

**DEVELOPMENT OF THE SELF_CONCEPT
DURING ADOLESCENCE IN JORDAN**

By

RAGDA HIKMAT SHREIM

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ABSTRACT

The developmental aspect of the self-concept has not been investigated in Jordan. The main aim of this study is to develop a research project which will yield first results and indicate further research to be carried out in the future.

Theories and studies of the self-concept during adolescence particularly in W. Europe and the U.S.A. indicate the occurrence of various developments, but do not entirely agree as to their nature.

This may be in part due to different conceptualizations of the self-concept, or to different research methods. This thesis explores this question and develops an empirical study in the light of such considerations.

The main interest of this study is to explore the development of the self concept during adolescence in Jordan. Two open ended questionnaires were designed to achieve this purpose. Random sampling of students [225 males, 200 females] at the ages of 13, 15, and 17 years provided the adolescents for this study. Their reported present possible selves and possible future occupational selves were studied at each age level. At all levels sex differences were investigated. For 17 years olds differences between teaching groups were also explored. Sex differences in approach to education and vocation were considered in the analysis.

Quantitative and qualitative analysis of the responses of the self-concept descriptions mentioned by the students show certain differences in relation to the age, sex, and teaching groups. The findings are discussed in relation to the concept of unitary or multiple self-concept, attention being given to the salience of different aspects of the self in different contexts. Suggestions are made for follow-up investigations.

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INTRODUCTION

The main interest of the present study is the development of the self-concept during adolescence in Jordan, taking into consideration certain contexts thought to be the most important in adolescent life.

Psychology of the self has been a subject of study in Jordan, but most of this research has been addressed to self-concept studies focused on self-esteem, which is only one component of the self-concept and not equivalent to it. The present study extends understanding by investigating development within a broader conceptualization of the self-concept.

The self-concept as a complex structure comprises different dimensions, develops over the life span, and varies from one social context to another. Little or no work relating to these issues has been carried out in Jordan. Therefore the present study is useful to cover particular gaps in self-concept investigations in this country. Adolescent self-concept is the main concern, adolescence being seen as an important phase in the life span.

In the absence of any published empirical work on this phase, and since empirical and theoretical frames of reference largely derived from American and European psychology might be ^{inapplicable} ~~inapplicable~~ adolescents in this study are allowed to talk about themselves as they see themselves

within different specific social contexts without the constraint of predetermined question content. They are free to choose the self-concept dimensions that are salient for them at that time for each context.

The review of the related literature, theoretical and empirical, is divided into three parts to cover the essential dimensions of the self-concept in this research. The first part is an introduction to the term self-concept; its meanings, definitions, components, and the way it is used in this study relates to these. The second part is about the variation of self description in different contexts, and the third concerns the development of the self-concept during adolescence.

The empirical study is introduced in chapter four which includes the pilot studies, research design and the coding system for the self-concept responses.

Chapters five, six and seven report the results of the empirical study. Chapter five describes the quantitative and qualitative analysis of the reported present possible selves according to context at different school levels for both sexes. Chapter six uses the same type of analysis but for different teaching groups at level 3 only (students aged 17). Chapter seven deals with the explorations of the future possible occupational selves reported at the three levels by both sexes. Chapter eight discusses the findings of this study.

CHAPTER ONE

AN INTRODUCTION TO SELF-CONCEPT AS EXPLORED IN THIS STUDY

THEORETICAL FRAMEWORK

The approach to the self-concept investigation in the present study is based on the assumption that the individual has the ability to serve as both subject and object at the same time. He himself is the knower and the known. Also the self as known by the self has two aspects, the first related to present possibilities, and the other to future ones. That is, each of us knows or has some ideas about his present potentialities, and also has his own aspirations, future goals, hopes and aims, whether they are related to present possibilities or not.

These ideas have been evident in several theoretical and empirical works. William James [1890] was an early theorist of the self, and his writing still influences current thought. Self in James' [1890(1981 edition)] theory consisted of the "Me" and "I". They are two differentiated aspects of the same entity. "I" is the subject, the pure experiencer, and "Me" is the object, the content of that experience. James focused more on the self as an object, which he termed the empirical me. He described three major components of the empirical self: the material self, which includes those things that we identify with ourselves, body, clothing, family, house and all other material possessions. Social self is the recognition which a person perceives from his friends and any other social relationship. It is any role that the person willingly or unwillingly accepts. Spiritual

self is one's inner and subjective being, it is mainly thinking and feeling which are the most enduring and intimate part of the self. The idea of the reflective self can be seen in the philosophical development of phenomenology in this century [Spinelli, 1989].

The main arguments develop the following points:

- 1- Reflection on experience constitutes the self concept [the objective self]
- 2- Different experiences result in different self-concepts.
- 3- Further reflection over time affects self-concept stability and variability.

Versions of these ideas are seen in the work referred to below, though not always developed from a phenomenological position.

Social Influence on the Self

Self-knowledge is influenced by the social environment. This assumption was the core of Cooley's [1902] and Mead's [1934{1962 edition}] theories. Both Cooley and Mead conceptualized the self as a social structure arising out of interpersonal interactions. So our self-concept is significantly influenced by others in the social environment. Cooley called this sort of social self a "looking glass self". He expressed this idea in the two following lines:

"Each to each a looking-glass

Reflects the other that doth pass".[p.152]

Cooley mentioned three principal elements of the social self, the imagination of our appearance to the other person, the imagination of his judgements of that appearance, and some sort of self feeling such as pride or mortification.

In addition to the effect of significant others on the self-concept, Mead expressed clearly the idea that the term "self" is reflexive, that is, the self is an object to itself. The acquisition of the self in Mead's theory is a sequential process in which each stage makes possible the one that follows. Language is an important feature of interaction, it is the communication between the individual and society, and then between the individual and himself. In the play stage the child takes different roles of generalized others (mother, father, doctor, nurse, teacher, etc...), which in turn are used to accompany, direct and evaluate its own behaviour. In the game stage the person achieves the ability to respond to self from the generalized others' view point. Rogers [1951(1965 edition, reprinted 1986)] also used the term self-concept to refer to the way the person sees himself. Self in his theory is the central aspect of personality. He defines it as "an organized, fluid, but consistent conceptual pattern of perceptions of characteristics and relationships of the "I" or the "Me" together with values attached to these concepts [p.498]. The self develops as a result of this interaction with the environmental interaction with others, different degrees of match or mismatch being possible. Rogers' approach is helpful in understanding the function, content and formation of the self-concept.

Multiple Self-Concept

James emphasized the multiplicity of the self-concept. He claimed that a person has as many social selves as there are individuals who recognize him and carry an image of him, particularly those individuals about whose opinion he cares. James also pointed to the

conflict that may occur between the social characters which the individual might wish to adopt. For James, to make one of these roles actual, the individual must suppress the others. "So the seeker of his truest, strongest, deepest self must review the list carefully, and pick out the one on which to stake his salvation [James, 1890(1981 edition, reprinted 1983, pp.295-296)]. In raising this issue James anticipates one of the most difficult struggles in the adolescent's search for identity [Harter, 1983, p.312].

For Cooley [1902] and Mead [1934(1962 edition)] self-concepts are modified according to changes in social relationships and/or social environment.

A Unitary Self-Concept, Development and Dimensionality

Erikson [1959(1980 edition)] has developed the concept of "identity". Adolescence, the focus of the fifth stage in his theory, is the critical time during which individuals are concerned with establishing an inner sense of identity. He defined identity in terms of "conscious sense of individual uniqueness, an unconscious striving for continuity of experience, and as a solidarity with a group's ideals [1968 (1971 , reprinted 1983, P.208)].

In Erikson's theory the concept of identity is important in understanding psychological development during adolescence. Identity is significantly influenced by early childhood experiences, and by social groups with which adolescents identify.

Although adolescence is an important period in psychological development, Erikson pointed out that all human life is a struggle for

identity [McCandless, 1979]. Further reference to his work is made in chapter 3.

Newman and Newman [1986] provide an example of the approach which looks at the dimensionality of self-concept. They defined the self-concept as a general term for attributes and expectations we have about ourselves. They described seven dimensions of the self-concept, each adding content, depth and energy to the self-concept. The seven dimensions are:

- 1- Bodily Self - physical experiences
- 2- Self Recognition - physical appearance
- 3- Extensions of the Self - sense of possession
- 4- The Reflected Self - responses the self gets from others across time
- 5- Personal Competences - things that person does, and content or discontent the self-concept
- 6- Aspirations and Goals - future hopes, goals, achievement, and seeking to grow
- 7- Self-Esteem - self evaluation

Higgins [1987] differentiated between three basic domains of the self: actual self, which refers to attributes the person actually thinks he possesses; ideal self, what the person would like ideally to possess [expressed as aspirations, wishes and hopes]; and the ought self, which refers to what the individual believes he should or ought to possess [e.g duties and obligations].

A number of self-concept studies have been carried out within this structural approach. But the idea of different self concepts returns to the issue of the extent to which the self concept is to be regarded as multiple rather than integral. Present work to be discussed below [McGuire and Markus] suggests that the present self concept is highly dependent on context. Thus it becomes an empirical question as to whether the subject reflecting on the self is drawing on attributes generalized over varied experiences over time [i.e stable attributes] or on those pertaining specifically to the context concerned. This has relevance to consideration of the notion of identity, and to the issue of multiple or integral selves.

Present and Future Possibilities

Although in general the literature on the self concept shows most interest in the actual self or selves, there are many implications for future ones, which are referred to as individual's aspirations and future goals. But few if any clear distinctions are made between these two types of selves: the present, which refers to the individual's present abilities, competence, and qualifications [how he sees himself in the present time in relation to the different social contexts], and the future, which refers to future possibilities, whether positive or negative, or related to present selves or not. Possible future selves capture the individual's expectations, hopes, goals, and fears. These two sets of possible present selves or possible future selves have been considered in the literature of the self-concept, but not clearly independently from each other largely because new contexts have been

thought to modify existing unitary self-concepts rather than allowing the development of a new addition to a multiple self-concept.

James [1890(1981 edition)] referred to certain kinds of ideal aspirations. He conceptualized self-esteem as a function of the discrepancy between aspiration and achievement. In Allport's [1955] theory one of the "proprium" components, which is "self image", functions as an evaluative component for present abilities, status, and role, and for future possibilities and aspirations. Douvan and Adelson [1966] think that the normal adolescent holds two conceptions of himself, what he is and what he will be. Coleman [1974] distinguished between two types of identity, present and future. Each adolescent conceptualizes himself in relation to present and future possibilities. Erikson [1968(1971 edition)] suggested that the failure of young individuals to develop a personal identity, resulting in identity crisis or role confusion, is most often characterized by an inability to choose a job or to follow future education. The Newman and Newman [1986] approach included a component which related mainly to aspirations and future goals, hopes and aims. Rogers [1951(1965 edition)] and Maslow [1954(1987 edition)] emphasized the individual's tendency and desire to become actualized in what he is capable of becoming.

Markus' [Markus and Nurius, 1986; Markus and Nurius, 1987] approach is a recent attempt to make a clear distinction between present and future self concepts, and to investigate future possible selves as an independent notion. This work will be discussed further below.

Evidence for the separation of present and future self-concepts in present thinking comes from McGuire [McGuire & Padawer-singer, 1976] who pointed out that 18% of children at 12 years old mentioned career aspirations, and 12% of them referred to hopes and desires in response to the request "Tell us about yourself".

EMPIRICAL FRAMEWORK

The recent research direction in studies of the self presents a wide variety of new self-related conceptions [Greenwald & Pratkanis, 1984]. Possibly because the scope of self-relevant phenomena is so broad, researchers have to explore several aspects of the self-concept. The results provide many notions, definitions, and models. However, for the present study, using the approach just defined at the beginning of this chapter, the most relevant and informative related empirical work seems to be that of McGuire with respect to the spontaneous self-concept and Markus with reference to the idea of self-schemata which include the notion of possible selves. Both approaches view the self-concept as a reflective cognitive structure, that is, how the individual thinks of himself, or what sort of ideas he has about himself. McGuire views the self-concept in term of phenomenological awareness. Therefore he explored the content of self-concept by using an open-ended probe, "Tell us about yourself", in order not to constrain the subject's responses. Markus, in general, used more reactive techniques to assess individual differences in the cognitive content of the self-concept.

McGuire's Spontaneous Self-Concept Research

It is important to differentiate between self-esteem and self-concept and clarify such confusion in the field of self-concept. Focus on self-concept points further to the advantages of the spontaneous self-concept approach of giving the person the opportunity to talk about himself freely.

McGuire and his colleagues [McGuire & Padawer-singer, 1976; McGuire, McGuire, Child & Fujioka, 1978; McGuire & McGuire, 1981; McGuire & McGuire, 1982; McGuire, 1987] presented the spontaneous self-concept approach. They suggested an open-ended probe for self-concept investigations to avoid two main shortcomings in the self research through the 1970s. First, the reactive measures of the self, where the individual thinks of him/herself only on the dimensions that are chosen by the researcher, no matter how much or how little they are salient or important for him, were seen as restrictive and possibly a threat to validity. Second, to allow the person to describe him / herself on other aspects rather than the self-esteem was seen as desirable. McGuire & Padawer-Singer's [1976] empirical work suggested that only 7% of the material mentioned by adolescents in response to the question "Tell us about yourself" consisted of self-evaluation, including 2% physical evaluation, 2% intellectual evaluation, 2% moral evaluation, and 1% emotional evaluation [McGuire & McGuire, 1981].

To code and analyse the subjects' free responses, McGuire and his colleagues developed a special system to allow possible computer analysis. Participants' self-description was rewritten exactly as reported in "basic English" roughly in the form of subject / verb /

complement format. The content of the three units in any segment could be translated into the 1000 terms in a basic concept dictionary which was developed and revised by McGuire and his colleagues.

McGuire's guiding theoretical notion was that when the person is confronted by a complex stimulus whose aspects cannot be entirely encoded, the person tends to notice peculiar aspects.

This distinctiveness hypothesis is appropriately applied to one's self-perception because the self is a complex stimulus, and the individual himself is complicated and relatively aware of himself. Therefore when he is suddenly asked to talk about himself, there has to be a great amount of selectivity in what comes to consciousness and what is reported.

According to this hypothesis the individual describes himself on dimensions that are peculiar in comparison with others in the usual social environment. Distinctiveness possibly affects the self-concept both directly and indirectly: directly by awareness of our particular characteristics, indirectly, by others perceiving and responding to us in terms of our peculiarities and our adopting others' views of our selves.

In addition to personal distinctiveness as a determinant of what the person might refer to in spontaneous self-concepts, McGuire pointed out that other factors might determine what is spontaneously salient in the self concept. He referred to two groups of variables. The situational included, [a] situational demand, which refers to the way persons are asked to describe themselves; [b] stimulus intensity which means that individuals are more likely to think of a more gross characteristic, such as hair colour, than a more subtle one, such as

shape of eyebrows, and of a broken leg rather than an ingrow toenail; [c] availability [in the sense of recency, familiarity or expectation] for example, we are more likely to think of a current rather than an earlier activity.

The second group of determining factors were related to the individual's internal motivational state. It included the individual's momentary need, enduring values, and past reinforcement. According to McGuire this list of determinants of what is salient in the spontaneous self concept could be extended or revised completely. McGuire's [McGuire & Padawer-Singer, 1976; McGuire, McGuire, Child & Fujioka, 1978] empirical work suggested that people are likely to think about themselves and describe themselves in terms of their peculiar characteristics [physical, ethnic, and gender]. The more peculiar the person is on a given trait, the greater the predicted probability that he/she would have spontaneously mentioned it in describing the self. This prediction was confirmed.

However, this finding of McGuire's may not be the whole story. To be different from others within a certain context, peculiar with respect to a certain aspect or trait, [e.g. to be a white person among black people, a woman within a group of men, short between tall people, and so on], is a good reason to feel and recognise the differences between the self and others, which in turn might influence the self description. But how do individuals describe themselves in a given context when the group is almost homogeneous, or when the individual does not have such peculiar characteristics ?

People have a tendency to evaluate themselves in comparison with social or non social norms [Festinger, 1954]. Suls and Mullen [1982]

formulate their life span model of self evaluation processes according to this assumption. There is no doubt then, that people learn about themselves from others either through social comparison or direct interaction. But it seems that as some individuals focus on whatever aspects of themselves they feel most peculiar or distinctive in certain social contexts, others probably like to see themselves in terms of the norms.

Markus' Self-Schemata Research

This work has been presented by Markus [Markus, 1977; Markus, 1980; Markus & Sentis, 1982; Markus, 1983]. It is a cognitive approach, that focuses on the nature and function of self knowledge as a significant aspect of personality.

This approach helps to accommodate the self as knower alongside the self as object of knowledge [Greenwald & Pratkanis, 1984].

Markus saw the self schemata as the process of selecting, encoding, and representing information about the self. Therefore in her investigation she focused on the individual's attempts to organize, understand, and explain his or her own behaviours. Markus defined the self-schemata as "cognitive generalizations about the self, derived from past experience, that organize and guide the processing of the self-related information contained in the individuals's social experiences" [1977, P.64].

So Markus viewed the self as a system of self-schemata. The self structure consists of three types of schemata. The universal schemata refer to the basic identifying features of the self such as one's name, physical characteristics, sex, and roles. The special schemata

are developed by some individuals in certain domains, and not by others, e.g. independence, or friendliness. Finally, there are schemata that relate to just a peripheral knowledge about the self. Markus focused in her empirical work on the second type, the special schemata. Her experimental model allowed her to differentiate between two groups of people: schematic, those who have schemas about themselves in particular behavioural domains, and aschematic, those individuals who have no clear schemas about themselves in certain areas of behaviour.

These two groups were compared for their performance on a variety of cognitive tasks. These tasks were self-rating, self-description, and prediction and interpretation of behaviour as a function of self-schemata. They were used to determine if schematics and aschematics differed in how they process information about the self.

Markus found systematic differences among people in selection and processing information about the self in relation to dependency versus independency, and between schematic versus aschematic individuals in relation to this particular domain of behaviour. Both independent and dependent schematic subjects differed clearly from aschematic subjects. The former two groups were relatively polarized in their estimation of their behaviour, more sure about what types of behaviour might be characteristic of them in certain settings. Aschematics did not categorize or make distinctions on the basis of the independence or dependence of their action. It seemed that for this group independence/dependence was not a meaningful dimension of behavior. Detailed findings showed that schematic individuals used a large range of adjectives for describing the given trait [dependency /

independency), and they took less time to make their own judgements. Schematics also resisted the acceptance of information that are inconsistent with the prevailing schema. Aschematics showed considerable inconsistency across various tasks, suggesting that their responses were not being mediated by a well-defined cognitive structure.

These findings have also been replicated with respect to schemas about creativity, body weight, and sex role [Markus, 1980].

Markus pointed out that self-conceptions that comprise the self-concept are different in their importance, their value, and their relation to the present, past or future. Also they differ as to whether they are actual, ideal or possible. Markus and Nurius [1986, 1987] hypothesized that among the individual's self-conceptions are possible selves. These selves represent specific, individually significant hopes, fears, and fantasies. Possible selves function as incentives for future behaviour, providing an evaluative and interpretive context for the current view of the self. Therefore, Markus and Nurius suggested that investigations concerning self-concept should take into consideration not only present possibilities, but future ones too: what the individual hopes to be, is afraid of being, and what he cares about. Also, strategies that the individual uses to evaluate, guide and control his own behaviour, should be included in the self-concept inquiries for their importance in highlighting the individual's behaviour. It seems that possible selves are influenced by several factors according to this approach, these

factors are, self-schemata, age, social context, aspirations, and affective and motivational state.

IMPLICATIONS OF THE REVIEW FOR THE DESIGN OF THE PRESENT STUDY

In spite of the variety of self-concept definitions in theoretical and empirical work, there is a meeting point among many researchers in describing the concept as a set of "perceptions or beliefs, ideas, schemas, theories, thoughts that the individual has about himself [Rogers, 1951; Epstein, 1973; Shavelson, 1976; Schwarzer, 1984; McGuire, 1987; Markus, 1977; Rosenberg, 1979; Newman & Newman, 1986; Damon & Hart, 1988].

The self concept in the present research is in line with such a definition.

An open-ended technique is used to allow adolescents to describe themselves on dimensions they choose. Present and future possible selves are investigated separately. Future selves are then mainly related to occupational possibilities in the future in the context of present academic achievement. Present possible selves are investigated in relation to different contexts. The issue of multiple versus unitary self is explored.

CHAPTER TWO

ADOLESCENT SELF_CONCEPT AND CONTEXT OF EXPERIENCE

Although, according to Hart [1988,p.71], the influence of the social context on the adolescent's self-concept is apparent, self-concept research has proceeded with little concern for it. Adolescents' social interactions are different from one social context to another. In each context there are certain demands and expectations. Therefore, adolescents' self-descriptions might differ from one social context to another , but this notion appears to have been the subject of few studies. Hart [1988] reviewed those studies that have considered the adolescents' self-concept in social contexts. He reported only three, Gecas, 1972; Volpe, 1981; and Smollar and Youniss, 1985.

Gecas [1972] asked adolescents aged 16-17 to rate themselves, "as you ordinarily think of yourself", in five contexts: 1- In the classroom, 2- With my family, 3- With my group of friends, 4- With a member of the opposite sex, 5- With adults. The concept "myself" was measured by twelve bipolar pairs of adjectives, each on a five-point, Likert-type scale. Two dimensions of the self esteem were considered in this study, power and worth. The results suggested both stability and variability in adolescents' self-esteem across social contexts. The variability was more a function of the power dimension of self-esteem, while stability was more characteristic of the self-worth dimension.

Gecas applied the same sets of adjectives to the five contexts, but

these might not have been equally appropriate for all contexts. So there was no clear interpretation of social effect on adolescents' self-esteem. However, this study was only interested in self-evaluation, and not in self-concept.

In Volpe's [1981] study young people aged 10-24 were interviewed and asked to complete three sentence stems: "When I am with my mother, I am ___", ; "When I am with my father, I am ___"; "When I am with my close friend, I am ___". They were asked to provide three responses for each context. Volpe found differences in self-description from one social context to another. For example, self with father was described in terms of maturity more than in the other two contexts. Self-with-best-friend was characterized as open and extroverted more than in the self-with-father and self-with-mother contexts. Also there were reported positive feelings [i.e. happy, relaxed, comfortable] in the friend context more than in the other two contexts.

Although the results suggested that self-understanding varies from one social context to another, the procedure that was used to elicit self-understanding prohibited any strong conclusions [Hart, 1988, P. 77].

Further elaboration of Hart's criticisms can be made. Characteristics mentioned in one context might have occurred in the others if adolescents were given the opportunity to give some more traits. Also respondents were asked to describe themselves by using only three characteristics for each context. In this case they had to be highly selective in choosing those attributes. Selectivity is a good reason for choosing the most salient characteristics in a given context, but when the individual is forced to be highly selective in his or her

choice, the chosen attributes might be related to very recent situational events, which might in turn be relatively unstable. If participants are given more time and freedom to describe themselves, self-description might be more rich and valid, and differences between contexts might appear clearly. Also the content of self-description is more important for an overall understanding than the hierarchy of self characteristics, where grounds for assuming that first descriptors are the most important are very uncertain.

Smollar and Youniss (1985) used Volpe's methodology. The same questions were asked, but responses to self-description were categorized on the basis of content similarity into eight categories without regarding the contexts. For example, if the self-with-close-friend was described as 'open' and self-with-father characterized as 'emotional' the two selves were classified as similar, because both were defined with adjectives from the intimate/sensitive category. It is not clear in this procedure why a self described as 'open' and another as 'emotional' should be in the same category, or one described as 'friendly' and another as 'obedient' should be similar and considered in one class (Hart, 1988). Results suggested that self-concept varied remarkably across social contexts especially with respect to parent-child and close friend relations. But to describe the self by choosing only three characteristics for each context, will influence the subject to concentrate on adjectives only, especially with a sentence completion prompt. This type of self-description is not enough to differentiate the self adequately from one context to another.

In a further study Hart [1988] extended the range of the questions about the self-concept in different social contexts. Participants from Grades 5, 7, 9, and 11 were interviewed. In the first part of the interview each student responded to five questions: 1- What kind of person do you think you are ? [General self] 2- What kind of person are you when you are with your mother ? 3- with your father 4- with best friend 5- and with unknown kids [This is Hart's terminology]. Students were asked to give as many descriptors as they could to describe themselves in these different contexts.

In the second part of the interview each student was asked if the given descriptor for the general self was valid for each of the other contexts. Finally, they were asked to judge "How real I am" when with mother, father, best friend, and unknown kids.

Hart's procedure allows for more validity in identifying those features that differentiate the self across social contexts. Each characteristic that described the self as the subject thinks of it [general self] was checked to see if it also occurred in the other four contexts. For example, if the person described himself as being open he would be asked if this is also true when he is with his mother, father, best friend, and unknown kids.

By using this method to assess directly the similarity between social selves, it was possible for Hart to determine that 25% of the characteristics referred to the self are specific to the self in one social relationship. This conclusion suggested that there appears to be a core self-concept that pervades the various social selves [Hart, 1988]. This idea is important for the notion of the multiplicity of the the self-concept. Although there are as many social selves as

there are social contexts, some characteristics are not influenced mainly by the context itself, but are more general or common.

In a study using an open-ended probe, McGuire et al. [McGuire, McGuire, and Cheever, 1986] asked students aged 7-17, "Tell us about your school", and "Tell us about your family". Each question was given three minutes, whether the participants expressed themselves in writing or orally. The results showed significant differences in self-description responses between the two social contexts, school and family. McGuire et al. limited the social contexts to school and family, but there are other important social contexts in the adolescents' life. Also, subjects were asked in this study to talk about school and their families, not to describe the self within any of these social contexts. The way that questions were asked might have affected the content of self-description.

McGuire et al. used psycholinguistic measures for coding and analysing the participants' responses. The focus was mainly on verbs [state verbs versus action verbs. State verbs were classified into being state versus becoming state. Action verbs divided into overt and covert. Overt action subdivided into physical versus social, and covert into cognitive versus affective]. This was a very systematic procedure for coding and categorizing students' responses. But the method of translating the responses from one part of speech to another [verbs] might have affected the content and added some restrictions to the self-description responses. Responses as exactly reported by adolescents might be more useful and valid in understanding the content of self-description in general or in any specific social

context. Therefore it might be difficult for other researchers to make comparisons with McGuire in relation to the content of self-description. This method of spontaneous self approach is very new in self concept research.

Markus [Markus and Wurf, 1987; Markus and Nurius, 1987] conceptualized the multiplicity of self-concept in terms of the working self concept, which was defined as "continually active shifting array of accessible self-knowledge" [Markus & Wurf, 1987, P.306]. The notion is based on the idea that not all self-knowledge is equally available for thinking and memory at any time. In two different situations two different sets of self-descriptions may be active. Accordingly, self-concept might be different from one social context to another, because each context might elicit different responses.

Markus [Markus and Nurius, 1987] reported an experimental study, carried out by Ruvolo and Markus in 1986, with three groups. The first group was asked to imagine themselves in the future and to think that everything had gone as well as it possibly could. They were told to assume that they had worked very hard and achieved their goals and expectations in relation to both social and career domains. They were asked to describe this future in writing. The second group was asked to imagine themselves in future but to assume that everything has gone badly as it possibly could, none of their goals had been achieved, no matter how hard they were working.

A third group imagined themselves doing their laundry.

After several intervening tasks, members of each group were given two tasks to perform. In the first they were given a number of difficult

mathematical problems. In the second, they were asked to copy a number of different figures using their left hand. Results showed that those who imagined themselves as having a very positive future performed better than others who imagined themselves with a very negative future. On another task the researchers found that the success imagery group were significantly faster than the failure imagery group to endorse the positive possibility, while the failure group were significantly faster to endorse the negative possibility. But the groups did not differ on a measure of achievement motive. Concerning this type of finding, the researchers thought that the failure imagery group had enlisted negative possible selves in their working self-concept and accordingly they could respond faster to negative possibility than positive possibility.

Implications for the Conception of the Multiplicity of the Self-Concept:

The notion of the multiplicity of self-concept has been investigated empirically by few studies. Whatever the methodology used, and contexts taken into consideration, results, in general, suggest significant differences between the different social contexts in relation to self-description.

Such results have important implications in self-concept research. The differentiation of the self-concept into a number of different selves, suggests that it might be better to investigate the multiple selves instead of one single self. However, this approach to self-concept investigation is still in its infancy, and needs to be developed by more studies in different social contexts.

This line of research concerning self-concept has not yet been carried out in Jordan. Therefore, the present study is interested in Jordanian adolescents' self-concept within different contexts on the basis of theoretical assumptions and empirical findings concerning the multiplicity of the self-concept. Its design takes into account some of the criticisms of the studies reviewed above.

However, before reporting the study, which is developmental in design, some discussion of the literature on the development of self-concept in adolescence is indicated.

CHAPTER Three

DEVELOPMENT OF SELF_CONCEPT DURING ADOLESCENCE

This chapter first presents an overview of the main features of adolescent development and then reviews work on the development of self-concept.

ADOLESCENT DEVELOPMENT

Adolescence is a period of growth arising from both biological maturation and efforts at socialization [Newman & Newman, 1986]. It begins when the individual acquires sexual maturity and ends when independence from adults' authority is legally assured [Hurlock, 1973].

A number of qualitative changes happen during adolescence: changes in physical appearance, in cognition, in peer relationships and in, moral thinking. Experiences of such changes lead to new developments in self-concept.

The beginning of the scientific study of adolescence is generally agreed to be G. Stanley Hall's pioneering work. His thinking shaped and influenced the study of adolescence for many years.

Hall characterized adolescence as a period of storm and stress. He believed that development from childhood through adolescence was relatively discontinuous [Dusek, 1987].

Hall's view of adolescence as a period of storm and stress or as a crisis, became an important argument in theoretical and empirical work on adolescence. Ausubel [1977] and McCandless [1979] thought that adolescents undergo drastic changes in their body images especially during early adolescence. Burns [1979] stated that most surveys of normal youth do not support the conception of adolescence as a crisis period. Dusek [1987] emphasized the gradual and continuous changes that occur during this period and thought that adolescence as a time of stress and storm was just a label attributed to adolescents by adults. Bandura [1972] also stressed this point in term of a self-fulfilling prophecy - if society labels adolescents as rebellious, unpredictable and wild, then they will meet these expectations in their behaviour. He indicated that the youngsters who experience turmoil during adolescence, and there are some, are supposed to be "poorly socialized". The image of adolescence as a storm and stress period is not a definite experience for each adolescent.

In a study of middle-class adolescents and their families Bandura and Walters[1959] found that parent child relationship is an important factor influencing adolescent behaviour. When the family is loving and stable the adolescent period is relatively an easy time. Aggressive teenagers in this study consistently came from unstable homes, where fights and arguments were frequently happening. Adolescents' behavioural problems, according to Bandura, are related to, and consistent with, pre-adolescent social behaviour. Such problems are not the out come only of adolescence, or even most likely to happen during it more than any other stage. No age is free from stress and

adjustment problems. However, whether the occurrence of the developmental changes during adolescence is considered as drastic and discontinuous, or gradual and continuous, they may affect and influence the adolescent's self-concept.

As a result of bodily changes adolescents, especially girls, are expected to behave as more grown up [Dusek, 1987]. The adolescent's body image no longer fits the new appearance. However, there is a change not only in the structure of the body image but also in its importance. Body image is not of the same significance throughout this entire period of growth [Ausubel, 1977].

The rapid physical changes that occur during pubescence begin earlier in girls than in boys. Also girls, as a group, are more interested in their developing bodies than boys, because to them, their bodies are more closely related to their roles in life, especially in courtship and marriage [Hurlock, 1973]. During this period of growth adolescents, especially girls, may be characterized as unstable emotionally.

However, this has several possible interpretations. The increase in hormonal level which stimulates sex awareness and arouses the sexual drive is not accompanied by experience in handling the new situation adequately. There is a sudden need for revising the body image .

There are differences in the rate of development, and problems related to early and late maturation. Tension is related to the process of achieving emotional independency of parents.

Although the physical changes during puberty are important, they are secondary when compared with the psychological, intellectual, and

social adjustment that must occur if the individual is to emerge as an integrated personality in the adult world [McCandless, 1979].

According to Piaget [1958] adolescent cognitive abilities develop from the concrete operational level of reasoning to formal operational thought. In this stage thinking becomes more logical, more abstract, and less egocentric than in childhood. Adolescents can hypothesize and draw deductions from their hypotheses. They can understand general theories and can combine them to solve hypothetical problems. By the age of 15 adolescents may be capable of the forms of logic that adults can master. They can tackle the world's problems, but with more idealism than realism. "The adolescent becomes an adult when he undertakes a real job. It is then that he is transformed from an idealistic reformer into an achiever. In other words, the job leads thinking away from the danger of formalism back into reality [Inhelder & Piaget, 1958, p.346].

Changes in intellectual development allow the adolescent to explain the social environment in ways not previously possible. Also the acquisition of increased cognitive abilities plays an important role in the development of moral thinking. According to Piaget, the highest stage of moral development is dependent on achieving formal reasoning or abstract operations [Muuss, 1975]. Kohlberg [1975] pointed out "moral thought seems to behave like all other kinds of thought. Progress through the moral levels and stages is characterized by increasing differentiation and increasing integration, and hence is

the same kind of progress that the scientific theory represents [p. 173].

Another important aspect of adolescents' life is the social, especially experience of the peer group. This becomes more significant as the child moves into this stage of growth. Peer groups often take priority over home and school in their demands for loyalty from their members. Within the peer group adolescents learn how to achieve mature relations with their age mates of both sexes, as well as a masculine or feminine social role [Havighurst, 1953].

Adolescence is identified as a period of developing vocational interest, selecting, and preparing for, occupations [Horrocks, 1976; Havighurst, 1953; McCandless, 1979; Dusek, 1987]. This implies looking ahead to future possible selves as well as current development of the self in different contexts such as the family, the peer group and the school or workplace.

THE DEVELOPMENT OF SELF_CONCEPT

Both theoretical and empirical work has suggested that adolescence is an important time for changes in self-concept [Petersen, 1981].

However, currently there is relatively little theoretical work that specifically addresses the development of self-concept during adolescence. Erikson's description of the period of identity formation comes closest [Petersen, 1981; Harter, 1983].

Erikson and the Concept of Identity Formation

Although Erikson [1950(1963 edition), 1959(1980 edition), 1968(1971 edition)] suggested that there are new challenges and opportunities for growth in each stage of life, he gave greater attention to adolescence as a period of development than to all the other seven stages in his theory. Adolescence is the last stage in childhood and the entrance to adulthood. During this period of rapid physical, cognitive and social change adolescents' views of themselves are also modified. Accordingly, adolescents begin to feel the necessity for self definition, or the sense of ego identity. In other words, they need to find the answer to the question of who they are. In this stage adolescents become aware of what kind of characteristics they share with others, but also they recognize those that are peculiar to themselves.

Erikson stated that identity develops out of the gradual interaction of all childhood identifications, "it includes all significant identifications, but also alters them in order to make a unique and reasonably coherent whole of them" [1968(1971 edition, reprinted 1983, p.161)]. Erikson thinks that in the last stage of identity formation, the individual is likely to suffer more deeply than he ever did before or ever will again from a confusion of roles. Adolescents help one another during these years of discomfort, confusion and uncertain occupational future by forming cliques and stereotyping themselves in their ideals, clothes, idols, and enemies. They may become remarkably clannish, intolerant, and cruel to others who are different to them. Also, adolescents come into conflict with their parents when they try to assert their autonomy in order to reach maturity.

The growth of a sense of identity is influenced by the future as the individual sees it, as well as by the past and the present. It depends on whatever current roles and career models are available. However, if adolescents are interested in adult roles, this may help as a guide for their developing sense of identity, because they will begin to form their identities accordingly. Search for a personal identity also includes the crystallization of a personal philosophy of life that can help the individual.

Adolescents who achieve a satisfactory sense of identity will be more confident of their own individuality and acceptable to their society. But if ego identity at adolescence is not adequately established, the great danger, in this period, is "role confusion". In this case adolescents will continue to be confused about themselves and what they are. They will experience self-doubt, inability to settle on an occupational identity, identification with popular cultural figures, or falling in love. They will also continue to be morbidly preoccupied with what others think of them, and will continue to display intolerance, clannishness and negative attitudes towards those who are different.

The implication of Erikson's theory is that in successful development the different developing aspects of the self-concept become bound together in an integral sense of self. Conversely, the sense of self may be diffused and uncertain.

Empirical Work on the Development of Self-Concept

In a major review, Wylie [1979] summarized studies of self-esteem during adolescence or adulthood that met adequate methodological

standards of design and measurement. She came to the conclusion that there is no association between age and self-regard scores. She also pointed out that "the burden of proof still lies upon any one who claims to find an age difference in over all self regard between ages 6 and 50. When such differences are found, they need to be replicated and possible sources of them other than age per se should be explored" [p.33]. Most self-concept measures focus on self-esteem rather than the nature or developmental status of the child's self-conceptions [[Damon & Hart, 1988]. Such approaches are not very helpful in understanding the development of the self-concept, because feelings about the self are not the same as ideas and thoughts about the self. However, in the investigations addressed to self-esteem or self-concept there has been a clear indication of change in the self-concept during adolescence. The main arguments develop the following issues:

- 1- Continuity versus discontinuity of development of the self-concept or concepts.
- 2- Development of self-concept within specific social contexts.

Continuity Versus Discontinuity

Empirical work has yielded conflicting results. Some studies have suggested continuity and stability in the self-concept throughout adolescence, others have claimed radical qualitative changes.

A sample of such studies is considered chronologically in this section. This approach was chosen for its advantage in clarifying any changes that might have occurred in the approaches or techniques that

have been employed to assess the continuity or stability of the self-concept during the last three decades.

A useful starting point in respect to this issue is the work of Engel [1959]. She carried out a longitudinal study on the stability of the self-concept during adolescence. She derived her data by testing and retesting 172 public school students. She administered a Q sort technique to boys and girls at grades 8 and 10 and later to the same group when they were at grades 10 and 12. Results showed a relative stability of self-concept between grades 8 and 10 and 10 and 12. She found also that students whose self-concept was negative at the first testing were less stable in self-concept than students whose self-concept was positive. Engel also showed that subjects who persisted with a negative self-concept over the two year period showed significantly more maladjustment on the MMPI than those who persisted with a positive self-concept.

Piers and Harris [1964] investigated the level of self-esteem in students in grades 3, 6, and 10. They applied a 140-item scale to assess high and low self esteem. Their results showed that while students in grades 3 and 10 were found not to be significantly different from each other in levels of self-esteem, the students in grade 6 had significantly lower levels of self-esteem than in other two grades.

Carlson [1965] carried out a longitudinal study to investigate the self-image during adolescence. The study involved 33 girls and 16 boys

in the sixth grade who were followed up six years later in high school. Self descriptive measures were designed to measure self-esteem and social-personal orientation. Self-esteem was defined in this study as the congruence between self and ideal- self descriptions. Carlson reported that self-esteem scores for both boys and girls were identical over the 6-year period. Her findings suggested also that there were no sex differences at the preadolescent level, though 6 years later the girls were significantly more socially oriented than the boys. Dusek and Flaherty, [1981] thought that these results were somewhat difficult to interpret because the size of the sample was small , and the time period between testing was large. They thought it entirely possible that instability existed at some point during the 6-year interval between testing, followed by a return to scores similar to those in initial testing.

Mullener and Laird [1971] asked three age groups, 12, 18 and 29 to evaluate themselves on 40 personal characteristics presented in the following content areas: achievement traits, intellectual skills, interpersonal skills, physical skills, and social responsibility. The investigators argued that with age there was a change from relatively global to relatively differentiated self-evaluation within the five domains. That is, as individuals reached adulthood, they viewed themselves in an increasingly differentiated way.

In another, cross-sectional, study Monge [1973] investigated the structure of self-concept at different stages during adolescence. Adolescents completed a 21-item semantic differential scale, rating

the concept "My characteristic Self" [yourself as you most feel about yourself]. Data for 1035 boys and 1027 girls from grades 6-12 suggested that there was a very high degree of structural similarity across grade and sex in the rating of self-concept. The evidence for restructuring of the self-concept was very slight for boys and modest for girls.

In the Simmons' et al. [1973] study, four dimensions of self-image were measured, [self-consciousness, stability, self-esteem and, perceived self] among 1,917 school children from the age 8-18 to explore whether adolescence is a period of disturbance for the child's self-image. Stability of self-image was measured by a five-item Guttman Scale. [Examples: ' A kid told me: "Some days I like the way I am. Some days I do not like the way I am". Do your feelings change like this'?

How sure are you that you know what kind of person you really are?
Are you....., *Very sure, *Pretty sure, Not very sure, or Not at all sure.]

Results suggested that early adolescents [aged 12-14] showed a higher level of self-consciousness, greater instability of self-image, slightly lower global self-esteem, low specific self-esteem, and more negative "perceived self". Stability of self-image seemed to improve after this point particularly in late adolescence. The researchers concluded that there was a definite disturbance of the self-image in adolescence, particularly in early adolescence.

Coleman's [1974] cross-sectional study was based on an interview technique. He applied a sentence completion test, [e.g. Now and again I realize that]. His findings supported Engel's study. He found relative stability between the years of 13 and 17. The study reported also that the proportions in each age group who felt negatively about themselves remained constant. There were no significant differences between the two sexes at any of the age levels.

In another study Coleman et al. [1977] differentiated between two types of self-concept, the first related to the self in the present and the other to the self in the future. The researchers also applied a sentence-completion test, which was constructed to include a number of items relating to concepts of the self in the present and in the future. [e.g. "When I think about myself I...", "If I think about when I am older.....". The study included 80 adolescent boys aged 13, 15 and 16. The results showed that none of the items relating to present self yielded significant differences between age groups, whereas results from items relating to the future were statistically significantly different. The negative self-image increased with age for the future self, but not for the present self. This study was limited to boys. It would be worthwhile to consider sex differences in relation to the self in the present and the future.

Montemayor and Eisen [1977] studied self-concept development from a cognitive-structural perspective. Students aged 10, 12, 14, 16 and 18 from both sexes were asked to write 20 different answers to the prompt "Who I am". The researchers found that adolescents were more likely than children to refer to themselves with terms that were future

oriented, abstract interpersonal, and psychological. They concluded that with increasing age an individual's self-concept becomes more abstract and less concrete.

Bernstein [1980] also explored the influence of cognitive structural changes on the development of self-esteem. Three age groups, 10, 15, and 20 years, were asked three types of questions to elicit data about their self-esteem. This was analyzed in terms of differentiation, abstraction, and integration. A free response procedure was used for its advantages in descriptive research of the self.

For differentiation, results showed that there were no significant differences in the number of categories used by the groups. But there were age-related differences in the types of categories that were used. Children at age 10 were tending to refer to situational, behavioural, and emotional aspects. Adolescents at age 15 and 20 were more likely to refer to their personality characteristics, their beliefs and values, and their consideration of social rules.

For abstraction, the ability to think about the self abstractly increased significantly with age. The youngest were more concrete in describing the self. The 15-year-olds were beginning to employ the higher range of abstraction, while 20-year-olds most frequently employed the highest range of abstract responses. These data suggested that the most significant changes in the ability to abstract occurred after age 15.

Concerning integration, there were significant differences among groups in the level of integration. The 10-year-olds had the greatest difficulty integrating their self-concepts. At best, they were at a

superficial level. In contrast, all the third group's [20 year] integrations were at the two highest levels. So there was a greater ability to integrate with age.

L'Ecuyer [1981] developed a multidimensional model of the self-concept. He explored the development of the self-concept throughout the life span [the first two years - 100 years]. To investigate the developmental changes in the self-concept at any age level he applied a technique which used inference from various kinds of evidence and self-report. His long term study of the development of the self-concept clearly demonstrated that the self-concept develops all through the life cycle. He found also that the self-concept undergoes six phases of developmental changes. In relation to adolescence, results showed that new dimensions of the self appear which are perceptions in terms of ideologies, abstract identifications, self-consistency, and ambivalence.

A further 3-year longitudinal study was conducted with students in grades 5-12 by Dusek and Flaherty [1981]. The subjects completed a 21-item semantic differential self-concept scale "My characteristics self". Results indicated a very high degree of factor stability and continuity in the self-concept during the adolescent years. On the other hand Peteresen [1981] argued that self-concept declines in early adolescence. She attributed this to some combination of pubertal changes and related changes in expectations. To measure the self-image she applied the Offer Self Image Questionnaire [OSIQ].

In another longitudinal study carried out by McCarthy and Hoge [1982], the researchers applied two questionnaires, [thought by them to be the most widely used and well validated measures of global self-esteem available] the 10-item Rosenberg Self Esteem Scale, and the 25-item Coopersmith Self Esteem Inventory. The researchers found that there was a significant increase in global self-esteem during adolescence. O'Malley and Bachman [1983] also conducted a longitudinal study. Self-esteem in this study was assessed by items adapted from the Rosenberg Self Esteem Scale. Findings also indicated a significant increase in global self-esteem during the adolescent years.

In a more recent 6-year longitudinal study carried out by Silbereisen and Zank [1984] the study included adolescents between 12 and 18 years old. A questionnaire was applied, and they were asked to rate themselves on a 4-point scale. Results showed higher self-esteem among the older group. The researchers pointed out that this finding agreed with O'Mally and Bachman's conclusion. The researchers also found a decline in interpersonal awareness with the older group. They attributed this finding to an increase in self-confidence. As adolescents grew older they became less interested in others' opinion of them. Also it was thought possible that adolescents became less inclined to see themselves as central to others' thoughts.

In a more recent 3-year longitudinal study, Damon and Hart [1988] found that the developmental changes in self-understanding followed a regular and predictable course during childhood and adolescence. This study included 52 boys and girls from grades 2-11. The individuals

were interviewed, during the 3-year period, on three separate occasions, with 18 months between each testing occasion. The findings indicated that transitions from one year to the next tended to be positive and gradual.

The above concise review of the empirical evidence of the stability and continuity of the self-concept during adolescence showed that the methods used influenced the findings. Several studies that suggested considerable changes in adolescents' self-concept aimed to assess self-esteem rather than self-concept. Early adolescence was considered generally to be most significant period for changes in self-concept. Probably when researchers concentrated only on one dimension of the self-concept, the picture appeared to be overemphasized, especially in critical periods when changes in certain aspects of personality, those related to physical characteristics, are more visible than others [i.e. cognitive aspects]. Also the tendency for self-evaluation seems to be related to the context itself. When the context required estimation, individuals started to evaluate their own characteristics, while in the absence of such a stimulus the probability of self-evaluation decreased. Therefore, it is difficult to draw general conclusions about the adolescents' self-concepts from a very restricted context and limited questionnaire.

Other studies which were interested in more than self-evaluation, and used different methods that allowed individuals to express their own ideas about themselves [i.e. free response procedure, sentence completion], showed different findings. There were gradual changes or a certain degree of stability and continuity in the self-concept

during adolescence. Also several studies suggested gradual changes in the self-concept towards greater differentiation and abstraction with age.

The review has shown that studies which sample only two ages yield less information about change than those which sample of three or more points.

It is worth concluding this section by pointing out that the present study is developmental in design, sampling at three age levels. It deals with data on specific changes, especially those of differentiation and abstraction in the adolescent's self-concept. The approach used allowed the adolescents to describe themselves freely without specific prompting.

Development of Self-Concept Within Specific Social Contexts

From the theoretical section of this chapter it appears that an individual's reported self-concept may depend very much on the social context concerned; but, as mentioned in chapter 2, the studies that have been carried out in relation to the multiplicity of self-concept have been few. Those conducted with respect to the development of multiple selves within particular social contexts have been fewer. The study of Smollar and Youniss [1985], the only example the author has found of such an approach, considered the developmental changes of self-concept within different social contexts. This study was reported in part in chapter 2, but other findings of this study are related to the developmental argument. This study involved 80 young people, 20 at each of four age levels: 10-11 years [preadolescents], 14-15 years [midadolescents], 18-19 years [late adolescencents], and 22-23 years

[young adults]. Males and females were equally represented at each age level. Young people were individually interviewed and asked to give three responses to the stem: "When I am with my close friend [mother, father] I am --- ". They were also asked to state whether they had changed in their relations with their close friend, mother or father over the past 4-5 years and, if so, how they had changed. The results suggested that within the context of close friend relations, conceptions of the self underwent a qualitative change from preadolescence to adolescence. Preadolescents described themselves as extroverted, sociable and cooperative. Late adolescents referred more frequently to themselves as being intimate, sensitive, and spontaneous. Midadolescents were evenly divided between the two. In the mother-child context developmental changes were clear in relation to descriptions of the self as intimate/sensitive and as hostile/withdrawn. These categories were mentioned more frequently by adolescents and young adults than by preadolescents. The self as hostile/withdrawn was mentioned most frequently by midadolescents. In the father-child context there were no clear developmental changes, but there was a dramatic increase in description of self as hostile/withdrawn in the case of midadolescent females. In relation to this context, females were more likely than males to describe themselves as hostile, withdrawn, intimate and sensitive. It was found that females had significantly higher hostile scores in the father-child context than in the mother-child context, while males did not differentiate between them. The researchers pointed out that the developmental changes in self-concept within the parent-child context was more complex than in the



close friend context. Also, they came to the conclusion that the development of self-concept during adolescence was discontinuous. That is, the self-concepts of adolescents were qualitatively different from those of preadolescents.

Developmental changes in the three contexts, with close friend, mother and father were assessed from the views of the young people themselves. They were asked to report, for each context, if they had changed over the past 4-5 years and how. Such a strategy was useful to differentiate some developmental changes within certain contexts. However, it might be difficult to rely only on their description of these changes, because the extent to which they were aware of shifts in their traits, and sufficiently specific in their self-characterization is a matter for question. Reliability is also questionable since they were asked to provide only three responses to each context. Three characteristics were hardly likely to differentiate specific developmental changes in any of these social contexts, especially when the context was complex. It might be better to compare age groups by analyzing the subjects' free self-descriptions in relation to each context.

The issues of development and context raised in this chapter are addressed in the present study. It is designed to explore them in the light of the approach to the exploration of the self which was developed in the first two chapters.

CHAPTER FOUR
THE EMPIRICAL STUDY: DESIGN AND METHOD

GENERAL DESIGN

The present study aimed to explore the development of the adolescent self-concept. The physical, cognitive and affective changes during adolescence, referred to in the previous chapters, led to the expectation of related differences in the self-concept. The design was cross-sectional using three age levels: 12-13, 14-15 and, 16-17 years, thus enabling comparisons to be made between these age levels.

It was expected that there would be differences between the self-concepts of boys and girls. The literature reviewed earlier suggested that girls would refer more to their physical and emotional self-concept. Also the literature suggested that social and cultural factors might lead to lower self-esteem in girls. The design sampled equal numbers of boys and girls.

The research literature strongly suggested that the salient features of the self-concept might vary with the contexts in which the self was being thought about and experienced. It was decided therefore to investigate the students' self-concept with reference to those contexts referred to in various studies and thought to be most important in the lives of adolescents, e.g. the context of reflection on the physical self, the academic context and contexts of family and friends.

The academic context was expected to be particularly important, not only for the present self concept but also for concepts of the self in the future. Since schooling in Jordan allocates students at 16-17 years to different academic and vocational teaching groups it was expected that there would be differences in the self-concept between these groups.

These expectations led to a research design which compared age levels, sex differences, contexts and teaching groups and explored the interactions between them.

Two aspects of the self-concept were investigated separately in a developmental design. The first was related to present selves and the second to possible future selves. The research design in the first case allowed for explorations in terms of multiple or unitary self-concepts. The future selves were limited to possible occupations, these being of particular interest in relation to present academic self-concepts

A questionnaire with open-ended format was used for its advantage in probing self descriptions as spontaneously reported by adolescents, without any specific prompting, except that of the questionnaire format.

The students were asked, in the first questionnaire, to describe themselves in relation to five contexts thought to be the most significant during this period of development. In the second, they were asked to describe themselves according to their possible

vocational future, taking into consideration reasons the students used to evaluate and make their own personal vocational choices.

Developmental differences between age levels, and between the sexes at each level, were analysed in terms of present self-concept [within different social contexts], and future possible occupational selves. Also, relationships between the present and future selves were considered in the analysis.

The design is summarized in the following table.

Table 4.1
Design Framework for the Investigation

Age	Sex	Number of Students				
		Mirror	In/class	Out/class	Family	Friends
12-13	B	50	50	50	50	50
	G	50	50	50	50	50
14-15	B	50	50	50	50	50
	G	50	50	50	50	50
16-17	B	125	125	125	125	125
	G	100	100	100	100	100

PILOT STUDIES

In order to investigate the development of the self-concept during adolescence, an open-ended questionnaire was designed. This questionnaire was the subject of a pilot study, at the conclusion of which it was divided into separate questionnaires to probe present and future possible self-concepts. The present self-concept

questionnaire was submitted to a further pilot study to refine the questions. At the conclusion of this second pilot study both questionnaires [present and future self-concepts] were submitted to a final pilot study. All questionnaires were presented in Arabic.

First Pilot Study: Present and Future Self-Concepts

The questionnaire used in this first pilot study consisted of three items or questions: one item related to the present possible selves and two items related to the students' vocational future.

The subjects in the first pilot study were drawn from public schools in Amman in February 1987. The sample consisted of 45 boys and 45 girls representative of ages 13, 15 and 17 years [i. e. 15 students in each category].

1- **Present Self-Concept:** To explore the present self-concept the students were asked to describe themselves, using up to twelve adjectives. The students' responses to this questionnaire were found to fall into the areas of personality traits [63%], physical characteristics [22%], emotional characteristics [6%] and miscellaneous descriptions [8%]. No responses of an academic or social nature were provided by the students.

Adolescents, in general, are affected by various social expectations and demands, particularly those emanating from parents, school and peers. The questionnaire used in this pilot study was therefore thought not to be satisfactory. In particular, the responses to the questionnaire yielded an unexpected imbalance in respect to the various dimensions of the self-concept.

There are two possible explanations for these results. The first is that the word "adjective" used in the instructions to the students is more closely related to personality traits than to the other dimensions of self-concept. The second possible explanation is that the questionnaire did not invite the students to adequately describe themselves. A second questionnaire was therefore formulated to overcome the limitations of the first.

2- **Future Possible Selves:** In order to probe the students' future possible occupational selves they were asked to list up to twelve occupations that they would be interested in taking up in the future along with an additional twelve occupations that they would not be interested in. [see Appendix A1]

The overall number of occupations mentioned by the students was 83 desirable and 82 undesirable. Of these, however, the boys listed 31 more desirable and 27 more undesirable occupations than did the girls. The most desirable and undesirable occupations chosen by the students are presented in the following tables. It will be seen that in a number of cases students entered the same occupation in both their desirable and undesirable lists.

Table 4.2
Most desirable occupations

N. 90

Occupation	Girl[%]	Boy[%]	Total[%]
Engineer	64	71	68
Teacher	67	60	63
Doctor	53	62	58
Solicitor	64	47	56
Pilot	16	47	31
Chemist	49	9	29

Table 4.3
Most undesirable occupations

N.90

Occupation	Girl[%]	Boy[%]	Total[%]
Teacher	69	24	47
Dustmen	2	64	33
Doctor	44	20	32
Tailor	49	16	32
Workmen	11	47	29

It may be seen from the tables that the professions of doctor and teacher were listed with high frequency as being both desirable and undesirable occupations. Teacher was listed as a desirable occupation by 67% of the girls and 60% of the boys while at the same time teaching was given as the most undesirable by both girls [69%] and boys [24%]. The doctor however, was seen as being slightly less desirable [53% girls] and [62% boys] and less undesirable than teaching [44% girls, 20% boys]. Nevertheless this occupation appeared in both lists.

The very high percentage of girls listing teaching as both a desirable occupation [67%] and an undesirable occupation [69%] suggested that whilst many adolescent girls may see teaching as a possible occupation for them, at the same time many do not particularly favour taking it up. Thus these findings appeared to be not clear and contradictory. In addition, this questionnaire gave no indication of students' reasons for choosing occupations as either desirable or undesirable. The implication from this finding was that a different format for the questionnaire was required to probe students' opinions.

To overcome the limitations of this questionnaire a second one was designed to investigate the development of future possible

occupational selves during adolescence.

Second Pilot Study: Present Possible Self-Concepts

The aim of the second questionnaire was to determine students' perceptions of themselves in different contexts in order to increase the range of responses. The questionnaire, which was an open-ended one, consisted of five sections - the self in front of the mirror; the self in the class; the self out of class; the self in the family; and the self among friends. These sections were chosen because they were thought to be the most important in the adolescents' life, and to reflect the different dimensions of the self-concept. Reasons for these choices emerged in the review of the literature, but are also developed below.

Students were asked to describe themselves in front of the mirror in order to bring them face to face with themselves in the absence of other influences such as friends and family. It is the mirror that reflects the self as seen directly. In this context, students are free to reflect upon themselves, and to describe themselves according to their own perceptions.

Researchers have suggested that the adults who have prime responsibility for children influence their self-concepts [Burns, 1982; Bandura, 1972; Hamachek, 1978; Youniss & Smollar, 1985]. Individuals come to know themselves as a result of the treatment they receive from the important people in their lives, sometimes referred to as significant others and also from the way they behave towards these others. From

these interactions individuals learn that they are good or bad, valuable or worthless, liked or unliked, successful or unsuccessful and so on. Wylie [1961] pointed out the importance of parent-child interaction in the development of the self-concept. Burns [1982] also considered parents to be the most significant others in the child's environment, while teachers and peers become important later. Students were therefore asked to describe themselves in the family.

Peer groups and interpersonal relationships also play their part in determining self-concept. Friendships and social interactions with peers provide a climate for growth and self knowledge that the family is not able to provide. Family and friends' relationships provide different contributions, but equally valuable. Both produce important experiences for adolescents' development [Youniss & Smollar, 1985]. Students were therefore asked to describe themselves when with their friends

The school is an important institution, for adolescents spend more hours working in school than at any other activity. Also, school provides further evaluation to that the child has faced already at home. School is a context in which evaluation is pervasive, continuous and systematic. Assessments of academic work, sporting ability and social behaviour cannot be avoided [Burns, 1982]. At school, whether inside or out of the classroom, students face success and failure, acceptance or rejection and reminders of their strengths and limitations.

The school is probably second only to home in determining individuals'

views of themselves. The questionnaire therefore required the students to describe themselves at school, in the class and out of the class, for these two contexts were considered dissimilar to each other although in the same environment.

Three hundred students , 150 male and 150 female, were drawn from public schools in Amman in May 1987. They consisted of equal numbers of male and female from each of the grades of first preparatory [12-13 years], third preparatory [14-15 years] and, second secondary [16-17 years]. Students were handed the questionnaire and were asked to write down what they thought of themselves in the five contexts described earlier.

The responses obtained covered the areas of personality traits, academic achievement, emotional and physical characteristics, social relationships and personal interests. The main dimensions of the self-concept appeared therefore to have been probed by the questionnaire.

Second Questionnaire: Future Possible Selves

To investigate the future possible selves, the domains used in the present self-concept questionnaire were translated into relative domains for the future. Thus, whereas in probing the present self-concept students were asked to describe themselves in relation to school [in class and out of class], now they were asked to describe themselves in relation to their future possible occupations.

In the earlier pilot exploration of the future possible selves questionnaire, students were only asked to list desirable and

undesirable occupations. Now they were asked to firstly list possible occupations. Then they were asked to choose the most desirable and least desirable occupations from the list and to give reasons for their choices. This change was made to encourage the students to avoid the confusion between possible and desirable which seemed to be present in the first pilot study, and take time to think about their responses and to increase their awareness of their perceptions of their own abilities and future possibilities. It was thought that in this way the data obtained would be richer and more reliable. This version of the future selves questionnaire was administered in the third pilot study.

Although the questionnaire asked for second as well as first choices only the first were eventually used in the analysis. Two other questions related to physical and social aspects of the future selves not reported in this study, were also asked of the students' at the same time. Data yielded by these questions may be used to develop further research.

Third Pilot Study: Present and Future Possible Selves

In the first two pilot studies the questionnaire was administered by school counsellors and teachers. One could not be sure therefore that the conditions and administration in relation to instructions, time provided and so on, were uniform. A third pilot study was therefore carried out with 30 male and 30 female students drawn from two public schools in Amman in September 1987. A representative sample of subjects was drawn from each of the first and third preparatory and

second secondary grades.

A period of two weeks was left between the completion of the present self-concept questionnaire and the future possible selves questionnaire to avoid fatigue and minimise possible interference between the two instruments.

The purpose of the third pilot study was to estimate the average time needed for students to complete the questionnaires; to clarify the instructions, to determine the administrative procedures required and to ascertain if the students experienced any difficulties in relation to reporting their thoughts about themselves in the future.

No time limit was set for the students to complete the questionnaires, in order to avoid any possible anxiety on their part. It was found however, that one class period [45 min.] was needed to complete the present self-concept questionnaire and two class periods [90 min.] was needed to complete the future possible selves questionnaire without hurrying the students.

The instructions were found to be generally clear, and were read out by the researcher. The same researcher was on hand to answer any queries should they arise. It was found that the students experienced very few difficulties, but to describe the self in relation to the present was easier for them, especially the youngest, than to imagine the future possibilities in any domain either occupational, physical or social. Therefore the future possible selves questionnaire needed more time. The students raised more questions and asked for more explanations.

Experience in this piloting led to the decision that the researcher

would also administer the questionnaires in the main study. The final questionnaires are in Appendix A2 & A3 .

CODING OF QUESTIONNAIRE RESPONSES

Present Self-Concept

All responses were translated into English for the purpose of analysis and report. The translation was checked independently during the coding as reported below.

The questionnaire in this study was designed to investigate the development of the self or selves as currently conceived. Students were asked to describe themselves in five different life contexts, thought to be important in influencing an adolescent's self-concept. By asking open-ended questions such as "describe yourself in front of the mirror", "describe yourself in the class", " describe yourself out of the class", " describe yourself among your family", and "describe yourself among your friends", students were free to choose those dimensions that they thought best described themselves.

In order to categorize the dimensions that were chosen by students, the self-descriptive statements in response to each question were listed separately. Every statement related to the self description mentioned by every student was taken into consideration. Nearly all the responses obtained were found to fall into the categories of physical traits, academic achievement, personality traits, and emotional or social characteristics. In addition to the categories above there were a few responses in other areas such as personal interest, home background, beliefs and others' perceptions of the

self. These were coded as a miscellaneous category during the coding procedure, but no reference was made to the miscellaneous category in the analysis. These characteristics were few and distributed over several sub-categories, therefore it was thought that they did not add any significant dimension to the adolescents' self-concept in this study.

Definition of Categories

The following definitions of categories were established to guide coders in allocating responses.

Physical Category

Any statement that described the body and its condition was coded in this category e.g. features that are visible or measurable such as size, weight, height, facial features and, appearance.

Academic Category

Statements related to school work, academic achievement, success and failure at school, interest in study, school discipline and attitudes towards school were included in this category. Other skills and abilities needed for school work like attention, concentration and understanding were also coded in this category along with responses related to the class situation [e.g. class discussion].

Personality Category

This category included statements related to personality traits,

personal adjustment and, any other response that describes the person in general without reference to any social context.

Emotional Category

Statements that were related to the state of feeling, mood and, emotional stability were included in this category. For example, "I feel happy", "I cry easily".

Social Category

Statements that described the social relationships between the individual and others, including his family, his friends and, his teachers were coded in this category.

Miscellaneous Category

The miscellaneous category consisted of the following areas:

[a] **Personal Interests** - Interests cited by the students such as hobbies, pastimes and out-of-school activities were included here.

[b] **Home Background** - This category included statements related to such matter as the financial situation of the family and the place where the individual lived.

[c] **Beliefs** - Statements related to beliefs held by the students in relation to religion or life in general were coded in this miscellaneous category, [e.g. I believe in God].

[d] **Self-as Others See Me** - Statements related to how the individual thought that others saw or described him were included here also. For example, "My mother thinks I am clever" would be placed in the

miscellaneous and not the personality category since the accent was on another's perception of the student.

Categorizing Responses

Each of the total lists of students' responses were then coded into the six categories described above, according to the definitions outlined, by an independent English coder.

A second independent coder whose mother tongue was Arabic then verified the former categorization. There was total agreement on the coding of all students responses with the exception of four statements. After careful consideration, the following changes from the initial coding were made, and the definitions of categories were further clarified.

- "My parents want me to leave school in order to work" was transferred from the academic to the social category. This change was made because the emphasis here was on family relationships rather than academic work at school.

- "I prefer to be alone" was transferred from the emotional to the personality category because the statement thought to describe trait more than an emotional state.

- "I do not like my life style" was transferred from the miscellaneous [home background] to the social category. This statement was thought by the second coder with an intimate knowledge of the Arabic life

style to be related to life in Arabic society, rather than to home background.

- "I give money to my friends to make them like me". A transference from the personality to the social category was made here. This statement was thought to be more a reflection of social relationships.

A third English coder again independently coded the students responses and there was complete agreement on all categories. The coding of responses was therefore thought to be both reliable and valid.

After that, each student's coded responses were transferred to separate cards. The first face of the card was for the self-description responses within the five contexts [in front of the mirror, in class, out of class, in the family and among friends], and the six self-concept categories [physical, academic, personality, emotional, social and the miscellaneous]. The other face of the card was for information about the student, and the summary of his responses expressed in figures, in relation to the five contexts and the six self-concept dimensions. An example is given in Appendix [C] These cards were prepared for the statistical analysis.

CHAPTER FIVE

ANALYSIS OF REPORTED PRESENT POSSIBLE SELVES ACCORDING TO CONTEXT AT DIFFERENT LEVELS

INTRODUCTION

Students from both sexes at three different levels [1, 2 and 3] were asked to describe themselves in relation to five different contexts thought to be the most important in adolescent life. These contexts were: in front of the mirror, in class, out of class, in the family, and among friends.

Students' responses were coded into five main types of attributes: physical, academic, personality, social, and emotional as described in chapter four.

In order to investigate the expected significant variations and interactions between sex, level, type and context a four-way analysis of variance based on presence or absence of a type of attribute in each context was carried out. This was followed by the second analysis which was based on the total frequencies of responses in each category of attributes in each context. The second analysis was to explore the effects in the first analysis of reducing data to the presence or absence of response.

A qualitative analysis was then carried out to further understand the nature of adolescent self-description, and to follow up the development of the pictures of the self in different contexts for both sexes. This is reported in the second part of this chapter.

SAMPLE

The sample consisted of 225 adolescent boys and 200 adolescent girls drawn from ten public schools in Amman during the period October 1987 to December 1987. The students represented three academic levels, first and third preparatory and second secondary. The mean ages of these students in years and months were 12:5 [SD=.87], 14:5 [SD=.65], and 16:7 [SD=.84] respectively.

The number of students in each category together with the levels and subjects are shown in table 5.1

Table 5.1
Students, Levels, and School Subjects in Sample.

Sex	Levels								Total
	L1	L2	L3			2nd Secondary			
	1st prep	3rd prep	Art	Sc.	Com.	H/M.	Ind.	Nur.	
Male	50	50	25	25	25	25	25	-	225
Female	50	50	25	25	25	-	-	25	200
Total	100	100	50	50	50	25	25	25	425

In table 5.1 and throughout this study first preparatory is described as level 1, third preparatory as level 2 and second secondary as level 3. This table shows that there were 50 male and 50 female students in each of levels 1 and 2, with 25 males and 25 females in each category of the art, science and commercial education classes in level 3, with 25 male students in each of the hotel management and industrial classes, and 25 female students in the nursing classes.

QUANTITATIVE ANALYSIS OF DATA BY LEVEL AND SEX

FIRST QUANTITATIVE ANALYSIS

The first analysis is based on the presence or absence of responses in each category of interest. The analysis of variance was used to explore the response patterns. A number of alternative approaches was considered. The issues involved in deciding were firstly; what is the most psychologically meaningful way of scoring the responses and secondly what was the most appropriate statistical test.

Regarding the scoring, the procedure approximates a model in which the individual is asked to give a response from any of five different categories of responses. The subject was not constrained in the category he/she chose for the response. On the grounds that each category was equally probable then the responses under each category are comparable. Care was taken in the design to ensure equiprobability of responses. This was done by removing time constraints and any other prompting of the subject.

However, it is scientifically and psychologically impossible to verify equiprobability of responses in this situation. Therefore the statistics used should not presuppose this condition. To avoid this assumption the presence or absence of a category in the response was used as a scoring technique. This ignored the number of times a category is mentioned.

If equiprobability had been ensured it would have been appropriate to regard the total number of acceptable responses under each category as being a total score for that category. In a loose sense this could be describe as a frequency on target responses. Therefore it is meaningful to regard the total in each category as equivalent to the total number of acceptable responses in each category.

Statistical analyses using both techniques were carried out. Greater reliance is placed on the former method of scoring because of its psychological strength. Of course, the dichotomous data reduces the confidence one places on this technique.

The second analysis which weighted each category for the number of responses given to it was less psychologically appropriate but provided a greater range of scores approaching normalcy of distribution. By scoring both ways, it is argued that greater confidence can be placed on the results.

Contd.

The mean values for each sex for each type of response in each context are shown in table 5.2 for the different academic levels*. A four-way analysis of variance, sex[2] x level[3] x type[5] x context[5], was carried out. Since each student's responses were analysed across all contexts and types the analysis allowed for repeated measures across these two variables. The results are shown in table 5.3, and the statistically significant comparisons are discussed below. The interactions within the significant overall differences between sex, context, level and type are of most interest, but it should be noted that, overall, girls provided more responses than boys, there were variations between contexts, and the older students provided more responses than the younger. These findings, shown in tables 5.3 to 5.7, were unsurprising.

* In these and all subsequent tables the figures are given as a correction to 2 decimal places for ease of presentation.

Contexts and attributes are abbreviated as follows:

Mirror	Mr	Physical	Ph
In Class	IC	Academic	Ac
Out of Class	OC	Personality	P
Family	Fa	Social	S
Friends	Fr	Emotional	E

Table 5.2
Mean-Self Description Responses

Level 1

Context	Type									
	Ph		Ac		P		S		E	
	M	F	M	F	M	F	M	F	M	F
Mr	.64	.88	.08	.06	.28	.38	.02	.10	.12	.08
IC	.06	.06	.66	.64	.32	.40	.20	.36	.14	.14
Oc	.06	.02	.06	.16	.08	.24	.56	.64	.16	.32
Fa	.00	.02	.10	.16	.30	.44	.64	.88	.40	.50
Fr	.02	.00	.02	.12	.32	.38	.68	.80	.28	.40

Level 2

Context	Type									
	Ph		Ac		P		S		E	
	M	F	M	F	M	F	M	F	M	F
Mr	.56	.64	.12	.04	.58	.50	.10	.16	.00	.18
IC	.02	.04	.66	.74	.48	.30	.40	.34	.12	.20
OC	.10	.08	.18	.08	.22	.40	.54	.48	.20	.28
Fa	.02	.04	.12	.04	.46	.52	.66	.86	.16	.38
Fr	.02	.00	.14	.04	.38	.52	.76	.78	.06	.36

Level 3

Context	Type									
	Ph		Ac		P		S		E	
	M	F	M	F	M	F	M	F	M	F
Mr	.54	.70	.18	.03	.47	.37	.22	.13	.11	.35
IC	.05	.04	.65	.65	.40	.46	.30	.43	.18	.23
OC	.07	.04	.26	.15	.28	.40	.43	.47	.27	.30
Fa	.02	.04	.23	.14	.54	.60	.83	.83	.41	.45
Fr	.03	.03	.10	.03	.41	.44	.86	.79	.24	.41

Table 5.3

ANOVA for sex[2] x level[3] x context[5] x type[5] with
repeated measures across context and type.

Source	SS	df	Ms	F	P
Level	3.91	2	1.96	12.25	.000*
Sex	4.58	1	4.58	28.69	.000*
Level x Sex	1.166	2	.83	5.19	.006*
error	66.90	419	.16		
Context	12.07	4	3.02	28.00	.000*
Level x Context	1.35	8	.17	1.57	.129
Sex x Context	.43	4	.11	1.00	.406
Level x Sex x Context	1.28	8	.16	1.49	.156
error	180.62	1676	.11		
Type	147.88	4	36.97	159.37	.000*
Level x Type	6.70	8	.84	3.61	.000*
Sex x Type	5.23	4	1.31	5.63	.000*
Level x Sex x Type	2.63	8	.33	1.42	.184
error	388.78	1676	.23		
Context x Type	338.64	16	21.16	137.79	.000*
Level x Context x Type	9.91	32	.31	2.02	.001*
Sex x Context x Type	6.53	16	.41	2.66	.000*
Level x Sex x Context X Type	5.79	32	.18	1.18	.225
error	1029.78	6704	.15		

1-Level x Sex

This interaction is statistically significant [$P < .01$]. The relevant means are shown in table 5.4

Table 5.4
Mean self-description responses for each level and sex.

Level	Male	Female	Overall mean
1	.25	.33	.29
2	.28	.32	.30
3	.32	.34	.33
Overall mean	.28	.33	.31

It appears from this table that girls mentioned more responses than boys across all three levels, but the margin of differences decreased significantly with level. The trend is evident from figure 5.1*

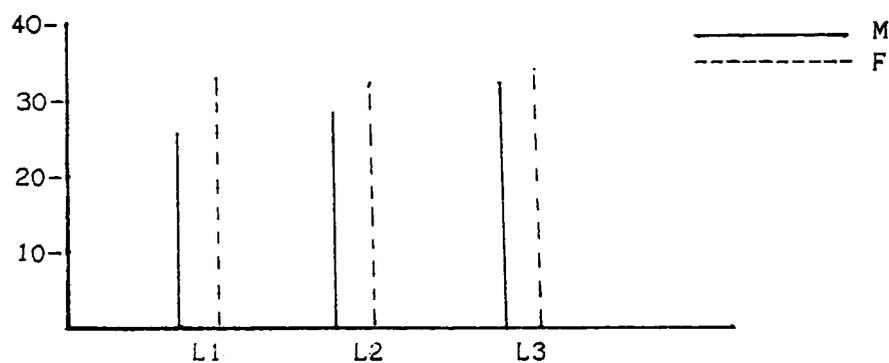


Figure 5.1 ,Mean self-description responses for each level and sex.

* In this and subsequent figures the decimal points on the mean scale are omitted

2- Type x Level

This interaction is statistically significant [$P < .01$]. The relevant means are shown in table 5.5

Table 5.5
Mean self-description responses for levels across types.

Level	Type					Overall mean
	Ph	Ac	P	S	E	
1	.18	.21	.31	.49	.25	.29
2	.15	.22	.44	.51	.19	.30
3	.16	.24	.44	.53	.29	.33
Overall mean	.16	.22	.40	.51	.24	.31

Overall significant differences between types show more responses in social and personality categories than in emotional, academic and physical categories. But personality and social categories may be expected to contain more responses if they are less context specific and permeate all contexts.

Students in level 1 mentioned more physical characteristics than the others in levels 2 and 3, otherwise the types tend to follow the overall pattern of increase with age especially in the personality and social categories.

Responses in the emotional category have been mentioned more frequently by the students in levels 1 and 3. Possibly these differences related to the physical changes with the younger and to the social relationships with the older students. The physical

changes that usually happen at the age of 12 produce, in general, different kind of emotional feelings, and the required social conformity found in Jordan at the age of 16 also generates emotion. The variation within grade and type are illustrated in figure 5.2

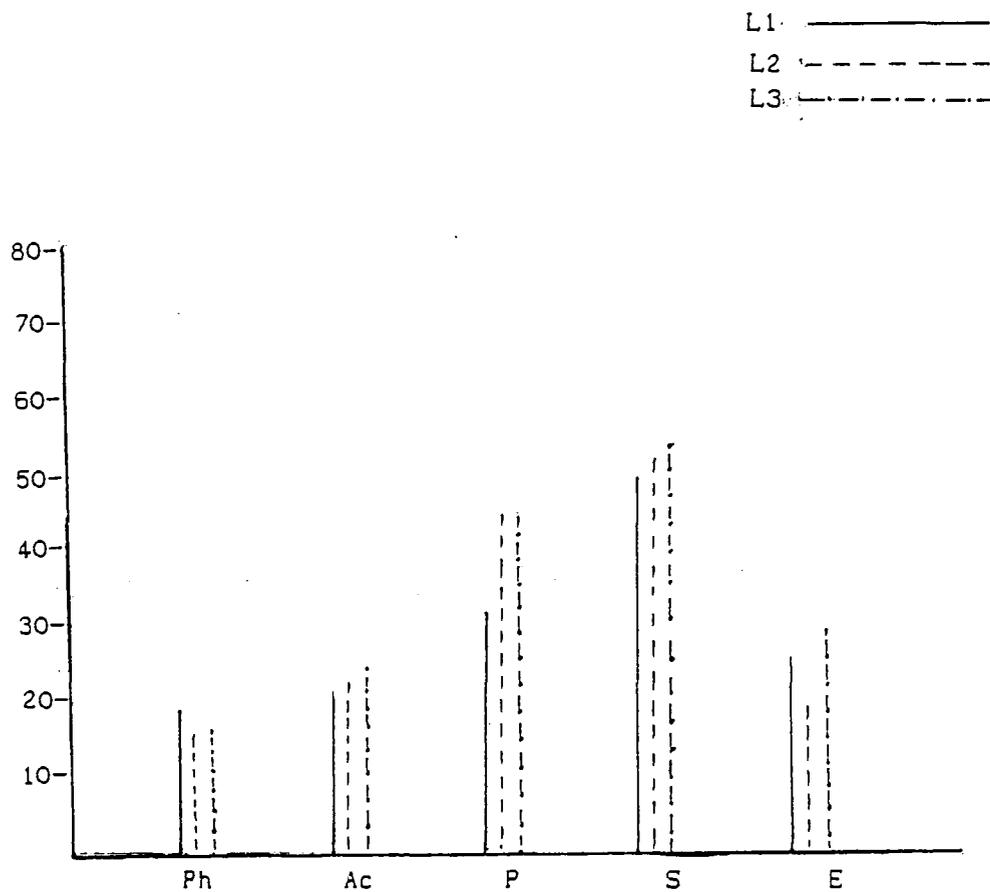


Figure 5.2 , Mean self-description responses for level across type.

3-Type x Sex

This interaction is statistically significant [$P < .01$]. The relevant means are shown in table 5.6

Table 5.6
Mean self-description responses for sex across type.

Sex	Type					Overall mean
	Ph	Ac	P	S	E	
Boys	.15	.24	.37	.48	.19	.29
Girls	.18	.21	.42	.54	.31	.33
Overall mean	.17	.23	.40	.51	.25	.31

It is clear from this table that responses related to academic achievement appear more frequently in the boys' answers. Responses concerning the other aspects of the self-concept, namely physical, personality, social and emotional are more frequent in the girls' responses to the questionnaire. This is clearly seen in figure 5.3.

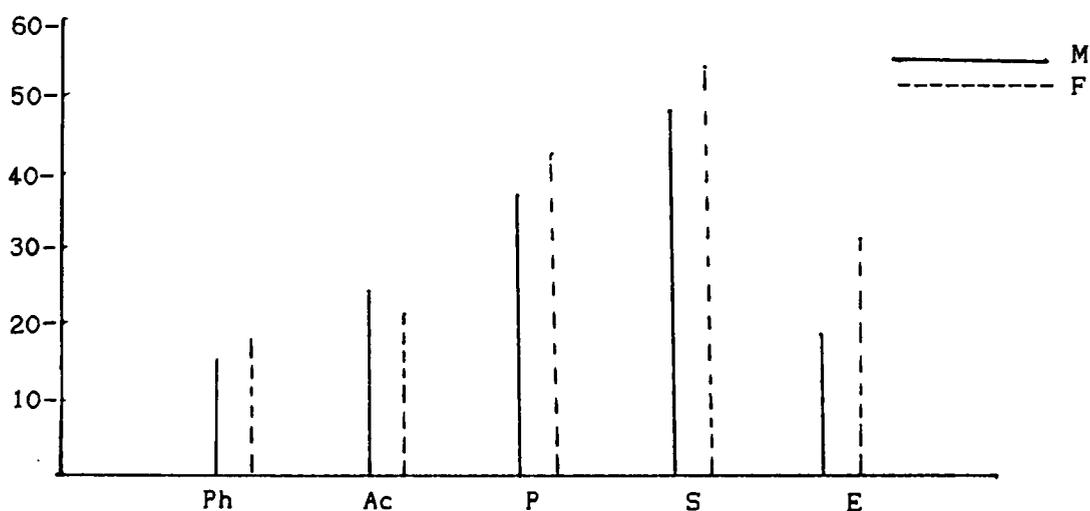


Figure 5.3, Self-description responses for sex across type.

4-Context x Type

This interaction is statistically significant [$P < .01$]. The relevant means are shown in table 5.7

Table 5.7
Mean self-description responses for context across type.

Context	Type					Overall mean
	Ph	Ac	P	S	E	
Mirror	.66	.09	.41	.12	.14	.28
In class	.05	.67	.39	.34	.17	.32
Out of class	.06	.15	.27	.52	.26	.25
Family	.02	.13	.48	.78	.38	.36
Friends	.02	.08	.41	.78	.29	.32
Overall mean	.16	.22	.39	.51	.25	.31

There are significant differences between contexts, fewer responses in front of the mirror and out of class than inside class and social contexts. It is clear from this table also that the self-descriptions vary across contexts:

1- Physical characteristics appear clearly in the students' responses to the self in front of the mirror.

2- Academic achievement is the prominent aspect of the self-concept when the students describe themselves inside the classroom.

3- Personality characteristics seem to distribute among the five contexts, with different frequencies, they do not relate mainly to a certain context. Possibly they are more common and stable, and not influenced by the context that much.

4- Concepts about the self in relation to others appear more frequently in the situations that need social communication like family, friends, and teachers, but not in front of the mirror.

5- Responses related to the emotional attributes tend to appear in a social context too, mainly within the relationships among family and friends.

The variations are illustrated in figure 5.4 , where the more context sensitive physical, academic and social attributes are presented first, and the more pervasive personality and emotional attributes are present second. The overall pattern of interaction suggests that the students did indeed respond carefully to the questionnaire, taking each context seriously.

It also shows the strength of certain contexts on the perception of self, and suggests that there might be a range of possible selves for an individual related to their current life experience.

In order to explore the further interactions with sex and level without the interference of variation from the main and two-way effects, this variation was removed as described by Guilford [1973] P.246.

Table 5.8 shows the adjusted scores for context x type for both sexes at all levels combined.

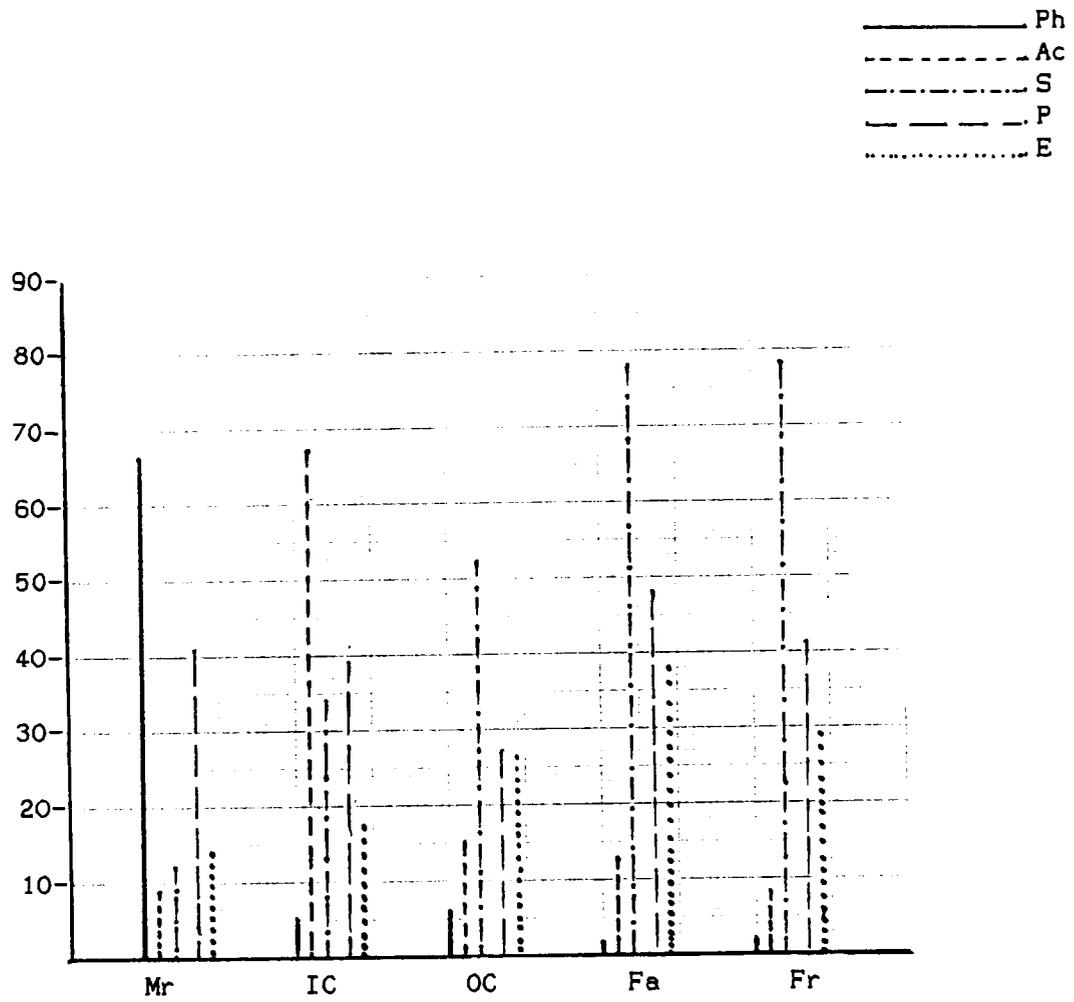


Figure 5.4, Mean self description responses fo context across type.

Table 5.8
Adjusted mean scores for context across type for both boys and girls
in the three levels

Context	Type				
	Ph	AC	P	S	E
Mirror	.82	.20	.36	-.04	.22
In Class	.17	.74	.28	.11	.21
Out of Class	.25	.29	.23	.37	.37
Family	.11	.17	.34	.53	.39
friends	.16	.17	.32	.57	.35

In drawing figures to show the interactions for this and subsequent tables linear graphs are adopted for greater ease of interpretation, although it is appreciated that the variables are not continuous.

Figure 5.5 shows the interaction for context x type further emphasising the pattern already described in figure 5.4.

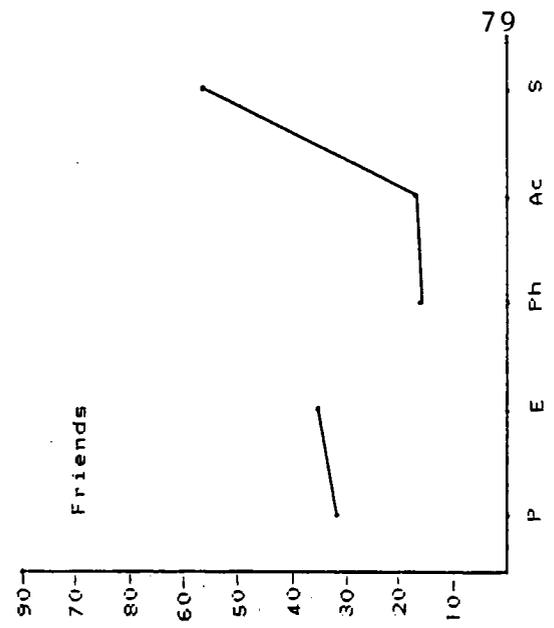
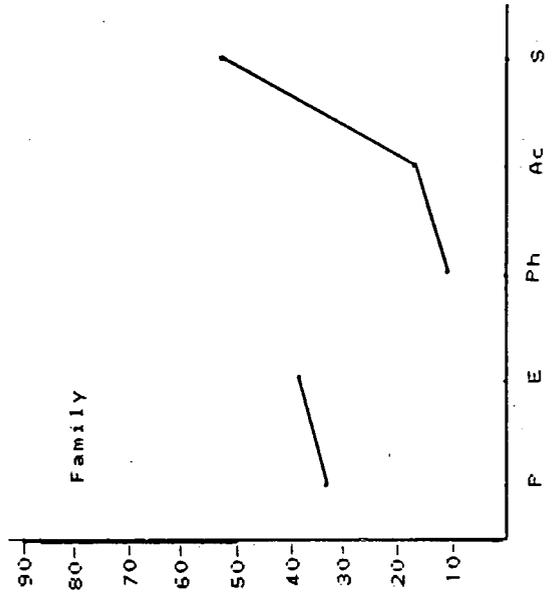
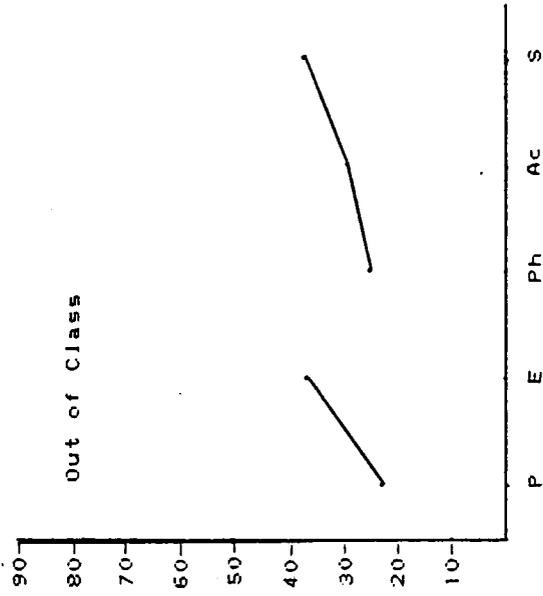
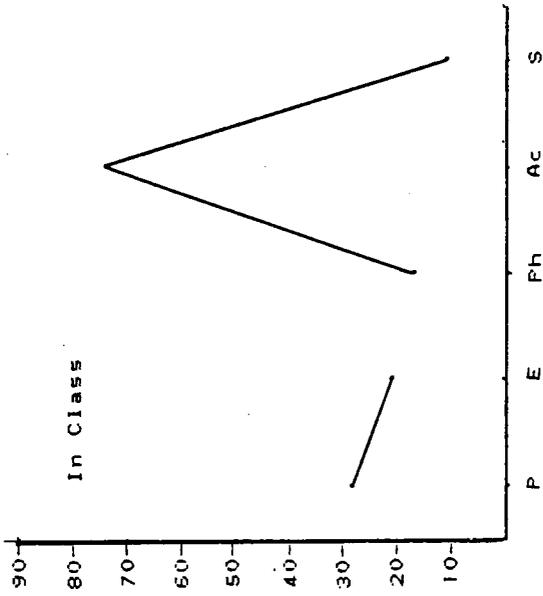
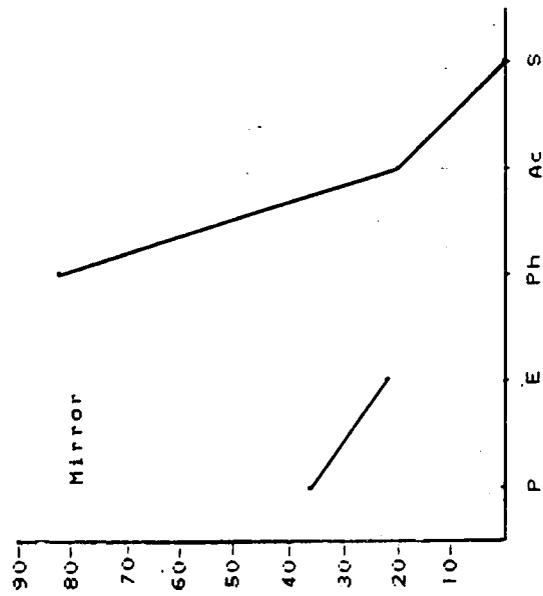


Figure 5.5, Self-description responses for context across type.

5- Level x Context x Type

This interaction is statistically significant [$P < .01$]. The adjusted scores for level x context x type are shown below in table 5.9.

Table 5.9
Adjusted scores for context across type for students from both sexes in the three levels

Level 1					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.90	.20	.34	-.11	.18
In Class	.16	.74	.33	.08	.18
Out of Class	.21	.27	.20	.47	.35
Family	.08	.19	.31	.53	.46
Friends	.13	.18	.34	.56	.40

Level 2					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.77	.19	.43	.00	.21
In Class	.16	.77	.24	.14	.24
Out of Class	.29	.27	.23	.35	.39
Family	.13	.12	.31	.50	.32
Friends	.16	.18	.32	.56	.31

Level 3					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.79	.20	.31	-.03	.27
In Class	.18	.70	.28	.13	.21
Out of Class	.26	.33	.26	.28	.36
Family	.13	.21	.39	.56	.40
Friends	.18	.14	.30	.61	.35

Table 5.9 shows that there is a strong context x type pattern similarity across levels but there are some minor differences which must be assumed to contribute to the significant interaction:

- Physical type in the mirror context is higher in level 1 than in levels 2 and 3. Possibly the mirror context attracted the students' attention to the rapid physical changes that usually happen at their age, that is, the age of 12.

- Academic attributes inside the classroom are higher in level 2. Students in this level seem to be more conscious of their school work when they describe themselves inside class, possibly because they have to submit to a comprehensive exam by the end of the academic year, while other students in levels 1 and 3 are not expected to sit for any general exam at their present levels.

- Personality attributes are relatively higher in the mirror context in level 2. Overall they present an unstable pattern.

- Emotional attributes are relatively higher for family and friends in levels 1 and 3 than in level 2. But family is the context that generates more emotional feelings in comparison with other contexts among the three levels.

Interactions between context x type and level are found mostly with the personality and emotional attributes, but are not easily interpretable.

The variations are illustrated in figure 5.6

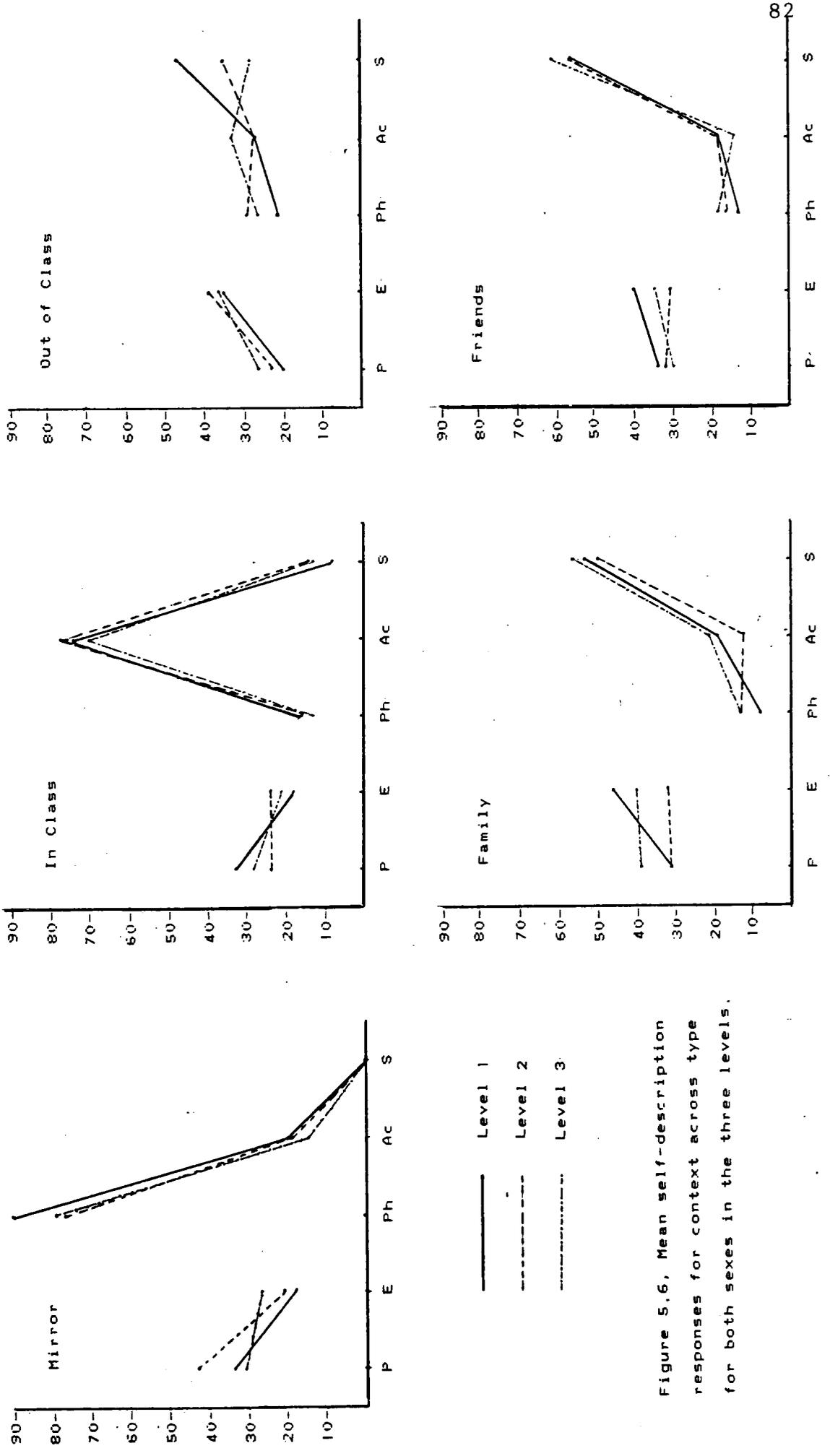


Figure 5.6, Mean self-description responses for context across type for both sexes in the three levels.

6- Sex x Context x Type

This interaction is statistically significant [$p < .01$]. The adjusted mean scores are shown in table 5.10

Table 5.10
Adjusted scores for context across type for boys in the three levels combined

Context	Type				
	Ph	Ac	P	S	E
Mirror	.75	.22	.39	-.05	.22
In Class	.17	.71	.31	.10	.25
Out of Class	.28	.29	.17	.38	.38
Family	.11	.17	.31	.48	.39
Friends	.17	.16	.30	.59	.31

Adjusted scores for context across type for girls in the three levels combined

Context	Type				
	Ph	Ac	P	S	E
Mirror	.89	.17	.33	-.04	.22
In Class	.16	.77	.26	.13	.17
Out of Class	.23	.29	.29	.35	.35
Family	.11	.17	.36	.58	.39
Friends	.14	.17	.34	.56	.39

The tables above show that:

- Girls score higher for physical attributes in the mirror context.
- Girls score higher for academic attributes in the class context.
- Boys score higher for personality attributes in the mirror and in class context.

- Girls score higher for social attributes in the family context.
- Girls score higher for emotional attributes in the friends context and lower in the class context.

This comparison is illustrated in figure 5.7

SUMMARY

The findings report different pictures of the selves in different contexts, and these pictures are basically stable across ages and across sex, but there are some variations within this picture.

- Girls referred to more self-description responses than boys across all three levels, but these differences tended to decline significantly with level.
- Physical attributes were mentioned by students in level 1 more than others in levels 2 and 3, and by girls more than boys.
- Although overall mean self-description responses of academic attributes were higher for boys, girls referred to more academic responses in the class context. Also students' mean score for academic attributes was higher in level 2 than in levels 1 and 3 in the class context. .
- Emotional attributes were mentioned by students in levels 1 and 3 more than in level 2, and by girls more than boys.
- Girls mentioned more social attributes in the family context than boys.

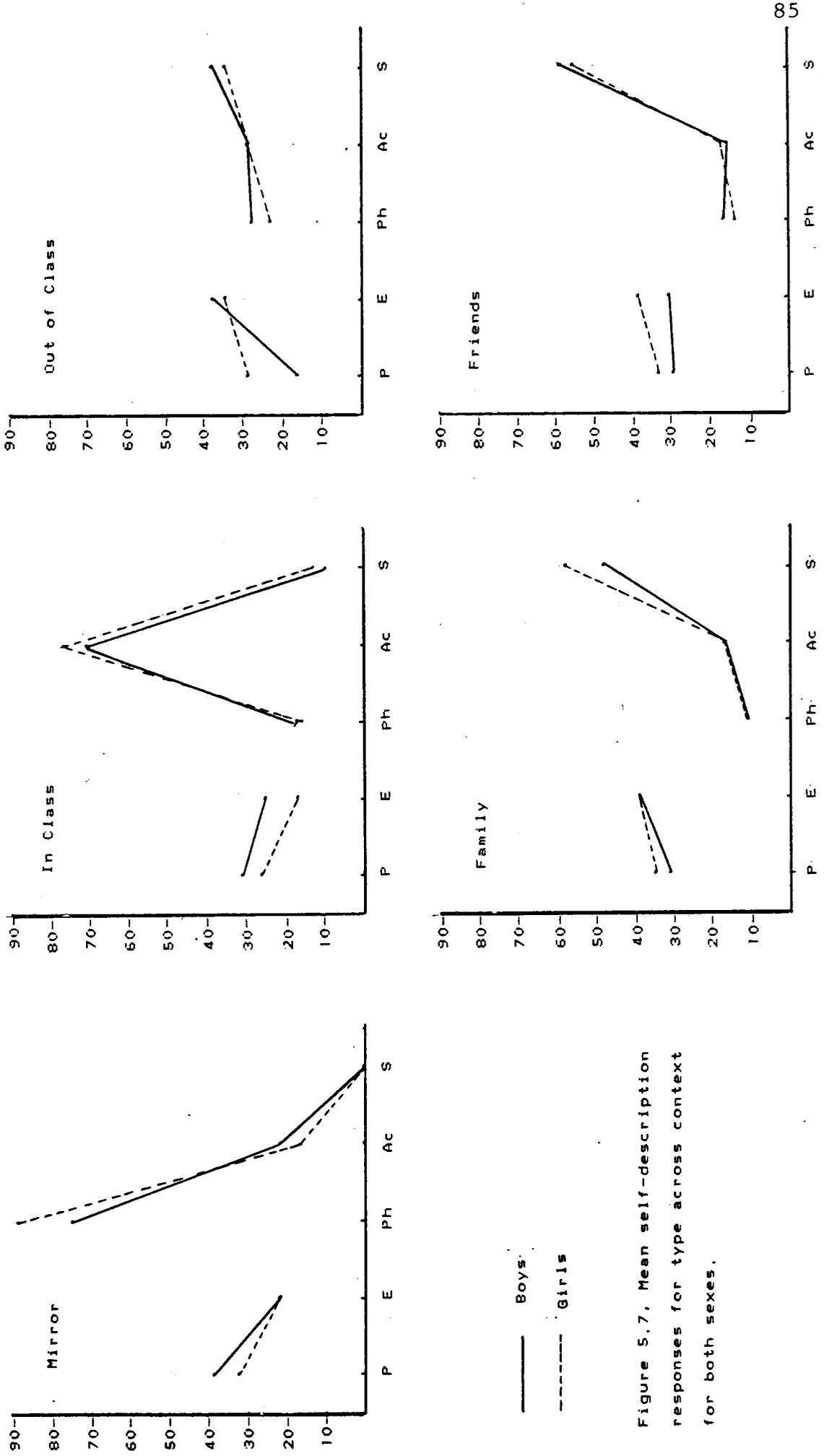


Figure 5.7, Mean self-description responses for type across context for both sexes.

SECOND QUANTITATIVE ANALYSIS

In order to examine the effects in the first analysis of reducing the data to the presence or absence of responses, the second analysis is based on the total responses [frequencies] in each category in each context. The following tables 5.11 to 5.14 summarize the data.

Table 5.11
Frequencies for all self-description responses for level 1

Context	Type									
	Ph		Ac		P		S		E	
	B	G	B	G	B	G	B	G	B	G
Mirror	76	152	4	3	19	27	1	7	6	4
In class	4	3	44	42	19	27	11	30	9	8
Out class	4	2	3	8	5	21	31	41	8	19
Family	0	1	5	8	16	32	51	79	22	32
Friends	1	0	1	6	19	31	52	85	14	24
Total	85	158	57	67	78	138	146	242	59	87

Table 5.12
Frequencies for all self-description responses for level 2

Context	Type									
	Ph		Ac		P		S		E	
	B	G	B	G	B	G	B	G	B	G
Mirror	43	75	6	2	36	34	6	8	0	11
In class	1	2	51	62	31	20	21	26	6	10
Out class	6	4	10	4	12	28	27	33	10	14
Family	2	2	7	3	32	38	50	112	9	26
Friends	2	1	7	1	25	44	63	72	3	24
Total	54	84	81	72	136	164	167	251	28	85

Table 5.13
Frequencies for all self-description responses for level 3

Context	Type									
	Ph		Ac		P		S		E	
	B	G	B	G	B	G	B	G	B	G
Mirror	99	160	22	3	78	57	34	16	16	39
In class	5	3	118	89	71	70	47	52	29	27
Out class	10	4	34	16	47	59	59	59	41	33
Family	2	4	29	15	96	89	181	181	61	63
Friends	7	4	13	3	72	81	184	137	32	52
Total	123	175	216	126	364	356	505	445	179	214

Table 5.14
Adjusted table for the size of group for level 3

Context	Type									
	Ph		Ac		P		S		E	
	B	G	B	G	B	G	B	G	B	G
Mirror	44	80	9.7	1.5	34.6	28.5	15	8	7	19.5
In class	2.2	1.5	52.4	44.5	31.5	35	20.8	26	12.8	13.5
Out class	4.4	2	15	8	20.8	29.5	26.2	29.5	18.2	16.5
Family	.8	2	12.8	7.5	42.6	44.5	80.4	90.5	27	31.5
Friends	3	2	5.7	1.5	32	40.5	81.7	68.5	14	26
Total	54	88	95.6	63	161.5	178	224	223	79	107

The trends evident in the first analysis are also seen here, namely an increase in number of responses with age, a higher frequency for girls than boys, with a lessening of the difference with age, and strong context effects.

It should be noted that the technique of open-ended prompting yielded a higher number of responses for most students in each context than the three usually sought in closed questions.

INTERACTIONS

The following tables 5.15 to 5.20 allow inspection of the interactions discussed in the first analysis. There is no evidence of differences in patterns.

1- Level x Sex

Table 5.15
Total self-description responses for level across sex.

Level	Sex		Total
	Boys	Girls	
1	425	692	1117
2	466	656	1122
3	614	659	1273
Total	1505	2007	3512

2- Type x Level

Table 5.16
Total self-description responses for type across level.

Level	Type					Total
	Ph	Ac	P	S	E	
1	243	124	216	388	146	1117
2	138	153	300	418	113	1122
3	142	159	339	447	186	1273
Total	523	436	855	1253	445	3512

3- Type x Sex

Table 5.17

Total self-description responses for type across sex

Sex	Type					Total
	Ph	Ac	P	S	E	
Boys	193	234	375	537	166	1505
Girls	330	202	480	716	279	2007
Total	523	436	855	1253	445	3512

4- Context x Type

Table 5.18

Total self-description responses for context across type

Context	Type					Total
	Ph	Ac	P	S	E	
Mr	470	26.20	179	45	47.50	768
IC	13.50	296	163.50	134.80	59.30	667
OC	22.40	48	116.30	187.70	85.70	460
Fa	7.80	43.30	205	462.90	147.50	867
Fr	9	22.20	191.50	422.20	105	750
Total	523	436	856	1252	445	3512

5- Level x Context x Type

Table 5.19
Total self-description responses for level 1.

Context	Type					Total
	Ph	Ac	P	S	P	
Mr	228	7	46	8	10	299
IC	7	86	46	41	17	197
OC	6	11	26	72	27	142
Fa	1	13	48	130	54	246
Fr	1	7	50	137	38	233
Total	243	124	216	388	146	1117

Total self-description responses for level 2

Context	Type					Total
	Ph	Ac	P	S	E	
Mr	118	8	70	14	11	221
IC	3	113	51	47	16	230
OC	10	14	40	60	24	148
Fa	4	10	70	162	35	281
Fr	3	8	69	135	27	242
Total	138	153	300	418	113	1122

Total self-description responses for level 3.

Context	Type					Total
	Ph	Ac	P	S	E	
Mr	124	11.40	63.10	23	26.50	248
IC	3.70	96.90	66.50	46.80	26.30	240
OC	6.40	23	50.30	55.70	34.70	170
Fa	2.80	20.80	87.10	170.90	58.50	340
Fr	5	7.20	72.50	150.20	40	275
Total	142	159	340	446	186	1273

6- Sex x Context x Type

Table 5.20
Total self-description responses for context across type for boys

Context	Type					Total
	Ph	Ac	P	S	E	
Mr	163	20	89.60	22	13	307.60
IC	7.20	147.40	81.50	52.80	27.80	316
OC	14.40	28	37.80	84.20	36.20	200.60
Fa	2.80	24.80	90.60	181.40	58	357
Fr	6	13.70	76	196.70	31	323
Total	193.40	234	375	537	166	1505

Total self-description responses for context across type for girls.

Context	Type					Total
	Ph	Ac	P	S	E	
Mr	307	6.50	89.50	23	34.50	461
IC	6.50	148.50	82	82	31.50	351
OC	8	20	78.50	103.50	49.50	259.50
Fa	5	18.50	114.50	281.50	89.50	509
Fr	3	8.50	115.50	225.50	74	426.50
Total	330	202	480	716	279	2007

Again the patterns repeat those found in the first analysis, and similar conclusions can be drawn. The reduction of data for the purpose of statistical analysis did not significantly distort the picture

QUALITATIVE ANALYSIS OF DATA BY LEVEL AND SEX.

INTRODUCTION

This analysis aims to explore the actual descriptions of the self reported by the students. It will be recalled that students were asked to describe themselves in relation to five contexts: mirror, class, out of class, family and friends, and their responses were coded and classified into five major types: physical, academic, personality, social and emotional.

The quantitative analysis showed that in each context students mostly referred to responses concerning the five types, but the frequencies of these responses varied from one context to another. It was clear that each context triggered a certain type of response related mainly to this context. So there was generally a dominant type in each context, particularly for physical, academic and social types of response. Personality and emotional attributes were rather different as these characteristics were more evenly distributed over the five contexts.

The most prominent type in the mirror context was the physical attributes, with academic achievement in the class context and the social and emotional among the family and friends. The out of class context was a mixture of few and different attributes. This context was not so differentiated and rich as other contexts were, possibly because it was less defined than others. However this context might be an illustrative contrast case for the strong relationship between context and type [attributes], when the context was well-defined.

PHYSICAL ATTRIBUTES

The physical attributes were mentioned most frequently in the mirror context. Students, of course, described some other attributes in the mirror apart from the physical ones, but most of their responses were related to their bodies, health and appearance.

It was noticeable that some students were interested in describing specific parts of the body, or specific physical attributes, while some others were less specific and mentioned the body as a whole, or general physical attributes.

Accordingly, students' responses in relation to the physical attributes were classified into two categories: specific physical description and general physical description. When the students defined and described certain parts of the body such as the mouth, nose, ears, neck, eyes, hair, skin and so on, their responses were considered as specific ones, and when they referred to the general features and the body as a whole such as weight, size, height, activity, beauty, appearance and so on, their responses were classified as general self-description.

Tables 5.21 to 5.23 summarize the physical attributes mentioned by students as specific and general descriptions at the three levels for both sexes.

Table 5.21

Numbers of general [G] and specific [S] physical attributes mentioned by students at the three levels from both sexes.

Level	Sex	Mr		IC		OC		Fa		Fr		Total
		S	G	S	G	S	G	S	G	S	G	
1	M	53	23	4	0	3	1	0	0	1	0	85
	F	67	85	3	0	2	0	1	0	0	0	158
2	M	38	5	1	0	6	0	2	0	1	1	54
	F	54	21	2	0	4	0	2	0	0	1	84
3	M	88	11	5	0	10	0	2	0	7	0	123
	F	110	50	3	0	4	0	4	0	3	1	175

Table 5.22
 Percentages of general [G] and specific [S] physical attributes
 mentioned by students at the three levels from both sexes.

Level	Sex	Mr		IC		OC		Fa		Fr	
		G	S	G	S	G	S	G	S	G	S
1	M	62.35	27	4.70	0	3.52	1.17	0	0	1.17	0
	F	42.40	53.79	1.89	0	1.26	0	.63	0	0	0
2	M	70.37	9.25	1.85	0	11.11	0	3.70	0	1.85	1.85
	F	64.28	25	2.38	0	4.76	0	2.38	0	0	1.19
3	M	71.54	8.94	4.06	0	8.13	0	1.62	0	5.69	0
	F	62.85	28.57	1.71	0	2.28	0	2.28	0	1.71	.57

Table 5.23
 Percentages of the specific physical attributes
 mentioned by both sexes at the three levels.

Level	Mirror		Other contexts	
	M	F	M	F
1	27	53.79	1.17	0
2	9.25	25	1.85	1.19
3	8.94	28.57	0	.57

These tables show that girls were more specific in describing their physical attributes than boys in all three levels. Both sexes in level 1 referred more frequently to the specific physical attributes than boys and girls in levels 2 and 3. Possibly the youngest were more attentive to the physical changes that usually happen at this stage. Or it might be that adolescents in this stage of development are less inclined than their elders to use more abstract concepts.

Students from both sexes in the three levels 1, 2 and 3 referred most frequently to the specific physical attributes in the mirror context. A few references were made to these attributes in some other contexts, in out of class and mainly in the friends context. In both of these contexts students were among peers and friends. Sometimes friends work as a mirror. People can see themselves in others, especially adolescents, who describe themselves in comparison with peers and friends.

Generally the mirror context was a particular context where adolescents could see their short hair, blue eyes, small mouth, big nose, long neck and the acne or freckles on the face. It was literally face to face. In the other contexts they tended to describe themselves as being tall, short, pretty, active, strong, weak, small or big in size, and so on. Variation between specific and general [possibly more abstract] concepts was a function not only of age but also of context. Such data suggests that the social context promoted a more generalized view of the self than the immediately reflected view in the mirror.

ACADEMIC SELF

Academic achievement and school work were mentioned most frequently in the class context. Some other academic self responses were also mentioned in the out of class and family contexts.

Students' references to school and academic achievement were generally evaluative. Students in the three levels from both sexes made this sort of estimation especially in the class context.

This tendency for evaluation did not appear so clearly in describing the physical attributes. Possibly students' estimations of their physical attributes were implied in their responses, but it is not sensible to rely on speculations in order to classify them.

In describing the academic self they were declared.

Accordingly, students' responses were classified as being negative or as positive or neutral. Each response representing a negative attitude towards the academic self, the school requirements and regulations was considered negative. Examples are: I am not good at school, I do not like to study, I am a dreamer in the class, I do not respect the school discipline, I cannot concentrate well I am behind for my grade, I get anxious when I have an exam, and so on. Otherwise the responses were considered positive or neutral, and grouped together as positive, because it was sometimes difficult to distinguish clearly between them and the contrast of interest was negative versus non-negative self esteem

Table 5.24

Numbers of positive [P] and negative [N] academic attributes mentioned by students at the three levels from both sexes.

Level	Sex	Mr		IC		OC		Fa		Fr		Total
		P	N	P	N	P	N	P	N	P	N	
1	M	4	0	36	8	3	0	4	1	1	0	57
	F	2	1	35	7	8	0	8	0	6	0	67
2	M	6	0	45	6	9	1	6	1	7	0	81
	F	2	0	41	21	4	0	2	1	1	0	72
3	M	22	0	80	38	26	8	27	2	13	0	216
	F	3	0	60	29	12	4	14	1	1	2	126

Table 5.25
Percentages of positive [P] and negative [N] academic attributes mentioned by students at the three levels from both sexes.

Level	Sex	Mr		IC		OC		Fa		Fr	
		P	N	P	N	P	N	P	N	P	N
1	M	7.01	0	63.15	14.03	5.26	0	7.01	1.75	1.75	0
	F	2.98	1.49	52.23	10.44	11.94	0	11.94	0	8.95	0
2	M	7.40	0	55.55	7.40	11.11	1.23	7.40	1.23	8.64	0
	F	2.77	0	56.94	29.16	5.55	0	2.77	1.38	1.38	0
3	M	10.18	0	37.03	17.59	12.03	3.70	12.50	.92	6.01	0
	F	2.38	0	47.61	23.01	9.52	3.17	11.11	.79	.79	1.58

Table 5.26
Percentages of negative academic attributes mentioned by students at the three levels from both sexes.

Level	In Class		Other contexts	
	M	F	M	F
1	14.03	10.44	1.75	1.49
2	7.40	29.16	2.46	1.38
3	17.59	23.01	4.62	5.54

Tables 5.24 to 5.26 show that girls became more negative in describing their academic self at levels 2 and 3 and more negative than boys.

The most prominent differences between both sexes and levels appeared in level 2. Negative responses mentioned by students in level 2 tended to decrease with boys and increase with girls in comparison with both sexes in levels 1 and 3. [see table 5.26]

The following negative responses were mentioned by girls in level 2 more than any other level from both sexes: I am a dreamer in the class [8%], I am not good in some subjects [4%], I am not good at school [4%], I do not like to study [3%].

A sufficient and clear interpretation for these finding was not possible, but school environment might influence such descriptions, especially in the classroom where students are usually evaluated by their teachers daily.

Negative evaluation of the academic self was made most frequently by the older students. Possibly adolescents became more aware of the personal limitations that would interfere in achieving their own goals. Also they began to pay more attention than previously to the environment's restrictions and the obstacles they would meet. The following examples were mentioned mainly by students in level 3: I am obliged to study nursing [2%], I do not like the subject that I am studying [3%], I do not understand my lessons [2.88%], I get anxious when I have an exam [3%].

Negative responses were mentioned mostly in the class context. Some negative responses were also referred to in the out of class and

family contexts. Both of these contexts also reminded the students of their academic self. The out of class context related immediately to the school, and families are usually interested in their childrens' academic achievement. Possibly the more related a context is to accademic matters the more it triggers negative responses. It calls to the mind the personal qualifications, limitations and difficulties, and that is enough to put the individual in an evaluative frame of mind.

Sex differences in relation to the academic self

There were some differences between boys and girls in certain responses related to academic achievement and school.

	M	F
- Boys emphasised the student's role.	6.22%	1%
- Boys mentioned school discipline more than girls.	12.33%	4.50%
- Boys referred to school punishment more than girls.	3%	.50%
- Boys thought of their academic future more than girls.	13.77%	3.50%
- Girls mentioned school activities more than boys.	1.77%	5.50%
- Also girls referred to class discussion more than boys.	19%	24.50%
- Boys had the opportunity to study with their friends more than girls.	9.33%	3.50%

Table 5.27
Percentages of the most frequent academic self-description
responses mentioned by students in the three levels from
both sexes

Responses according to level [age] of highest frequency.	Level		
	1	2	3
Level 1 -----			
- I am attentive.	26	14	15.55
- I often take part in school activities.	5	3	3
- Teachers punish me sometimes.	4	1	1.33
Level 2 -----			
- I am good at school.	17	20	14.66
- I often take part in class discussion.	19	30	15
- I often do my homework.	3	7	1.77
- I study with my friends.	5	8	6.66
- My main aim is to succeed at school.	1	4	0
- I like to study.	0	3	0
- I am not good in some subjects.	1	4	2.22
Level 3 -----			
- I think of my academic future.	3	7	12.44
- I study at home.	6	5	15
- I am advanced for my grade.	1	0	2.22
- I get anxious when I have an exam.	1	1	3
- I do not understand my lessons.	1	1	2.22
- I do not respect the school discipline.	0	1	4.88

Developmental Differences

Table 5.27 shows some differences between levels in describing the academic self.

- In level 1 students were more interested in being attentive in the class, participating in the school activities and complaining about school punishments.

- In level 2 students became more aware of the real academic work either inside or outside the class. Their responses were more related to the academic self than to the school environment.

- By level 3 students became more involved in their studies, not only for present goals, but also for future ones. Students in level 3 were more interested in planning and thinking for the future. It is clear from table 5.27 that this tendency developed by age or the level of education.

PERSONALITY ATTRIBUTES

Personality attributes were distributed among the five contexts. It seems that as a category they do not relate to a particular context. Descriptions used by students do not immediately relate to factors in personality scales such as introvert / extrovert or neurotic / stable, but they do appear to relate to everyday behaviour.

It is difficult in this research to categorize the students' responses in relation to the personality attributes into negative and positive ones. It is not easy to speculate if the students mentioned any of the following attributes as positive, negative or as neutral: frank, obedient, shy, quiet, serious, curious, and kind hearted.

Also factors such as sex, age and culture are needed to evaluate the personality attributes to be able to classify them. However this target is not possible in this research.

There are three main points worth mentioning in regard to personality attributes as mentioned by students in the three levels from both sexes:

- 1- The number of personality attributes mentioned by both sexes in the three levels increased with level [age]. That is, the older students referred to more personality attributes in describing themselves than the younger students. Girls referred to more personality attributes than boys at the three levels.

Table 5.28
Number of personality attributes mentioned by
both sexes in the three levels.

Level	Sex	
	M	F
1	23	37
2	41	55
3	61	69

2- There were some differences between the sexes in referring to certain attributes. Girls described themselves most frequently as being shy, cheerful, introvert, jealous, stubborn and selfish. The most frequent personality attributes mentioned by boys were obedient, responsible, independent, leader, domineering.

There is a good reason to think that characteristics which were regarded as normal for their sex in Jordan were not mentioned as frequently as deviations from normal expectations, e.g. girls who generally expect to be obedient made less reference than the boys did. It seems also from the choice of words that both sexes were influenced by the social feedback and cultural definition of sex roles in describing themselves.

Table 5.29 shows clearly the differences between boys and girls in describing their personality attributes.

Table 5.29
Percentages of the most frequent personality attributes
mentioned by students at the three levels for both sexes.

Personality attributes	Sex	
	M	F
- I am cheerful	15.90	36.50
- I am obedient	8.88	3.50
- I am responsible	9.76	7.50
- I am independent	3.52	.50
- I am a leader	2.62	0
- I like to be domineering	5.76	3.50
- I have a weak character	4.41	4
- I have a strong character	4.44	4
- I prefer to be alone	3.99	10.50
- I am selfish	.44	4.50
- I am shy	6.64	10.50
- I am stubborn	0	4.50
- I am jealous	.88	5
- I am quiet	15.98	14

3- It seems that some of the personality attributes differ from one context to another. There were prominent personality attributes in each context. Some of the attributes were distributed among most of the contexts, e.g. cheerful, helpful, and quiet, although they were more frequent in some contexts than others.

Table 5.30 shows how the personality attributes differed from one context to another.

Table 5.30
Percentages of most frequent personality attributes mentioned
by students at the three levels from both sexes in each context.

Personality attributes	Sex	
	M	F
Mirror Context		
- I am as normal as most people	8.44	6
- I am proud of myself	3.11	.50
Class Context		
- I am polite	8	8
- I am quiet	10.66	6.50
- I am obedient	2.66	0
- I am shy	2.66	4
- I am cheerful	1.33	4.50
- I am clever	.44	2.50
Out of Class Context		
- I am cheerful	4.44	12.50
- I am shy	1.33	2
- I prefer to be alone	.44	4
- I am polite	3.11	2.50
Family Context		
- I am helpful	13.33	14.50
- I am responsible	8	5
- I am obedient	6.22	3
- I am cheerful	1.77	5.50
- I am stubborn	0	2.50
- I prefer to be alone	1.77	5.50
- I like to be domineering	2.22	3
Friends Context		
- I am cheerful	6.66	11
- I am sincere	7.11	10.50
- I am helpful	8.44	12.50
- I am honest	1.77	3
- I am empathetic	1.33	3.50
- I am modest	1.33	3

EMOTIONAL ATTRIBUTES

Responses related to the emotional attributes were mentioned most frequently in the family context, then in the friends, out of class , and mirror contexts respectively. Emotional attributes appeared clearly when there was a possibility or a need for social communication such as being within the family and among friends. It was possible to categorize the emotional attributes into positive and negative ones, because some of the emotional characteristics were bi-polar, such as. happy /unhappy, relaxed / unrelaxed, afraid / secure , free / restricted, stable /unstable emotionally. The rest of the emotional attributes were descriptions of some other emotioal conditions which could be good or bad, e.g. I am a nail biter, I tried to commit suicide, and I am concerned. Responses which fell under the negative pole, or represented tension, anxiety, dissatisfaction or low self esteem were considered as negative. Examples are, I am nervous, I am anxious, I wish I would die, I cry easily, I often feel sorry for things I do, I hate myself, I am worthless.

Table 5.31
Percentages of the negative emotional attributes mentioned
by students in the three levels from both sexes.

Level	Sex	
	M	F
1	15.25	22.98
2	42.85	47.05
3	35.75	48.59

Table 5.32
 Percentages of the most frequent emotional attributes mentioned
 by students in the three levels by both sexes in each context.

Emotional responses	Sex	
	M	F
Mirror Context		
- Memories flood my mind.	1.77	8
- I often feel sorry for things I do.	.44	3
- I am a happy person.	3.11	1
- I am a daydreamer.	0	3.50
Class Context		
- I feel bored.	4.88	4
- I feel restricted.	4	4
- I often feel afraid.	.88	7
- I am happy	3.11	3.50
Out of Class Context		
- I am happy	5.77	9
- I feel relaxed	8.44	8.50
- I feel free	6.22	7
Family Context		
- I am happy	10.22	14.50
- I feel relaxed	8	5
- I feel restricted	2.22	7
- I am nervous	3.55	11
- I feel free	3.50	1.50
- I am unhappy	1.33	3
- I feel secure	2.66	7
- I cry easily	0	3
Friends Ccontext		
- I am happy	12.44	31.50
- I feel free	4.44	4
- I feel secure	0	4
- I feel relaxed	2.66	10

Table 5.33

Percentages of the most frequent emotional attributes mentioned by students from both sexes in each level in each context.

Responses according to level of highest frequency	Level		
	1	2	3
Level 1			
- I am happy	89	28	35.53
- I feel secure	10	3	6.65
Level 2			
No distinctive emotional characteristics			
Level 3			
- memories flood my mind	0	3	7.55
- I often feel sorry for things I do	0	1	2.66
- I am a daydreamer	0	0	4.88
- I feel restricted	1	11	11.99
- I feel bored	1	4	9.32
- I feel free	1	9	19.10
- I feel relaxed	10	22	26.65
- I am nervous	2	6	8.88

There were some differences in referring to the emotional attributes. These differences were found to be related to the three variables, sex, context and levels.

1- Girls were more negative than boys in describing their emotional attributes in the three levels. [see table 5.31]

2- Table 5.32 shows that students referred to different emotional attributes in the different contexts. In the mirror they were facing some kind of feelings related to themselves apart from others [relatively], such as, their dreams ,behaviour and memories. In the class they were bored, afraid and restricted. The case was the opposite in the out of class context. The family context was described

by both sexes as a context that triggered a lot of contradictory feelings such as being happy / unhappy, secure / afraid, free / restricted, and relaxed / nervous. Also it seems that boys had less emotional stress in the family situation than girls had. Friends prompted pleasant emotions for both sexes , but mainly for girls. Girls were happier, more relaxed and more free with their friends than when they were among their families.

3- Students in level 2 and 3 from both sexes referred to more negative emotional attributes, and showed more emotional stress than students in level 1 [see table 5.33]. Possibly the older students faced more challenges, they needed to cope with inner and outer changes, and their awareness and recognition of the social world around them had increased. These factors might have created some emotional tension, especially for the girls where the social demands they were supposed to meet were more stressful for them as girls. But it was not the same for the boys. Girls faced a social restrictions more than boys, e.g. "My parents do not allow me to visit my friends" [4% for girls, 0% for boys], they were expected to be obedient and helpful at home. Girls were fighting with their sister[s], brother[s], and parents sometimes. Such situations, were most likely to produce more emotions.

Students' responses in levels 2 and 3 were richer and more specific in describing their feelings than those students in level 1 . [see table 5.33]. In contrast with physical description, where generality was the more abstract quality, the emotional specificity reflected finer distinctions within already abstract concepts.

SOCIAL ATTRIBUTES

Students described themselves in relation to others. Most of the social responses were mentioned in the family and friends contexts, followed by the school, and a few responses were mentioned in the mirror context. Students referred to their roles as son or daughter, brother or sister and as a friend. They described the reciprocal attitudes and relationships with their families and friends and sometimes with their teachers and some others.

The social self appeared most clearly in the family and friends contexts. Accordingly, students' responses in relation to the social attributes were considered within these two main contexts.

Some differences were found between boys and girls and between the three levels in describing the social self in the family and friends contexts.

Family Context

1- Sex differences :

- It seems that girls had more difficulties in establishing family relationships than boys, especially girls in level 2.

Possibly girls had lower self-esteem in comparison with boys. Girls referred more frequently than boys to some negative responses in describing their status in the family, the relationships with the members of their families, and their families' attitudes towards them. [see table 5.34]

- On the whole , boys expressed the reciprocal attitudes with their families in terms of respect . Generally , girls referred to these

attitudes in terms of liking .

- Girls were interested in referring to their ordinal position in the family more than boys, especially girls in level 3. Girls mentioned if they were the eldest, youngest, the middle one, second, third, even the fourth one in the family. [25% for girls, 12% for boys]

- It seems that girls needed to assert themselves in the family by being helpful sometimes, or by being aggressive and argumentative at other times. The situation appeared to be less stressful in relation to self-assertion for boys.

2- Level differences

Table 5.35 shows that there were some differences in the self-description between the three levels. Some developmental aspects seem to appear in this kind of self-description. Students expressed different needs and different characters in each level.

In level 1 students were closer to childhood. They needed their parents' care and attention, they were more affected by their parents' relationships. They were playing with their brothers and sisters at home, and still beaten by their parents and eldest brother[s] or sister[s].

In level 2 they needed good treatment, trust and better understanding. In addition to these changes, they became by level 3 more capable of reflecting their families' attitudes towards them than before. In this stage they needed to feel their importance in their families. They had their own opinions, their own characters which needed to be considered in the family relationships.

Friends Context

1- Sex differences

These are summarized in table 5.36 . It seems that friendship was very important for girls. They described the reciprocal relationships between them and their friends in terms of liking. Friendship was needed by girls and appreciated by them. It was important too for boys, but girls expressed their need for friends more than boys. Boys were more aggressive in their relationships with friends than girls, so they used to get into fights with each other.

Boys showed more interest in the opposite sex than girls. Possibly girls were more inhibited and avoided such responses because of social restrictions, not because they lacked this kind of interest.

2- Level differences

Friendship developed with levels [ages] as indicated in table 5.37 . The relationships between friends took different forms from one level to another. Students in level 1 played and fought with their friends and helped each other e.g. I play with my friends, my friends help me, I get into fights with my friends.

In level 2 adolescents needed understanding and loving friends. At this age they became much aware of the differences between them and their friends and became more sensitive to their friends' attitudes towards them. e.g. I can confide in my friends, my friends do not like me, my friends are better than me, it is important for me to meet my friends expectations.

In level 3 they became more selective, not any one was a friend, It is

not the one that they used just to play with as in level 1. At this age the friend is a special person, someone with whom you can be yourself. Adolescents became more interested in their position among their friends than before. Also the interest in the opposite sex appeared more clearly than before, e.g. I choose my friends carefully, I have a good position among my friends, I can be myself when I am with my friend, I like to attract the opposite sex.

Table 5.34
Percentages of the most frequent social attributes mentioned
by students from both sexes in the family context.

Social attributes	Sex	
	M	F
- I think of my family.	2.2	.50
- I help my brother[s] and sister[s] in their studies.	4	8.50
- I have a good relationship with my family.	12	8
- I am a spoilt daughter [son].	.88	3.50
- I am the eldest.	6.20	9.50
- I am the youngest.	5.30	3.50
- I get into fights with my brother[s] and sister[s].	2.20	10.50
- I do not like my family.	.44	3
- My family does not like me.	0	3
- I cannot confide in my family.	.44	6.50
- My parents do not allow me to visit my friends.	0	4
- My parents treat my sister[s] and brother[s] better than me.	.44	2
- My parents prefer boys to girls.	0	1.50
- My parents are unfair to me.	.44	2
- I fight with my mother.	0	2
- I cannot get on well with my mother.	0	2
- I am not an important member of my family.	.44	1.50
- My mother is a nervous person.	.44	1.50

Table 5.35
Percentages of the most frequent social attributes mentioned by students from both sexes in the three levels in the family context.

Responses according to level of highest frequency	Level		
	1	2	3
Level 1			
- My parents fight a lot.	4	2	1.70
- My parents hit me sometimes.	6	2	.44
- My mother is a nervous person.	2	0	.88
- No body understands me at home.	2	0	.44
- My parents treat me as an adult.	2	1	0
- My father used to travel a lot.	3	1	.44
- My brother[s] hits me sometimes.	4	0	.44
- I play with my sister[s] and brother[s].	9	2	2.22
Level 2			
- I respect my family.	7	10	7
- I like my family.	12	14	10.66
- I can confide in my family.	0	6	3.55
- My parents are unkind to me.	0	2	0
- My parents treat me as a child.	0	2	.88
- My parents do not trust me.	0	2	0
- It is important for me to meet my parents' expectations.	2	3	.44
Level 3			
- My family respect me.	2	1	4.88
- My family likes me.	7	11	15.55
- I am an important member of my family.	3	3	7.50
- I am well treated at home.	0	0	3.55
- My parents ask for my opinion.	0	0	3.55
- I am the eldest.	6	5	9.77
- I hit my brother[s] and sister[s] sometimes.	1	1	3

Table 5.36
Percentages of the most frequent social attributes mentioned by
students from both sexes in the friends context.

Social attributes	Sex	
	M	F
- I like my friends.	16.40	54.40
- My friends like me.	11.50	24
- I respect my friends.	7.50	6
- My friends respect me.	7.50	3
- I consider my friends as my brother[s] or sister[s].	10.20	13.50
- I confide in my friends.	9.70	19
- I cannot confide in my friends.	0	1
- My friends do not understand me.	0	5.50
- I trust my friends.	0	1.50
- My friends do not care about me.	0	1
- I do not like my friends.	0	1.50
- I get into fights with my friends.	6.20	.50
- My friends use me.	3	.55
- I do not have many friends.	2.20	7.50
- I understand my friends.	.88	1.50
-I like to attract the opposite sex.	4.50	.50

Table 5.37
Percentages of the most frequent social attributes mentioned by
studends from both sexes in the three levels in the friends context.

Response according to level of highest frequency	Level		
	1	2	3
Level 1			
- I play with my friends.	51	14	10.20
- My friends help me.	9	2	6.22
- I get into fights with my friends.	8	2	2.22
Level 2			
- I can confide in my friends.	7	20	14.66
- My friends do not like me.	1	4	.88
- My friends are better than me.	1	4	.88
It is important for me to meet my friends expectations.	1	2	.88
Level 3			
- I choose my friends carefully.	1	1	6.66
- I have a good position among my friends.	1	4	8.44
- I have many friends.	1	1	5.77
- I can be my self when I am with my friends.	0	2	4
- My friends usually follow my ideas.	0	1	2.66
- I like to attract the opposite sex.	0	2	4

SUMMARY OF QUALITATIVE ANALYSIS

Students' responses were reported and analysed in this chapter in relation to the most dominant type in each context. As it was mentioned previously, this approach has been chosen since the connections between certain types and certain contexts were so obvious. It was noticeable too, that in spite of the dominant aspect in each context there were a few other responses distributed among the other contexts. It would be interesting to explore the nature of responses that were mentioned by students in the less related contexts. Although a particular view of the self might be salient in one context it was not unrelated to the self in other contexts.

Personality and emotional attributes were reported and analysed according to the five contexts, and social in the family and friends contexts, because these attributes were influenced by more than one context. A brief description might be enough to cover other responses mentioned in the other contexts that have not been considered in this chapter.

Physical Attributes

Physical attributes were mentioned mainly in the mirror context. Responses in the other four contexts were similar. Activity was the most frequent attribute in the class, out of class and family contexts, and beauty in the friends context. There was a developmental

trend from emphasis on particular, specific features to more general descriptions. Girls were more specific than boys.

Academic Attributes

Academic attributes were mentioned in the class context. Responses in other contexts were spread among the family, out of class, mirror and friends contexts respectively. The most frequent responses in each context were:

- Family context: I study at home, I do my homework, I am good at school

- Out of class context: I study with my classmate[s], I think of my academic future, I often take part in school activities, I respect / do not not respect school discipline, I am a student.

- Mirror context: I think of my academic future, I am a student.

- Friends context: I study with my friend[s].

There was an increase in negative evaluation with age and a change from present, school focussed preoccupations in the younger children to performance and future concerns in the older.

Social Attributes

Most of the social attributes were mentioned in the family and friends contexts. The rest were distributed among the other three contexts.

The following examples were the most frequent responses in each context:

- Mirror context: I like to attract the opposite sex, I like people, people like me, I think of my family, I am a man.

- Class context: I like my teacher[s], I respect my teacher[s], I am well accepted / not accepted by some teachers, I like to be trusted by my teacher[s], I like my classmate[s], my classmate[s] like me, school is my second home.

- Out of class context: I meet my friends at school, I play with my friends, I get into fights with my friends, I have a good position among my friends.

The qualitative analysis in this chapter has developed the picture of sex x context x type interaction revealed in the quantitative analysis in a psychologically meaningful way. Each type of attribute was mentioned in each context, but certain contexts attracted certain types. There were some differences between students from both sexes in the self-description responses in each context through all the three levels, the main findings are listed below:

- The mirror context invited specific and general physical attributes more than any other context, by younger students more than the older, and by girls more than boys.

- Academic self-evaluation responses were more frequent in the class context with some differences between levels and both sexes. Negative evaluation of the academic self was increased with age. Girls were more negative than boys in describing their academic self. The personal life significance of academic performance became more evident with age.

- Personality and emotional attributes were supplied in each context at each level from both sexes, though they were influenced by context, sex, and age. Girls expressed a wider range of responses than boys, and more of the negative emotional evaluations that increased with age.

- Social attributes appeared more clearly in the family and friends contexts. There were some differences between sexes and levels. It seemed that girls had lower self-esteem than boys in the family context. Friendship was needed and appreciated by girls more than boys. Students expressed different needs and different characters in the family context, also different types of relationships with friends through development.

CHAPTER SUMMARY

The quantitative analysis of the students' self-description showed differences in relation to context, sex and level. Different selves appeared in the different contexts. The physical self differentiated in the mirror context, the academic self in the class context, and the social self in the family and friends contexts. Whereas personality and emotional attributes permeated the five contexts.

Girls mentioned more responses than boys at the three levels, but the differences decreased significantly with age. Girls showed more and wider interest in their physical self than boys, also they appeared to be more emotional and social than boys. Boys, in general, expressed higher attention to the academic self than girls.

The qualitative analysis explored the nature of such differences that found between levels and sexes in the different contexts. The main findings are listed below:

- Girls were more specific in describing their physical attributes than boys in the three levels. Such tendency decreased significantly with age. The specific physical description was higher in the mirror context than in any other context.

- Negative evaluative responses of the academic self were higher in the class context than in any other context. Also, girls were more negative than boys. The negative evaluation of the academic self increased with age.

- Although personality attributes pervaded the five contexts, some of them were influenced by the context. Personality characteristics were mentioned by girls more than by boys and increased with age. It seemed also that they were influenced by the cultural definition of sex roles.

- Though emotional attributes were distributed over the five contexts they were different from one context to the other. Family context appeared to be the context that triggered the most contradictory feelings. Girls were more negative than boys in describing their emotional self. Negative emotional attributes increased with age.

- Most of the social attributes were mentioned in the family and friends contexts. It seemed that girls had a lower self-esteem in the family context and more interested in friendship than boys. Social self developed and differentiated with age in both family and friends contexts.

CHAPTER SIX

**QUANTITATIVE AND QUALITATIVE ANALYSIS OF
SELF-DESCRIPTION IN DIFFERENT CONTEXTS AT LEVEL 3**

FIRST QUANTITATIVE ANALYSIS: INTRODUCTION

This analysis is an investigation of differences across different teaching groups [classes] at the second secondary stage. These groups might be expected to differ in their self-description. In order to explore this possibility an analysis of variance was carried out on the basis of presence or absence of response, as in the first analysis. The variable of level was replaced by that of teaching groups [classes]. The numbers of students selected from each teaching group are shown in table 6.1

Table 6.1
Students and teaching groups in the second secondary stage.

Sex	Class						Total
	Arts	Sc.	Com.	Vocational			
				H/M.	Ind.	Nur.	
Male	25	25	25	25	25	-	125
Female	25	25	25	-	-	25	100
Total	50	50	50	25	25	25	225

The table above shows that there were 25 male students and 25 female students in each of the arts, science and commercial classes, with 25 males in each of the hotel management and industrial classes, and 25 female students in the nursing class.

The hotel management, industrial and nursing classes are described in this table as a vocational group, because students in these classes

were following vocational training programmes. This kind of teaching was supposed to directly influence their vocational future.

On the other hand other groups had more chances to choose their future study and thus their future occupations.

At the present time in Jordan the hotel management and industrial classes are limited to boys, and nursing classes are limited to girls. The mean self-description scores for boys and girls in the different classes are shown in tables 6.2 and 6.3

The results of the ANOVA are shown in table 6.4 . It can be seen that there are no overall differences between teaching groups but there is a significant interaction for group x sex x context x type. All other significant effects are expected since they were present in the first analysis, but the significant group x sex x context x type interaction shows that the context x type and the sex x context x type interactions do not apply similarly to all groups.

The interaction for group x sex x context x type is explored below .

In order to carry out an exploration without the main effects of context and type, and the interaction effect of sex by type, obscuring the picture, the scores in tables 6.2 and 6.3 were adjusted to removed the variation attributed to these effects in the manner described by Guilford [1973] P.246.

The context by type interaction is shown in figure 6.1 which plots the overall mean adjusted scores for type against their contexts.

The means are shown in table 6.5

Table 6.2
Mean self-description responses for context across type
for boys in all four classes.

1-Arts class					

	Type				
Context	Ph	Ac	P	S	E

Mirror .	.48	.16	.60	.28	.16
In class .	.04	.52	.40	.44	.16
Out class	.04	.32	.32	.60	.20
Family	.04	.24	.52	.84	.36
Friends	.04	.12	.48	.84	.24

2- Science class					

	Type				
Context	Ph	Ac	P	S	E

Mirror	.60	.16	.40	.24	.04
In class	.04	.52	.56	.28	.28
Out class	.04	.16	.32	.36	.36
Family	.00	.20	.44	.80	.56
Friends	.00	.04	.36	.96	.24

3- Commercial class					

	Type				
Context	Ph	Ac	P	S	E

Mirror	.52	.16	.52	.12	.12
In class	.00	.68	.36	.24	.16
Out class	.04	.32	.16	.36	.24
Family	.00	.28	.68	.92	.32
Friends	.00	.24	.40	.84	.20

4- Vocational class					

	Type				
Context	Ph	Ac	P	S	E

Mirror	.56	.20	.42	.22	.12
In class	.08	.76	.34	.26	.14
Out class	.12	.24	.30	.42	.28
Family	.02	.22	.54	.80	.40
Friends	.06	.06	.40	.84	.26

Table 6.3
Mean self-description responses for context across type
for girls in all four classes.

1- Arts Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.76	.00	.24	.00	.20
In Class	.00	.72	.48	.28	.28
Out Class	.00	.28	.40	.44	.28
Family	.04	.16	.40	.96	.40
Friends	.00	.00	.48	.96	.48

2- Science Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.80	.00	.28	.20	.48
In Class	.08	.64	.48	.44	.12
Out Class	.12	.12	.60	.68	.12
Family	.04	.28	.80	.80	.36
Friends	.12	.00	.48	.76	.48

3- Commercial Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.48	.08	.44	.16	.32
In Class	.04	.56	.44	.44	.24
Out Class	.00	.08	.28	.36	.32
Family	.08	.08	.60	.76	.60
Friends	.00	.04	.48	.72	.28

4- Vocational Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.76	.04	.52	.16	.40
In class	.04	.68	.44	.56	.28
Out class	.04	.12	.32	.40	.52
Family	.00	.04	.60	.80	.44
Friends	.00	.08	.32	.72	.40

Table 6.4
ANOVA for sex[2] x group[4] x context[5] x type[5] with repeated
measures across context and type for second secondary classes[level 3]

Source	SS	df	Ms	F	P
Group	.57	3	.19	1.24	.296
Sex	.39	1	.39	2.51	.115
Group x Sex	.74	3	.25	1.60	.191
error	33.35	217	.15		
Context	11.78	4	2.95	27.51	.000*
Group x Context	1.95	12	.16	1.52	.111
Sex x Context	.36	4	.09	.83	.506
Group x Sex x Context	1.63	12	.14	1.27	.231
error	92.94	868	.11		
Type	99.56	4	24.89	100.33	.000*
Group x Type	2.09	12	.17	.70	.751
Sex x Type	4.84	4	1.21	4.87	.001*
Group x Sex x Type	3.00	12	.25	1.01	.439
error	215.34	868	.25		
Context x Type	176.65	16	11.04	68.36	.000*
Group x Context x Type	7.72	48	.16	1.00	.483
Sex x Group x Type	6.88	16	.43	2.66	.000*
Group x Sex x Context x Type	13.00	48	.27	1.68	.003*
error	560.79	3472	.16		

Table 6.5
Adjusted mean scores for students from both sexes in level 3

Context	Type				
	Ph	Ac	P	S	E
Mirror	.82	.21	.34	-.01	.29
In Class	.21	.72	.32	.16	.24
Out of Class	.30	.37	.30	.33	.40
Family	.13	.20	.39	.55	.39
Friends	.21	.17	.32	.63	.37

- The main patterns of self-description in the second secondary classes were similar to the general patterns in the first analysis, which included the whole sample.
- In the third analysis, as in the first, personality and emotional attributes as categories permeated all contexts. Students' scores for these two aspects of the self-concept were, generally, around the average score in the different contexts.
- The out of class context was not well-defined enough to evoke a strong profile. Students' scores for the five aspects of the self-concept in relation to this context were, generally, around the average score.
- Physical, academic and social attributes as categories were more sensitive to context. Students' recognized their physical attributes in the mirror context, academic achievement in the class, and their social attributes in the family and friends contexts. Students' scores for each aspect in the related context were higher than the average scores. That is, scores for physical aspect were higher in the mirror, academic in the class, and social in the family and friends contexts. Accordingly patterns are described below in relation to sensitivity versus insensitivity to context.

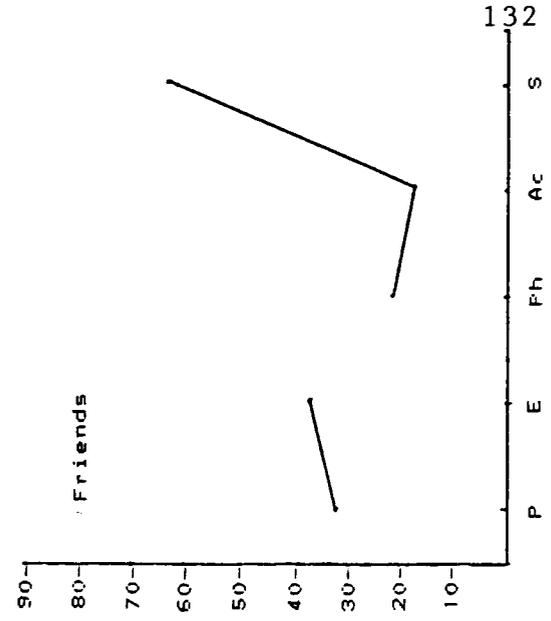
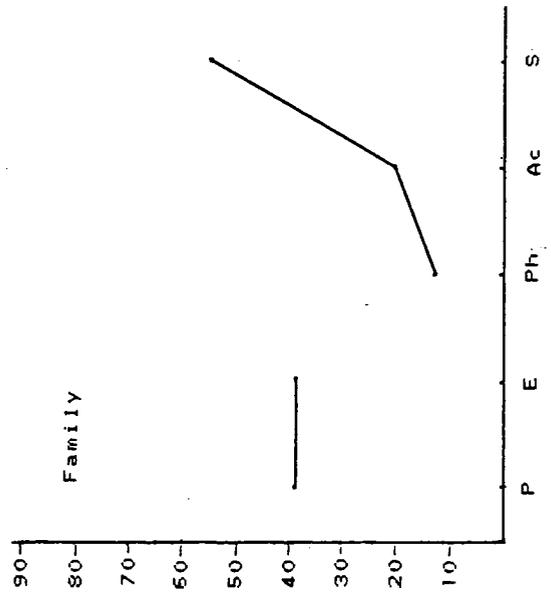
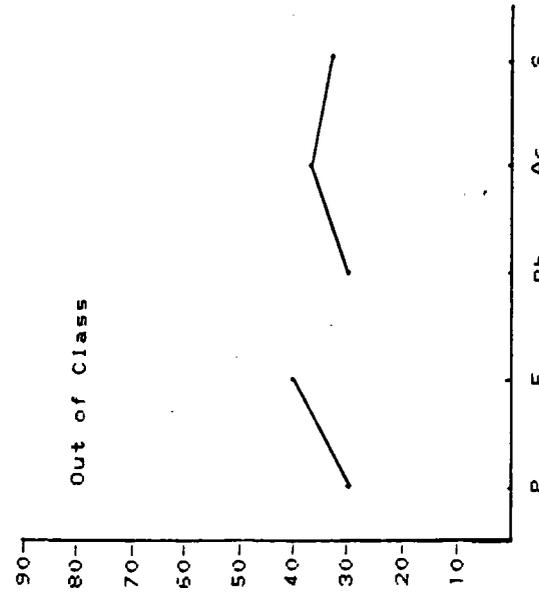
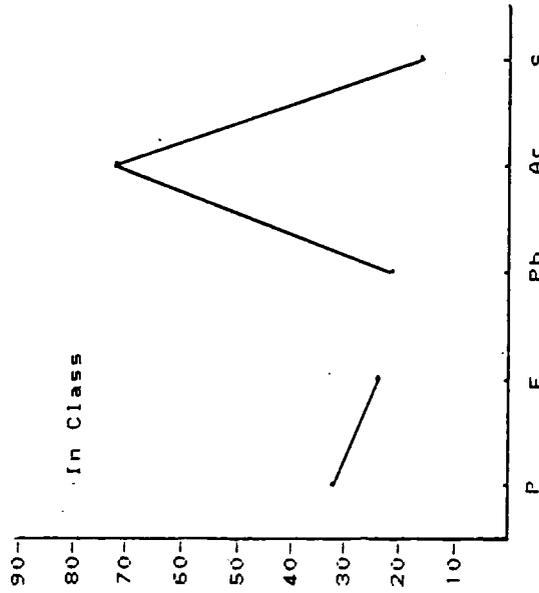
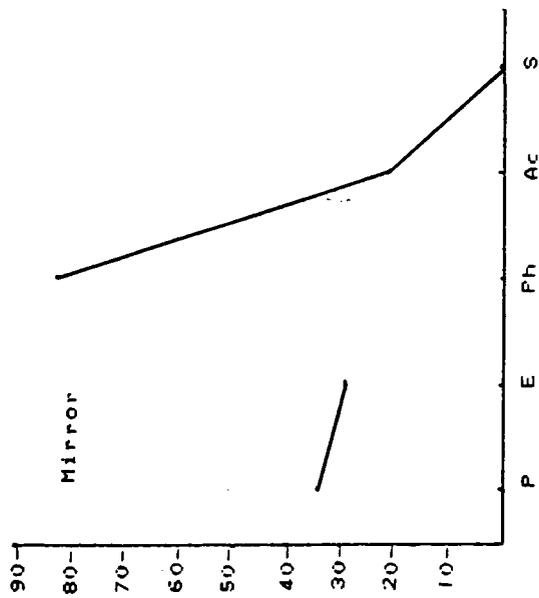


Figure 6.1. Figures showing mean levels of response type for different contexts.

Context x Type x Sex Interactions

Since the sex x context x type interaction was also significant the pattern for each sex is graphed [figure 6.2]. The relevant mean adjusted scores for each sex are shown in table 6.6

Table 6.6
Adjusted mean scores for boys in level 3

Context	Type				
	Ph	Ac	P	S	E
Mirror	.75	.23	.41	.03	.21
In Class	.22	.65	.31	.09	.26
Out of Class	.32	.37	.25	.30	.42
Family	.13	.20	.37	.55	.41
Friends	.22	.16	.31	.66	.32

Adjusted mean scores for girls in level 3

Context	Type				
	Ph	Ac	P	S	E
Mirror	.89	.19	.27	-.04	.37
In Class	.20	.78	.33	.23	.22
Out of Class	.28	.36	.35	.35	.37
Family	.13	.20	.40	.56	.37
Friends	.20	.17	.32	.60	.41

The graphs may be used as a template or overall pattern against which the patterns for individual classes can be examined and interpreted.

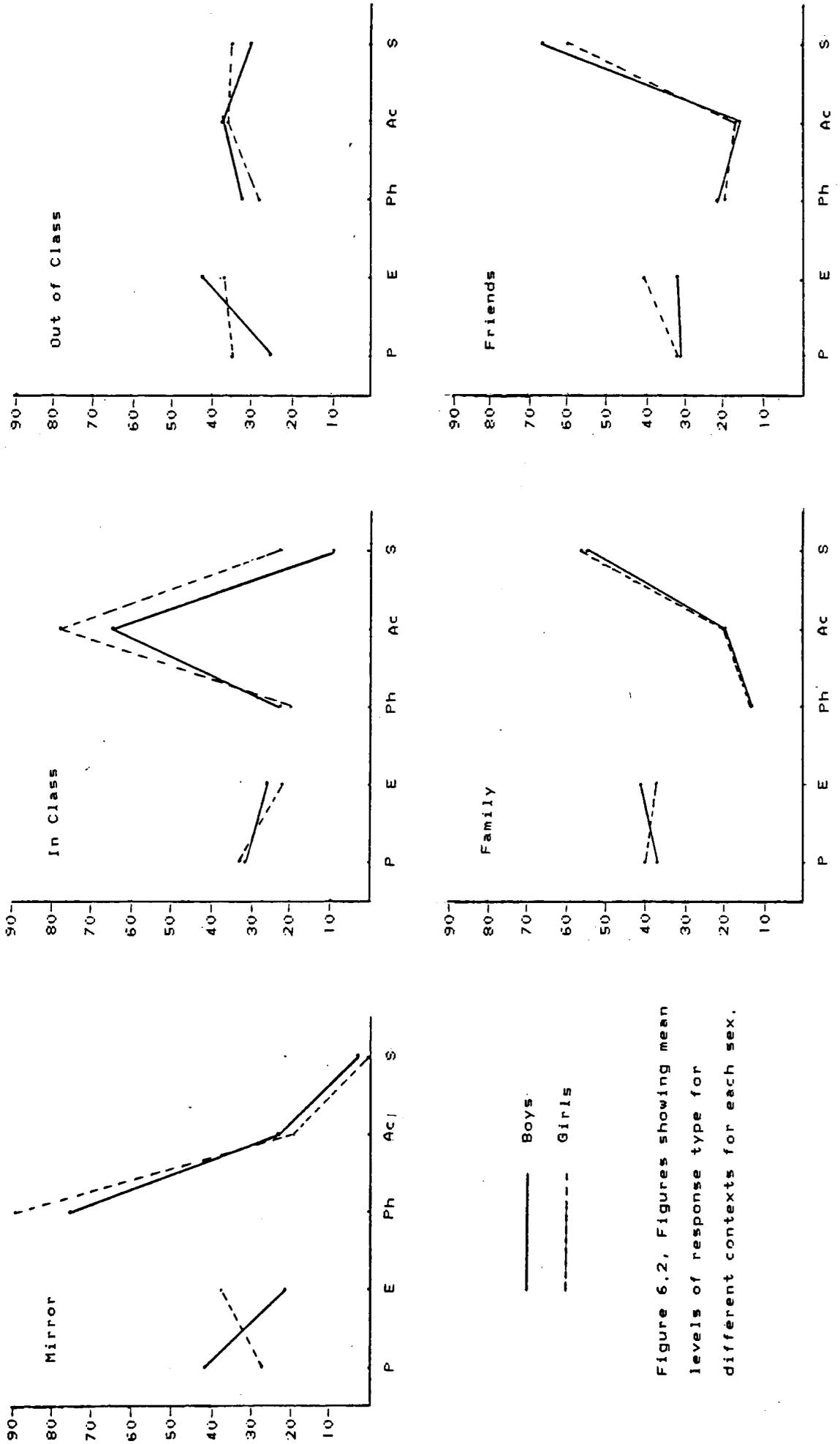


Figure 6.2, Figures showing mean levels of response type for different contexts for each sex.

Context x Type x Group x Sex Interactions

With this background the pattern for each class can be more meaningfully explored. Figures 6.3 to 6.6 show the patterns of context x type interaction for both boys and girls in each class. The relevant mean adjusted scores are found in tables 6.7 and 6.8 .

In this section an attempt is made to draw out salient features of sex and class differences which raise questions of interest. Only deviations of more than .10 from the general context x type graphs for boys and girls are considered, inspection of the graphs suggesting this to be a useful decision.

Differences Between the Four Classes

Comparison across classes is made according to each context. Attributes in each context are described as being context sensitive or insensitive as suggested above. The main findings of each context are listed below.

Mirror Context

[a] Context-sensitive Attributes:

There are no real differences in pattern across classes for either boys or girls.

[b] Context-insensitive Attributes:

- The main crossover pattern holds for science and commercial classes, though boys scores are especially low and girls scores are high on emotional attributes in the science classes.

- Arts class girls scores are low on both and boys scores are high on personal attributes.
- Vocational class boys scores are very similar to the overall pattern but girls scores high on personality.

In Class Context

[a] Context-sensitive Attributes:

- Science classes scores reflect the overall pattern for classes combined for both sexes.
- Arts class girls scores are low on social attributes, boys scores are low on academic.
- Vocational class boys scores are especially high on academic attributes.

[b] Context-insensitive Attributes:

- There is considerable though minor variation from the overall crossover pattern
- Arts and vocational classes patterns are similar to each other, with girls registering more than boys on both attributes, and levels are similar to those of the overall pattern.
 - Science class boys scores are rather high on personal attributes, girls scores low on emotional attributes.
 - Commercial class girls scores are similar to overall pattern for girls

Family Context

[a] Context-sensitive Attributes:

- Boys scores are similar to the overall pattern in all four

classes.

- Science class girls scores are exceptionally high on academic attributes.
- Arts class girls scores are high on social attributes.
- Vocational class girls scores are low on academic attributes.

[b] Context-insensitive Attributes:

- Vocational classes [from both sexes] reflect the overall pattern
- Commercial class girls scores are similar to the overall pattern for girls.
- Arts class boys scores are similar to the overall pattern for boys, but girls scores are low on personality attributes.
- Science class boys scores are low on personality and high on emotional attributes, while girls scores are especially high on personality.

Friends Context

[a] Context-sensitive Attributes:

These are similar to the overall mean scores except that,

- Arts class girls scores are high on social attributes.
- Science class boys scores are high on social attributes.
- Commercial class boys scores are high on academic attributes.
- Vocational class girls scores are low on personality attributes.

[b] Context-insensitive Attributes:

The variations of interest are :

- Girls scores are low on personality attributes in the vocational class, and low on emotional attributes in the commercial class.
- Boys scores are high on personality attributes in the arts class.

Table 6.7
Adjusted mean scores for boys in all four teaching groups.

1- Arts Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.69	.22	.52	.09	.26
In Class	.22	.55	.29	.22	.23
Out of Class	.30	.43	.29	.46	.35
Family	.15	.20	.34	.55	.36
Friends	.23	.16	.38	.63	.32

2- Science Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.81	.22	.32	.05	.14
In Class	.22	.55	.45	.06	.35
Out of Class	.30	.27	.29	.22	.51
Family	.11	.16	.26	.51	.56
Friends	.19	.08	.26	.75	.32

3- Commercial Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.73	.22	.44	.07	.22
In Class	.18	.71	.25	.02	.23
Out of Class	.30	.43	.13	.22	.39
Family	.11	.24	.50	.63	.32
Friends	.19	.28	.30	.63	.28

4- Vocational Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.77	.26	.34	.03	.22
In Class	.26	.79	.23	.04	.21
Out of Class	.38	.35	.27	.28	.43
Family	.13	.18	.36	.51	.40
Friends	.25	.10	.30	.63	.34

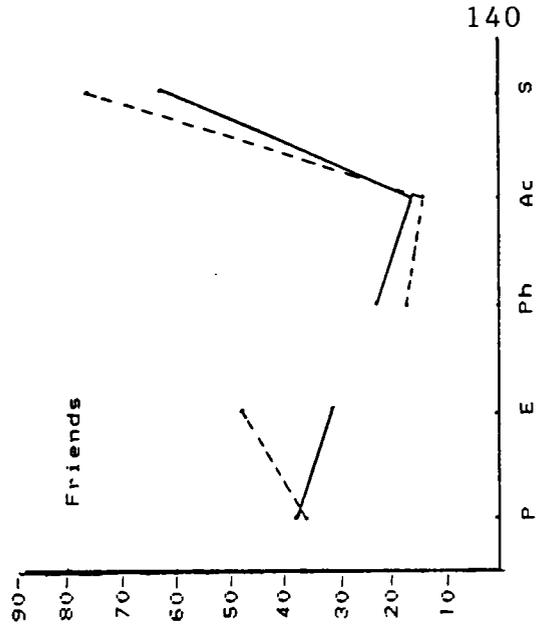
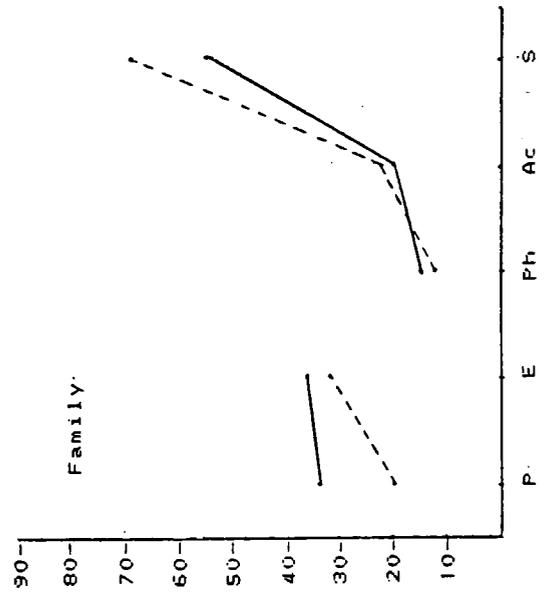
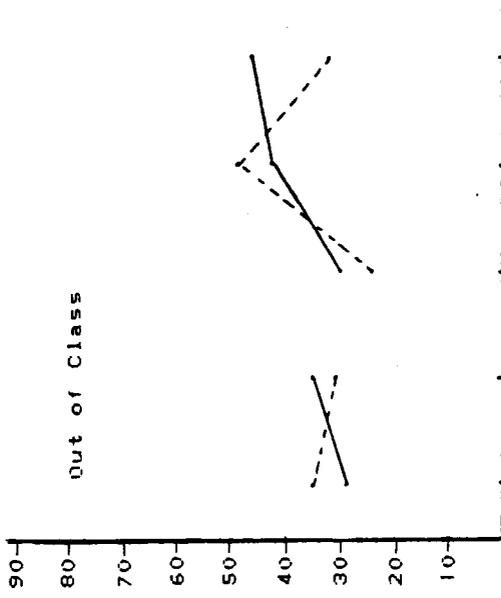
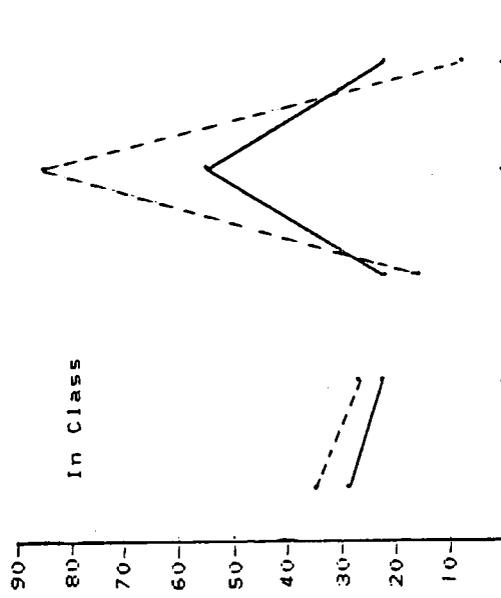
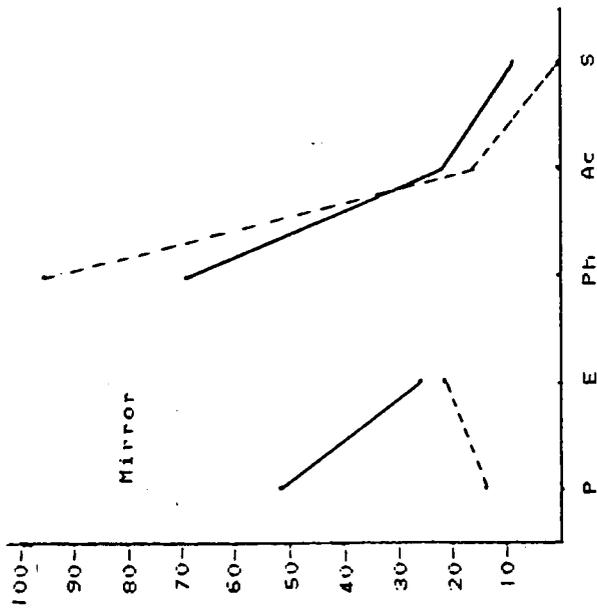
Table 6.8
Adjusted mean scores for girls in all four teaching groups.

1- Arts Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.95	.16	.14	-.17	.22
In Class	.16	.85	.35	.08	.27
Out of class	.24	.49	.35	.32	.31
Family	.13	.22	.20	.69	.32
Friends	.17	.14	.36	.77	.48

2- Science Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.99	.16	.18	.03	.50
In Class	.24	.77	.35	.24	.11
Out of Class	.36	.33	.55	.56	.19
Family	.13	.34	.60	.53	.28
Friends	.29	.14	.36	.57	.48

3- Commercial Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.67	.24	.34	-.01	.34
In Class	.20	.69	.31	.24	.23
Out of Class	.24	.29	.23	.24	.39
Family	.17	.14	.40	.49	.52
Friends	.17	.18	.36	.53	.28

4- Vocational Class					
Context	Type				
	Ph	Ac	P	S	E
Mirror	.95	.20	.42	-.01	.42
In Class	.20	.81	.31	.36	.27
Out of Class	.28	.33	.27	.28	.59
Family	.09	.10	.40	.53	.36
Friends	.17	.22	.20	.53	.40



— Boys
 - - - Girls

Figure 6.3, Mean self-description responses for context across type for arts class from each sex.

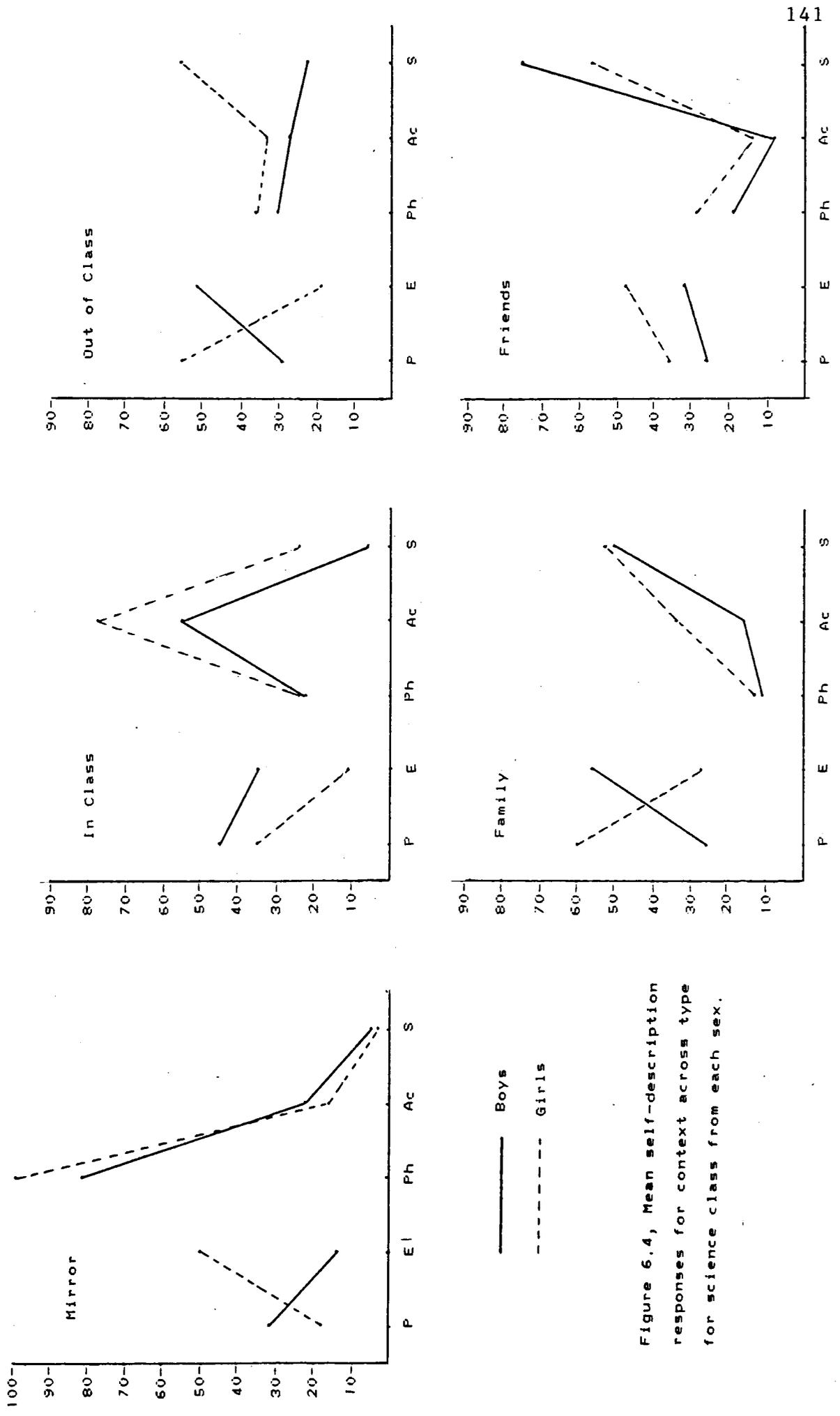
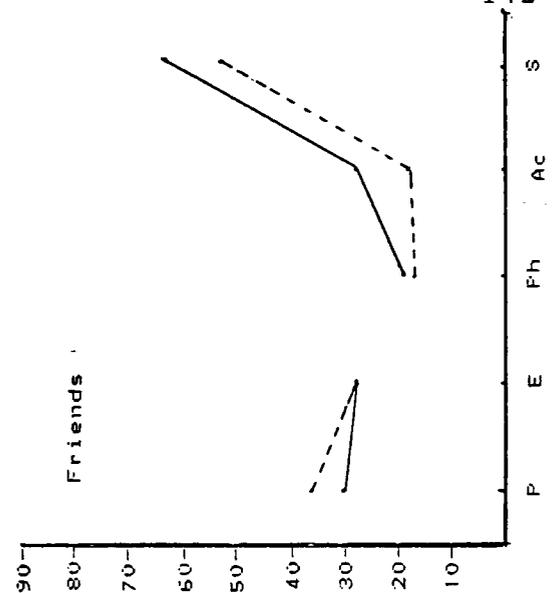
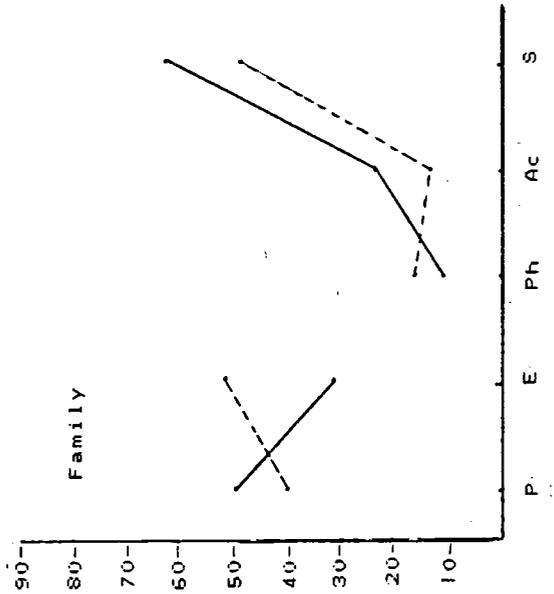
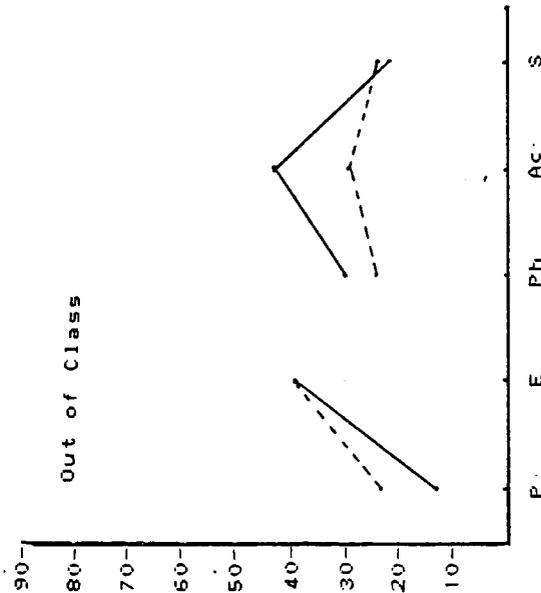
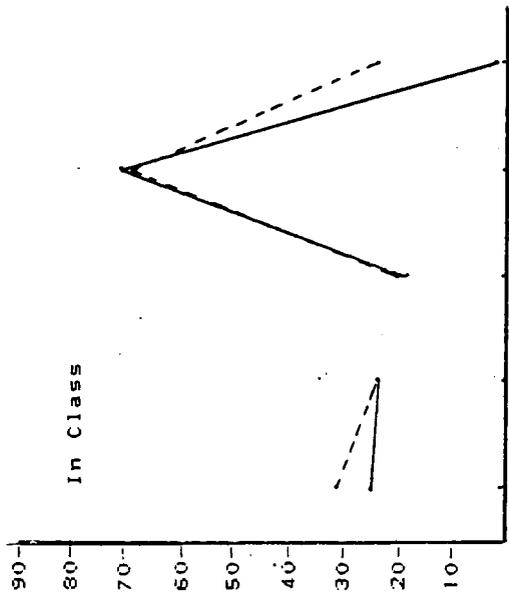
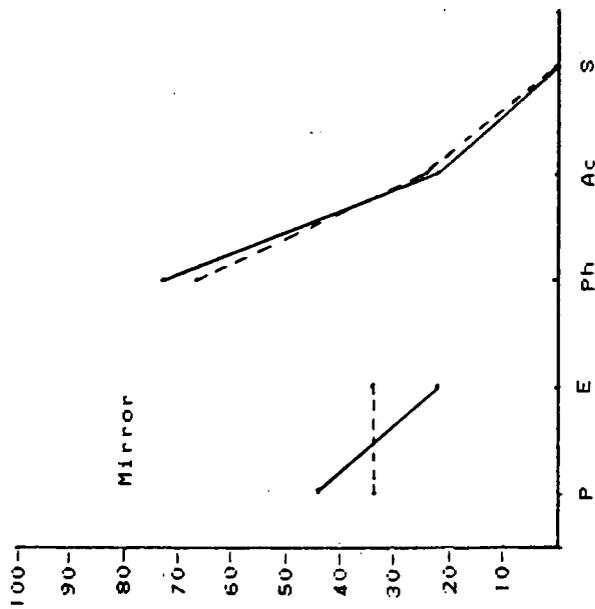


Figure 6.4, Mean self-description responses for context across type for science class from each sex.



— Boys
 - - - Girls

Figure 6.5. Mean self-description responses for context across type for commercial class from each sex.

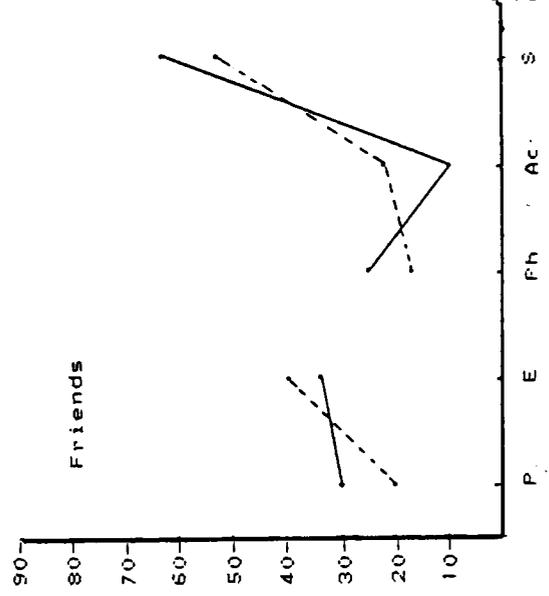
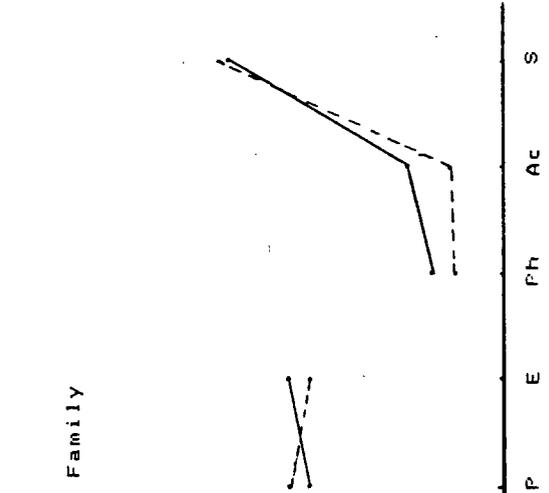
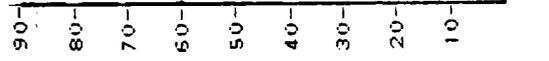
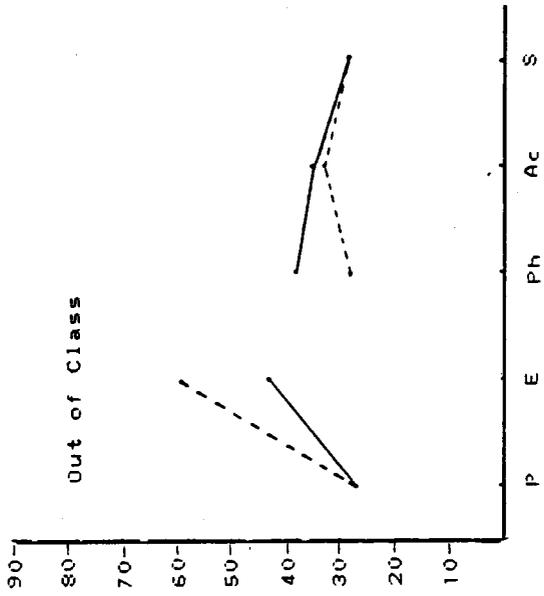
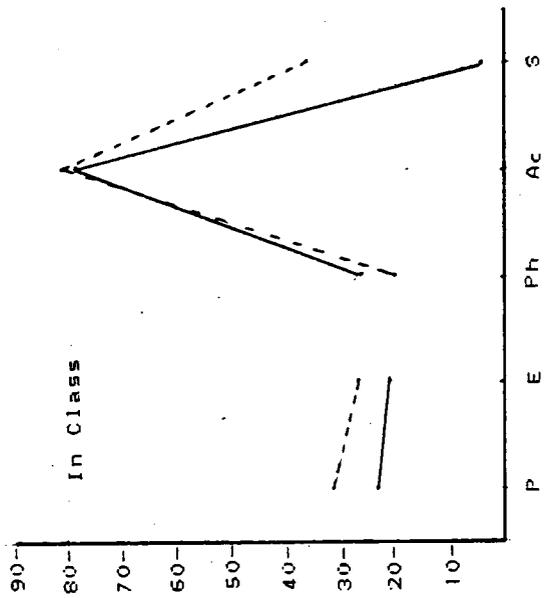
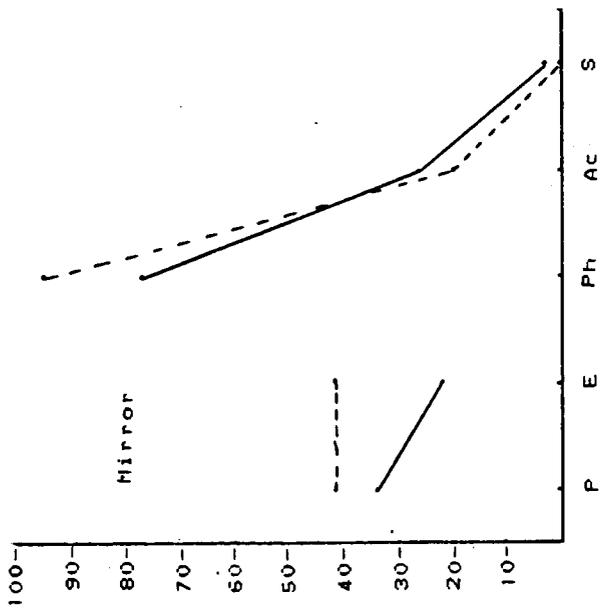


Figure 6.6. Mean self-description responses for context across type responses for context across type for vocational class from each sex.

SUMMARY PICTURES OF EACH CLASS**Arts Class**

- Mirror Context: Girls score low on personality and emotional attributes. Boys score high on personality .
- In Class Context: Girls score low on social attributes. Boys score low on academic attributes.
- Family Context: Girls score high on social and low on personality.
- Friends Context: Girls score high on social attributes. Boys score high on personality.

Science Class

- Mirror Context: Girls score high on physical and emotional attributes. Boys score low on emotional attributes.
- In Class Context: Boys score low on academic, high on personality. Girls score low on emotional attributes.
- Family Context: Boys score low on personality and high on emotional attributes. Girls score high on academic and personality and low on emotional attributes.
- Friends Context: Boys score high on social attributes.

Commercial Class

- Mirror Context: Girls score low on physical attributes.
- Family context: Boys score high on personality. Girls score high on emotional attributes.
- Friends Context: Boys score high on academic attributes. Girls score low on emotional attributes.

Vocational Class

- Mirror Context: Girls score high on personality attributes.
- In Class Context: Boys score high on academic, low on personality and social attributes.
- Family Context: Girls score low on academic attributes.
- Friends Context: Girls score low on personality attributes.

INTERPRETATION

Although the results showed some differences between teaching groups in relation to sex, context and type, interpretation of these findings is difficult at this stage of research. It is not easy to draw a clear and logical picture of the possible reasons that might be responsible for the differences between teaching groups.

Better explanation and understanding of these differences might be more available in the light of the qualitative analysis of data by teaching groups and sex at level 3. Even though such differences suggest further exploration, they might have arisen by chance.

Only further data collection could elucidate the generality of the findings across a wider sampling of teaching groups.

SECOND QUANTITATIVE ANALYSIS

Before carrying out a qualitative analysis it was judged sensible to explore the frequencies of response in order to try to ascertain whether the reduction of data in the first analysis had seriously distorted the pattern. The results are given in tables 6.9 to 6.12 .

Table 6.9
Frequencies for all self-description responses for arts students.

Context	Type									
	Ph		Ac		P		S		E	
	M	F	M	F	M	F	M	F	M	F
Mr	13	53	4	0	17	7	8	0	4	5
IC	1	0	16	26	17	14	13	7	8	7
OC	1	0	8	8	11	15	17	11	8	8
Fa	1	1	7	4	20	11	40	57	13	14
Fr	1	0	3	0	17	19	37	45	8	13
Total	17	54	38	38	82	66	115	120	41	47

Table 6.10
Frequencies for all self-description responses for science students

Context	Type									
	Ph		Ac		P		S		E	
	M	F	M	F	M	F	M	F	M	F
Mr	18	48	5	0	10	15	6	6	1	13
IC	1	2	16	20	21	23	9	15	8	4
OC	1	3	5	3	11	23	9	25	10	3
Fa	0	1	5	8	14	38	34	50	15	13
Fr	0	4	1	0	11	29	47	40	6	15
Total	20	58	32	31	67	128	105	136	40	48

Table 6.11
Frequencies for all self-description responses for commercial students

Context	Type									
	Ph		Ac		P		S		E	
	M	F	M	F	M	F	M	F	M	F
Mr	20	21	4	2	19	18	5	4	3	8
IC	0	1	22	20	12	16	7	14	6	8
OC	1	0	9	2	6	10	11	11	8	8
Fa	0	2	7	2	25	20	39	28	8	18
Fr	0	0	5	1	15	18	40	26	5	9
Total	21	24	47	27	77	82	102	83	30	51

Table 6.12
Frequencies for all self-description for vocational students

Context	Type									
	Ph		Ac		P		S		E	
	M	F	M	F	M	F	M	F	M	F
Mr	48	38	9	1	32	17	15	6	8	13
IC	3	0	64	23	21	17	18	16	7	8
OC	7	1	12	3	19	11	22	12	15	14
Fa	1	0	10	1	37	20	68	46	25	18
Fr	6	0	4	2	29	15	60	26	13	15
Total	65	39	99	30	138	80	183	106	68	68

Inspection shows that the context x type interactions found in the analysis of variance hold for the total frequency data for all the classes at level 3. It seems legitimate therefore to use this data for a qualitative analysis of the students' responses.

QUALITATIVE ANALYSIS OF DATA BY TEACHING GROUP AND SEX AT LEVEL 3

INTRODUCTION

Students at level 3 were allocated into teaching groups to follow different educational and vocational programmes.

The classification method that has been used to divide students, and the courses that students were following might effect their self-concept.

The results of the analysis of variance which was carried out in the first part of this chapter, showed significant differences between teaching groups in relation to interactions between sex, context, and type.

A qualitative analysis was therefore undertaken to clarify the self-description responses mentioned by each group by both sexes in each context.

The analysis first presents the data according to type of attribute.

PHYSICAL ATTRIBUTES

These were analysed in terms of specific versus general descriptions as in the previous chapter. The results are shown in tables 6.13 to 6.16

- Girls were more specific in describing their physical attributes than boys in each teaching group.
- Arts and vocational girls were more specific in their description than science and commercial girls.
- It seems that the frequencies of the specific or general attributes related to the context. If the physical attributes were mentioned in the mirror context, they were much more likely to be specific than if they were mentioned in other contexts. A comparison between tables 6.14 and 6.15 shows this result clearly.
- It is difficult to find a clear interpretation of differences between teaching groups for both sexes in relation to the physical attributes. Differences between arts and vocational [both sexes] and science and commercial students might arise by chance. Why else should science and commercial boys and girls students be more alike in making specific responses while arts and vocational girls make substantially more and boys substantially fewer ?

Table 6.13
 Numbers of general [G] and specific [S] physical attributes mentioned
 by students at level 3 from both sexes in the different teaching groups.

Group	Sex	Mr		IN		OC		Fa		Fr		Total
		G	S	G	S	G	S	G	S	G	S	
Art	M	12	1	1	0	1	0	1	0	1	0	17
	F	35	18	0	0	0	0	1	1	0	0	54
Sc.	M	15	3	1	0	1	0	0	0	0	0	20
	F	34	14	2	0	3	0	1	0	4	0	58
Com.	M	18	2	0	0	1	0	0	0	0	0	21
	F	15	6	1	0	0	0	2	0	0	0	24
Voc.	M	43	5	3	0	7	0	1	0	6	0	65
	F	26	12	0	0	1	0	0	0	0	0	39

Table 6.14
 Percentages of general [G] and specific [S] physical attributes mentioned
 by students at level 3 from both sexes in the different teaching groups.

Group	Sex	Mr		IC		OC		Fa		Fr	
		G	S	G	S	G	S	G	S	G	S
Art	M	70.58	5.88	5.88	0	5.88	0	5.88	0	5.88	0
	F	64.81	33.33	0	0	0	0	0	1.85	0	0
Sc.	M	75	15	5	0	5	0	0	0	0	0
	F	58.62	24	3.44	0	5.17	0	1.72	0	6.89	0
Com.	M	85.71	9.52	0	0	4.76	0	0	0	0	0
	F	62.50	25	4.16	0	0	0	8.33	0	0	0
Voc.	M	66.15	7.69	4.61	0	10.76	0	1.53	0	9.23	0
	F	66.66	30.76	0	0	2.56	0	0	0	0	0

Table 6.15
percentages of specific physical attributes mentioned by
students from both sexes at level 3 .

Group	Mirror		Other contexts	
	M	F	M	F
Art	5.88	33.33	0	1.85
Sc.	15	24	0	0
Com.	9.52	25	0	0
Voc.	7.69	30.76	0	0

Table 6.16
Percentages of physical attributes mentioned by both
sexes at level 3 in the mirror context.

Sex	Art	Sc.	Com.	Voc.
M	76.46	90	95.23	73.84
F	98.14	82.62	87.50	97.42

ACADEMIC ATTRIBUTES

These were analysed in terms of positive and negative evaluation as in the previous chapter.

It seems that commercial and vocational students have lower academic self-esteem than students in the arts and science classes. Table 6.17 shows the frequencies of the most frequent negative responses mentioned by students in level 3. It is clear that most of these responses were mentioned by commercial and vocational students, e.g. I am a dreamer in the class, I am not good in some subject, I do not like the subject that I am studying.

Table 6.17
Percentages of the negative academic attributes mentioned by both sexes in level 3.

Group	In class		Other contexts		Total	
	M	F	M	F	M	F
Art	5.26	13.15	13.15	0	18.41	13.15
Sc.	9.37	0	6.24	6.44	15.61	6.44
Com.	14.89	40.74	8.50	7.40	23.50	48.14
Voc.	25.25	40	0	6.66	25.25	46.44

The highest level of negative frequencies were mentioned in the class context, except in the case of science girls and arts boys, where the out of class and family contexts produced more negative evaluation than the class context, e.g. I get anxious when I have an exam, I do not respect the school discipline, I am slow in studying.

Girls in arts and science classes appeared to be more positive in

describing their academic self than boys. The case was the opposite in commercial and vocational classes. Differences between commercial and vocational girls and other teaching groups from both sexes were too big to be related only to the chance possibility. So what were the reasons that caused this level of negative evaluation with girls? Boys and girls in the vocational and commercial classes were classified according to the same educational rules, which might influenced their academic self-esteem. Possibly they were really less competent than others who were classified in the arts and science classes. Also they might have evaluated themselves as less qualified because they were categorized as being less clever than arts and science students.

But if both sexes submitted to the same academic rules why were girls in arts and science classes were more positive and in the commercial and vocational more negative in evaluating their academic self?

It would be that girls were more sensitive to others' evaluations and influenced by social feedback more than boys. So they might have reflected others' assessments to a certain degree. This conclusion seems to be consistent with others reported below related to the personality attributes and social self in the family context.

Table 6.18
Percentages of the most frequent negative academic attributes
mentioned by both sexes in level 3.

Responses	Art		Sc.		Com.		Voc.	
	M	F	M	F	M	F	M	F
- I am a dreamer in class.	4	0	0	0	4	8	20	12
- I do not like to study.	0	0	4	0	0	0	4	0
- I get anxious when I have an exam.	0	4	0	4	8	4	0	8
- I am not good at school.	0	0	0	0	0	12	8	0
- I am not good in some subject.	0	0	0	0	4	0	4	12
- I do not understand my lessons.	0	0	0	0	4	4	4	4
- I am obliged to continue my studies.	0	0	0	0	0	4	0	4
- I cannot concentrate well.	0	0	0	0	0	4	8	0
- I do not like the subject that I am studying.	0	0	0	0	0	4	4	4
- I do not like school.	0	0	4	0	0	4	0	0
- I am behind for my grade.	0	0	4	0	0	0	0	4
- I do not respect school discipline.	4	4	0	0	12	4	0	0

Table 6.19
 Numbers of positive [P] and negative [N] academic attributes mentioned
 by students at level 3 at each sexes in the different teaching groups.

Group	Sex	Mr		IC		OC		Fa		Fr		Total	
		P	N	P	N	P	N	P	N	P	N		
Art	M	4	0	14	2	4	4	4	6	1	3	0	38
	F	0	0	21	5	8	0	4	4	0	0	0	38
Sc.	M	5	0	13	3	4	1	4	4	1	1	0	32
	F	0	0	20	0	2	1	7	1	1	0	0	31
Com.	M	4	0	15	7	6	3	6	6	1	5	0	47
	F	2	0	9	11	1	1	2	2	0	0	1	27
Voc.	M	9	0	39	25	12	0	10	0	0	4	0	99
	F	1	0	11	12	2	1	1	1	0	1	1	30

Table 6.20
 Percentages of positive [P] and negative [N] academic attributes
 mentioned by students at level 3 from both sexes.

Group	Sex	Mr		IC		OC		Fa		Fr	
		P	N	P	N	P	N	P	N	P	N
Art	M	10	0	36.84	5.26	10.52	10.52	15.78	2.63	7.89	0
	F	0	0	55.26	13.15	21.10	0	10.52	0	0	0
Sc.	M	15.62	0	40.62	9.37	12.50	3.12	12.50	3.12	3.12	0
	F	0	0	64.51	0	6.45	3.22	22.58	3.22	0	0
Com.	M	8.51	0	31.91	14.89	12.76	6.38	12.76	2.12	10.63	0
	F	7.40	0	33.33	40.74	3.70	3.70	7.40	0	0	3.70
Voc.	M	9.09	0	39.39	25.25	12.12	0	10.10	0	4.04	0
	F	3.33	0	36.66	40	6.66	3.33	3.33	0	3.33	3.33

EMOTIONAL ATTRIBUTES

As mentioned in the level analysis in the previous chapter, emotional attributes varied from one context to another, and could be categorised as positive or negative. Tables 6.21 to 6.23 present the results. Differences between groups were more clear in the family and mirror contexts. Science girls mentioned negative emotional attributes in the mirror context more than any other teaching group. The most frequent negative emotional attributes mentioned in the family context were by the arts and science girls.

Intrepretations of the differences between the teaching groups in relation to the negative emotional attributes, either in each context or as a whole appear to be difficult and could be misleading.

Table 6.21
Overall percentages of negative and positive emotional attributes mentioned by both sexes in level 3.

Group	Positive		Negative	
	M	F	M	F
Art	60.96	59.56	39.01	40.41
Sc.	49.90	47.90	32.50	52.07
Com.	83.31	54.88	16.66	45.08
Voc.	58.80	61.74	41.16	38.22

However there are three points which attract attention in table 6.21 .

1- Science girls mentioned negative emotional attributes more than any other teaching group from both sexes. 52% of their responses to the emotional aspect were negative ones. It seems that science girls

were more sensitive than others in reacting to the social environment around them. Also to meet others' expectations would be a stressful condition for them, because the science class was known as the highest level of competence. Science girls described themselves as being nervous [24%], crying easily [8%], and often feeling sorry for things they do [12%].

2- References to the negative emotional attributes made by commercial boys were the least among all teaching groups and from both sexes. There is no obvious reason for this tendency.

3- Vocational boys mentioned more negative emotional attributes than arts and vocational girls. Arts boys were about equal with arts girls. These cases were not consistent with the general results where girls appeared to be more emotional than boys. No differences between arts and vocational students from both sexes would be mainly related to the contexts.

Accordingly, it is possible that emotional attributes might be situational in terms of their quality, though they were distributed fairly evenly over all contexts in terms of quantity.

Table 6.22
 Numbers of positive [P] and negative [N] emotional attributes
 mentioned by students from both sexes at level 3.

Group	Sex	Mr		IC		OC		Fa		Fr		Total
		P	N	P	N	P	N	P	N	P	N	
Art	M	0	4	2	6	8	0	7	6	8	0	41
	F	4	1	0	7	8	0	3	11	13	0	47
Sc.	M	0	1	2	6	7	3	13	2	5	1	40
	F	4	9	0	4	3	0	2	11	14	1	48
Com.	M	2	1	3	3	8	0	7	1	5	0	30
	F	1	7	2	6	6	2	10	8	9	0	51
Voc.	M	3	5	2	5	10	5	12	13	13	0	68
	F	4	9	0	8	11	3	12	6	15	0	68

Table 6.23
 Percentages of positive [P] and negative [N] emotional attributes
 mentioned by students from both sexes at level 3.

Group	Sex	Mr		IC		OC		Fa		Fr	
		P	N	P	N	P	N	P	N	P	N
Art	M	0	9.75	4.87	14.63	19.51	0	17.07	14.63	19.51	0
	F	8.51	2.12	0	14.89	17.02	0	6.38	23.40	27.65	0
Sc.	M	0	2.50	5	15	17.50	7.50	32.50	5	12.50	2.50
	F	8.33	18.75	0	8.33	6.25	0	4.16	22.91	29.16	2.08
Com.	M	6.66	3.33	10	10	26.66	0	23.33	3.33	16.66	0
	F	1.96	13.72	3.92	11.79	11.76	3.92	19.60	15.68	17.64	0
Voc.	M	4.41	7.35	2.94	7.35	14.70	7.35	17.64	19.11	19.11	0
	F	5.88	13.23	0	11.76	16.17	4.41	17.64	8.82	22.05	0

SOCIAL ATTRIBUTES

Social attributes were mentioned most frequently in the family and friends contexts. Differences between teaching groups in relation to these two contexts were very slight in the family context, and not clear in the friends context. The data from the qualitative analysis are shown in tables 6.24 to 6.26 .

It seems that arts and science students were more self-assertive in the family context than commercial and vocational students from both sexes. Arts and science students referred more to what appeared to be a sort of confrontation with members of the family, e.g. I get into fights with my sister[s] and/or brother[s], I cannot get on well with my mother/father.

Commercial and vocational students appeared to be more self-pitying and less aggressive in the family context than others [arts and science], e.g. my parents are unfair to me, no body cares about me at home, I am not an important member of my family.

It might be possible to assume that self-assertion would be influenced by a positive academic self, and self-pity by a lower academic self-esteem, or the direction of influence might be in the opposite direction.

PERSONALITY

comments about description by sex and level have already been made in the levels analysis. There is no obvious sub-classification of these responses within level 3. It is not possible therefore to draw out any meaningful differences between classes. The data are shown in tables 6.27 and 6.28 .

Table 6.24
 Frequencies of social attributes mentioned by
 students from both sexes at level 3.

Context	Art		Sc.		Com.		Voc.		Total	
	M	F	M	F	M	F	M	F	M	F
Mr	8	0	6	6	5	4	15	6	34	16
IC	13	7	9	15	7	14	18	16	47	52
OC	17	11	9	25	11	11	22	12	59	59
Fa	40	57	34	50	39	28	68	46	181	181
Fr	37	45	47	40	40	26	60	26	184	137
Total	115	120	105	136	102	83	183	106	505	445

Table 6.25
 Percentages of frequencies of social attribute
 mentioned by students from both sexes at level 3.

Context	Art		Sc.		Com.		Voc.	
	M	F	M	F	M	F	M	F
	Mr	6.95	0	5.72	4.41	4.90	4.81	8.19
IC	11.30	5.84	8.58	11.02	6.86	16.86	9.83	15.09
OC	14.78	9.17	8.58	18.38	10.78	13.25	12.02	11.32
Fa	34.78	47.50	32.38	36.76	38.23	33.73	37.15	43.39
Fr	32.18	37.50	44.77	29.41	39.21	31.32	32.78	24.52

Table 6.27
 Frequencies of personality attributes mentioned by both sexes at level 3

Context	Art		Sc.		Com.		Voc.		Total	
	M	F	M	F	M	F	M	F	M	F
Mr	17	7	10	15	19	18	32	17	78	57
IC	17	14	21	23	12	16	21	17	71	70
OC	11	15	11	23	6	10	19	11	47	59
Fa	20	11	14	38	25	20	37	20	96	89
Fr	17	19	11	29	15	18	29	15	72	81
Total	82	66	67	188	77	82	138	80	364	356

Table 6.28
 Percentages of frequencies of personality attributes
 mentioned by both sexes at level 3 .

Context	Art		Sc.		Com.		Voc.	
	M	F	M	F	M	F	M	F
Mr	20.73	10.60	14.92	11.71	24.67	21.95	23.18	21.25
IC	20.73	21.21	31.34	17.96	15.58	19.51	15.21	21.25
OC	13.41	22.72	16.41	17.96	7.79	12.19	13.76	13.75
Fa	24.39	16.66	20.89	29.68	32.46	24.39	26.81	25
Fr	20.73	28.78	16.41	22.65	19.48	21.95	21.01	18.75

SUMMARY

Although some differences were found between teaching groups, interpretation was not easy, therefore further investigation at level 3 is suggested. The main findings are listed below:

- Girls were more specific in describing their physical attributes than boys. Interpretation of other differences between groups regarding the physical type was not possible.
- Commercial and vocational students from both sexes showed lower academic self-esteem than those in arts and science.
- Arts and science girls were more positive in describing their academic self than arts and science boys. The case was the opposite with commercial and vocational girls.
- Science girls referred to more negative emotional attributes than any other group from both sexes. Other differences also were found between some groups without sensible explanation.
- Arts and science students from both sexes showed more self-assertion than others. Commercial and vocational students appeared to be more self-pitying than others.

Students' scores in the quantitative analysis, high or low, were better interpreted in the light of the qualitative analysis. High or low scores on any aspect of the self-concept in any context could mean either negative or positive self-evaluation; or high or low self-esteem. therefore the qualitative analysis was more meaningful than the quantitative analysis in understanding the nature of the self-concept.

CHAPTER SEVEN

EXPLORING POSSIBLE OCCUPATIONAL SELVES

This chapter reports how future possible occupational selves are related to present academic achievement. It was expected that students' perceptions of their own abilities might influence occupational choices. The data yielded by the questionnaire pointed to certain occupations and groups of occupations more frequently than others. The following analysis will deal with these occupations, which are listed in tables 7.1 and 7.2

Table 7.1
Groups of occupations chosen by the students as
the first choice of desirable possible jobs.

Occupations	Sex	1st prep	3rd prep	2nd					Total	
				Art	Sc.	Com.	H/M.	Ind. Nur.		
Teaching	M	2	2	1	2	1	3	-	-	11
	F	7	7	8	1	1	-	-	4	28
Engineering	M	9	10	-	6	-	1	9	-	35
	F	5	3	-	4	-	-	-	-	12
Health Care	M	6	6	-	4	-	-	-	-	16
	F	20	15	-	13	-	-	-	16	64
Transport	M	11	5	2	7	-	1	-	-	26
	F	2	3	-	-	-	-	-	-	5
Police and Armed Forces	M	9	6	8	1	1	-	1	-	26
	F	3	-	1	-	1	-	-	1	6
Hotel Manag.	M	-	1	-	-	-	16	-	-	17
	F	-	-	-	-	-	-	-	-	-
Commerce	M	3	10	3	1	19	-	-	-	36
	F	1	3	1	-	18	-	-	-	23
Technician	M	2	2	-	-	-	-	14	-	18
	F	-	-	-	2	-	-	-	1	3

Table 7.2
Groups of occupations chosen by the students as
the first choice of less desirable possible jobs.

Occupations	Sex	1st prep	3rd prep	2nd		Secondary			Total	
				Art	Sc.	Com.	H/M.	Ind.		Nur.
Teaching	M	8	9	12	3	3	2	-	-	37
	F	12	12	8	12	6	-	-	4	54
Engineering	M	1	7	1	2	-	-	-	-	11
	F	1	3	-	1	-	-	-	-	5
Health Care	M	3	12	-	8	1	-	1	-	25
	F	10	11	-	6	1	1	-	5	34
Transport	M	3	2	-	1	-	3	3	-	12
	F	4	-	-	-	-	-	-	-	4
Police and Armed Forces	M	-	-	2	1	-	-	-	-	3
	F	-	-	-	-	-	-	-	-	-
Hotel Manag.	M	-	-	-	-	-	17	-	-	17
	F	-	-	-	-	-	-	-	-	-
Commerce	M	9	6	3	3	17	-	1	-	39
	F	9	13	8	4	10	-	-	7	51
Technician	M	4	2	-	-	1	1	1	-	9
	F	-	-	-	-	-	-	-	2	2

It is interesting that for teaching and commerce more students identified these as possible but less desirable than as possible and desirable. This suggests that some students already saw themselves as heading for occupations they were not sure they would enjoy. This might also include boys in relation to health care. The different occupations are examined in detail below.

TEACHING

Table 7.3
Teaching as a desirable and less desirable possible occupation

	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
Desirable	M	2	2	1	2	1	3	-	-
	F	7	7	8	1	1	-	-	4
Less desirable	M	8	9	12	3	3	2	-	-
	F	12	12	8	12	6	-	-	4

Girls chose teaching as a desirable possible occupation more than boys at all levels, though at level 3 teaching was chosen mostly by girls from the arts and nursing classes. Such girls perceived themselves as having a real interest and a personal aptitude for this job, though reasons for choice included social and parental values. Boys chose teaching mainly for personal interest [see table 7.4].

Thus the self concept was implicated in terms of interest, aptitude and academic qualifications the importance of which was highly appreciated by students. They were aware of being sufficiently qualified to achieve their aims [see tables 7.5 & 7.6].

Girls chose teaching as a less desirable possible job more than boys, but more students of both sexes chose teaching as a less desirable possible job than as a desirable possible job. Some students from both sexes thought that this job was possible for them because they would be able to meet the required academic qualifications, and some of them thought that this was possible for them because teaching is always

needed in society. Some girls chose it as a possible job because of parental pressure in spite of lacking a real interest in it [see table 7.6]. Most of the students justified the lesser desirability on the basis of lack of personal interest and on social evaluation of the occupation, except that some of them mentioned not having the personal characteristics needed for this kind of job. Thus the self-concept was also implicated where the student mentioned such personal characteristics.

In general students who chose teaching, especially at levels 2 and 3, felt they would be adequately qualified academically and that there was a demand for teachers. The most important indications of desirability was interest in the job, while evaluations of social esteem and working conditions were less frequent

Table 7.4
Teaching as a desirable possible occupation
Why do you think this is possible for you ?

Responses	Sex	1st prep	3rd prep	Secondary					
				Art	Sc.	Com.	H/M.	Ind.	Nur.
This job is highly respected by people	M	-	1	-	-	-	-	-	-
	F	1	-	-	-	-	-	-	-
There is a demand- for this job.	M	-	-	-	1	-	-	-	-
	F	-	-	1	-	-	-	-	-
It is easy to get the job.	M	-	1	-	-	-	1	-	-
	F	-	-	-	-	-	-	-	-
My parents like it.	M	-	-	-	-	-	-	-	-
	F	1	-	1	-	-	-	-	-
I like it.	M	1	-	1	1	1	2	-	-
	F	6	7	6	1	1	-	-	4
I have the personal aptitude for this job	M	1	1	-	-	-	-	-	-
	F	2	2	1	-	-	-	-	-
This job does not require high acad- emic qualifications	M	1	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
I am good at school.	M	-	-	-	-	-	-	-	-
	F	1	1	-	-	-	-	-	-
It is very suitable for girls	M	-	-	-	-	-	-	-	-
	F	-	-	1	-	-	-	-	-

Table 7.5
Teaching as a desirable possible occupation
What would you have to do to be able to achieve it ?

Responses	Sex	1st prep	3rd prep	Secondary					
				Art	Sc.	Com	H/M.	Ind.	Nur.
I must get high marks to be able to enter the university.	M	-	-	-	-	-	-	-	-
	F	2	-	3	-	-	-	-	-
I must be persistent, serious and good at school.	M	1	2	1	-	-	-	-	-
	F	4	2	3	-	-	-	-	2
I must get the appropriate scientific qualifications.	M	1	1	-	2	1	3	-	-
	F	4	7	5	1	1	-	-	2
I have to be sure about myself.	M	-	1	-	-	-	-	-	-
	F	2	-	-	-	-	-	-	-

Table 7.6
Teaching as less desirable possible occupation.
Why do think this is possible for you ?

Responses	Sex	1st prep	3rd prep	Secondary					
				Art	Sc.	Com.	H/M.	Ind.	Nur.
It is needed in the society.	M	-	-	1	1	-	-	-	-
	F	1	-	1	-	-	-	-	-
It is easy to get the job.	M	2	8	6	1	3	2	-	-
	F	2	11	4	7	4	-	-	3
I do not need high marks to enter the the university or any other training course.	M	-	2	4	1	-	-	-	-
	F	-	2	4	5	2	-	-	1
I am good at school.	M	2	-	-	-	-	-	-	-
	F	2	-	-	-	-	-	-	-
My parents like it.	M	-	-	-	-	-	-	-	-
	F	1	-	-	2	1	-	-	-
Students who did not understand the question	M	4	1	1	-	-	-	-	-
	F	6	-	-	-	-	-	-	-

Table 7.7
Teaching as less desirable possible occupation.

Why do you think you would not like it ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
It is a boring job.	M	-	-	1	1	-	1	-	-
	F	-	1	2	6	1	-	-	1
It is tiring and difficult.	M	2	1	2	-	1	-	-	-
	F	4	5	3	2	4	-	-	-
It has a lot of restrictions.	M	-	-	1	-	-	-	-	-
	F	1	-	-	1	-	-	-	-
No future for this occupation.	M	-	1	1	-	-	2	-	-
	F	-	-	-	1	-	-	-	1
It is not well respec- ted by people.	M	-	-	4	1	1	-	-	-
	F	-	-	1	5	-	-	-	-
The income is not that much.	M	-	1	2	1	-	-	-	-
	F	-	-	-	1	-	-	-	-
I prefer my first choice.	M	-	2	1	-	1	-	-	-
	F	3	3	2	1	-	-	-	2
I do not have the necessary personal characteristics for this job.	M	1	1	-	-	-	-	-	-
	F	1	2	1	1	-	-	-	-
I just do not like it.	M	3	4	2	-	-	-	-	-
	F	4	6	1	1	1	-	-	-
Students who did not understand the question.	M	4	-	-	-	-	-	-	-
	F	2	-	1	-	-	-	-	-

ENGINEERING

Table 7.8 shows the number of students for whom engineering was the first choice of possible occupations. Engineering in this table included any branch of engineering mentioned by the students.

Table 7.8
Engineering as a desirable and a less desirable possible occupation

	Sex	1st prep	3rd prep	Secondary					
				2nd Art	Sc.	Com.	H/M.	Ind.	Nur.
Desirable	M	9	10	-	6	-	1	9	-
	F	5	3	-	4	-	-	-	-
Less desirable	M	1	7	1	2	-	-	-	-
	F	1	3	-	1	-	-	-	-

Boys chose engineering as a desirable possible occupation more than girls, and students in levels 1 and 2 chose engineering as a desirable occupation more than students in level 3. Possibly this was because students in the preparatory school still had the chance to think about future possibilities freely without the restrictions that controlled students' choices in the secondary school. Students in level 3 realized how much their future occupations related to their present studies.

To explore this the distribution of responses at level 3 is examined. Students of both sexes in the science class chose engineering as a desirable occupation more than students in any other teaching group. It was possible for them to enter the university to study engineering, but it was not possible for other groups.

Also students in the industrial class [all male] chose engineering as a possible and desirable occupation. However only a few of them were likely to qualify to enter further training for engineering.

Thus by level 3 most students judged desirability in terms of possibility. Self-concept was implicated in terms of academic ability and subject taken, though reasons for choice also included social and parental values [see table 7.10 which also clearly shows that the students appreciated the importance of academic qualifications]. Some students [both boys and girls] reported engineering as less desirable, even at level 2 before allocation to specialised classes which would happen at level 3. At level 2 pupils may think engineering is possible for them but preferences point to other choices.

Self-concept was not much implicated in judgements of less desirability. These were few and were made on grounds of perceived evaluation of the occupation.

Thus, unlike teaching, few students were likely to enter work without expecting to enjoy it, but some who would like an engineering type job saw themselves as excluded on grounds of their own lack of ability or qualification.

Table 7.10

Engineering as a desirable possible occupation.

What would you have to do to be able achieve it ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
I must get high marks to be able to enter the university.	M	3	4	-	2	-	-	1	-
	F	3	1	-	2	-	-	-	-
I must be persistent, serious and good at school.	M	4	10	-	4	-	1	7	-
	F	4	2	-	2	-	-	-	-
I must get the appro- priate scientific qualification.	M	2	4	-	3	-	-	2	-
	F	2	-	-	3	-	-	-	-
I must be satisfied with the subject that I am studying.	M	1	1	-	1	-	-	-	-
	F	-	1	-	-	-	-	-	-

Table 7.11
Engineering as undesirable possible occupation.
Why do you think this is possible for you ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/m	Ind.	Nur.
It is needed in the society.	M	-	1	-	1	-	-	-	-
	F	-	-	-	-	-	-	-	-
My financial situation allows me to start this occupation	M	-	-	-	1	-	-	-	-
	F	-	-	-	-	-	-	-	-
I have the personal aptitude.	M	-	1	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
It is my fathers' job [or any other member of the family]	M	-	1	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
I am good at school.	M	-	2	-	-	-	-	-	-
	F	-	2	-	1	-	-	-	-
Students who did not understand the question	M	1	2	1	-	-	-	-	-
	F	1	1	-	-	-	-	-	-

Table 7.12
Engineering as undesirable possible occupation.
Why do you think you would not like it ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
It is a dangerous job.	M	-	1	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
It is tiring and difficult	M	-	1	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
It is difficult to find a vacancy.	M	-	1	-	-	-	-	-	-
	F	-	1	-	-	-	-	-	-
I prefer my first choice.	M	2	-	1	-	-	-	-	-
	F	1	-	-	1	-	-	-	-
I just do not like it.	M	1	2	-	1	-	-	-	-
	F	1	1	-	-	-	-	-	-
Students who did not answer the question	M	-	-	-	-	-	-	-	-
	F	-	1	-	-	-	-	-	-

HEALTH CARE

Unlike engineering where the data suggested pooling different specialist engineering occupations the differences within the health care group suggested comparison within it.

Table 7.13

1- Desirable

Occupations	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
Doctor	M	6	6	-	4	-	-	-	-
	F	11	9	-	10	-	-	-	1
Chemist	M	-	-	-	-	-	-	-	-
	F	3	3	-	3	-	-	-	5
Nurse	M	-	-	-	-	-	-	-	-
	F	6	3	-	-	-	-	-	10

2- Less desirable

Occupations	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
Doctor	M	3	10	-	5	1	-	1	-
	F	8	4	-	4	-	-	-	1
Chemist	M	-	-	-	-	-	-	-	-
	F	-	1	-	-	-	-	-	-
Nurse	M	-	2	-	3	-	1	1	-
	F	2	6	-	2	1	-	-	5

Girls chose occupations related to health care as desirable possible jobs more than boys.

The students in levels 1 and 2 chose occupations related to health care as desirable jobs more than the students in level 3, except for the science and nursing classes. Students in the science class would have the chance to be a doctor or a chemist and it would be much easier to be a nurse. It was not possible to follow these occupations from any of the other teaching groups except for nursing from the nurse training class. One student from the nursing class chose chemist as a desirable occupation. Although it would be difficult for her to get this job, she chose of it possibly because it is related to her studies.

Only 40% of the students in the nursing class chose nursing as a desirable job, and 20% as a less desirable one, although they were training to be nurses. This finding possibly indicates that some students in the nursing programme were not satisfied with it.

According to the regulations this group has only the choice of being in the nursing class or leaving school. Some students preferred to be in any programme rather than to leave school.

Thus, as for engineering, desirability is focussed to possibility. Self-concept is implicated in that the academic self is evaluated, but so also is subject interest [see table 7.14]. Additionally social and parental values are reported and some recognition of "suitability for

girls". One or two responses to the question of what to do to achieve the goal include personal characteristics and self confidence. These were not mentioned for engineering and suggest an awareness of client or patient interests.

Sufficient students at all levels thought health care occupations possible but undesirable for attention to be paid to their reasons. As in the case of teaching these included an expectation that their abilities would enable them to qualify for nursing but this was not highly esteemed. One or two felt parental pressure made the occupation of doctor possible for them in spite of their own lack of interest. By level 3, when possibility was constrained by ability and class in school, undesirability focussed on the low status of nursing and doubt about having appropriate personal characteristics for the job [see tables 7.15 and 7.16].

Table 7.15

Health care as desirable possible occupations.

What would you have to do to be able to achieve it ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
I must get high marks to be able to enter the university.	M	-	3	-	1	-	-	-	-
	F	4	9	-	9	-	-	-	1
I must be persistent, serious and good at school.	M	6	6	-	4	-	-	-	-
	F	16	12	-	10	-	-	-	13
I must develop the necessary personal characteristics for this occupation.	M	-	-	-	-	-	-	-	-
	F	1	2	-	2	-	-	-	-
I must be optimist about my future.	M	-	-	-	1	-	-	-	-
	F	-	-	-	1	-	-	-	-
I must be sure about myself.	M	-	-	-	1	-	-	-	-
	F	-	-	-	4	-	-	-	2
I must be satisfied with the subject that I am studying.	M	-	-	-	-	-	-	-	-
	F	1	-	-	-	-	-	-	-
I must speak some languages.	M	-	-	-	1	-	-	-	-
	F	-	-	-	-	-	-	-	-
I have to save some money to begin this occupation.	M	-	-	-	-	-	-	-	-
	F	-	-	-	1	-	-	-	-
Students who did not understand the question.	M	-	-	-	-	-	-	-	-
	F	2	1	-	-	-	-	-	-

Table 7.16

Health care as less desirable possible occupations.

Why do you think this is possible for you ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
It is needed in the society.	M	1	1	-	3	-	-	-	-
	F	-	1	-	-	1	-	-	-
It is easy to get the job. [for nursing only]	M	-	-	-	-	-	-	-	-
	F	1	2	-	-	-	-	-	-
It is related to the subject that I am studying.[nursing]	M	-	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	4
I do not need high marks to enter the university or any other training course.[nursing]	M	-	1	-	2	-	-	-	-
	F	1	5	-	1	1	-	-	-
I have the personal aptitude for this job.	M	-	-	-	-	-	-	-	-
	F	-	1	-	1	-	-	-	-
I have some experiences related to this job. [for nursing only]	M	-	-	-	-	-	1	1	-
	F	-	-	-	-	-	-	-	-
I am good at school.	M	-	6	-	3	-	-	-	-
	F	3	3	-	2	-	-	-	-
It is my parent's desire.[for Dr.]	M	-	-	-	1	-	-	-	-
	F	-	1	-	2	-	-	-	-
It is my father's job [or any other member of the family.[for Dr.]	M	-	-	-	-	-	-	-	-
	F	1	-	-	-	-	-	-	-
I like it.[for Dr.]	M	-	-	-	-	-	-	-	-
	F	1	-	-	-	-	-	-	1
Students who did not understand the question.	M	2	4	-	-	1	-	-	-
	F	3	3	-	-	-	-	-	-

Table 7.17

Health care as less desirable possible occupations.

Why do you think you would not like it ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
It is tiring and difficult.	M	-	1	-	1	-	1	-	-
	F	1	2	-	4	-	-	-	-
No future for this job. [for nursing only]	M	-	1	-	1	-	-	-	-
	F	1	1	-	-	-	-	-	-
It is not well respected by people.[nursing]	M	-	-	-	-	-	-	-	-
	F	-	2	-	-	1	-	-	3
It is difficult to find a vacancy.	M	-	1	-	1	-	-	-	-
	F	-	-	-	-	-	-	-	-
The income not that much.	M	-	1	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
I prefer my first choice.	M	1	-	-	1	-	-	-	-
	F	1	1	-	1	-	-	-	1
I do not have the necessary personal characteristics for this occupation.	M	-	2	-	3	-	-	-	-
	F	-	3	-	-	-	-	-	1
I just do not like it.	M	1	7	-	3	-	-	-	-
	F	7	-	-	1	-	-	-	-
Students who did not understand the question.	M	1	2	-	-	1	-	-	-
	F	1	2	-	-	-	-	-	-

TRANSPORT

Table 7.18 summarize responses in this category.

Table 7.18

Occupations in transport as desirable possible jobs.

Occupations	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
Pilot	M	10	5	2	7	-	1	-	-
	F	2	3	-	-	-	-	-	-
Driver	M	1	-	-	-	-	-	-	-
	F	-	-	-	-	-	-	-	-

Occupations in transport as less desirable possible jobs.

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M	Ind.	Nur.
Pilot	M	3	-	-	1	-	-	-	-
	F	-	-	-	-	-	-	-	-
Driver	M	-	2	-	1	-	3	3	-
	F	4	-	-	-	-	-	-	-

Concerning transport the students mentioned only pilot and driver as both desirable and less desirable possible occupations.

Pilot as an occupation was more desirable than driver for boys and girls for social reasons. Boys chose pilot as a desirable possible job more than girls.

Students who chose pilot as a desirable possible occupation were from levels 1 and 2 and from science, arts and [only one student] from the hotel management class at level 3. Possibly students in the vocational teaching group were more controlled by their programmes, and their choices were made mostly in relation to their studies. Students in the academic programme [arts and science] and students at levels 1 and 2 were able to think of more possibilities, even though one student from the hotel management group thought that this job was possible for him, but he chose it on the basis of personal interest.

Self-concept was implicated in term of academic ability, though reasons for choice included personal interest and financial, parental and social values. [see table 7.19]

The students were aware of of the importance of academic qualifications and personal characteristics for achieving their goals. [see table 7.20]

Four female students from level 1 and some male students from levels 2 and 3 chose the driver occupation as a less desirable job. Students from both sexes thought that their abilities would enable them to qualify for this job. [see table 7.21]

But this job was not desirable for boys and girls for different reasons. Most boys who chose driving as a possible and less desirable job concentrated on the probability of facing accidents. From the students' responses we can speculate that the many accidents that occur in Jordan every year somehow scare them away from choosing driving as a profession. Two other male students felt that they did not have the appropriate personal characteristics for this job. Girls considered this job as more suitable for men than for women. [see table 7.22]

Table 7.22

Occupations related to transport as less desirable possible jobs.

Why do you think you would not like it ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
It is a boring job. [for driver only]	M	-	-	-	-	-	1	-	-
	F	-	-	-	-	-	-	-	-
It is a dangerous job.	M	2	2	-	1	-	2	-	-
	F	1	-	-	-	-	-	-	-
It is tiring.	M	1	-	-	1	-	-	-	-
	F	-	-	-	-	-	-	-	-
It is not well respected by people. [for driver only]	M	-	-	-	1	-	1	-	-
	F	-	-	-	-	-	-	-	-
I prefer my first choice.	M	-	-	-	-	-	1	-	-
	F	-	-	-	-	-	-	-	-
I do not have the necessary personal characteristics for this occupation.	M	-	-	-	-	-	-	2	-
	F	-	-	-	-	-	-	-	-
I just do not like it.	M	-	-	-	-	-	-	1	-
	F	-	-	-	-	-	-	-	-
It is more suitable for men.[driver]	M	-	-	-	-	-	-	-	-
	F	3	-	-	-	-	-	-	-

Occupations related to the police and armed forces were thought more desirable by boys than girls. Some girls chose the occupation of policewoman but none of them chose to be in the armed forces.

Most of the students who chose the police and the armed forces occupations were from levels 1 and 2 and from the arts group at level 3, probably because the other teaching groups [at level 3] had educational and vocational programmes related to specific occupations connected to their studies which influenced their choices. Reasons for choice include social values, personal interest and personal abilities.[see table 7.24].

The self-concept was implicated, in that academic and personal characteristics had been evaluated. Table 7.25 shows that students concentrated more on both the importance of their academic qualifications and on their personal characteristics for achieving their goals.

Only three boys mentioned the police and the armed forces jobs as less desirable possible occupations. Students mentioned only one reason related to academic qualifications to justify the possibility, and one reason related to personal characteristics to justify the lesser desirability. [see tables 7.26 & 7.27]

Table 7.24

Occupations related the police and armed forces as desirable possible jobs.

Why do you think this is possible for you ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind	Nur.
This job is highly respected by people.	M	-	-	1	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
There is a demand for this job.	M	7	3	3	-	-	-	-	-
	F	2	-	-	-	1	-	-	-
I like it.	M	1	1	6	1	-	-	-	-
	F	-	-	1	-	1	-	-	1
I have the personal aptitude for this job.	M	2	-	-	-	-	-	1	-
	F	-	-	1	-	-	-	-	1
I am good at school.	M	-	-	1	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
It easy to get the right practice for this occupation.	M	-	1	-	-	1	-	-	-
	F	-	-	-	-	-	-	-	-
It is an interesting occupation.	M	-	-	1	-	-	-	-	-
	F	-	-	-	-	-	-	-	-
Students who did not understand the question.	M	1	-	-	-	-	-	-	-
	F	1	-	-	-	-	-	-	-

HOTEL MANAGEMENT

Table 7.28 summarizes responses in this category.

Table 7.28

Occupations related to hotel management as desirable possible jobs.

Occupations	Sex	1st prep	3rd prep	2nd			Secondary		
				Art	Sc.	Com.	H/m.	Ind.	Nur.
Hotel Management [undefined]	M	-	-	-	-	-	1	-	-
	F	-	-	-	-	-	-	-	-
Hotel manager	M	-	1	-	-	-	6	-	-
	F	-	-	-	-	-	-	-	-
Receptionist	M	-	-	-	-	-	2	-	-
	F	-	-	-	-	-	-	-	-
Cook and chief	M	-	-	-	-	-	7	-	-
	F	-	-	-	-	-	-	-	-

Occupations related to hotel management as less desirable possible jobs.

Occupations	Sex	1st prep	3rd prep	2nd			Secondary		
				Art	Sc.	Com.	H/M.	Ind.	Nur.
Hotel Management [undefined]	M	-	-	-	-	-	4	-	-
	F	-	-	-	-	-	-	-	-
Cook	M	-	-	-	-	-	3	-	-
	F	-	-	-	-	-	-	-	-
Waiter	M	-	-	-	-	-	9	-	-
	F	-	-	-	-	-	-	-	-
Hotel maid	M	-	-	-	-	-	1	-	-

Occupations related to hotel management as desirable and less desirable possible jobs were chosen mainly by the hotel management students [all males] except that one male student from level 2 chose the occupation of hotel manager as a desirable possible job, because he thought that he would be capable enough and the income is not bad. It is interesting that the provision of a special class at level 3 does not appear to influence choices at levels 1 and 2.

Some students chose cook [28%] and some others chose hotel manager [24%] as the most desirable possible jobs; reasons for choice included the subject taken and personal interest. The self-concept was implicated in terms of academic abilities. Again the students were aware of the importance of academic qualifications in order to achieve their goals [see table 7.30].

The least desirable job chosen by the hotel management students was waiter [36%]. In addition some other occupations in the same field like cook [12%] and hotel maid [4%] were less desirable, while 20% of the students mentioned undefined jobs, any job in the hotel management.

Students thought that these jobs were possible for them because they related to their studies, also students thought that their abilities would enable them to qualify for these jobs. But some students [40%] thought that the job of waiter and hotel maid were not highly esteemed, while others did not have any real interest in hotel

management occupations.

64% of the hotel management students chose occupations related to their subject as desirable, and 68% of them chose jobs also related to hotel management as less desirable occupations. The students did not consider occupations outside hotel management very much, but a number were likely to enter it with a low level of job satisfaction.

Table 7.29

Occupations related to hotel management as desirable possible jobs.

Why do you think this is possible for you ?

Responses	3rd prep Male	H/M. Male
There is a demand for this job.	-	4
I like it.	-	9
I have the personal aptitude for this job.	1	1
It is related to my present study.	-	12
I am good at school.	-	1
This job has a good future.	-	1
The income is very good.	1	-
It is easy to get the right practice for this occupation.	-	1
It is an interesting job.	-	1

Table 7.30

Occupations related to hotel management as desirable possible jobs.

What would you have to do to be able to achieve it ?

Responses	3rd prep Male	H/M. Male
I must be persistent, serious and good at school.	-	13
I must get the appropriate scientific qualifications.	1	7
I must be satisfied with the subject that I am studying.	-	2
I must enter some training courses.	-	3
I must be sure about myself.	-	1

Table 7.31

Occupations related to hotel management as less desirable possible jobs.

Why do you think this is possible for you ?

Responses	3rd prep Male	H/M. Male
This job is related to the subject that I am studying.	-	14
It is easy to get the appropriate training for this occupation.	-	4
Students who did not understand the question.	-	1

Table 7.32

Occupations related to hotel management as less desirable possible jobs.

Why do you think you would not like it ?

Responses	3rd prep Male	H/M. Male
It is not well respected by people. [for waiter & hotel maid only]	-	10
No future for this job.	-	2
I just do not like it .	-	3
I do not have the appropriate abilities for this job.	-	1
Students who did not understand the question.	-	1

COMMERCE

Table 7.33 summarizes responses in this category.

Table 7.33
Occupations related to commerce as desirable possible jobs.

Occupations	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
Business-person	M	3	9	2	1	5	-	-	-
	F	-	1	-	-	1	-	-	-
Company-manager	M	-	-	-	-	4	-	-	-
	F	-	-	-	-	7	-	-	-
Secretary	M	-	-	-	-	-	-	-	-
	F	1	1	1	-	7	-	-	-
Bank clerk	M	-	-	-	-	-	-	-	-
	F	-	1	-	-	1	-	-	-
Accountant	M	-	1	1	-	10	-	-	-
	F	-	-	-	-	2	-	-	-

Occupations related to commerce as less desirable possible jobs.

Occupations	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
Business-person	M	8	4	-	-	1	-	-	-
	F	-	-	-	-	-	-	-	-
Company-manager	M	1	-	-	1	1	-	-	-
	F	-	1	-	-	-	-	-	-
Sales-person	M	-	-	-	1	1	-	-	-
	F	1	-	-	-	-	-	-	-
Secretary	M	-	2	1	1	7	-	-	-
	F	8	10	8	3	7	-	-	7
Typist	M	-	-	-	-	-	-	-	-
	F	-	1	-	-	-	-	-	-
Bank clerk	M	-	-	-	-	2	-	-	-
	F	-	1	-	-	-	-	-	-
Accountant	M	-	-	2	-	5	-	1	-
	F	-	-	-	1	3	-	-	-

Boys chose occupations related to commerce as desirable possible jobs more than girls. Students in the commercial class from both sexes chose occupations related to commerce as desirable possible jobs more than any other teaching group at level 3, and more than the students at levels 1 and 2.

Self-concept was implicated in terms of academic ability and subject taken, though reasons for choice also include social and parental values in addition to personal interest and some personal experiences [see table 7.34]. The importance of the academic self-concept is seen in table 7.35 which shows that students were interested in their academic qualifications in order to achieve their goals.

Sufficient students [boys and girls] from all levels thought that the occupation of secretary was possible for them because their abilities would enable them to qualify for this job, but this was less desirable because this job was not highly esteemed, and they lacked interest in it.

It seems that the students [both sexes] at levels 1 and 2 and also in other teaching groups at level 3, except the commercial class, were thinking mainly of the occupations of business-person and secretary as desirable and less desirable possible occupations.

Students perceived the possibility in the light of the required academic qualifications for these two jobs, and they thought that they would be able to meet these requirements.

Some students from both sexes at level 3 thought that the occupation of an accountant was possible for them but less desirable. Some male students at levels 1 and 2 thought that the occupation of businessman was possible for them but they did not like it. A few other students from the different levels [both sexes] chose the job of bank clerk, company manager and salesperson as less desirable possible occupations.

Students' justifications for these possibilities were made on the basis of academic qualifications, subject taken and personal aptitude for these jobs, though reasons for choice also included social and parental values [see table 7.36]. The academic self-concept was implicated in the students' judgements of possibilities rather than lesser desirability. A few students mentioned the personal characteristics and the personal abilities needed for these jobs to justify their lesser desirability, while all other judgements were made on ground of perceived social evaluation for these occupation in addition to personal interest [see table 7.37].

Table 7.35

Occupations related to commerce as desirable possible jobs.

What would you have to do to be able to achieve it ?

Responses	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur.
I must get high marks to be able to enter the university.	M	1	6	1	1	6	-	-	-
	F	-	1	-	-	4	-	-	-
I must be persistent, serious and good at school.	M	2	4	3	1	15	-	-	-
	F	-	1	-	-	10	-	-	-
I must get the appropriate scientific qualifications.	M	1	-	1	-	8	-	-	-
	F	-	-	1	-	5	-	-	-
I must enter some training courses.	M	-	3	-	-	4	-	-	-
	F	1	2	-	-	6	-	-	-
I must speak some languages.	M	-	-	-	-	1	-	-	-
	F	-	-	-	-	-	-	-	-
I must have some money to begin this job.	M	-	-	-	-	-	-	-	-
	F	-	-	-	-	1	-	-	-

Table 7.37
Occupations related to commerce as less desirable possible jobs.
Why do you think you would not like it ?

Responses	Sex	1st prep	3rd prep	2nd			Secondary		
				Art	Sc.	Com.	H/M	Ind.	Nur.
It is a boring job.	M	-	1	-	1	10	-	-	-
	F	1	1	2	1	2	-	-	-
It is a tiring job.	M	1	-	-	1	1	-	-	-
	F	1	-	-	-	-	-	-	-
It has a lot of restrictions.	M	-	-	-	1	6	-	1	-
	F	1	4	4	3	2	-	-	-
No future for this job. [for secretary]	M	1	-	1	-	4	-	-	-
	F	-	1	1	1	-	-	-	1
It is not well respected by people. [for secretary]	M	-	-	-	-	-	-	-	-
	F	-	1	-	-	3	-	-	3
The income is not that much.	M	-	-	-	-	1	-	1	-
	F	-	-	-	-	-	-	-	-
I prefer my first choice.	M	1	-	-	-	3	-	-	-
	F	-	2	2	1	1	-	-	-
I do not have the necessary personal characteristics for this job.	M	-	-	-	-	1	-	-	-
	F	-	-	1	-	-	-	-	-
I just do not like it.	M	2	2	2	1	2	-	-	-
	F	4	3	4	1	2	-	-	3
I do not have the appropriate abilities for this job.	M	-	-	-	-	-	-	-	-
	F	-	1	-	-	1	-	-	-
My parents do not like it.	M	-	-	-	-	-	-	-	-
	F	-	1	-	1	1	-	-	-
Students who did not understand the question.	M	3	4	-	-	-	-	-	-
	F	1	-	-	-	-	-	-	-
Students who did not answer the question.	M	2	1	-	-	-	-	-	-
	F	1	-	-	-	-	-	-	-

TECHNICIAN

Table 7.38
Technician as a desirable and less desirable possible job.

	Sex	1st prep	3rd prep	2nd		Secondary			
				Art	Sc.	Com.	H/M.	Ind.	Nur
Desirable	M	2	2	-	-	-	-	14	-
	F	-	-	-	2	-	-	-	1
Less desirable	M	4	2	-	-	1	1	1	-
	F	-	-	-	-	-	-	-	2

Boys chose the occupation of technician more than girls. Students in the industrial class chose the job of technician as a possible desirable occupation more than any other teaching group and more than the students in levels 1 and 2. They chose to be technicians in their own field which was "air conditioning".

Some students in other teaching groups chose the same occupation, but in other fields related to their studies especially in the science and the nursing classes. The students in levels 1 and 2 chose this occupation for different reasons related mainly to the academic qualifications and parental values. [see table 7.39] The importance of the academic self-concept is seen in table 7.40 which clearly shows that students appreciate the importance of the academic qualifications in achieving their goals.

Some students chose technician as a possible jobs but less desirable. It was possible for them in relation to the subject taken, personal

abilities and vocational experiences, but it was less desirable for personal interest and for the social evaluation of this job. [see tables 7.41 & 7.42]

The self-concept is implicated when students justify the possibility in terms of academic abilities and the experienced self. While the self-concept has not been implicated when students made judgements for their less desirability.

56% of the students in the industrial class chose jobs related to their subject as desirable possible jobs. While 4% of them chose occupations related to their studies as less desirable possible jobs. That is mean there are still 40% of the students chose other jobs in other fields. This conclusion raise a question for consideration related to the degree of satisfaction in this course. It seems that some students were not satisfied with their studies although they were training to be technicians in certain craft.

SUMMARY

The students' choices and reasons for making them could be interpreted within the frame-works of provision in school, parental values, and the appraisal of the jobs themselves.

Within the school context the academic self-concept and issues of qualification were salient. Comparing levels 1 and 2 with level 3 showed how students became constrained in what they saw as possible for their own academic ability as reflected in their selection for classes at level 3. By level 3 we found students who were fortunate enough to be qualified for occupations that they wanted to follow, others who were qualified only for certain occupations but were not really interested in them, and yet others who would have liked to follow certain occupations but were not qualified to do so. This finding suggested that in certain occupations such as teaching and nursing there was some risk of job dissatisfaction and depression.

Although there was evidence of an appreciation of the wider frame-work of parental values and social appraisal of the job, the student's own interests and awareness of the relevance of qualifications were salient.

The exploration of the possible occupational self has allowed not only discussion of context influenced self-concept as looked at elsewhere in this study but has also made clear how students interests and preferences are a part of their appraisal of themselves.

Appreciation of the possibilities and constraints of academic

qualifications and abilities showed how important the present academic self-concept was, particularly at level 3, in thinking about future possible selves, at least in so far as occupation was concerned.

Students referred to some other characteristics of the self-concept which were not related to every day context. In particular qualities of seriousness, persistence and care for others. These qualities related more to the tasks the students saw ahead of them than to perceptions of the self in the present contexts. Students perceived such attributes as requirements for achieving their future goals. Therefore it seems important to take into account the individuals' frame of reference when they describe themselves.

It would be interesting to follow this work with a larger sample of students at level 3 and to explore the relation of other aspects of perceived future selves to current self-concepts.

CHAPTER EIGHT

DISCUSSION

The present study, which is developmental in design, explored present possible selves in relation to several contexts, together with future possible occupational selves. However, these were based on self-report in imagined contexts. Validation through further investigation in real contexts is essential if the findings are to be fully interpreted. As they stand, the findings suggest various developmental changes in the self-concept during adolescence. Differences were found in respect to the following aspects:

LEVEL (age)

Quantitative analysis showed that the older students provided more responses than the younger. The qualitative analysis showed these to reflect greater abstraction and differentiation with a richer variety of self descriptions. All the self-concept dimensions underwent such changes. Negative self-evaluation appeared to increase with age. The evidence for this came from the description of the academic self, emotional attributes and the possible occupational selves.

SEX

Girls showed greater interest in their physical attributes. Also they appeared to be more social and emotional than boys. Boys, in general, made more reference to the academic self. Girls, generally, were more negative in describing themselves, suggesting that girls had lower

self-esteem than boys. Also it seemed that girls were more socially oriented than boys.

CONTEXT

The present study showed a clear interaction between context and the dimensions of the self-concept. Different pictures of the self appeared in the different contexts, and they were basically stable across age and sex. The physical self was recognized in the mirror context, the academic self in the class context and the social self in the family and friends contexts. Personality and emotional descriptors pervaded the five contexts.

TEACHING GROUPS

Although some differences between teaching groups were found to be significant, more investigation is needed to ascertain the quality of such differences. However the most clear findings were that the commercial and vocational students from both sexes showed lower academic self-esteem than others in arts and science classes. Also they appeared to be more self-pitying than others. Other findings suggested sex differences in the salience of self descriptions in different contexts in different teaching groups.

OCCUPATIONAL SELVES

The students were, generally, realistic in their choices of future possible jobs, and in the reasons they gave to justify their answers. A connection between present selves, especially the academic self, and future occupational selves appeared to be evident. Students'

evaluation of their academic abilities and the subjects they were studying constrained their choices more than other factors. So the range of the occupational choices decreased with level, and became more limited in level 3 [teaching groups], especially in the case of the vocational classes. Some differences were found between boys and girls in relation to some occupations. Some students classified certain jobs as suitable either for men or women and chose accordingly.

The findings reported in this study have several important implications for understanding the self-concept during adolescence. The following notions were the most interesting points in this study:

DEVELOPMENT OF THE SELF-CONCEPT

With respect to the developmental aspect, adolescents' self-conceptions were different from one stage to the other. As students got older they gave more abstract and sophisticated self-description responses. Probably such changes depend on the developing ability of individuals for understanding themselves and being able to draw inferences about their own characteristics from their own life experiences.

There is no general agreement in the literature whether the development of the self-concept is continuous or discontinuous. Results seem to be influenced by the techniques the researchers used. However the general qualitative findings of the present study suggested gradual and constructive changes in the adolescents' self-concept from one level to another and for each of the five aspects of

the self which were analysed. The quantitative analysis showed that the number of students providing each type of descriptor increased with age, as also did the absolute number of descriptors used. There was some suggestion of different rates of change in this respect between the ages selected. However, given the design of this study, it was always possible that there might be discontinuities that were not revealed. A longitudinal study with the same students reporting relatively frequently might resolve this question.

CONTEXT INFLUENCE ON THE SELF-CONCEPT

Self description responses were found to be different from one imagined context to another. Self appeared to be differentiated according to context. Since each context reflects specific aspects of the self-concept it seems important to consider various types of contexts or social relationships to investigate the development of the self-concept. There is general agreement that the child-parent relationship is a very important variable that affects the self-concept. School is probably nearly as important. It is useful to regard self-report in each context separately since each provides a particular picture of the self. Although the connection between context and the self-concept is evident in the literature, the present study explored this point in greater detail than most others. Some contexts were more powerful in eliciting specific context-related descriptions [mirror, family, school class and friends] and the other context [out of class] elicited less clearly related descriptions with rather more reference to general personality and emotion. These findings suggest that the developing self-concept might

best be considered in terms both of general features and of specific aspects related to particularly important life experiences.

UNITARY SELF-CONCEPT OR MULTIPLE SELVES

In spite of the reference to the notion of the multiple selves in the literature there is little empirical work on this topic. The present study provides good evidence of the importance of exploring the self-concept as multiple rather than as global. The students in this study expressed different selves as salient in the different contexts. Each self had its own characteristics and was well differentiated.

Although there was an indication of a general self-concept, particularly described in terms of personality and emotion, that permeated the various contexts, it seemed that exploring the self-concept without reference to different contexts might be unsatisfactory. The example of the class context, which was not specific enough to elicit a context related description, illustrated this point. A research method of eliciting description without reference to context is likely to yield the rather narrow band of general description found in that context. There are certain characteristics and specific social relationships which influence the individuals' self-concepts which cannot be understood without consideration of relevant contexts.

It was clear in this study that the self-concept consists of several dimensions, and some of these dimensions were a part of the self-concept in one context more than the others. This finding provides sufficient justification for exploring the individual's multiple selves instead of one single self, but it should not be concluded that the

multiple selves are unrelated. Although the data have not been analysed thoroughly to explore this issue it was clear that self descriptions given for different contexts cross-referenced in at least two ways. Sometimes the same descriptor was used for different contexts, and sometimes the same topic was referred to, though from different perspectives.

POSSIBLE SELVES IN THE LIGHT OF CURRENT AND ANTICIPATED LIFE EXPERIENCE

The findings showed an increase in negative self-evaluation with age, and with self-related evaluation of occupational goals. Probably as individuals got older they became aware of the personal and environmental restrictions that might preclude achieving their goals. Particularly it seemed that the educational or vocational programmes the students followed had some effect on their self-esteem. The students who were chosen for the science and arts classes expressed more positive attitudes towards themselves and others than those who were allocated to follow vocational programmes. A number of students from the vocational classes (boys and girls) showed dissatisfaction either with their present study or with future jobs which they supposed to be related to their present study. Such findings suggested that a certain number of individuals would take up jobs they might not enjoy and appreciate in the future.

It is difficult in this research to assess the origins of the lower self-esteem of the vocational students, but it should not be forgotten that admission to the different teaching groups was based on academic performance, an experience which influenced the academic self-concept.

The findings were a clear example of how reflection on current and anticipated life experience contributed to the self-concept.

CONCLUSION AND SUGGESTIONS FOR FURTHER RESEARCH

The study developed some questions of concern for further research:

- Validation of the effect of context by analysis of self-report in actual contexts
- A longitudinal study to investigate the developmental trends suggested in this study.
- Exploration of the interaction between the present and the future possible selves in relation to other aspects than the occupational selves.
- A systematic study to explore the quality of the significant differences in self-conceptions between the different teaching groups in the secondary school.

This study presents no challenge to the findings about the processes of adolescent development that were reviewed in the literature although it was located in a different culture. The author had expected, however, that the content of the self concept would reflect some of the cultural characteristics of life in Jordan. The data did reveal certain aspects of family and friends relationships. Culture appears to influence specific content rather than the overall picture, but this generalization is made cautiously since the actual location, a capital city with well-developed schooling, may not be the best to test it. Findings from rural locations would be useful. However the study does investigate the development of the self-concept in systematically greater detail than most others and its findings may influence the development of further research both in Jordan and elsewhere.

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APPENDIX A2

Main study - First questionnaire

Dear student,

This questionnaire is about how an individual of your age describes him/herself.

There are no right or wrong answers in this questionnaire. Your answer is only a description of yourself in different situations-related to your daily life. Please try to answer all questions honestly, frankly and seriously. None of the written material will be shown to anyone at your school. It will be use for research purposes only.

Give yourself enough time to think about the answers.

Please answer all the questions. Do not hesitate to ask it you find anything not clear.

Thank you for your help.

Student name:

School:

Class:

Subject:

Sex:

Date of birth:

Describe yourself in each of the following situations or places:

a) In front of the mirror

b) Inside the classroom

c) Out of the classroom

d) At home with your family

e) With your friends

APPENDIX A3

Main study

Second questionnaire

Dear student,

This questionnaire is about how an individual of your age describes him/herself according to future possibilities. That is, how you think of yourself in the future. It is true that no one knows exactly what he or she might be in the future, but everyone has some idea about the possible positive or negative changes in his/her life. Also, everyone has some idea of the things he/she likes or dislikes and of the things he/she wants or does not want. Nothing is sure, but many things are possible.

All the given questions this time relate to future possibilities with different situations of life. Please read each question carefully and try to answer all of them honestly, frankly and seriously.

I would like to remind you that none of your answer will be shown to anyone at your school and will be used for research purposes only.

Please answer all questions. Do not hesitate to ask if you find anything vague or not clear.

Thank you for your help.

Student name:

School:

Class:

Subject:

Sex:

Date of birth:

Imagine yourself as a grown up and tell me what occupations or jobs are possible for you in the future.

Try to list them

-

-

-

-

-

-

-

Choose from your list the two occupations or jobs that you would like the most:

First choice:

a) Why do you think this is possible for you?

b) What would you have to do to be able to achieve it?

Second choice:

a) Why do you think this is possible for you?

b) What would you have to do to be able to achieve it?

Now have another look at your list and choose the two jobs or occupations that you would like the least:

First choice:

a) Why do you think this is possible for you?

b) Why do you think you would not like it?

Second choice:

a) Why do you think this is possible for you?

b) Why do you think you would not like it?

Imagine yourself at the age of 30 looking into the mirror.
What do you think you will look like?

By the age of 30 many people will have married and become independent, while many others will be about to marry. What do you think is possible for you at this age, and what do you like and dislike about family life?

APPENDIX B1

MIRROR CONTEXT

1. Physical category - Mirror context

Self-description items

I am ugly.

I am a short-sighted person (myopic).

I am of average height.

I am tall.

I am big.

I am small.

I am healthy.

I am pretty.

I am unhealthy.

I am short.

I am of average size.

I have attractive eyes.

I am fat.

I am thin.

I am energetic.

I see how much I am changing.

My body is out of proportion.

I am a good athlete.

I am graceful.

I have a good physique.

I am not as nice looking as most people.

I am interested in my appearance.

I am strong.

I have acne.

I have a nice figure.

I am not energetic.

I dress fashionably.
I am average looking.
I look like my mother.
I have brown hair.
I have blond hair.
I have black hair.
I have soft hair.
I have coarse hair.
I have a lot of hair.
I have tidy hair.
I have beautiful hair.
I have long hair.
I have short hair.
My hair has split ends.
I have dark eyes.
I have dark brown eyes.
I have brown eyes.
I have green eyes.
I have blue eyes.
I have small eyes.
I have long eyelashes.
I have brown skin.
I have tan-coloured skin.
I have white skin.
I have sensitive skin.
I have freckles on my face.
I have a small mouth.
I have an average sized mouth.
I have a beautiful mouth.
I have a big nose.

I have a small nose.

I have a beautiful nose.

I have small ears.

I have average sized ears.

My teeth need straightening.

I have a pale face.

I have dimples.

I have a short neck.

I have a long neck.

I have fat arms.

I have soft hands.

I have short nails.

I have thin legs.

I am elegant.

2. Academic category - Mirror context

Self-description items

I keep thinking of my study and my future.

I am not ignorant.

I am good at school.

I am not good at school.

I am advanced for my grade.

I am a student.

3. Personality Category - Mirror context

Self-description items

I am different from other people.

I am silly.

I am hesitant.

I am tidy.

I am clean.

I am polite.

I like the way I am.

I am arrogant.

I am kind.

I am conceited.

I am cheerful.

I am peculiar.

I am not normal.

I am proud of myself.

I am modest.

I am perfect.

I am sure of myself.

I am not sure of myself.

I am weak in character.

I am as normal as most people.

I admire myself.

I am clever.

I am bold.

I respect myself.

I am of average intelligence.

I am satisfied with myself.

I am able to express myself.

I am gloomy.

I am dull.

I am serious.

I am independent.

I would change many things about myself if I could.

I am quiet.

I am aware.

I am a good person.

I am persistent.

I am kind-hearted.

I am tolerant.

I am frank.

I am stubborn.

I am a normal person.

I am jealous.

I am selfish.

I am mean.

I am a moral person.

I am shy.

I am ambitious.

I have a strong character.

I am honest.

I am an important person.

I am optimist.

I am an example to follow.

I am responsible.

I am a complicated person.

I am patient.

I am a decision maker.

I do not understand myself.

I think that it is better to have a good personality than good appearance.

5. Social category - Mirror context

Self description items

I am well accepted by others.

People make fun of me.

I like people.

I like to attract the opposite sex.

I am not easy to be liked.

I do not please my father.

I wish for good things for everyone.

I think of my family.

My friends usually following ideas.

I have high status.

People like me.

I am inexperienced.

I evaluate my relationship with other.

I live in a jungle with wild animals.

My family does not consider my feelings.

I like to be praised.

I respect others.

I am a girl.

Nobody understands me.

I like to get a lot of attention.

People do not respect me.

I am treated well by others.

My parents treat me sometimes as a child and sometimes as an adult.

I am a man.

6. Emotional category - Mirror context

Self-description items

I am a happy person.

I am nervous.

I am unstable emotionally.

I am often sorry for the things I do.

I am worthless.

I hate myself.

I am tortured.

I am a daydreamer.

I am a nail-biter.

My mood influences the way I see myself.

I feel depressed.

Memories flood my mind.

I am stable emotionally.

My thoughts are not in order.

I am often afraid.

I have strange ideas.

7. Self as others see me category - Mirror context

Self-description items

People think I am thin.

People think that I have attractive eyes.

My friends see me as a beautiful person.

People ridicule me because of my height.

People think I am a short person.

People think I am a fat person.

People think I am a tall person.

Others see me as a gloomy person.

I am regarded as a nervous person.

Others see me as a brunette.

8. Beliefs Category - Mirror context

Self-description items

I think that God must be mighty to have created mankind.

I believe in God.

9. Interests category - Mirror context

Self-description items

I like to imitate singers.

I am interested in reading.

I am interested in sport.

10. Home Background category - Mirror context

Self-description items

I am poor.

I am rich.

APPENDIX B2**CLASS-CONTEXT****1. Physical Category - Class context**Self-description items

I am short.

My body is not very well developed.

I am ugly.

I am energetic.

I feel sick.

I am pretty.

2. Academic category - Class contextSelf-description items

I am attentive.

I am a dreamer.

I do not like school.

I like school.

I do not like to study.

I do not understand my lessons.

I am obliged to continue my studies.

I do not like the subject that I am studying.

I am good at school.

I am not good at school.

I am excellent at school.

I often do my homework.

I do not have the ability to concentrate most of the time.

I often take part in the classroom discussion.

I do not like to take part in classroom discussion.

I am advanced for my grade.
I am not interested in my study.
I get anxious when I have an exam.
I get nervous when the teacher calls on me.
I cannot speak well in front of the class.
I am not good in some subjects.
I respect the school discipline.
I can concentrate well sometimes.
My main aim is to succeed at school.
I think about my academic future.
Teachers punish me sometimes.
I understand my lessons.
I do not do my homework.
I am a student.
I am not disciplined at school.
I am behind for my grade.
I am obliged to study nursing.

3. Personality category - Class context

Self-description items

I am curious.
I am persistent.
I am quiet.
I am tolerant.
I am proud of myself.
I am shy.
I am a moral person.
I am obedient.
I am bold.

I have a weak character.

I cannot express myself well.

I am helpful.

I am clever.

I am dull.

I am tidy.

I am polite.

I am independent.

I have a strong character.

I am frank.

I do not talk very much.

I am hesitant.

I am serious.

I am a good person.

I am honest.

I am clean.

I am satisfied with myself.

I am modest.

I am gloomy.

I am aware.

I am sure of myself.

I am not sure of myself.

I am responsible.

I am well organised.

I am unselfish.

I am a leader.

I am empathetic.

I am cheerful.

I have to speak out when things are incorrect.

I prefer to be alone.

5. Social category - Class context

Self-description items

I respect my teachers.

I respect my friends.

I have good relationships with my friends.

My friends respect me.

I am well accepted by my teachers.

I like my teachers.

I like my friends.

I have a good position among my friends.

I do not have many friend.

My friends are better than me.

I like to be trusted by my friends and my teachers.

I like to get a lot of attention.

My classmates like me.

My classmates do not like me.

I like my classmate(s).

I do not trust anybody.

School is my second home.

I do not like the student who sits next to me.

I study to satisfy my parents.

My friends 'use' me.

I am not well accepted by some teachers.

I do not respect weak teachers.

6. Emotional category - Class context

Self-description items

I am happy.

I am unhappy.

I am restricted.

I often feel afraid.

I am bored.

I am secure.

I am depressed.

I am unstable emotionally.

I cry when I have been punished by my teachers.

I am not relaxed.

7. Self as others see me category - Class context

Self-description items

My friends think that I am beautiful.

My friends think that I am clever.

My teachers think that I am active.

My teachers think that I am polite.

My teachers think that I am gloomy.

APPENDIX B3**OUT OF CLASS CONTEXT****1. Physical category - Out of class context**Self-description Items

I am energetic.

I am not good at sport.

I am short.

I am average looking.

I am pretty.

I am tall.

I am white.

I am not strongly built.

I am strong.

I suffer from/with headaches.

I am interested in my appearance.

2. Academic category - Out of class contextSelf-description Items

I respect the school discipline.

I often take part in school activities.

I think of my academic future.

I usually do not respect the school discipline.

I am good at school.

I get anxious when I have an exam.

I like school.

I am a good student.

I do not like to wear the school uniform.

I study with my classmate(s).

I am not good at some subjects.

I am advanced for my grade.

I am behind for my grade.

3. Personality category - Out of class context

Self-description Items

I am curious.

I am sincere.

I am clean.

I am clever.

I am tidy.

I am helpful.

I am shy.

I am polite.

I am a moral person.

I am proud of myself.

I am well adjusted.

I have a strong character.

I am quiet.

I am ambitious.

I am sure of myself.

I am frank.

I am responsible.

I do not like to harm anybody.

I am bold.

I am sensitive.

I am arrogant.

I am kind.

I am an optimist.
I am inferior.
I am of average intelligence.
I am selfish.
I am hasty.
I am stubborn.
I am domineering.
I am modest.
I have a weak character.
I am obedient.
I am peculiar.
I speak in a loud voice.
I am cheerful.
I prefer to be alone.

5. Social category - Out of class context

Self-description Items

I respect the headmaster.
I respect the teachers.
My friends do not like me.
I do not have a lot of friends.
I have good relationships with my friends.
I am easily influenced by others.
My friends ridicule me.
Nobody is interested in me.
I make fun of my friends.
My friends like me.
I like my friends.

I respect my friends.

My friends respect me.

I have a good position among my friends.

I play with my friends.

I get into a lot of fights with my friends.

I meet my friends at school.

I wish for good things for everyone.

I do not like my friends.

I give money to my friends to make them like me.

Nobody understands me.

6. Emotional category - Out of class context

Self-description Items

I am happy.

I am unhappy.

I am relaxed.

I feel bored.

I am a dreamer.

I am restricted.

I feel sorry for many things that I do.

I am nervous.

I feel free.

I am lonely.

7. Self as others see me category - Out of class context

Self-description Items

My friends think that I am cheerful.

My friends think that I am clever.

My family and my friends think that I have a strong character.

My friends think that I am an interesting person.

My friends think that I am a complicated person.

My friends think that I am an unhappy person.

8. Interests category - Out of class context

Self-description Items

I am interested in music.

I am interested in reading.

I am interested in riding.

I am interested in ballet.

I am interested in acting.

APPENDIX B4**FAMILY CONTEXT****1. Physical category - Family context**Self-description items

I do not eat very much.

I am very energetic.

I feel very tired.

I am small.

I am not tall.

I suffer from heart disease.

I am tall.

I am fat.

I am pretty.

I am ugly.

I am interested in my appearance.

2. Academic category - Family contextSelf-description Items

I do my homework and study at home.

I do not understand my lessons.

I cannot be the first in my class as my parents want me to be.

I like to study.

I do not like the school uniform.

I am obliged to study science.

I chose my subject myself.

I think of my academic future.

I do not like to study.

I am slow at studying.

I am good at school.

I am weak in maths.

3. Personality category - Family context

Self-description Items

I am cheerful.

I am jealous.

I am an introverted person.

I am a realistic person.

I am kind.

I am helpful.

I am shy.

I am obedient.

I am proud of myself.

I am talkative.

I do not speak a lot.

I cannot express myself well.

I am cold.

I do not harm anybody.

I am a moral person.

I am sure of myself.

I am polite.

I have a strong will.

I am immoral.

I am disobedient.

I am tolerant.

I am honest.
I am responsible.
I am quiet.
I like to be domineering.
I am patient.
I am independent.
I am ambitious.
I am a leader.
I am a good example to follow.
I have a strong character.
I am clever.
I am rebellious.
I am an idiot.
I am weak in character.
I am a complicated person.
I am stubborn.
I am serious.
I am inferior.
I am aggressive.
I am an imaginative person.
I am sensitive.
I am gloomy.
I like to challenge others.
I am not sure of myself.
I am selfish.
I am overly generous.
I am conceited.
I am bold.
I am pessimistic.
I am lazy.

I am sociable.

I am clean.

I am empathetic.

I prefer to be alone.

5. Social category - Family context

Self-description Items

I like my family.

I respect my mother.

I respect my father.

I respect my brother(s) and my sister(s).

I respect my family.

My brother(s) and sister(s) respect me.

My family respects me.

My family likes me.

My father likes me.

My mother likes me.

My mother does not like me.

My stepmother does not like me.

My family does not like me.

I like my father.

I like my mother.

I like my brother(s) and sister(s)

I do not like my family.

I do not like my father.

My brother hits me sometimes.

My father hits me sometimes.

My mother hits me sometimes.

I hit my brother(s) and/or sister(s) sometimes.

My parents fight a lot.

I get into a lot of fights with my brother(s) and sister(s)

My parents scold me sometimes.

Nobody is interested in me at home.

I play with my brother(s) and sister(s).

My father used to travel a lot.

My mother is a nervous person.

My father is a nervous person.

My father is my friend.

I am an important member of my family.

I can confide in my parents.

I do not feel that I am an important member of my family.

It is important for me to meet my parents expectations.

I am lucky to have such a good father.

My parents do not trust me.

My family is satisfied with my behaviour.

My father is unkind to me.

I help my brother(s) and sister(s) in their study.

My parents ask for my opinion.

I do not see my father much.

My father interferes in my own business.

My father is domineering.

My parents treat me as a child.

My parents treat as an adult.

My mother is not Arabic.

I cannot get on with my father.

I cannot get on with my brother.

I cannot get on with my mother.

I fight with my mother.

My family ridicules me.

There are many times when I would like to run away from home.

My father is dead.

My parents treat my sister(s) and brother(s) better than me.

I cannot confide in my parents.

My parents prefer boys to girls.

My mother is sick.

I do not like my mother.

My parents do not allow me to visit my friends.

I am the youngest.

I am the eldest.

I am the middle one in the family.

I am second in the family.

I am third in the family.

I am fourth in the family.

My father trusts me.

My brother is a nervous person.

My parents criticize me.

My parents often tell me what to do.

I am a spoilt son (or) daughter.

I am well treated at home.

My parents expect too much of me.

My parents are unfair to me.

My parents want me to leave school in order to work.

I do not like my life style.

I have a good relationship with my family.

Nobody understands me.

I think of my family.

I fight with my family.

My family does not care about me.

6. Emotional category - Family context

Self-description Items

I feel lonely.

I am happy at home.

I am unhappy at home.

I feel relaxed at home.

I feel secure.

I am satisfied.

I am nervous.

I have some personal problems.

I am restricted.

I am not relaxed at home.

I hate myself.

I am bored most of the time.

I am unstable emotionally.

I thought about committing suicide.

I tried to commit suicide.

I wish I would die.

I cry easily.

I am concerned.

I am a dreamer.

I feel free.

I feel afraid.

7. Self as others see me category - Family context

Self-description Items

My family thinks that I am a complicated person.

My family thinks that I am fat.

My family thinks that I am pretty.

My family thinks that I am lazy.

My family thinks that I am selfish.

My family thinks that I am inferior.

My family thinks that I am not good at maths.

My family thinks that I am a good person.

My mother sees me as a cruel person.

My family sees me as an intelligent person.

My family sees me as not being a sociable person.

My family sees me as being a conceited person.

My family sees me as being arrogant.

My family sees me as being cheerful.

My family sees that my father likes me more than my sister and my brother(s).

8. Beliefs category - Family context

Self - description Items.

I pray regularly.

I do not pray regularly.

I do not wear Islamic dress.

9. Interests category - Family context

Self-description Items

I am interested in watching TV.

I am interested in music.

I am interested in reading.

I am interested in computers.

I like to listen to the radio.

I am interested in chess.

I am interested in drawing.

I am interested in dancing.

I am interested in parties.

I am interested in fashion design.

10. Home background category - Family context

Self-description items

We are fairly well-to-do.

We are poor.

APPENDIX B5**FRIENDS CONTEXT****1. Physical category - Friends context**Self-description items

I am small.

I have a lisp.

I am attractive.

I am sick.

I am not strongly built.

I am of average height.

I am short.

I am short-sighted (myopic).

I am pretty.

I am energetic.

I am interested in my appearance.

2. Academic category - Friends contextSelf-description Items

I study with friends.

I am good at school.

3. Personality category - Friends contextSelf-description Items

I am empathetic.

I am cheerful.

I am jealous.
I am honest.
I am sincere.
I am helpful.
I am shy.
I am modest.
I am kind.
I am a liar.
I am arrogant.
I am independent.
I am patient.
I am sensitive.
I have a weak character.
I am sure of myself.
I am not sure of myself.
I am polite.
I am impolite.
I have a strong character.
I am a leader.
I am a moral person.
I am a just person.
I am quiet.
I am an optimist.
I am inferior.
I am clever.
I am proud of myself.
I am stubborn.
I am generous.
I am nervous.
I am serious.

I am selfish.

I am not good at expressing myself.

5. Social category - Friends context

Self-description Items

I play with my friends.

My friends do not like me.

My friends like me.

I like my friends.

I respect my friends.

My friends respect me.

My friends ridicule me.

I can confide in my friends.

I cannot confide in my friends.

I have good relationships with my friends.

I get into fights with my friends.

It is important for me to meet my friends expectations.

I visit my friends when they are sick.

I consider my friends as my sister(s) or brother(s).

I am proud of my friends.

My friends help me.

My friends 'use' me.

I have a good position among my friends.

My friends do not respect me.

I have many friends.

I like to be different from my friends.

I can do without my friends.

My parents do not allow me to have a girlfriend (or) boyfriend.

I have a girlfriend (or) a boyfriend.
I like to be the dominant one.
I am a man.
I choose my friends carefully.
I do not trust my friends.
I trust my friends.
I prefer my friends to be older than me.
I can be myself when I am with my friends.
I understand my friends.
I do not have friends.
My friends like my ideas.
My friends do not understand me.
My friends are better than me.
No one cares about me.
I do not like my friends.
My parents do not allow me to visit my friends.
I have difficulty in making friends.
I like to attract the opposite sex.

6. Emotional category - Friends context

Self-description Items

I am happy with my friends.
I am unhappy with my friends.
I hate myself.
I feel free.
I feel relaxed.
I am lonely.
I am unstable emotionally.
I feel secure.

7. Self as others see me category - Friends context

Self-description Items

My friends think that I am sincere.

My friends think that I am arrogant.

My friends think that I have staring eyes.

My friends think that I am selfish.

My friends think that I am conceited.

My friends think that I am schizophrenic.

My friends think that I am quiet.

My friends think that I am gloomy.

9. Interests category - Friends context

Self-description Items

I am interested in hunting.

I am interested in swimming.

I am interested in cycling.

I am interested in reading.

10. Home background category - Friends context

Self-description items

I am poor.

APPENDIX C

Example of data analysis card

The First Face of the Card

	Mr	IC	OC	Fa	Fr
Ph	-I am interested in my appearance		-I am of average looking		-I am interested in my appearance
Ac		-I like school	-I am good at school	-I study at home -I think of my academic future	
P		-I am shy	-I am quiet -I am shy -I am serious -I am an intro- verted person	-I prefer to to be alone	-I am shy -I am an intro- verted person -I prefer to be alone
S		-I like to get lot of attention -My class- mates respect me	-I think that others are better than me		-My friends do not understand me
E				-I am nervous -I feel secure	
Misc.				-I watch television	

The Second Face of the Card

Students' No. 3

Class: 2nd Secondary

Subject: Science

Sex: Female

Age: 16

	Mr	IC	OC	Fa	Fr
Ph	1	-	1	-	1
Ac	-	1	1	2	-
P	-	1	4	1	3
S	-	2	1	-	1
E	-	-	-	2	-
Misc.	-	-	-	1	-