at 59% compared to 63% and 68% urban and semi-urban respectively.

4.3. 2 Fortitude scale (FORQ)

4.3.2.1 Gender

On the gender domain for FORQ, both males (86, 95%) and females (88, 15%) do cope well or successfully and would experience low levels of depression. However, a small percentage of male participants (13%) and female (12%) do not have strength to manage stress thus unable to cope successfully and may experience high levels of depression. In this study, participants indicate that they can generally manage their lives with less or with low levels of depression. So their psychological well-being seems good. Of note, the percentages of support coming from self (88%), support from others (87%) and from family are almost evenly distributed.

4.3.2.2 Race

On the race cross tabulation, Asians (91%), Whites (89%), Blacks (87%) and Coloureds (87%) all have strength to manage stress and stay well. Their strength is derived from within themselves, the family members and support from others. They, therefore, would experience low levels of depression because they would be able to cope successfully. About 10% across four races could not manage stress and would probably experience high levels of depression. In conclusion, about 88% across the race groups manage stress and stay well.

4.3.2.3 Religion

On the religion domain cross tabulation, 88% of the participants felt that they have the strength to manage stress and stay well, regardless of which religion they are affiliated. Such strength comes from self appraisal, family and social support.

4.3.2.4 Area of school

On the area of school domain, urban (86%) semi-urban (86%) and rural (87%) indicated strength to manage stress and stay well. Strength is derived from appraisal of the self, the family and support from others. They would probably cope successfully with stress and would experience low levels of depression. On the one hand urban (11%), semi-rural (8%) and rural (12%) indicated poor strength to manage stress. It could be that they have poor self appraisal, poor/weak family support and poor/weak support from others. Such participants may not cope successfully with stress and could experience low levels of depression.

4.3.3 Affectometer (AFM)

4.3.3.1 Gender

On the gender domain for AFM, male participants indicate that 62% have positive affect (PA) compared with 17% having negative affect (NA). On the other hand, females (59%) have positive affect (PA) as against 19% who have negative affect (NA).

4.3.3.2 Race

On the race domain, Asians (69%), Blacks (59%), Whites (54%) and Coloureds (53%) indicated happiness i.e. more positive on the positive affect (PA). However, Asians (28%), Whites (44%), Blacks (34%) and Coloureds (37%) were less positive. The negative affect indicated that Whites (50%), Asians (40%), Blacks (43%) and Coloureds (39%) were less negative. On the other hand, whites (11%), Asians (11%), Blacks (19%) and Coloureds (18%) were more negative.

4.3.3.3 Religion

On the religion domain, 60% of the participants were more positive on the positive affect (PA) whereas 33% of the participants were less positive on the positive affect (PA) statements. On the AFM negative affect (NA) 18% were more negative and 43% were less negative. In total 93% were positive on the positive statements and 7% were not positive on positive statements. On the one hand, 61% were negative on the negative (NA) statements in general and 39%.

4.3.3.4 Area of school

With regard to the area of the school, urban (58%), semi-urban (63), rural (59%) expressed more positive general feeling of happiness or some sense of well-being. On the one hand, urban (35%), semi-urban (25%) and rural (34%) express less positive general feelings of happiness or some sense of well-being on an affective level. With regard to negative affect (NA), urban (17%), semi-urban (21%) and rural (19%) were more negative. On the other hand, urban (43%), semi-urban (41%) and rural (41%) were less negative on the negative affect.

The overall results of the FORQ indicate that the more positive affect level predominates over the negative affect with regard to race, gender, religion and area of schools.

4. 4 Corroboration of results

In corroborating (supporting or strengthening) the results given by the Wilks' Lambda statistic on page 36 (there are statistically significant differences in the way different religious groups, gender and race are contributing factors to the incidence of mass hysteria) and interpretation of data from the same scales (Satisfaction with Life, Affectometer and Fortitude), but using gender, race, religion and area of school, one is tempted to assert that the usage of the above scales describe directly and indirectly the subjective well-being of the participants in relation to the occurrence of hysteria. The following paragraphs highlight this corroboration and different distribution incidence of mass hysteria in terms of gender, race, religion and area of the school but focusing on their subjective well-being as measured by the scales. Subjective well-being as construed by Pavot and Diener (1993) is a

concept that describes the level of well-being people experience according to their subjective evaluation of their lives anywhere (semi-urban, rural or urban). Such evaluation may be positive or negative depending on one's judgment about life satisfaction, engagement, interest, affective reaction (sadness and joy) to his/her life events. In other words subjective well-being occurs within a person's experiences in their surrounding environment.

In the research done self-report measures were used to gather the global subjective well-being of the participants (Whites, Blacks, Asiatics and Coloureds). The results given showed that most of the participants indicate high levels of subjective well-being in each specific category. Such levels were interpreted as actually beneficial to them; thus stressors were reduced and they in general functioned effectively. As a result they unknowingly generated their own social support systems.

Culture, race, religion and gender were variables that helped to shape the results depicting Whites, Blacks, Coloureds and Asiatics differences as stated in the Wilks' Lambda statistics.

With regard to gender, the relative well-being levels between genders have frequently been examined and found that there are no substantial differences on average subjective well-being except that women appear more frequently happy, meaning that women experience positive and negative emotions more frequently and more intensely than men (Diener, Suh, Lucas & Smith, 1999). This contention has been shown in the incidence of mass hysteria documentation.

With reference to culture and subjective well-being, Diener and Diener (1996) argue that subjective well-being differs between nations. Such differences may sometimes be explained by the effects of culture and socialization of each group. The self reporting scales used as subjective well-being scales cannot therefore exclude the influence of culture in any environment of the participant whether urban, semi-urban or rural areas.

Cultural differences are also applicable to expressing emotions across cultures. Eid and Diener (2001) found that guilt, for example, is of greater importance in collectivistic cultures (blacks) whereas pride and self esteem are valued in individualistic cultures (whites).

With reference to religion, there is a relationship between religiosity or spirituality and well-being of every group. Groups that frequently participate in religious services tend to have higher well-being levels, higher satisfaction with life and lower suicidal attempts than those who do not (Diener & Seligman, 2004). The strength of positive linkage between religiosity and high levels of well-being is thought to originate from a sense of meaning and purpose from social networks and the support systems. For example, in the Hindu religion (Asiatic) transcendental meditation is linked with *mantras* which are inseparable from the names of religious deities. A *mantra* is a spiritual tool used in calling on spiritual beings to make believers happy more especially when they feel down.

Despite the positive results from the subjective scales the role of the unconscious mind cannot be underestimated since it is a realm of psychical activities and a vast repository of inaccessible memories and experiences, which are sometimes difficult to accept and deal with (Mkhize, 2003). Such repressed memories and experiences may be manifested through hysterical attacks.

4.5 Qualitative research

4.5.1 Introduction

Thematic analysis in this qualitative research was used with a small randomly selected sample of twenty teenagers schooling in the urban and semi-urban and rural areas. The objective of thematic analysis was first, to identify, analyze and report patterns within the data collected, second, to explore the themes that would substantially inform the decision making, leading to interpretation and conclusions regarding mass hysteria.

It was expected that the sample's contents would reflect a range of responses in how participants experienced and dealt with hysteria. Themes capture important information about the data provided in relation to the research question.

Thematic content analysis was chosen because it was not based on any particular existing theoretical framework. Its advantage is that it was to be used as a 'realistic' method to report experiences, reality and how individuals create and make meaning of their experiences (Aronson, 1994). The qualitative aspect as part of the main quantitative research was included to avoid focusing on some aspects of the quantitative data at the expense of other potentially important aspects.

4. 5. 2 Method

The study was directed towards an intimate understanding of human experience, the objective was to rely on the rich description of lived experiences, co-constructed with twenty participants through an interactive encounter. The participants were randomly selected i.e. individuals who would participate as subjects from a target population of interest. A limited number of twenty compared to the quantitative research, would probably share almost the same geographic area (urban and semi-urban). Their age group ranges from 16 to 19 years and the majority were Africans (Blacks) and a few Coloureds. The main reason for this was of logistical constraints and lack of finance capacity. Participants were not fully acquainted with details of hysteria but had heard of or experienced and witnessed it in their schools.

Although questions were a mixture of close and open ended types, they acted mainly as guides to their answers. Nonetheless, selected participants were willing to openly participate in the research to share their experiences and they could respond in whatever way seemed meaningful to them. Ethical considerations to preserve and abide by professional guidelines to avoid harming those involved were observed.

4. 5. 3 Interviews

The semi- structured interviews were carried out by two trained research assistants (i.e. BA Psychology Honours Graduates). Research assistants were more directly involved in the entire interview, making interviews to be co-constructed Kvale (1992) and be a specific form of human interaction. Each interview including recording and transcribing lasted for about one hour in the school premises. Although transcripts were not genuine copies or representations of some original reality expressions they were co-constructed for the purpose of communicating the participant's stories. Every attempt was made to preserve the participant's phrases, experiences and meanings (Kvale, 1992, p.165). By the time data collection was started the researcher had an understanding of the meaning of data from the quantitative perspective.

From the aggregation of transcripts related activities were united into connected concepts in order to give a meaningful picture of their personal experiences. Put differently, short stories were reconstructed and re-authored without essentially losing participants' phrases and meanings (Kvale, 1992; Rubin & Rubin, 1995; White, 1995). Re-authoring by the researcher was done minimally since some questions were close ended.

4. 5. 4 Themes

The study produced a meaningful description of interactively produced 'realities' of participants. A total of five themes emerged from the stories. They are discussed below:

1. Family background and hysteria attacks

It emerged that participants falling within the above background in the Christian community were mainly from either broken or dysfunctional families (no parents, single parent, death or separation parents), had two or more attacks of hysteria. Most of them (70 to 80 %) had been admitted to various hospitals for 'treatment and management.'

2. Symptoms or manifestation of illness

The symptoms and signs displayed were almost similar to all of the afflicted participants. Symptoms were centered around the disturbance of the central nervous system. Manifestation were characterized by, among others, fainting/collapsing,

screaming, running away, visual and auditory hallucinations, seeing ghosts, seeing odd people attacking them, de-realization and showing psychotic-like features.

3. Gender – based attacks

Fewer males had admitted and narrated about hysterical attacks except that they had witnessed it a couple of times in school. Hysterical attacks were commoner among female participants and they were mostly admitted to the hospital for a few hours or a day.

4. Etiological or precipitating factors to hysteria

This theme did not specifically point at one possible cause of an attack. It, however, emerged that some participants had or were suffering from other medical conditions usually asthma, stressors at home from bickering/fighting parents, for example. Other participants mentioned that hysteria is caused by evil spirits and demons; some mentioned that any tension at school e.g. suicide or imminent tests or exams could precipitate hysteria (their observations).

5. Management/treatment of hysteria

Reactions as to how hysteria was managed and treated varied from being admitted to the hospital for drips and sedation for a few hours to a day to resorting to traditional healers, and priests. There were no certainties as to whether hysteria can be cured by whom and how except that all professionals could have treatment roles e.g. psychologists, priests and herbalists. In almost all cases there was no specific cure for hysteria.

Two vignettes have been cited to illustrate participants' personal life experiences

Vignette 1

In response to the open ended questions two randomly selected participants responded as follows:

Nomacala (pseudonym), a 16 year old girl in grade 11 said "I am living with my grandparents, my mother passed away three years ago, have never seen my father. We are staying in an old house just outside the main town (about 3 km away). My

life is difficult because I cannot get all I want since we live on grandparent's pensions.

My problems are that I get frequent headaches and sometimes suffer from these attacks (about four times) "ukuhayiza". I have been to the hospital but doctors can't find anything wrong with me, they admitted me and put up a drip and was discharged after a day. I think on two occasions I couldn't remember how I came to the hospital because I regained my consciousness in the ward.

My experiences during the attacks are dizziness, falling down, screaming, fearful, seeing a two headed snake coming towards me, getting paralysis or weakness in my legs...but cannot remember some details. Some of the happenings (what I do) I hear from the witnesses.

"Maybe this is caused by demons or evil spirits....and don't think there is a cure".

Vignette 2

Sizakele (pseudonym), a 15 year old girl in grade 9 reported as follows:

"I grew up and was brought up by my grandparents up until I was 12 years old. My grandparents are traditional people, still believe in rituals, and I have no problems with that. I am very close to them. Both my biological parents are alive but separated, not divorced. Two years ago my mother decided to take me away from them because they were separating. I was not happy with the move. What is also painful is that my mother does not want me to visit my grandparents anymore...but I always want to because she doesn't give me a reason...I miss them! I do not really feel that my mother was there for me.

Since I started living with my mom I frequently have fainting attacks at school. The teachers phone my mom to come and fetch me and she ends up taking me to a doctor or hospital. The doctors do not find anything wrong with me. Sometimes I get admitted for a few hours or a day or two after the tests. My illness is the same as the one I have seen with other children...I cannot really remember what I do when the attack comes, but they say it is something like fits when my body shakes, see strange things, I really don't know the cause. I have been taken to traditional healers and prayed for but it does not help".

From a psychodynamic perspective it can be assumed that their psychological well-being is unhealthy. Conversion symptoms were possibly manifestations of deep seated intra- psychic conflicts. In both vignettes it would appear that there are precipitating factors....repressed or suppressed feelings...triggering the attacks?

Or, it can be suggested that their experiences are attributed to psychological factors including their vulnerable pre-morbid personalities and ostensible symptoms are precipitated by what is happening in their environment. With regard to their relative quick recovery, one would not be certain whether it is spontaneous or not. Spontaneous recovery is understood as a phenomenon whereby patients come out of psychological distress with or without treatment. In such cases attendants may attribute this to treatment despite lack of evidence to support the claim (Dawes, 1986).

4.5.5. Summary of thematic analysis

The main conclusions drawn from the study were broad guidelines highlighting some common similarities to (quantitative research analysis) and literature review symptoms. Although most research theories on mass hysteria are generated in the Euro-Western thoughts, the study that is done locally produced knowledge that is applicable elsewhere and rather integrates the Western type of hysteria and African picture of hysteria (see literature review). The above statement would imply that the fundamental etiological factors are not dissimilar, for instance, the emotional catharsis and anxiety and contagiousness produced by mass hysteria is universal to a large extent.

It is however to be noted that a different researcher would interpret the qualitative data and come up with a different meaning altogether. Nonetheless, the qualitative study was more probing, comprehensive at an individual level. It provided better insight into how participants personally experienced hysteria. Such hard facts, even if the sample was small, could be generalized in most cases.

With regard to (coping) personal management and treatment of (mass) hysteria there was no indication of how individuals personally coped with hysteria except that help was to come from outside i.e. psychologists, medical practitioners, traditional healers, etc. This is an area that challenges authorities to embark on psycho-education at community level.

Chapter 5: Conclusion, recommendations and limitations

5.1 Introduction

The study explored potential relationships between hysteria and different dimensions of context. Furthermore, it was not to change the ‘facts’ of history to highlight their significance.

Although there is no doubt that psychological disturbances play a considerable role in the genesis of hysteria symptom, it is important to realize that in nearly two-thirds of patients presenting in hospital with hysterical symptoms they will have some evidence of pre-existing central nervous systems or other related diseases (Slater, 1965; Witlock, 1967).

5.2 Discussion and Recommendations

As indicated in Table 8, the Wilk’s Lambda statistic shows an overall statistical significance for participants’ responses disaggregated by religion, gender and race ($p < 0,05$). This means that there are statistically significant differences in the way different religious groups, gender and race are contributing factors to the incidence of mass hysteria in participants.

Deducing from the above (Wilk’s Lambda statistic) one is tempted to suggest that the differences in religion, gender and race directly or indirectly determine also the psychological well-being of each individual participant, therefore one’s psychological ‘makeup’ plays a significant role in the ‘genesis’ of hysteria symptoms. When they become hysterical, (not willingly) they actually protect their central nervous system from overwhelming stress Goleman, (2004), or, they are communicating metaphorically as they ‘really look ill and need immediate intervention’.

From the literature review, it emerges that mass hysteria is a universal phenomenon in the sense that it has both Eurocentric/Western and Afro-centric manifestations with almost similar experiences. However, such experiences are tainted with respective belief systems and religious differences regarding coping mechanisms and the psychological ‘makeup’ of

different race groups. Nonetheless, the bottom line seems to converge on neuropsychological and neurobiological perceptions acting as the 'springboard' for various symptom presentations. The research question as to why black teenagers are experiencing it more than other race groups, particularly in the UThukela District, opens a debate which could create arguments between universal psychological theory and the distinctive psychic experience situated in some Black Africans, particularly in South Africa. However, the study is not an attempt to be 'reductionistic, that is, featuring the dominant Western psychology by separating blacks, Whites, Coloureds and Asiatics in the UThukela District, but is an attempt to indicate that mass hysteria is neurobiologically, neuropsychologically and psychodynamically a universal phenomenon

Mass hysteria does have unique epistemologies some of which are derived from medicine, psychiatry, cultural/traditional values, narrative creations/discourses and belief systems. Perhaps differences in epistemologies account for the identities, knowledge systems and hysteria presentations. In other words, Blacks, Whites, Coloureds and Asiatics would express hysteria with slightly different symptoms. For instance, some indigenous Africans are rooted in their belief systems which differ from those of Western and Asiatic societies. Some belief systems could trigger neuropsychological reactions areas in the 'mind' / brain or in both resulting in the cascading of hysterical symptoms (as highlighted in the vignettes above).

Although, firstly, the samples were unequal with regard to race and gender and secondly, the psychosocial conditions of different race groups were heuristically deduced in this research, one can extrapolate from the data, literature review and vignettes that results from statistical analysis have not clearly pointed out or explained why Blacks versus Whites, or Coloured and Asiatics differ in their experiences of mass hysteria symptoms; also figures show that blacks report it more or act it out more regularly than other race groups. Perhaps unique African 'epistemologies' such as belief system, religious background can account for their typical presentation of symptoms, 'illness' or behavior patterns that distinguish them from other race groups, for instance, Bodibe, (1992, 1996) in Mol Ian, asserts that Africans tend to project their problems outwards to establish relationships with the sky, the

land and one's kinship groups. According to Bodibe (1992, 1996) it is non-African to entertain dualism, that is, to differentiate between mind and or body (psychosomatic) and thinking / feelings. Africans (blacks) in particular are holistic, spiritual and ancestrally oriented in their self-hood (Nsamenang, 1992). In the same vein Ngcobo and Edwards (2008) assert that being psychologically unwell varies from culture to culture, for instance, people raised in capitalistic societies are more autonomous and independent than those raised in communalistic societies; the latter are connected to ancestors and thus their illnesses are experienced in relation to other people. Attendants to hysteria victims should be sensitive to such similarities and differences.

As a researcher one acknowledges that the study uses the language and concepts which are derived from Euro American ethno sciences. However the objective was to explore whether there are real fundamental differences between race groups, and to ascertain whether there is a distinct African or other Eurocentric epistemologies that can explain influential factors regarding the symptoms presented differently. The results have not clearly demonstrated this rigour but neurobiological or neuropsychology and other literature reviews have come close to shed light on factors influencing mass hysteria.

The results, therefore, directly or indirectly dispute the notion of mass hysteria being regarded as essentially African but concurs with mass hysteria as a universal phenomenon. The outline in the vignettes on mass hysteria, especially described by African teachers could be a demonstration that African communities (black in particular) are fundamentally distinct from Western or Asiatic communities in the sense that with African intuition, unquestionable values, stereotypes and idioms of the cultural mass try to explain the etiology behind mass hysteria as caused by evil spirits, demons, myths, folklore and proverbs as opposed to explaining it in a more scientific sense as in neuropsychological or neurobiological processes in the mind or brain or both. It may therefore be difficult to explain and 'convince' some Africans (blacks) and other race group believers by explaining psychoanalytic, biological and neuropsychological theories as the factors influencing mass hysteria. On the one hand it does not mean that the scientific understanding should be cast aside because of reliance on and stereotypical traditional belief systems. The scientific

information should be incorporated into life orientation in schools to increase students' understanding of mass hysteria without undermining the old age historical / traditional belief systems which are yet to be proven.

Edwards (1999) posits that with reference to the old age traditional belief systems, healing in the African and Asiatics, implied a process of 'making whole.' This has been an area entertained by shamans, traditional healers, priests, psychologists and diviners for many years. Traditional healing among traditional Africans and Indians, for example, was based on the energy of the *amadlozi* (ancestors) and *Ayurveda* (a holistic approach that enables people to take charge of their own health) respectively. Therefore, downplaying any of the hysteria epistemologies would be suggesting a schism between African and Western understanding of psychology as a discipline.

From a community psychology viewpoint it would be recommended that both approaches be taught in Life Orientation at high schools without prejudice so that students would make a choice. On the one hand the emphasis on primary prevention of hysteria should be placed on healthy living (salutogenesis) as opposed to emphasizing illness. In other words, students should be taught that life stressors are not to be taken as isolated misfortunes but they are part of daily living of human existence (Wissing & van Eeden, 1998). Again students need to be made aware of or equipped with knowledge of understanding the meaning and management of stressors. Educators, parents and all stakeholders in communities should be in the forefront to disseminate such information regarding positive psychology.

Stakeholders should keep in mind that environmental failures and successes are not merely impressed on blank slates and passive individuals, but are given meaning and experienced by active or afflicted people.

5.3 Limitations of the study

The study focused on the Uthukela District, a relatively large area in KwaZulu-Natal (KZN); therefore it may not necessarily be representative of the whole District. Due to a

small sample of qualitative research it becomes necessary to be careful when interpreting the findings of the study. Furthermore, the study focused on small self-report measures with qualitative information, but perhaps longitudinal studies could generate other equally competing results.

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Addendum

The questionnaire is as follows:

Qualitative Questionnaire for Mass Hysteria (to be used by research assistants)

Biographical Data

(1) Age

(2) Grade

(3) Religion

South Africans

(4) **White**

M F

(5) **Asiatic**

M F

(6) **Black**

M F

(7) **Coloured**

M F

Schools (Tick appropriate box)

(8) **Urban**

(9) **Semi-urban**

(10) **Rural**

Questionnaire

- Have you ever been admitted to hospital? (11) **Yes** or (12) **No**

If **yes**; give reason(s) _____ . (13)

What was the diagnosis? _____ . (14)

How many times? _____ . (15)

- Have you ever visited a medical doctor (GP)? (16) **Yes** or (17) **No**

If **yes**; please give reason(s) _____ . (18)

How many times? _____ . (19)

- Have you ever had an attack of hysteria at school? (20) **Yes** or (21) **No**
If **yes**; how many times? _____ (22)

- Have you personally seen someone having hysteria? (23) **Yes** or (24) **No**
If **yes**; what were some of the thoughts that went through your mind during the incident? _____ (25)

- Do you live with your (26) **Mum** (27) **Dad** (28) **Granny** (29) **Relative** (30) **Other**
 (31) \ /
 Both

- All the above? (32)

- Are your parents **Divorced** (33) or **Living Apart**? 34
- Have you ever been sexually abused? (35) **Yes** or (36) **No**
- Who do you think can treat a person with mass hysteria?
 - Medical doctor (37)
 - Psychologist (38)
 - Social Worker (39)
 - Traditional healer / *Inyanga* (40)
 - Priest (41)
 - Faith / Spiritual healer (42)
 - All of the above (43)
 - I do not know (44)
 - None of the above (45)

Do you believe that hysteria can be cured? (46) **Yes** or (47) **No**

If **yes**; how do you think that this can be done?

Please elaborate_____

_____ (48)

MANOVA

Table 1. Tests of Between-Subjects Effects (Bonferroni): Satisfaction With Life Scale

Source	Dependent Variable	df	Mean Square	F	Sig.
SWLS	In most ways my life is close to my ideal.	16	3787933.395	1.989	.012
	The conditions of my life are excellent.	16	1031221.131	.925	.539
	I am satisfied with my life.	16	202912.956	.360	.990
	So far I have gotten the important things I want in life.	16	566296.636	.674	.821
	If I could live my life over, I would change nothing.	16	827972.469	.992	.463

The Bonferroni correction show statistically significant results where alpha (α) is less than 0.05 (i.e. $p < 0.05$).

Table 2. Tests of Between-Subjects Effects (Bonferroni): Fortitude Questionnaire

Dependent Variable	Df	Mean Square	F	Sig.
FORQ I always feel pretty sure of myself.	16	1909735.759	2.006	.011
I take a positive attitude towards myself.	16	3644575.136	2.721	.000
I have no trouble making up my mind.	16	1824817.971	1.096	.355
I trust my ability to solve new and difficult problems.	16	1482433.400	1.343	.165
On the whole, I am satisfied with myself.	16	2241405.310	1.354	.158
In general, there are more than 5 people that I could really count on to be dependable when I need help.	16	1649715.084	1.191	.269
I am very satisfied with the comfort and support that I get from others.	16	1246399.890	1.123	.328
Learning about new and different things is very important in our family.	16	1538519.627	1.236	.234
When I make a decision, I weigh the consequences of each alternative and compare them against each other.	16	2187259.253	1.216	.250
I am very satisfied with the help and support that I get from those that I count on.	16	1509212.812	1.087	.363
I know that someone will always be around if I need assistance.	16	2702813.986	1.305	.187
There is plenty of time and attention for everyone in our family.	16	2599133.349	1.452	.111
My friends give me the moral support I need.	16	3197729.305	1.452	.112

FORQ CONTINUED....				
I rely on my family for emotional support.	16	5649948.479	2.080	.008
I have a deep sharing relationship with a number of members of my family.	16	1847652.744	1.339	.167
Members of my family are good at helping me solve my problems.	16	4112393.745	2.016	.010
In my family we tell each other about our personal problems.	16	2416723.469	1.248	.225
Activities in our family are pretty carefully planned.	16	3225413.877	1.566	.072
Friends often have good advice to give.	16	2324320.364	1.294	.194
At times I think I am no good at all.	16	1435190.189	1.299	.191

Table 3. Tests of Between-Subjects Effects (Bonferroni): Affectometer

	Dependent Variable	df	Mean Square	F	Sig.
AFM	My life is on the right track.	16	1367619.456	1.095	.355
	I wish I could change some part of my life.	16	2153941.253	1.299	.191
	My future looks good.	16	4994954.780	2.168	.005
	I feel as though the best years of my life are over.	16	3774635.764	1.619	.059
	I like myself.	16	4628096.566	2.890	.000
	I feel there must be something wrong with me.	16	3943592.507	1.596	.064
	I can handle any problems that come up.	16	2551834.830	1.320	.178
	I feel like a failure.	16	2258087.524	1.492	.096
	I feel loved and trusted.	16	2650062.973	1.373	.148
	I seem to be left alone when I don't want to be.	16	4054985.851	1.554	.076
	I feel close to people around me.	16	2752333.623	1.427	.122
	I have lost interest in other people and don't care about them.	16	2820495.049	1.363	.153
	I feel I can do whatever I want to.	16	2827537.452	1.468	.105
	My life seems stuck in a rut.	16	11908736.963	4.385	.000
	I have energy to spare.	16	4517581.177	1.648	.052
	I can't be bothered doing anything.	16	6359524.456	2.238	.004
	I smile and laugh a lot.	16	2207429.206	1.227	.241
	Nothing seems very much	16	3466467.040	1.482	.100

AFM CONTINUED....				
fun anymore.				
I think clearly and creatively.	16	3625006.610	2.052	.009
My thoughts go around in useless circles.	16	2600579.286	1.254	.221
Have you ever experienced hysteria?	16	50894.253	.180	1.000

Table 4. Tests of Between-Subjects Effects (Bonferroni): Have you ever experienced hysteria?

Dependent Variable	df	Mean Square	F	Sig.
Have you ever experienced hysteria?	16	50894.253	.180	1.000

However, the Bonferroni correction results do not show precisely where the differences are in the data. The Levene's test results show for which variables those statistical significances do or do not lie in the data; and the Wilks' Lambda statistic shows which factors yield statistically significant results.

Table 5. Levene's Test of Equality of Error Variances: Satisfaction With Life Scale

SWLS	F	df1	df2	Sig.
In most ways my life is close to my ideal.	1.680	28	690	.016
The conditions of my life are excellent.	.994	28	690	.475
I am satisfied with my life.	.151	28	690	1.000
So far I have gotten the important things I want in life.	1.531	28	690	.040
If I could live my life over, I would change nothing.	2.196	28	690	.000

Table 5 ... shows an overall statistical significant result only for the statements: "In most ways my life is close to my ideal"; "So far I have gotten the important things I want in life"; and "If I could live my life over, I would change nothing" of the Satisfaction with Life Scale. This means that there is a statistical significant variance in 60% of the participants responses to this scale; and for the rest (40%) of the statements in this scale, the variance is equal.

Table 6. Levene's Test of Equality of Error Variances: Fortitude Questionnaire

FORQ	F	df1	df2	Sig.
I always feel pretty sure of myself.	4.972	28	690	.000
I take a positive attitude towards myself.	4.489	28	690	.000
I have no trouble making up my mind.	1.835	28	690	.006
I trust my ability to solve new and difficult problems.	2.143	28	690	.001
On the whole, I am satisfied with myself.	3.114	28	690	.000
In general, there are more than 5 people that i could really count on to be dependable when I need help.	1.669	28	690	.017
I am very satisfied with the comfort and support that I get from others.	1.899	28	690	.004
Learning about new and different things is very important in our family.	1.964	28	690	.002
When I make a decision, I weigh the consequences of each alternative and compare them against each other.	1.208	28	690	.213
I am very satisfied with the help and support that I get	1.422	28	690	.074

FORQ CONTINUED....				
from those that I count on.				
I know that someone will always be around if I need assistance.	1.099	28	690	.332
There is plenty of time and attention for everyone in our family.	1.852	28	690	.005
My friends give me the moral support I need.	1.264	28	690	.166
I rely on my family for emotional support.	1.720	28	690	.012
In my family we tell each other about our personal problems.	1.139	28	690	.284
Activities in our family are pretty carefully planned.	2.236	28	690	.000
Friends often have good advice to give.	1.390	28	690	.088
At times I think I am no good at all.	2.381	28	690	.000

Table 7. Levene's Test of Equality of Error Variances: Affectometer

AFM	F	df1	df2	Sig.
My life is on the right track.	1.616	28	690	.024
I wish I could change some part of my life.	1.559	28	690	.034
My future looks good.	1.392	28	690	.087
I feel as though the best years of my life are over.	1.538	28	690	.039
I like myself.	3.684	28	690	.000
I feel there must be something wrong with me.	1.288	28	690	.148
I can handle any problems that come up.	1.266	28	690	.163
I feel like a failure.	2.291	28	690	.000
I feel loved and trusted.	1.454	28	690	.062
I seem to be left alone when I don't want to be.	1.113	28	690	.314
I feel close to people around me.	1.516	28	690	.044
I have lost interest in other people and don't care about them.	2.134	28	690	.001
I feel I can do whatever I want to.	1.884	28	690	.004

AFM CONTINUED....				
My life seems stuck in a rut.	2.065	28	690	.001
I have energy to spare.	1.163	28	690	.258
I can't be bothered doing anything.	2.691	28	690	.000
I smile and laugh a lot.	1.208	28	690	.213
Nothing seems very much fun any more.	1.185	28	690	.235
I think clearly and creatively.	2.089	28	690	.001
My thoughts go around in useless circles.	1.350	28	690	.108
Have you ever experienced hysteria?	.100	28	690	1.000

The Levene's test gives statistically significant results for 70% (14/20) of responses to the statements in the Fortitude Questionnaire (Table 2). This reflects equal variance in 30% of the participants' responses to all statements whose significant level (Sig.) is more than alpha (α) at 0.05 (i.e. $p > 0.05$). Table 2 displays the Levene's test statistically significant results for 55% (11/20) of responses to the statements in the Affectometer. There is equal variance in 45% of the participants' responses to all statements whose significant level (Sig.) is more than alpha (α) at 0.05 (i.e. $p > 0.05$).

Table 8. Wilks' Lambda Statistic

Effect	Value	F	Hypothesis		Sig.
			df	Error df	
Religion * Gender * Race	Pillai's Trace .000	.(b)	.000	.000	.000
	Wilks' Lambda 1.000	.(b)	.000	667.500	.000
	Hotelling's Trace .000	.(b)	.000	2.000	.000
	Roy's Largest Root .000	.000(b)	46.000	644.000	1.000

The Wilks's Lambda statistic shows an overall statistical significance (Table 8) for participants' responses disaggregated by religion, gender and race ($p < 0,05$). This means that there are statistically significant differences in the way different religious groups, gender and race are contributing to the incidence of mass hysteria .