

CHAPTER 3

AFFECTIVE FACTORS AND THEIR IMPORTANCE IN ACADEMIC ACHIEVEMENT

3.1 INTRODUCTION

Affective factors and their relationship to academic achievement and learning have been well documented (Cooper & Hyland 2000, Marsh, Byrne & Yeung 1999 and Mboya 1999). Although they cover a wide spectrum of attitudinal, emotional and experiential dimensions, they arguably perform an important role in terms of school achievement.

Essentially these affective factors involve our feelings and emotions, as individuals, towards a given set of circumstances or conditions. Examples of these factors include the attitudes of students towards their learning environment, student motivation, the way in which students interact and relate to each other and the relationship students share with their significant others, particularly their parents and teachers (Marjoribanks & Mboya 1997).

Although affective factors in general and their influence on academic achievement in particular, has generated a considerable degree of research, much of this research has indicated that in the matrix of academic success and learning, within schools, certain affective factors seem more important than others (Mboya 1999). This has also been the case in terms of this writer's experience where the disaffected and failing school student often displays poor attitudes, lacks motivation and is driven by low self-esteem and a considerable amount of resentment towards teachers.

The writer has therefore selected for the purposes of this investigation the following affective factors:-student self-concept of academic ability (in English), student attitudes towards the subject English, and the way in which students perceive their teachers of English.

3.2 THE SELF-CONCEPT: NOTIONS OF ITS ORIGIN, HISTORY, NATURE, IMPORTANCE AND ITS RELATIONSHIP TO ACADEMIC ACHIEVEMENT

3.2.1 Introduction

Recent history has seen the self-concept assume an important role in the arena of education and psychology (Burns 1979, Hamachek 1995, Purkey 1970). As far as education is concerned the construct suggests its predictive value in terms of academic performance, whilst in the case of the latter, it is often seen as a centrally located construct as far as the concepts of individuality and personality are concerned. This study assumes the self-concept's importance as a key construct in both of these domains. In order to establish its bona fides, its roots (historically and otherwise), are not only explored but also elaborated upon.

The role of the self-concept in the educative research process has heralded a plethora of studies linking it, in a weak or strong manner, to academic performance or achievement in school. This concept has therefore become a core educational psychological one with its roots in the philosophies of both Kant and Descartes (in Magee 1985). It has also found favour in the clinical observations of both Freud and Rogers (in Kagan, Havemann & Segal 1984).

Working definitions of the terms self-concept and achievement were outlined in chapter 1. However a more extensive appraisal of these terms will be offered in this chapter since they are core concepts as far as this study is concerned.

As researchers such as Harter (1989) suggest, the self-concept has many dimensions and its role in the structure of adolescent identity and personality is instructive as far as this investigation is concerned. Importantly, Harter (1989:2) says that 'the self is clearly a social construct'. It is a construct which depends for its formation upon the input of others. Individuals cannot manufacture their own self-concepts; significant others play a critical role in the formation of the self. This notion has implications for individual

students within the school environment who form their content or subject related self-concept from an environment concerned with success or failure.

The self therefore relies on inputs from a variety of sources including peer group, school and parents. Harter (1989) also suggests that the adolescent period is a transitional one where there is an emergence of new cognitive capacities as well as societal expectations. These in turn may alter the shape and the very nature of the self-concept. Therefore she proposes that it is those adolescents who successfully navigate the journey of self-development, who then acquire a clear and real sense of the true self. Thereafter this self becomes internalised and forms the basis for further identity development: -

“...Given the emergence of new found cognitive capacities and changing societal expectations that, in consort, profoundly shape and alter the very nature of the self-concept. Adolescents who successfully navigate the journey of self-development, should acquire a clear and consolidated sense of true self that is realistic, internalised; and that will form the basis for further identity development.”
(Harter 1989:2).

She also supports the notion that there are multiple self-concepts which are domain specific for example scholastic competence, athletic competence and physical appearance. These disparate self-concepts then become internalized during the latter part of the adolescent period, often achieving an integrative homeostasis, as they fuse cognitively and mentally into individual personality.

Therefore the self-concept may be seen as an explanatory construct which endeavours to provide a tangible and rational way of conceiving a phenomenon which seemingly governs both our actions and behaviour.

This chapter addresses the self-concept in relation to the schooling process. It is this process which more often than not ascribes notions of success or failure to individual students. If for example a student performs in a weak academic manner he/she may be treated as a person who is intellectually weak. This chapter in particular and the study in general attempts to locate weak or sometimes strong academic achievement in regions

outside the cognitive, hence it addresses the self-concept and begins importantly, with its origins.

3.2.2 The origin of the self-concept

The genesis of this construct may be found in humanity's thirst for answers to fundamental philosophical questions concerning life and existence. Written history gives much credence to the spirit, soul and psyche as representations of self. During the middle ages the concept of soul was further developed by theologians who stressed its immortality and superiority to the body in whom it dwelt.

A distinct turning point, however, in humanity's conceptualization of self was elaborated by Descartes in his work entitled 'Principles of Philosophy', (in Magee 1985). His famous quip 'Cogito Ergo Sum', (I think therefore I am), suggested the element of doubt in the philosophical process. In fact he saw doubt as the principal tool of disciplined enquiry. He reasoned that if he doubted that he was thinking. Therefore he must exist.

During the lifetime of Descartes terms such as self, psyche and soul were not differentiated in the writings of the period but there seemed to be a growing realization that these phenomena represented something beyond the physiological, and that we as human beings, were seemingly governed by processes beyond our conscious control.

3.2.3 The history of the self-concept

William James (1890), often heralded as one of the most significant contributors to the notion of the self in psychology, in his seminal work entitled 'The Principles of Psychology', categorized two aspects of the global self: -

“.....personality implies the incessant presence of two elements, an objective person, known by a passing objective thought and recognized as continuing in time. Hereafter let us use the words Me and I for the empirical person and the judging thought.” (James 1890:371).

James considered the global self as both Me and I. They were different sides of the same coin. The 'I' according to James (1890) was pure experience, whilst the 'Me' was the content of that experience. The self was the subject (I) and the (Me) the object. He emphasized however, that although they can be differentiated linguistically and appear to be different from the commonsense perspective, they are in practical terms difficult to part. For example, awareness cannot be experienced without the ability to be aware of that experience. Here James creates in a sense a new construct and a new way of explaining a heretofore elusive phenomenon.

James also claimed that the empirical self comprised of four selves ranked in descending order: the spiritual self, the material self, the social self, and the bodily self. The spiritual self, according to James, encompassed our ability to think and feel and was the core of our being. The material self, on the other hand, was how we presented ourselves to the world in terms of our dress and possessions in particular; whilst the social self was more to do with the variety of groups which we are part of. Finally, the bodily self has to do with the image we project to the world. However, according to James these 'selves' combine in unique ways to constitute the totality of a person's perceptions of self. In this respect James contributed significantly to our conceptions of the self especially in terms of pre-empting more modern descriptions of the construct. He introduced a differentiated self, one which confronted an array of different circumstances and contexts.

How we regard ourselves, in terms of self-evaluation and self-esteem, in relation to the world, was very important to James. He argued that one's self-esteem largely depends upon whether or not one's position in the world is regarded as successful or otherwise, and that we all want to maintain our self-esteem if permitted to, by exigencies. He made it clear that we as individuals back ourselves in the self-esteem stakes. We avoid failure and humiliation in order to maintain our self-esteem (in Burns 1979:9).

Thus the formula for self-esteem according to James is:-

$$\text{“Self-Esteem} = \frac{\text{Success}}{\text{Pretensions}}\text{”}$$

(in Burns 1979:9)

James (in Burns 1979), brought the notion of self to the psychological forefront. As an emerging science, psychology and particularly its key tenets were characterized by controversy and disagreement in the post-James period. However the emerging psychologists during the post-James period used James's foundational work to good effect and in this respect Mead's (1934) treatise is of historical importance.

Mead's (1934) ideas about the self were as important as James's. He extended James' notion of the social self, which, according to James, arose from the recognition given to the self by significant others. Mead (1934) however believed that in the socialization process the individual internalizes the ideas and attitudes expressed by the significant or major figures in the person's life, and then expresses them as his/her own. His essential belief was that an individual develops self-attitudes which are consistent with those expressed by significant others in his/her existence. Therefore, self-esteem is largely derived from the reflected appraisal of others. This recognition (by Mead), that significant others play a key role in the formation of the self-concept in terms of providing 'feedback' to the individual is important as far as this study is concerned. If this 'feedback' is inappropriate for example within a school context, where a student feels unjust victimization or unfair marking has occurred, then that student could develop a negative attitude towards both teachers and the school. For instance a teacher's appraisal of a piece of work may cause the individual to either 'jump for joy' or to despair and to feel like giving up. This in turn could affect subsequent academic performance. Later researchers such as Harter (1989), were to confirm the importance of the significant others in terms of the formation of the self-concept.

Different explanations for the phenomenon of the self-concept emerged in the eras of the thirties, forties and fifties and were often based upon retrospective reports derived from patients in treatment for mental conditions. Therefore the formulations of Adler, Horney and Sullivan, (in Burns 1979), not surprisingly, have pathological overtones. Sullivan (in Burns 1979), supports Mead's thesis that the self has social origins and proposes that the individual is continually guarding against the loss of self-esteem. It is this loss, according to Sullivan, which causes anxiety. On the other hand, Horney (in Burns 1979),

places great emphasis on the processes of warding off the feelings of low self-esteem. Horney (in Burns 1979) also believes that certain conditions increase anxiety and therefore lessens self-esteem. These include domination, indifference, lack of respect, disparagement, lack of admiration, lack of warmth, isolation and discrimination. However, some of her ideas concur with modern views, especially where she concedes that the most vital antecedents affecting self-esteem arises within the parent-child relationship. Her major contribution, however, to the field is to alert us to the way in which individuals defend themselves against feelings of anxiety and self-degradation. She mentions one method of coping with anxiety, and that is to formulate an idealized image of one's capacities and goals. This ideal self-image, according to Horney (in Burns 1979), will have the effect of uplifting self-esteem.

Adler (in Burns 1979), is also concerned with low self-esteem and concentrates on organ deficiencies and inferiorities which produce feelings of inadequacy, but he says that support from parents and friends represent an important factor in the individual's feelings of self-worth.

Freud (in Magee 1985) also contributed to the debate concerning the self. He alludes to the self under the concept of Ego development and functioning. Freud's Ego represents all that is sane and rational in mental life in contrast to his irrational Id. The Ego, according to Freud, is a set of processes such as perceiving and thinking. It determines the content of consciousness and distinguishes between reality and imagination. Therefore, it becomes immediately comparable to the global self-concept which encompasses that totality of psychological processes which control the speed, the direction and flow of consciousness. This in turn lies at the root of purposive motivated behaviour. Thus, in the Freudian sense, Ego refers to the core of personality that controls impulses and drives from the Id and the Superego in conformity with the requirements of reality. What differentiates it from self-concept, however, is that its roots are in unconscious dynamics, whilst the self-concept is anchored in conscious awareness and subjective experience.

Nonetheless Freud's contribution to our conceptions of the self confirms that although we are aware of our self-concept especially its derivative, self-esteem, we sometimes commit ourselves to actions which we are unable to explain. This suggests that at least part of what we refer to the self-concept remains hidden from us. As far as this study is concerned we may surmise that the inability to do particular tasks within a learning environment may be explained by factors outside the direct control of the individual.

The emergence of the self-concept as a psychological factor was somewhat restricted by the progenitors and adherents to Behaviourism such as Watson, Thorndike, and Skinner (in Mwamwenda 1995). The self-concept was essentially seen as unscientific and difficult to prove involving, as it did, matters of the mind rather than behaviour. The Behaviourists, who believed in the notion of scientific proof and verifiable data, so pervaded the world of psychology that it took nearly half a century for the self-concept to fully emerge as a core psychological construct.

Eventually, however, the rigidity of Behaviourism, with its over reliance on statistical results stemming from controlled experimentation, began to show signs of dementia. Not all behaviour could be accounted for by the stimulus/response mechanism.

Later, the work of for example Erickson (1963) fuelled the debate about the central importance (in psychological theory) of the self. Others, such as Snygg and Combs (1949), and Rogers (1963), provided sufficient ammunition in terms of phenomenological theory, to lay to rest the predominance of the Behaviourists. From the sixties onward, the self-concept became firmly rooted in psychological theories, so much so that the Behaviourists, had to admit to its substance.

Rogers (1951) in particular, contributed significantly to our understanding of the phenomenon; self. Rogers (1951:154) directed his concerns towards the self-concept's clinical applications and defined self as a learned perceptual system which functions as an object in the perceptual field.

His research involved patients classifying themselves at different junctures during their treatment (counselling) using a six-category checklist and noting any differences in the answers over a period of time. Positive shifts in the patients' self-concepts were noted where counselling was successful.

Rogers (1951) therefore saw the perceived self-concept as the core of phenomenology and he utilized the concept to underpin his client-centred psychotherapy. To him, the self-concept was developed by reflexive thought from the raw material of our percepts. Thus, according to Rogers (1951), evaluative and affective attitudes attach themselves to these percepts and concepts so that each one becomes either good or bad. These evaluative items are then internalized from the culture, from others and from the self. Thus, the self-concept is an 'embattled' concept, according to Rogers (1951). It attempts to preserve a positive outlook in the face of negative experiences in order to preserve its position as that of the key factor in the drive for self-actualisation. The self-concept therefore has a basic tendency to 'actualize, maintain and enhance the experiencing organism' (Rogers 1951: 487). It can, however, lose the battle to maladjustment where incongruence exists between self-actualising tendencies of the organism and actual (negative) experiences.

Therefore, according to Rogers (1951) the self-concept is not just a slow accretion of experiences, conditionings and imposed definitions by others, but rather a configuration. Alteration of one aspect is able to alter the nature of the whole. These ideas or notions of Rogers (1951), seems to bear some resemblance to the much later work of Myburgh, Grobler and Niehaus (1999), where it is suggested that the self-concept provides a 'roadmap' for the individual which if 'tampered with' causes the individual to lose direction .

On the other hand, Snygg and Combs (in Burns 1979), saw the self-concept as the core feature of the phenomenal field of conscious experience. This phenomenal field (see figure 3.1) possesses 3 constituents according to Snygg and Coombs (in Burns 1979):

- The total perceptual field which includes the perceptions of all individuals. This is represented by the largest circle.
- Within this circle there is a smaller one which includes all those perceptions which a person holds about himself/herself irrespective of their clarity or importance at any particular moment. This is the phenomenal self.
- The core circle represents only those aspects which are deemed important or vital to the person. This is the self-concept. It is a stable concept and is composed essentially of those perceptions which seem to the individual, to be basically him/her.

Figure 3.1 THE PHENOMENAL FIELD

A

THE PHENOMENAL FIELD

THE

C _____ **SELF-CONCEPT**

SELF

Source: Burns (1979 : 35)

The work of Cooley (1902) cannot be ignored. He was a researcher of historical eminence in terms of the formation of the self-concept and contributed a slightly different but important perspective:-

“As we see.....our face, figure and dress in the glass, and we are interested in them because they are ours, and are pleased or otherwise with them according as they do or do not answer to what we should like them to be so in imagination we perceive in another’s mind some thought of our appearance, manners, aims, deeds, character, friends, and so on, and are variously affected by it.” (Cooley 1902 : 159).

Cooley’s ‘Looking Glass’ Self arises from the symbolic interaction between an individual and various primary groups. Such groups are characterized by face-to-face association, relative permanence and a high degree of intimacy between group members. The face-to-face contacts within the groups serve to produce feedback for the individual to evaluate and relate to his own person. Hence, the self-concept is formed by a trial and error process through which values, attitudes, roles and identities are learned.

Goffman (1980) also made a contribution to our conception of self. Essentially, Goffman saw it as a collaborative entity managed by the person, but existing within the dynamic of social interaction. Every context or situation would allow the genesis of a new self. As an actor would change roles and parts in a play, so would the self change depending on the context or situation. These selves would form the totality of the person. Therefore the self was seen by Goffman as representing the total person rather than the objective Me (of James).

Contemporaneously, the work of Harter (1989) focuses on the adolescent self-concept. She supports the idea that the self-concept is a social construction where the peer group and parental expectations play a major role in determining values. Byrne & Shavelson (1986:474) confirm this view when they suggest that ones perceptions of self derives from interactions with significant others, self-attributions and the overall experiential aspect of the social environment.

In order for the concept to be accepted in everyday terms by psychologists and psychiatrists in particular, and society in general, it needed to go beyond its genesis and be transformed into a useful analytical tool. This is especially important in the related and allied areas of psychology such as psychotherapy and experimental psychology. In other words, it had to move from being a peripheral concept employed by theoreticians, to one used indispensably in everyday psychology and psychotherapy. This move from a revolutionary concept (Kuhn 1970), to a normal concept began to occur during the period between the 1940's and the early 1970's.

Between the 1940's and 1950's, the first comprehensive clinical and experimental studies of self-esteem began to appear. Maslow (in Burns 1942) conducted one of the first of these clinical studies on self-esteem.

Maslow's studies triggered a series of clinical studies on the relationship of self-concept to issues such as Rorschach characteristics (Bills in Burn 1979), among others. During this time period, self-esteem also became associated with the 'client therapy' approach associated with Rogers (1951). These clinical studies, along with a growing interest in self-esteem in already established forms of psychotherapy, helped link the concept of self-esteem to success in therapy. This move expanded the concepts usefulness beyond theoretical understandings of human behaviour, to the diagnostic tools of practitioners.

During the period from the 1940's to the early 1970's, self-esteem became a central concept in experimental and survey studies in psychology and social psychology (Wylie 1961:2).

During the 1960's the empirical work on self-esteem began to multiply at a rapid pace. Within this period, two important books were published which helped to cement the self-esteem as an indispensable concept in psychological research. The first of these was Morris Rosenberg's 'Society and the Adolescent Image' (Rosenburg 1965). He was among the first to use large-scale survey research techniques to explore factors which influence self-esteem. He identified a number of elements which influence the self-esteem of adolescents, such as family structure, social class, ethnicity, and religion. He

also tied self-esteem to a series of personality and social problems such as anxiety, low occupational motivation, leadership potential and social isolation. Among Rosenberg's (1965), conclusions were that parenting and educational tactics were the two most important factors influencing the development of the adolescent's self-esteem. Rosenberg's educational 'tactics' seem to suggest the importance of using the correct strategies, within a school context, to elicit positive responses from the students. Education is not seemingly only about the delivery of the curriculum to passive 'consumers' but more about how that curriculum is delivered. This has direct implications for this study which has selected a number of affective factors which seem to play a role in academic achievement.

A second influential text was that of Stanley Coopersmith's (Coopersmith 1967). In his 1967 treatise entitled 'The Antecedents of Self-Esteem', Coopersmith concluded that parents of children with high self-esteem tend to be concerned and attentive towards their offspring and they also tend to structure the world of their children along the lines they believe to be proper and appropriate. They also permit greater freedom (for their children), within the structures they establish. Coopersmith (1967), as a result, managed to establish a link between parenting style and the level of self-esteem in children and adolescents. He brought to the fore the important role played by parents in terms of providing not only a physically nurturing environment for their offspring but also a psychologically nurturing environment which best prepares children for school. Many teachers face children in classrooms who are already disaffected and teachers then become their closest significant others and *in loco parentis* of them

The years between 1942 and 1973 saw much research on the self-esteem especially as far as measuring instruments were concerned. Instruments such as Sherwoods self-concept inventory and the Tennessee self-concept scale were used extensively (Robinson & Shaver 1973), covering both the causes and effects of self-esteem.

During this period, self-esteem became part of the normal knowledge of clinical and experimental psychology and the concept also began to infiltrate the domains of policy

makers in education. Academic performance became a key concern for psychologists as the concept of self-esteem/self-concept became more related to particular (school) subjects, such as English and Mathematics and therefore more content specific in their relationship to academic achievement in these subject areas.

The growth of the self-concept and related concepts outlined above may account for the welfare of students becoming of increasing concern. This concern in practical terms seems to have also increased the amount of school time devoted to issues outside the domain of the traditional school curriculum. For instance many secondary schools in Zimbabwe have a full-time school counsellor/advisor and workshops and seminars have been devoted to these areas of concern.

3.2.4 The nature of the self-concept

An interesting question to pose at this juncture is what gave rise to such a concept? The idea of the concept arose from the work of Descartes in the 17th century (in Magee 1985). Although from the earliest times man was aware of his unique place in the world. Another question arises as a result of the first. Is the concept an internal organizing phenomenon? Many researchers have suggested that it is. Among these researchers are Speers and Deese (1973), who argue that the self-concept involves the personality striving for self-adequacy. Therefore according to Speers & Deese (1973:147), the self-concept involves the striving for personal fulfillment; its fundamental driving force.

Thomas (1973:13), on the other hand suggests that a conceptual analysis of the self, reveals it to be a learned structure which in turn influences the learning process. In other words it is dynamic and an expression of the relationship between the self and an ever changing world or reality.

The definitions offered by Speers and Deese (1973) and Thomas (1973), are important since they both suggest that the self-concept is an active phenomenon. It is not static or unchanging but according to these researchers, it actively gathers inputs from a variety of

sources and mediates these stimuli in an effort to provide a 'homeostatic' environment for the individual

Philosophers, psychologists, historians and others have also asked questions concerning the location of the self. Most agree it is in the mind, where it manifests itself by absorbing a constant flow of positive and negative attributions, and then organizing them in a coherent pattern of 'fitness' for internal acceptance or otherwise.

Evidence also exists that the development of the self-concept is due both to the dynamics of interaction within the individual's phenomenal field (the physical, social and psychological environment), and that individual's inner experience. Therefore the question arises as to whether or not the self-concept is a stable concept or is it subject to change, since it seems to be influenced by so many factors. Harter (1989:13), particularly, refers to the adolescent period where these 'Fluctuations' occur where the adolescent may experience one attribute in a given situation and the opposite attribute in a different situation. Harter (1989:13) suggests that it is the inability to 'cognitively coordinate these disparate self-perceptions,' that can cause the adolescent angst. As a result the adolescents' 'sensitive' self-concept in the classroom could have repercussions in terms of learning and achievement in the classroom.

This question is partially answered through the process of introspection. This is where we become aware of our attitudes and feelings and the way in which they change when confronted with new or different phenomena. Another question arises; does the phenomenon order our lives?

According to many researchers (Marsh et al 1994, 1997, the phenomenon of the self-concept certainly assumes some importance as far as our educational careers are concerned. It therefore has a shaping affect on our lives leaving its imprint on an individual's expectations.

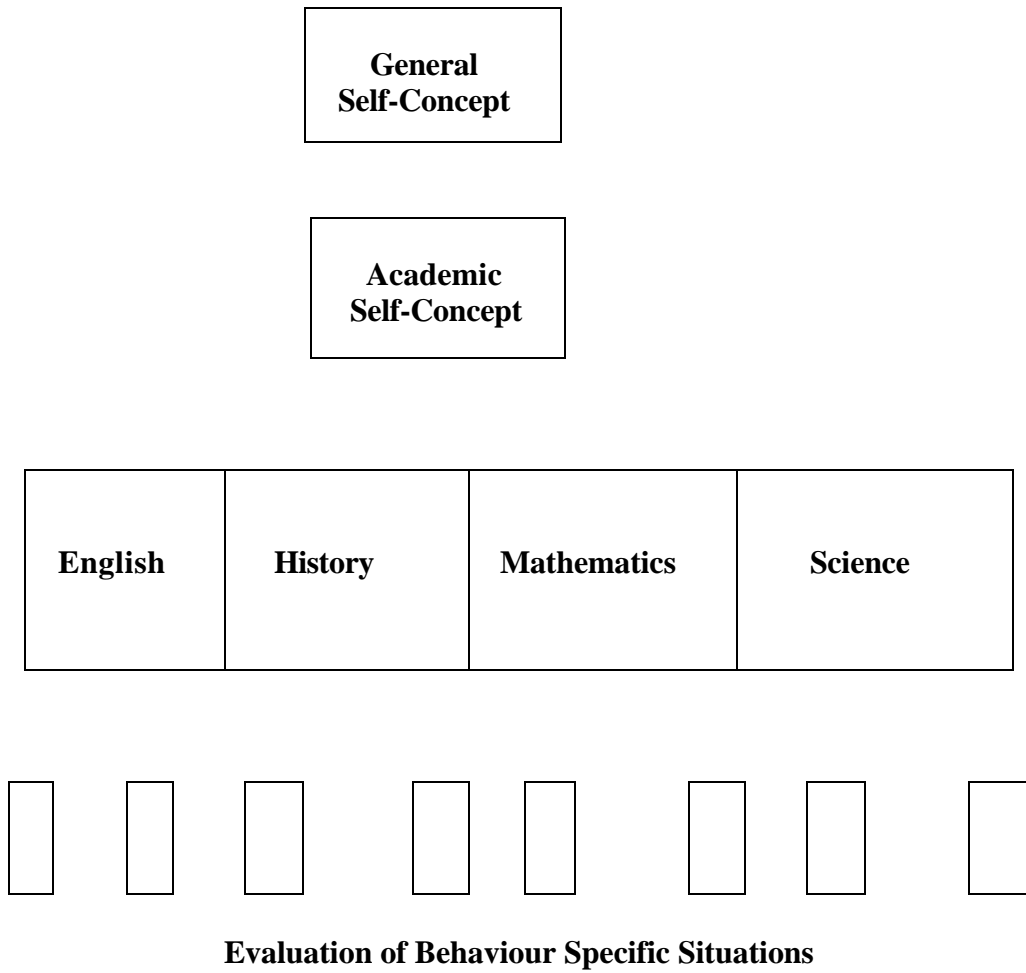
Studies by Byrne and Shavelson (1986), Marsh (1990) and others, suggest the self-concept is differentiated and hierarchical in nature (an important development in terms of this study since it supports the premise that the self-concept of academic ability in terms

of specific school subject domains, is worthy of investigation). Figures 3.2 and 3.3 illustrate not only the multi-faceted character of the self-concept, but also its differentiated and hierarchical nature.

Figure 3.2 places the general self-concept at the apex, whilst the academic self-concept becomes discipline specific below, that is in the areas of English, Mathematics, History and Science.

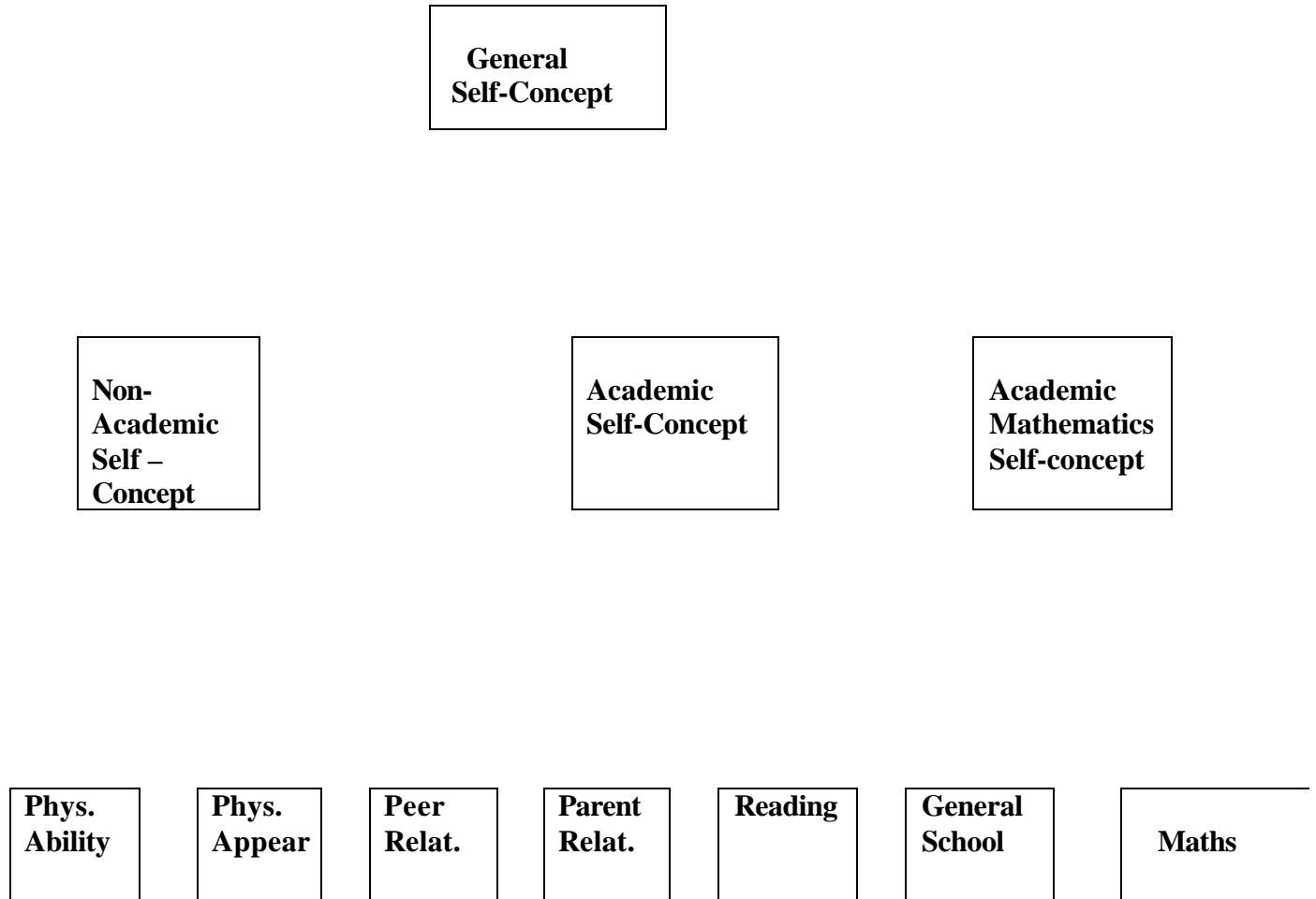
Figure 3.3 goes on further to illustrate a wider compass of the self-concept in terms of its non-academic areas.

Figure 3.2 The hierarchical nature of the self-concept



Adapted from Byrne and Shavelson (1986 : 475)

Figure 3.3 Specific hierarchically bound notions of the self-concept



Source : Marsh and Shavelson (1986 : 114)

Both figures 3.2 and 3.3 illustrate the nature of the self-concept in terms of its hierarchical nature and its multi-dimensionality. The school as the main mediating agency in society, in terms of instructing newcomers to the norms, mores and other societal necessities, plays a pivotal role in the above conceptions of the self-concept.

Figures 3.2 and 3.3 also illustrate the important role played by the key school subjects such as mathematics and English in terms of conceptions of self within the school context.

Therefore increasingly, through the foundational work of Brookover et al (1964), and the work of Marsh et al (1988), the self-concept is seen as a differentiated, hierarchical and contextually bound concept.

Brookover et al (1964) speak of the self-concept of academic ability whilst Marsh et al (1988), revisit the earlier work of Shavelson et al (1976), where the self-concept is seen as a differentiated, hierarchical and multi-faceted concept. Here, the general self-concept appears at the apex of this differentiated self-concept, whilst its parts comprise of academic and non-academic self-concepts. See figure 3.2.

The Brookover et al (1964) model of the self-concept suggests that when it is applied to a specific context like the school learning situation/environment, a relevant aspect of the self-concept, that is the person's conception of his/her own ability to learn acceptable modes of academic behaviour, comes into play. These conceptions form the *modus operandi* vis a vis conceptions of the self-concept and provide the conceptual framework for viewing the self-concept. Marsh et al (1988) provide strong support for the multi-dimensionality of the self-concept where for example, only mathematics achievement has a positive influence on mathematics self-concept, and verbal self-concept on verbal achievement.

Others, such as Howcraft (1991), presuppose the differentiated nature of the self-concept when he investigates self-esteem and its relationship to academic achievement (note that Howcraft uses self-esteem interchangeably with self-concept of ability). He notes that his study reveals a significant relationship between actual academic performance and self-concept of academic ability. Others, including Byrne (1984), Hansford and Hattie (1982), support this view, since academic performance is inextricably intertwined with the notion that self-concept is a differentiated, multi-faceted phenomenon. Marsh et al

(1999), further qualify this view by suggesting that it is the academic self-concept in particular subject areas (explored in time frame-worked waves), which correlates positively with performance or achievement. These notions have important implications for this study since they underpin the study's assumption that the self-concept is indeed multi-dimensional and that the key subjects like English may be utilized as expressions of a particular dimension of the self-concept. In terms of this study that dimension is the self-concept of academic ability in English

Marsh et al (1988), further explore this differentiation of the self-concept in what they term the I/E model which predicts the use of an internal/external frame of reference where, more specifically, English and mathematics self-concepts are distinct from one another, and therefore content specific in their relationship to performance/achievement in English and mathematics.

In other words, they suggest a definitive relationship between these self-concepts and achievement. Importantly Marsh (1990), and Hay, Ashman and Van Kraaynoord (1998), reveal that these self-concept components and their relationship to performance/achievement, seem to be reciprocal. They seem to exist on the same continuum, and one cannot divorce one from the other. These constructs seem to 'feed' on one another either negatively or positively.

A distillation of the definitions of the self-concept and its related constructs (above) would suggest that the self-concept is a descriptive and explanatory device intended to provide an insight into the workings of humanity's inner motivations, drives and reasons for action. All humans have an awareness of self (unlike most animal species). The writer of this study believes that it is the self-concept which gives us our individuality and therefore our distinctive personality.

This study recognises that arguably there seems to be a core self which may be 'hidden' by layers of experiential inputs (success or failure in school, occupational contentment or otherwise). These layered attributions seem to be subject to change. Thus if we believe

that this construct which has become known as the self-concept, is important in life and more particularly within the context of school and learning, then we must appreciate that the inner motivations and self-perceptions of individuals may be altered and changed by positive inputs and experiences within the schooling process.

3.2.5 The importance of the self-concept

The self-concept, often used interchangeably with self-esteem in its early days, has become a psychological construct and is accepted by the social science research fraternity as an important phenomenon in the matrix of human behaviour. Ward argues that the process of its 'construction' needs clarification as self-esteem moved from 'revolutionary to normal knowledge' (Ward 1997:2). Ward goes on to say that since the early 20th Century, the concept has been employed as a tool for unlocking the inherent secrets of human behaviour. It has become, suggests Ward, an acceptable everyday term with unquestionable credibility. It is used normatively where its corollaries; self-efficacy, self-evaluation, self-ideal and importantly self-concept have come to be viewed as something that everyone possesses in varying degrees. It is also seen as 'an intrinsic and universal part of the human experience' (Ward 1997:1).

Its history is also shaped by its social origins where according to Shapin it is only 'arrived at, sustained and recognised through collective action' (Shapin 1994:6).

Ward further suggests that self-esteem is arrived at epistemologically, through what he terms an 'actor network theory' (Ward 1997), which differs from the three generally propounded ontological and epistemological standpoints concerning the production of knowledge. These are: -

- Realist: where advocates place reality independently of human cognition and representational practices.
- Post-modern: where it is argued that reality cannot be separated from signs and symbols used to represent it.
- Social constructionist: where it is argued that reality is a collective production resulting from prevailing social forces or society.

Ward (1997), however, argues that these positions are self defeating and paradoxical. The realists claim that a phenomenon like self-esteem is real, but has only recently been discovered and reported, denies the important 'knowledge work' that must be accomplished for everyone to know something. The postmodernist claim that all knowledge is signification, fails to address the issue that some 'texts' are stronger and more successful than others. The social constructionist's argument that self-esteem may seem real, but is in actuality the product of social forces, quickly falls into a reflexive dilemma associated with one vocabulary trying to explain and replace another.

Ward's actor network theory suggests that the conception of the self presupposes a conceptual awareness within each individual of an organic being capable of constructing a unique identity fed by genetic, familial, fraternal and environmental factors. Other self-concept researchers and theorists (Marsh, 1990, Mboya 1998) would agree. They go on to predict a considerable relationship between the self-concept and academic achievement, and suggest its utility as a psychological construct in understanding a wide variety of behaviours. Furthermore, the concept is deemed by them and others to be of critical importance in the field of education.

This study hopes to demonstrate the value of the self-concept in terms of its relationship to academic achievement within the educational environment. There is a need at this juncture, however, to discuss the constructs relationship to academic achievement, before moving to the related considerations.

3.2.6 The self-concept and its relationship to academic achievement

The question posed by Marsh, Byrne, and Yeung (1999), 'Do changes in academic self - concept lead to changes in subsequent academic achievement?' is apposite. The recognition that education and, therefore, schooling has wide and diverse aims, and that such variables such as social class, I.Q. and parental interest can only partially explain academic performance, has signaled the growing need to bring into account other factors: the most prominent being the self-concept.

The nature of schooling itself creates situations, through tests and examinations, where individuals feel either academically secure and comfortable or inadequate and uncomfortable.

The emphasis on competitive examinations, the pressures applied by the ethos of the school, and the importance both teachers and parents place on academic success, lead inevitably to students employing academic attainment as an index of self worth.

Non-cognitive explanations for learning behaviour in school became a focus of investigation by researchers as long ago as the forties and fifties, (Snygg & Combs 1949, Staines 1958). The former emphasized the way in which the self -concept influenced the performance of both teachers and taught whilst the latter was able to conclude that the self-concept was present in all learning situations, although teachers may be unaware of its presence.

Burns (1979) reviews much of the research into the relationship between self-concept and achievement citing in particular the investigations of Brookover, et al (1964), Fink (1962), and Jones and Grieneeks (1970). These studies among others reflect the strong relationship between the self-concept and academic achievement. In fact the results of Brookover, et al's study , show positive correlations between self-concept and academic achievement, even when I.Q. is controlled. Perhaps of more importance, is that their results demonstrate that there are specific areas of self-concept of ability which relate to specific areas of academic performance.

Fink's (1962), study was important since it focused rather on the relationships between low self-esteem and academic under-achievement where he found significant patterns in support of the influence of self-concept on achievement; whereas Jones and Grieneeks (1970) examined the relationship between measures of self-perception and academic achievement. The tenet as far as the latter was concerned, was to establish whether self -perception was an accurate predictor of academic achievement. The results demonstrated a positive relationship between all measures of self-perception and academic achievement.

More recent studies, Schicke and Fagan (1994), Marsh and Yeung (1997), and Cokley (2000), demonstrate the pivotal role self-concept continues to play in its relationship to school academic achievement. Schicke and Fagan (1994), in their research, utilized both the multi-dimensional self-concept scale and the Piers-Harris self-concept scale. Findings indicate significant and moderately positive correlations between academic self-concept and academic achievement. In the case of Marsh and Yeung (1997), results were also positive, with the added dimension that three performance indicators were used instead of one. These were school marks, teacher ratings of school performance and quality of homework.

The work of Marsh, Byrne & Yeung (1999), in a re-analysis of Byrne's pioneering work where she found a negative causal relationship between academic self-concept and achievement, found instead supporting evidence for a positive relationship.

The credibility of the self-concept and its relationship to achievement is also confirmed by Craven, Marsh and Debas (1991). They suggest that the self-concept is widely valued as a desirable educational goal which is frequently posited as a mediating variable that facilitates the attainment of for example academic success in school.

Simpson, Licht, Wagner and Stader (1996) affirm the importance of what they term 'self-perception' as a predictor of school performance, but go further to differentiate various constructs which form these 'self-perceptions.' These include self-concept, perceived ability and performance expectancies.

This view is supported by others including Filozof, Albertin, Courtney, Jones, Steme, Myers, and McDermott (1998). They suggest:-

“Regardless of the directionality debate, self-esteem relates not only to current academic achievement but also to future academic and career plans”
(Filozof et al 1998:68).

Their results indicate a positive relationship between self-concept and academic achievement. The work of Abu-Saad (1999), also supports the thesis of a positive

relationship between self-concept and achievement (in this case perceived academic levels), in a study completed in Israel.

Perceptively, the pioneering work of Lecky (in Burns 1979) indicated the possibility that how students feel about their abilities may, for better or worse, consciously or unconsciously, affect their academic performance. He therefore suggests that academic achievement may not be simply an expression of students' abilities, but more importantly, of students' perceptions of those abilities.

The self-concept and its relationship to achievement have been reviewed extensively. This includes the work of Hansford and Hattie (1982), which reviewed a total of 128 studies involving 202,825 respondents and produced a data base of 1,136 correlations between self-ratings and performance measures. Correlations were found to range between .77 and .96. This important review suggests that the relationship between self-concept and academic achievement is important, despite differences in grade level (of participants), type of achievement measures, socio-economic status, ethnicity and ability. The work of Marsh (1990), Marsh, Byrne and Shavelson (1998) and Shavelson and Bolus (1982), clearly support the notion that academic self-concept is clearly differentiated from the general self-concept, and is even more highly correlated with academic achievement, than is the general self-concept.

Thus, research not only supports the idea that self-concept of ability and achievement are related, but that this relationship is strengthened when self-concept measures are linked to specific academic content areas.

In the case of the self-concept of academic ability and its relationship to academic achievement research by Byrne and Shavelson (1986:74) suggests the importance of the multi-dimensional structure of the self-concept and that the English self-concept of academic ability is an important component of the hierarchically bound general or global self-concept. Marsh (1990) substantiates this view and recognises English as a key component of self-concept of academic ability. His study (1990), attempts to determine how different frames of reference affect the formation of English and Mathematics self-

concepts. He found among other results, that better English skills were associated with substantially higher levels of English self-concept.

3.2.7 Conclusions

The discussion has hopefully provided an insight into the phenomenon of the self-concept. Its origins emanating from the minds and writings of philosophers such as Descartes are discussed, as well as the more modern conceptions (of the construct), through the writings of Herbert Marsh and others.

The self-concept as a differentiated and multi-faceted construct, as revealed above, has implications for both education and learning. If as suggested here, it operates as a mechanism which mediates individuality, provides motivation and drive and impacts on perception, then through experiential and significant other influence, it is likely to have educational repercussions. School students who enter institutions of learning arrive with their self-concepts confirmed by their previous experiences and the inputs of significant others. However the way in which individuals experience school, as implied by the research of Byrne and Shavelson (1986), especially as far as content related self-concepts are concerned, may trigger the self-concept to change and to therefore influence negatively or positively the school lives of individuals.

Therefore the school and especially teachers may be of enormous importance and influence, in terms of the way in which students' self-concepts of academic ability either thrive or fall by the wayside.

3.3 ATTITUDES TOWARDS SCHOOL: ITS NATURE AND RELATIONSHIP TO ACADEMIC ACHIEVEMENT

3.3.1 Introduction

Attitudes involve not only the way we view society and its institutions in general (as individuals and in groups), but also the strong beliefs and feelings that we have towards people and situations. In terms of this study, attitude is deemed to be an important affective factor especially as far as the institution of the school is concerned.

The attitudes we possess, as individuals, are important contributors to the way in which we progress through school. Many of the problems associated with an individual's progress, concern that individual's ability to learn and to meet with success in his or her studies. This investigation feels that school administration, teachers and even the students themselves are sometimes unaware of the multiplicity of dispositions towards authority for example, which students bring to the school environment, at an early age. By the time students reach the secondary sector, these attitudes may have arguably become ingrained, entrenched and seen as unproblematic. They may even be viewed as personality defects. Arguably when negative attitudes are recognized as a hindrance to learning, changes of a positive nature may occur.

3.3.2 The nature of attitudes

When we speak of the nature of attitudes we are not only considering what they are and where they arise, but also why we possess them in the first place.

In order to provide a basis for discussing the nature of 'attitude' we ought to define the term as concisely as possible.

Psychologists tend to define attitude as a tendency or inclination to behave in a certain way. Lefrancois (1983), for example says an attitude is typically defined as a prevailing and consistent tendency to react in a given way whilst it also has important emotional connotations. He also says that attitudes may be described as either positive or negative and that they therefore have strong motivational consequences. This notion, in turn, distinguishes them from opinions. It may on the other hand be claimed that an attitude is either a persistent feeling that influences our thoughts or indeed that thought itself precedes feelings and creates moods.

However Wade and Tavris (1990) suggest that attitudes far from being feelings, are rather opinions and that an attitude is a relatively stable opinion containing a cognitive element.

Depending on the authority an attitude is therefore a thought rather than a feeling, a feeling rather than a thought, a feeling rooted in a thought, or neither a feeling nor a thought but simply a tendency or inclination.

These competing definitions need to be examined in order to obtain a consensual view of 'attitude'. Are attitudes tendencies? Clearly they are related to behavioural tendencies but that view would not suffice since tendencies are fickle and very much dependent upon circumstance. Therefore are attitudes 'thoughts,' that is products of a conscious mental process? They could be since any behaviour arguably is preceded by thought. However if one is not aware of ones attitudes and others point out one's negative attitudes, is one able to argue convincingly that attitudes are indeed thoughts? Are attitudes therefore feelings? It may be argued that feelings are erratic and capricious, shifting from elation one minute, (praise from a teacher for example), to depression the next (admonishment from another). It seems that attitudes are remarkably constant and changes to them are severely resisted.

Therefore a more satisfactory definition is needed. In order to arrive at this definition we need to examine other views.

Two other psychological concepts need to be visited in order to explore attitude further. They are the concepts of habit and emotion. Adler (1992) offers definitions of both these terms which pave a way to defining attitudes in a more acceptable and appropriate manner. He says that attitudes may be internal as well as external and that emotion combines feeling and thought. A more satisfactory definition emerges from this perspective, that is, that 'an attitude is an emotional response driven by belief' (Ruggiero 1998:13).

From the standpoint of education the most important words in this definition are 'driven by belief.' Beliefs are ideas we hold to be true. Unlike feelings and tendencies, they may be clearly identified and articulated. We then need to examine the foundation for some attitudes and the way in which these arise from beliefs. These beliefs represent reality and

are subject to the rules of logic. Unlike feelings or tendencies they may be tested for their reasonableness. For example a teacher's job is to guide, instruct and lead to greater knowledge. If instead the teacher disparages, neglects and pours scorn on his students, can that be construed as teaching? The moment the teacher realizes that what he is doing goes against all the tenets of teaching, he will see his role as the teacher change and an attitudinal change (towards the profession), may occur.

Therefore attitudes are the stances we have adopted over a period of time which we are inclined to confirm by our perceptions of reality which in turn reflect our views and notions of that reality.

3.3.3 The attitudes of students towards school, teachers and subjects

Arguably the often negative attitudes students bring to school and the classroom may be traced to ideas of 'selfism'. Ruggiero (1998) argues that selfism arises from a 20th Century concern with the promotion of the self at the expense of restraint and denial. He suggests that words or terms such as self-criticism, self-denial, self-discipline, self-control, self-effacement, self-mastery, self-reproach and self-sacrifice have been replaced by terms such as self-assertion, self-indulgence, self-realization self-approval, self-acceptance, self-love and self-esteem. He seems to be saying that the balance has been tipped in favour of a view of self which encourages egocentrism over a rational expression of self-worth. We are not seeking to know ourselves but rather to express our desires, needs and wants over everybody else's.

These attitudes Ruggiero (1998) argues stem from mass culture where ideas and values are disseminated by the entertainment and communications media industry. In particular he suggests that mass culture promotes a spectator mentality and a desire to be entertained. This 'mass culture' seems to be in opposition to a number of other societal values. These include the following:-

- achievement through effort (mass culture extols the virtue of 'if I believe it, it is true for me')

- informed opinion (mass culture suggests that all opinions are equally meritorious)
- moral standards (mass culture extols doing what ever feels good)
- intellectual activities (mass culture teaches that the only satisfying activities are those that dazzle the senses)
- improvement through constructive change (mass culture promotes accepting and asserting one's self and inflicting self on others)
- thinking (mass culture, particularly advertising, plays on the public's needs and desires and triggers the suspension of critical judgement and the acceptance of testimony as fact)
- and finally, self-discipline where mass culture lauds immoderation and lack of restraint.

Ruggiero's (1998) assertions have a direct bearing on the attitudes many students have towards school in general and teachers and subjects in particular, in western countries. These have been well documented not only in the research literature (Witherspoon, Speight & Thomas 1997), but in the number of strategies and educational innovations embarked upon in order to combat negative attitudes towards school.

In Africa the concept of attitudes towards school is an emerging phenomenon and few studies to date, have been conducted. In a study by Chivore (1990) it is suggested that the attitudes towards the teaching profession are complex and so by extrapolation are attitudes towards school. However Chivore (1986) found that students (especially females) in Zimbabwe think highly of the teaching profession by placing it second in the top ten professions below that of nursing. He also found that the urban rural divide (in Zimbabwe), had an influence on attitudes towards the teaching profession and that many more rural students were interested in teaching than their urban counterparts.

As far as student attitudes towards subjects are concerned, Hodzi (1992:296) recognises the important role played by three factors in terms of student attitudes towards the subject science. He argues that student attitudes towards school science is not only linked to a strong positive regard for their own abilities and a positive perception of self, but also to

the school where the characteristics of teachers, peers, curriculum and classroom climate are strong contributors to attitudes towards science.

Hofman (1977: 281) also provides research evidence of pre-independent Zimbabwean students' attitudes towards English (see 2.2), and suggests that there are a number of reasons for the adoption and acceptance of the English language in the mainstream of Zimbabwean life.

These attributions confirm the writers experiences where teachers through curricula innovation, well-planned lessons and the creation of a learning environment may combat the negative attitudes created by the influence of Ruggiero's 'mass culture'

3.3.4 Attitudes and their relationship to academic achievement

It may be argued that students, who come to school with positive attitudes towards school and learning, ought to achieve academically. However this view depends upon not only the deferment of the immediate wants and needs of the student but also the students positive attitude towards the teacher by accepting the teachers role as facilitator and guide (Ruggiero 1998).

Others suggest that the challenge of academic achievement resides in pursuance of a number of research generated factors including the marrying of two practices; changes in instructional practices and changes in student motivations. These include more student choices and the improvement of students' self-esteem and by inference, attitudes towards school (Chall 2000).

3.3.5 Concluding remarks

Having derived our attitudes from a number of contending factors including our belief systems, we find them colouring the way in which we view and respond to the world. Importantly these attitudes arguably have a particular impact on our progress through

school where positive and negatives (towards school), may lead to success or indeed failure.

Chall (2000), Ruggiero (1998), and others see the importance of approaching the challenges in obtaining optimal academic success for the greater number of students, residing not only in the mechanistic/systemic dimensions of good practice and sound management, but also in the adoption of approaches (to teaching) which would change the affective behaviours of students.

The challenges inherent in the schooling processes of the 21st century reside in the ability of schools to adapt to current societal conditions which demand that every person should be employable and indeed satisfied with their occupational role. These aspirations are often enshrined in the human rights oriented constitutions of countries including that of Zimbabwe's. Therefore it rests on the mediation efforts of the schooling process to optimise levels of achievement in schools rather than using the school as a means of screening students.

3.4 STUDENT PERCEPTIONS OF THEIR TEACHERS AND ITS RELATIONSHIP TO ACADEMIC ACHIEVEMENT

3.4.1 Introduction

The question which pre-empt any discussion of student perceptions of teachers is why should educators take into account student perceptions in the first place? If we agree, and this is sometimes contentious, that the student or the child is the centre of the educative process, then surely the child's interests and desires need to be taken into account? Many educators and others would perhaps agree that the immediate desires or wants of the student need not to be addressed but rather cognizance ought to be taken of their views in order to at least partially fulfil ethical and pragmatic imperatives.

Ethically this notion raises complex issues. If, the intention of education (in democratic societies), is to develop students as independent learners, to be informed and autonomous

agents able to think for themselves and to be able to critically evaluate issues of the day, then we ought to provide sustained opportunities for them to consider their own learning in school (Cooper & Hyland 2000).

Taking students views into account raises a challenge since students are often not in a position to understand the causes, motives and implications of teaching with them in mind. However if their views are heard they are often able to offer acute observations and judgements. Therefore ethically ought they not to be heard?

Pragmatically students are able to contribute to teacher skills development and professional knowledge as Hayes observes:-

“ Teachers who make a habit of asking children their views are often surprised by the perceptiveness of their comments. Any evaluation of school effectiveness is enhanced by asking those most intimately involved in the process.”(Hayes 1996: 2).

Students are perhaps also able to offer a contribution to educational improvement as partners in the educational process as Cullingford (1991), intimates. According to Cullingford children often reveal that they are sufficiently articulate and honest to analyse what they experience. They also demonstrate consistent judgement and are able to substantiate these judgements evidentially. Cullinford also says that their views deserve to be taken into account because they know better than anyone which teaching and which learning styles are successful and which techniques of learning bring the best out in them.

Thus it seems that students are able, arguably, to make significant contributions to their own success in school, if allowed to input into the educational process, especially as far as providing feedback for the teacher is concerned. This notion will be discussed in more detail below.

3.4.2 Student perceptions of their teachers

There is perhaps an initial need to address the question of a working definition of the term perception. Black (1996:20), defines perception, in the context of the classroom, by suggesting that perceptions are an individuals own evaluations and beliefs about a particular method as distinct from its objective characteristics. These perceptions then according to Black act to form a construct of reality for each individual and will then differ from student to student. Importantly where there are common or shared perceptions of methods, according to Black, it provides insights into the learning process itself.

In her understanding of the phenomenon of perception (above), Black (1996), underscores the observation that students respond to the situation as they perceive it, and not necessarily the one defined by others, for example teachers and the school.

The model appearing below (figure 3.4), describes and defines the process of classroom learning where what students bring to the classroom (that is their perceptions of process), are factored in.

Figure 3.4 A model of Classroom Learning

Source: Black (1996 :204)

Black's model shows how students with their special characteristics (such as prior knowledge, abilities, values, expectations especially concerning achievement and learning preferences), bring to the teaching context where the teaching method used is one component (along with teacher's personality, classroom climate, and assessment methods). Derived from the presage factors are students' perceptions of the teaching context, which in turn affect their motives and decisions about how to go about the task of learning.

3.4.3 Student perceptions of teachers and its relationship to academic achievement

Research (Mathusa & Ackerman 1999:243), has indicated the importance of student perceptions of their teachers in the matrix of student behaviour and success in school. Teachers, as significant others, have a direct and consequential influence on their students' performance. Therefore, student perceptions of their teachers may provide an important insight into the dynamics of school achievement.

Masutha and Ackerman (1999), and Masutha (1996), found that most students had positive attitudes towards their teachers, but that level of academic achievement significantly influenced students' perceptions of teacher behaviour. They also confirmed the relationship between student perception (of their teachers) and academic achievement.

Others address the question of how close the perceived 'partnership' between students and teachers is (Baker & Morotz 1997), in recognizing their mutually exclusive traits. In this regard Tartwijk, Brekelmans, Wubbels, Fisher and Fraser (1998), suggest the importance of students' perceptions since they are able to mediate the influence of the learning environment on student outcomes. Clarke (1995:1) agrees and suggests that how students perceive their learning environments 'has long been accepted as having a significant influence on the quality of the students' learning outcomes.' Clarke (1995) also suggests that if the perceptions students have of their teachers are taken cognizance

of, they have the potential to arouse the students' motivation and encourage the learning process.

On the other hand, Hsiao-lin, Huey-Por and Kuo-Hua (2000), investigated student perceptions of teachers' knowledge, through an instrument which measures three areas concerning student perception of classroom procedures. These are: specific strategy instruction, generic teacher behaviours and the classroom-learning environment. They implicitly support the notion that the way in which students perceive their teachers has an influence on student achievement outcomes.

In a related study undertaken in Zimbabwe, Chivore (1986) investigates the general perceptions students have towards the teaching profession in terms of ranking it alongside other professions. Chivore's results indicate that teaching is still viewed as a worthwhile profession.

3.4.4 Concluding remarks

In educative terms the way in which students perceive their teachers, needs arguably, to be taken into account. After all the students are themselves the primary recipients of the education process and as a result their views are important. Student input however, concerns balancing the empowerment involved in making students stake-holders (in the education process), with the notion that students need to be nurtured and perhaps to a certain extent, led.

3.5 SUMMARY

Arguably if taken into account in the education process the affective factors attitudes towards English and self-concepts of ability in English along with student perceptions of their teachers of English may be considered to be of some importance.

As the literature suggests, they seem to play a significant role in determining an individual's performance within the context of school. The research review (above) seems to support the notion that affective factors along with the cognitive, are able to affect school academic performance.

Whereas this chapter focused on a review of the literature related to the selected affective factors, the following chapter reveals the results of the empirical investigation.