SELF-SCHEMATIC CHANGE: THE EXPERIENCE OF UNEMPLOYMENT AND JOB-SEARCH TRAINING

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BEING A REPORT OF AN INVESTIGATION SUBMITTED AS PARTIAL REQUIREMENT FOR THE DEGREE OF MASTER OF PSYCHOLOGY

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This thesis contains no material which has been accepted for the award of any other higher degree or graduate diploma in any university and, to the best of my knowledge and belief, contains no material previously published or written by another person, except when due reference is made in the text of this thesis.

[Signature]
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ABSTRACT

Review of the literature concerning cognitive schemata revealed numerous approaches and definitions. It was proposed that personal construct theory offered an established framework for the study of schemata, and that repertory grid techniques derived from this theory may be effective in assessing self-schematic change.

The Social Self-Esteem Inventory, the Assertion Inventory, repertory grid and implications grid were administered to 24 unemployed subjects before and after attending a job-finding club, an intervention expected to produce a change in self-perception.

No change in self-esteem or assertion was found with inventory data. Repertory grid data appeared to be sensitive to self-esteem change. Cognitive organisation change was assessed by repertory grid measures of intensity, cognitive complexity, and consistency, and by implications grid measures.

Results were negatively affected by data collection difficulties and the lack of a control group, and tentative conclusions only could be drawn. Findings were considered to support the application of personal construct theory and repertory grid techniques to the investigation of self-schematic change, but it was concluded that further research was necessary.
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INTRODUCTION
The concept of cognitive schemata in information processing has received considerable attention, with many and varied approaches producing a multiplicity of descriptions. This study will argue that an existing, well-developed theory, that of personal construct psychology, may be seen as accounting for schematic processes, and that the methodology derived from personal construct theory may be effectively applied to areas of investigation in which the schema concept is applied.

Toward this end a discussion of schema theory and personal construct theory is presented, with a discussion of the area in which the theory was applied in the present study, that of the unemployment experience and self-schematic change.

**SCHEMATA**

There are two prominent features to the area of schema research—the sheer volume of research carried out in the area (Taylor & Crocker, 1981; Graesser & Nakamura, 1982) since the concept was developed by Bartlett in 1932, and the lack of agreement among researchers as to the definition of a schema (Graesser & Nakamura, 1982; Ingram, 1984). Bartlett's (1932, p.201) original definition referred to a schema as "an active organization of past reactions, or of past experiences, which must always be supposed to be operating in any well-adapted organic response." This definition appears to have been the basis for subsequent conceptualizations of schemata or schema-like structures, these
latter including scripts (Abelson, 1976; Schank & Abelson, 1977), frames (Minsky, 1975), and plans (Miller, Galanter & Pribram, 1960).

There does seem to be agreement among researchers that with the large amount of information available to the individual from the environment at any time there is a need for selectivity in what is attended to in order to minimize cognitive processing. Taylor and Crocker (1981) have described information processing as scanning the environment, selecting items to attend to, taking in information about these items, and either storing the information or using it as a basis for action. They describe the process as necessarily selective, requiring criteria and guidelines.

Schemata, and the schema-like structures mentioned, have been suggested to exist to facilitate this process, Anderson (1977, p.429) going so far as to claim that "without some schema into which it can be assimilated, an experience is incomprehensible". As a basic definition, Markus (1980, p.106) has described schemata as "knowledge structures which we develop to represent the external world [and which] provide guidelines about how to interpret incoming data". These structures allow the individual to quickly identify a stimulus, relate it to previous knowledge, fill in any missing information and select further strategies for action. From this point researchers differ in their conceptualizations of schemata and definitions vary according to the processes hypothesized to take place. However, some common themes may be seen in the characteristics suggested for schemata.
by different authors and these will be outlined.

**Development of Schemata**

The developmental theories of Piaget generally receive mention where reference is made to the development of schemata (Stotland & Canon, 1972; Anderson, 1977; Markus, 1980; Crocker, Fiske & Taylor, 1984). Piaget (in Ginsburg & Opper, 1978) described the transition of the child through developmental stages, from sensorimotor, preoperational, and concrete operational to formal operational (from concrete to more abstract processes) and suggested the existence of schemata which change in relation to this transition. For Piaget the schema referred to an organized pattern of behaviour, generally based on experience, or to the basic structure underlying the child’s actions (Ginsburg & Opper, 1978).

Piaget postulated the involvement of two cognitive processes in the transition from one developmental stage to the next, assimilation and accommodation. These have subsequently been suggested to function in schema development in general, adult as well as child (Stotland & Canon, 1972; Anderson, 1977; Markus, 1980; Crocker et al., 1984). Assimilation refers to the adaptation of information to fit with the schema where the schema resists change, while accommodation refers to modifying the schema in response to the environment, altering it to accommodate inconsistent information (Crocker et al., 1984). Assimilation and accommodation will be discussed at greater length.
Stotland and Canon (1972) have suggested that an individual would be expected to develop schemata involving those dimensions which are used most frequently. They cited a study by Koltuv in 1962, which asked people to indicate which traits were most relevant for their evaluations of other people. The finding was that people tended to list such dimensions as "friendliness-hostility", "loyalty-disloyalty", dimensions which are relevant for interaction, while dimensions such as "awkwardness" or "originality" were rated to be irrelevant. Stotland and Canon (1972) concluded that more frequently experienced or relevant dimensions were more likely to be incorporated into a schema.

Similarly, Cromwell and Caldwell (1962) found that when making judgements of acquaintances subjects showed more fully developed schemata (assessed by complexity of ratings) for concepts which they typically used, compared with concepts which were less familiar to them.

Based on Prior Knowledge

Bargh (1984) echoes Piaget in describing the foundation of cognitive structures as based on experience, referring to a script, in this case, as a mental representation of a type of situation, abstracted from many encounters with it.

Bartlett (1932) had referred to a schema as an organization of past reactions or past experiences. These experiences may be personal, observed through the actions of others, or taught formally (Stotland & Canon, 1972). Schemata may be considered the
representations in memory of these past experiences, or generic information, which then interact with incoming information to influence future perception, comprehension, and remembering (Anderson, 1977; Brewer & Treyens, 1981; Brewer & Nakamura, 1984), and provide background knowledge for such processes as generating inferences (Graesser & Nakamura, 1982) or anticipating events (Bargh, 1984).

**Network of Associations**

Schemata may be seen as representing a network of cognitive associations, both of the concepts or variables (cf. Rumelhart & Ortony, 1977; Rumelhart, 1982) within each schema and between schemata (Rumelhart & Ortony, 1977; Tesser, 1978; Ingram, 1984). Ingram (1984) in fact stated that he preferred to use the term "associative network" rather than "schema" (citing the previously-mentioned lack of agreement on definition of schemata and the greater possibility he perceived for discussion of processing assumptions as compared with schema theory). He referred to connections between memories which are conceptually similar, or have become associated for the individual, through associative linkages. The strength of these pathways is seen to be a function of how strongly the memories are associated, more strongly associated memories having stronger and more closely associated linkages (Ingram, 1984). Tesser (1978) saw the development of the schematic network as being related to the frequency of use of particular schemata. The more frequently a schema is used, the more fully developed (i.e., complex and
articulated) it becomes. Crocker, Fiske and Taylor (1984) described well-developed or expert schemata as involving more organisation, so that links between components of expert knowledge are more numerous and stronger.

Rumelhart and Ortony (1977) also viewed schemata as representing networks of related properties or event sequences, while Taylor and Crocker (1981) referred to the "rich web" of associations between schemata. The latter authors described the possibility of the representation of single events in several schemata through this network, and claimed that as a result of the association network each schema may be accessed by a bottom up, top down or lateral process.

Structure

The majority of the authors reviewed tended to regard a schema as a hierarchical concept, some referring to "embedding" of schemata one within another (e.g., Neisser, 1976; Rumelhart & Ortony, 1977; Rumelhart, 1982). The hierarchical structure is central to Cohen's (1981, p.49) definition of a schema, which refers to "an hypothetical cognitive structure that represents associations among lower level units of information (i.e., the most concrete or closest to the peripheral perception), resulting in a functional higher-level cohesive and meaningful unit". To Cohen (1981) the hierarchical structuring of information is the function of schemata.
A consistent theme has been the idea of information being organised from that which is more concrete and specific to that which is more abstract and general. Rumelhart and Ortony (1977) defined schemata as occurring at all levels of abstraction, referring to schemata as being either specialised (less abstract) or general (more abstract). The concept of organisation from concrete to abstract schemata is similar to developmental transitions such as those described by Piaget. Markus (1980) compared self-schematic development with the process described in developmental literature, whereby the concrete and shallow self-concept of the child becomes more abstract and complex.

Taylor and Crocker (1981) described schemata as pyramidal structures, with more abstract or general information at the top and categories of more specific information nested within general categories, the lowest level of the hierarchy containing specific examples of the schema. Similarly, Stotland and Canon (1972) suggested that each high level schema is based on several lower ones, the higher level schemata being more abstract and more general than the lower level, so that higher level schemata can be applied to a wider variety of situations. An example of a higher level, or abstract, schema might be a story schema, with an example of a lower level schema being a schema for eating in a restaurant (Graesser & Nakamura, 1982). Stotland and Canon (1972, p.107) suggested that "the relative abstractness of the concepts involved in the schema can provide an index of its position in a hierarchy of schemas".
Referring to scripts (which are here considered to be schema-like structures), Wyer and Carlston (1979) described the hierarchy of a script being composed of a series of vignettes, each vignette consisting of a set of related schemata. The schemata each have a name and consist of a configuration of attributes (Wyer & Carlston, 1979). This hierarchy, though using the terminology of script theory, resembles those described for schemata.

Researching the schematic effects of social attitudes on information processing, Judd and Kulik (1980) cited evidence for schemata having a bipolar form, and although the concept of social schemata and this research will be considered at a later point, it should receive mention here in relation to schematic structure.

CHARACTERISTICS OF SCHEMATA

Types of Schema

Taylor and Crocker (1981) suggested that different classes of information required the use of different types of schemata, and described three classes of schema which they believed to be in general use - person, role, and event. Person schemata referred to prototypical conceptions of attributes, such as introversion/extraversion, person impressions or representations of particular individuals, and schemata relating to the self. General role schemata were related to occupations, social roles, and stereotypic views of social groups. Schemata pertaining to
well-practiced behavioural scripts (as described by Abelson, 1976) or stories (Bower, Black & Turner, 1979) were titled event schemata.

Brewer and Nakamura (1984) also defined schemata as modular, in that different cognitive domains have schemata with different structural characteristics. Graesser and Nakamura (1982) referred to schemata for person stereotypes and roles, goal-oriented action sequences, and "spatial scenarios". Some of these authors' more concrete schemata also have similarities with Abelson's (1976) concept of scripts, which deal with such events, and, in concordance with Taylor and Crocker (1981), Graesser and Nakamura (1982) conceive of scripts, stereotypes, frames and other structures as being different types of schemata.

Social Schemata

Processing of information about other people appears to take place through well-developed specialised schemata (Tesser, 1978) and Crocker, Fiske and Taylor (1984, p.197) have defined such social schemata as "representations of types of people, social roles, or events". Lingle and Ostrom (1979) suggested that in the majority of daily situations the judgements which people make about others are memory-based, so that they are based on information from the cognitive representation of that person in memory (schema) rather than on the presented factual information.

An early study into social schemata was carried out by Kuether
Having previously found that subjects used schemata when asked about the relations existing between people, Kuethe (1962) presented groups of cut-out figures (including people, a dog, and geometric shapes) which he invited his subjects to arrange, investigating similarities between arrangements by different subjects.

It has been suggested (Markus, 1980) that interpersonal information about the self or others may be stored in the form of traits which function to summarize a large amount and variety of detailed behaviour which has been observed and categorized. Cantor and Mischel (1977) also indicated that traits may function as prototypes or summaries and are powerful in organizing information in memory.

The organization of trait information about others, or impression formation schema, has also been referred to as "implicit personality theory" (Cohen, 1981; Tesser, 1978). As Judd and Kulik (1980) note, much of the research on schemata used for encoding social information has focused on the schematic properties of traits (e.g., Cantor & Mischel, 1977, 1979). Implicit personality theory is concerned with perceiver's implicit notions about the co-occurrence of traits and related behaviours in others (Cohen, 1981). Cohen (1981) has suggested that implicit personality theory may be viewed as a high-level schema representing the interrelationships between traits which are assumed by the perceiver, and cites as an example "clever" being closely related to "witty". For Cohen each individual trait
may be seen as a lower-level schema representing a variety of characteristics and behaviours indicative of the trait (Cantor and Mischel, 1977, however, described a trait as being the highest level of a prototype, with more specific behaviours at lower levels).

As mentioned previously, Judd and Kulik (1980), researching in the area of social schemata, have suggested that such schemata may have a bipolar form. Cantor and Mischel (1977), for example, found results consistent with trait schemata being bipolar, with information being integrated and retained depending on its fit with a bipolar trait schema of introversion or extraversion. Judd and Kulik (1980) state that research on the processing of descriptions about interrelations among hypothetical people supports a bipolar schema notion, and their own study (Judd & Kulik, 1980) demonstrated bipolar schematic effects, in that information which was either highly consistent or highly contradictory to subjects' attitudes was judged more easily and was more likely to be recalled than was information which was only moderately consistent or contradictory. This was supported by Jessop (1986) in a study of conservation attitudes in Tasmania. Greenwald and Pratkanis (1984) also referred to a bipolarity effect, for example, in the work of Kuiper (1981), and Rosch (1975).

Self-schemata

Markus (1977, p.63) defined 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 an individual's social experience."

Markus (1980; Markus & Smith, 1981; Pietromonaco & Markus, 1985) viewed the self as a set of schemata for understanding and explaining one's own behaviour, in the same way that social schemata function to help understand and explain the behaviour of others, so that when people think about themselves they use self-schemata.

Similarly, Rogers and Kuiper (Derry & Kuiper, 1981; Kuiper, MacDonald & Derry, 1983; Rogers, Kuiper & Kirker, 1977) proposed that the self can be viewed as a cognitive schema, a "memory structure that is deeply involved in the interpretation, transformation, organization, and memory for personal information" (Kuiper, MacDonald & Derry, 1983, p. 193).

Rogers (1981) and Derry and Kuiper (1981) have described the self as a category structure which is hierarchically organised internally, the content of which is described as "a list of general and specific terms characteristic of the individual derived from long experience with personal data" (Derry & Kuiper, 1981, p. 286). As with schemata generally, Rogers, Kuiper, and Kirker (1977) suggested that the ordering of information within the self-schema is from general to specific, with general terms ordered by salience and extremity. Derry and Kuiper (1981) elaborated on this, defining general terms as being akin to personality traits, and specific terms as more situation-specific behavioural examples.
Markus (1980) described the development of the self-schema as most likely in areas in which individuals may compare themselves with others or in which they stand out from other people. The content of the self-schema consists of cognitive representations of specific events and situations in which the individual has been involved, general representations built up through repeated categorisation and evaluation of the individual's behaviour by himself or others, and very general trait-like terms, such as "I am generous" (Markus, 1980). The content descriptions of Rogers and associates and Markus are similar, referring to specific examples of behaviour and more general traits, though Markus (1980) does not specify relationships between these.

Markus (1980, p.115) referred to traits as "powerful organizing concepts in memory". According to Markus, as individuals develop they may rely increasingly on trait adjectives to describe their behaviour, and the development of the child's self-concept from concrete to abstract descriptions was mentioned previously. Markus (1980) described this process as involving a shift from self-descriptions such as "I am in fourth grade and I play football" to more trait-like descriptions such as "I am friendly".

Self-schemata may function as do other types of schema in enhancing or distorting information processing (Kuiper & Derry, 1981).

**Assimilation Effects**
Schematic effects on the processing of information where the schema does not change (assimilation) have received particular attention for empirical study in the areas of attention to information types, information processing time, and "biases" in storage and retrieval of information from memory (e.g., Rogers, Kuiper & Kirker, 1977; Markus, 1977, 1980; Greenwald, 1978; Graesser & Nakamura, 1982; Brewer & Nakamura, 1984; Greenwald & Pratkanis, 1984). Much of this work has been carried out in relation to depression.

**Self-schemata and Depression**

In an early application of the schema concept, Beck (1967) proposed that depression was the result of stresses in an individual's life activating a particular schema which interprets information in a negative way, producing a negative view of the self, the world, and the future, and leading to systematic errors in thinking, such as overgeneralisation or arbitrary inference. Following these lines, Isen (1984) suggested that depression involves increased accessibility of negative material, which is better integrated with other material and more extensive than would be the case for nondepressed individuals or the same individual when not depressed. Kuiper, Olinger and MacDonald (in Ingram, 1984) and Hammen, Marks, Mayol and de Mayo (1985) have noted that depressive schematic effects may not be potent after remission of depression and may not be implicated in etiology per
Ingram (1984) regarded Davis (1979a) as the first empirical study of information processing in depression. Davis (1979a; 1979b; Davis & Unruh, 1981) employed a multi-trial free recall task with short and long-term depressives, suggesting that cognitive organisation of negative information will become more structured with length of depression and familiarity with depressive self-descriptions. Flaws in this research have subsequently been pointed out by Derry and Kuiper (1981), for example, who suggested that Davis' (1979a) target stimuli may have been inappropriate and questioned the process behind the finding of Davis and Unruh (1981) that increasing familiarity with depressive symptomatology facilitated long-term depressives subjective organisation of nondepressive as well as depressive material. This finding may seem more reasonable if viewed in terms of a bipolar schematic effect, so that both highly self-referential and highly non self-referential information receives more efficient processing.

Prior to the work of Davis studies of information processing had been carried out by other authors (eg., Lloyd & Lishman, 1975; Nelson & Craighead, 1977), and subsequently the work of Kuiper and Derry (as cited previously) elaborated upon Beck's (1967) model, proposing that the self-schema in depression has a negative content and facilitates the processing of congruent (negative) information. Examples of this process will be cited in relation to the different proposed assimilation effects of schemata.
Selecte Attention

Previously it was noted that there is a need for selectivity in attending to stimuli in the environment and that schemata have been suggested by a number of authors to facilitate this process. Black, Galambos and Read (1984), for example, have described schemata and similar structures as a set of selectively attentive filters. It is proposed that schemata will automatically process information which is expected in the situation, leaving limited remaining conscious attention available for unexpected, salient stimuli (Bargh, 1984).

Greenwald (1980) and Turk and Salovey (1985) have suggested that a confirmatory bias exists, in that information which confirms judgements already arrived at or which is schema-consistent is more likely to be processed. Similarly, Nisbett and Ross (in Kuiper et al., 1983) have suggested that self-schemata may have an effect on an individual’s judgements concerning the frequency of occurrence of events, so that an unemployed person would show a tendency to overestimate the percentage of unemployed in the population, while an employed person would be expected to underestimate the percentage of unemployed. This processing of schema consistent information may be seen as the automatic passage of that information through the cognitive filters (cf. Black et al., 1984). In the area of depression, Nelson and Craighead (1977) found that depressed subjects were accurate in their estimation of negative feedback while nondepressives tended
to under-estimate the frequency of the negative feedback. Roth and Rehm (1980) found that depressed subjects over-estimated their own negative and under-estimated positive behaviours, compared with nondepressed raters.

Information which is novel or deviates from the schema should receive more attention than information which is relevant to the schema and is processed automatically, as suggested by Bargh (1984), Graesser and Nakamura (1984), and Turk and Salovey (1985). Abelson (1976) and Schank and Abelson (1977) have discussed this finding in relation to scripts.

**Information Processing Time**

Schemata have been posited to ensure the efficient processing of information, and one of the effects of this system is suggested to be more rapid processing of schema relevant than non-relevant information (Crocker, Fiske & Taylor, 1984). Lloyd and Lishman (1975), for example, found that more severely depressed subjects, who were assumed to have a more developed negative schematic system, recalled unpleasant words more quickly than pleasant, while the reverse was found for less depressed subjects. Zajonc (1979) suggested that affective judgements are made more quickly than cognitive judgements.

Self-referential effects have been examined in relation to processing speed, and it has been found that self-referential judgements are made more rapidly than judgements about others (Greenwald & Pratkanis, 1984; Kuiper & MacDonald, 1982),
reflecting the schematic effects of greater knowledge of the self or more specific information gained through lengthy experience as suggested by Derry and Kuiper (1981). Faster rating times have been recorded by Markus (1977) for descriptions judged to be self-referential as opposed to non self-referential, while Kuiper and Rogers (in Kuiper & Derry, 1981) and Kuiper (1981) found a more bipolar effect, with descriptions judged to be extremely like or unlike the self being rated more rapidly than those with some doubt.

Memory

Brewer and Nakamura (1984) proposed five means through which schemata could operate during the memory process. In addition to the regulation of the allocation of attention to information, these authors suggested that schemata could serve as a framework to preserve incoming information or that generic schema information could interact with the incoming information to produce a combined memory of old and new information. Further, schemata could guide retrieval processes to locate information and influence which retained information will be produced.

Similarly, Cohen (1981) and Turk and Salovey (1985) have suggested that schemata may influence the encoding, storage, or retrieval of information, with schema-consistent information being more likely to be processed and retrieved. Wyer (1979) has suggested that a desire to preserve cognitive consistency may be seen as underlying such findings.
For Rumelhart and Ortony (1977) memories are the result of the interpretation of events by schemata, rather than the input itself, the "natural side effects" of comprehension.

Several studies, particularly in the area of depression research, have investigated the effects of schema-consistent or non consistent information on recall, supporting the suggestion (Cohen, 1981; Turk & Salovey, 1985) that schema-consistent information is recalled better than non consistent information (eg., Bradley & Mathews, 1983; Derry & Kuiper, 1981; Judd & Kulik, 1980; Lloyd & Lishman, 1975; Roth & Rehm, 1980). Further, this effect has been found to be stronger in recall of self-referential than non self-referential information (Bradley & Mathews, 1983; Derry & Kuiper, 1981; Rogers, Kuiper & Kirker, 1977).

In addition to influencing the recall of presented information, schemata may also function to "fill in gaps" or furnish information which is schema-consistent where none is provided, generally (but not always) making for more efficient processing of situational information (Cohen, 1981; Graesser & Nakamura, 1982). This effect has been shown in studies where subjects incorrectly identified schema-consistent but previously unseen information as having been presented on an earlier occasion (Bower, Black & Turner, 1979; Markus, 1980), or in studies of stereotyped judgements (Wyer & Carlston, 1979). Lingle and Ostrom (1979) suggested that in most situations judgements made about other people are memory-based, rather than derived from presented
factual information (cf. Rumelhart & Ortony, 1977), and these would be expected, therefore, to show similar schematic effects on information processing as self-referential or other general information.

**Schematic Change**

As Crocker, Fiske and Taylor (1984) point out, stable schemata provide order, structure, and coherence to stimuli in the environment which would otherwise be complex, unpredictable or overwhelming, but schemata which are completely resistant to change will be dysfunctional to the perceiver. Such resistance would be expected to lead to inefficiency or inaccuracy in processing information, or even the altering of reality to fit the schema, as in mental illness (Crocker et al., 1984).

Crocker et al. (1984) suggested that schemata can change, or accommodate, through increasing experience with examples, some of which fit the schema well and others which do not, or through exposure to information which is improbable given the schema. Three models for schematic change have been proposed by these authors (Taylor & Crocker, 1981; Weber & Crocker, 1983; Crocker et al., 1984) - subtyping, bookkeeping, or conversion. Subtyping involves the development of subcategories of the schema in response to the incongruent information, and can be seen as a branching out of the schema from more general, all-encompassing categories to more and more specific, and smaller subcategories. A study by Weber and Crocker (1983) supported this model,
suggesting that it is most useful where incongruent information is concentrated.

The bookkeeping model implies that each time incongruent information is encountered a gradual incremental process of minor adjustments to the schema is carried out, "fine-tuning" the schema. This model seems to be involved when incongruent information is dispersed (Crocker et al., 1984). Conversion refers to all or none change in the schema, where salient, dramatically incongruent experiences lead to sudden schema revision (Crocker et al., 1984). Weber and Crocker (1983) have suggested that the subtyping and bookkeeping models are those most likely to be in operation, and that conversion is a less common occurrence. These models are congruent with the idea of schemata as hierarchical organisations of information. Crocker et al. (1984) saw "well-developed" schemata as more resistant to change as they are more organized and compact, and store more congruent examples.

Anderson (1977) had also noted that the more fully developed a schema is, the less likely it will be to change, and noted that higher level schemata are particularly resistant to change. He referred to schematic change as a result of gradual extension, articulation, and refinement of the schema, a process similar to that of bookkeeping as described by Crocker et al. (1984). Anderson saw a fundamental schematic change, similar to the conversion of Crocker et al. (1984), as being the individual's last choice, when assimilation of the information would compromise cognitive consistency.
Rumelhart and Ortony's (1977) model of specialisation and generalisation provided an explanation of schematic change as it relates to the development of concrete and abstract schemata, and corresponded to the concept of more frequent usage of schematic information influencing development (e.g., Tesser, 1978). Rumelhart and Ortony (1977) suggested that if a schema is frequently used with the same values assigned to some of its variables then the generation of a more specialised schema with those values fixed may occur. Schema generalisation is described as the converse of specialisation, where a fixed portion of an old schema is replaced with a variable to construct a new and more abstract schema. This model may fit with either the bookkeeping or subtyping processes suggested by Crocker et al. (1984).

Summary of Schemata

In summary, similarities may be found between the various formulations of schema theory and related concepts, such as script theory. These similarities have been described in relation to the functions of schemata, their development, structure, and effects on information processing. However, although a basic concept of schemata appears to underlie the different formulations, producing the similarities observed, approaches remain varied and superficial inconsistencies between them are evident.

It is suggested that a well-developed and articulated general theory of schemata may be found in personal construct theory
(Kelly, 1955) and that investigation of schematic processes may be effectively carried out within the framework of this approach.

PERSONAL CONSTRUCT THEORY

Personal construct psychology was presented by George Kelly as a complete, formally stated theory (Bannister & Fransella, 1986). Kelly developed personal construct theory from the idea of 'man-the-scientist', observing the existence of scientist-like qualities and behaviours in all people (Bannister & Mair, 1968). He noted between his clients and his graduate psychology students a similarity of processes in attempting to understand the world, these processes revolving around the invention and re-invention of an implicit hypothetical framework through hypothesis formation, prediction, and experimentation (Bannister & Mair, 1968; Fransella & Bannister, 1977). This implicit framework Kelly described as an individual's personal construct system (Fransella & Bannister, 1977). From this foundation Kelly (1955) formulated the central idea, or Fundamental Postulate, of personal construct theory - a person's processes are psychologically channelized by the ways in which they anticipate events.

To this fundamental postulate Kelly (1955) added eleven corollaries:

1. Construction Corollary - a person anticipates events by construing their replications

Underlying making sense of the world is the continual detection
of repeated themes, categorisation of these themes, and segmentation of the world in terms of them (Bannister & Fransella, 1986).

2. Individuality Corollary - Persons differ from each other in their construction of events

The perception and interpretation of a situation will differ between individuals, for example, in terms of what is considered important, the implications of the situation, or what is clear or obscure in the situation (Bannister & Fransella, 1986).

3. Organisation Corollary - Each person characteristically evolves, for their convenience in anticipating events, a construction system embracing ordinal relationships between constructs

A hierarchical organisation of constructs is suggested to facilitate the processing of information (Bannister & Fransella, 1986).

4. Dichotomy Corollary - A person's construction system is composed of a finite number of dichotomous constructs

Constructs are suggested to be most usefully seen as bipolar, having a pole of affirmation and a negative pole (Bannister & Fransella, 1986).

5. Choice Corollary - Persons choose for themselves that alternative in a dichotomised construct through which they anticipate the greater possibility for the elaboration of their system
6. Range Corollary - A construct is convenient for the anticipation of a finite range of events only. A construct will not be relevant for all classes of stimuli, those for which it is not relevant are said to be outside the range of convenience of the construct (Bannister & Fransella, 1986).

7. Experience Corollary - A person's construction system varies as they successively construe the replication of events. Personal construct theory implies continual development, with construct systems varying in relation to the accuracy of anticipations.

8. Modulation Corollary - The variation in a person's construction system is limited by the permeability of the constructs within whose range of convenience the variants lie. Permeability refers to the degree to which a construct can assimilate new elements within its range of convenience and generate new implications (Bannister & Fransella, 1986).

9. Fragmentation Corollary - A person may successively employ a variety of construction subsystems which are inferentially incompatible with each other. A construct system is seen as a hierarchy and a series of subsystems with varying ranges of convenience, so that conclusions about the 'same' series of events can be drawn at levels which are not directly consistent with other (Bannister & Fransella, 1986).

10. Commonality Corollary - To the extent that one person employs
a construction of experience which is similar to that employed by another, their processes are psychologically similar to those of the other person

The complement of the individuality corollary, this corollary stresses that people are not similar because they have experienced similar events, but because they construe in similar ways (Bannister & Fransella, 1986).

11. Sociality Corollary - To the extent that one person construes the construction processes of another, they may play a role in a social process involving the other person

Interpersonal interaction is in terms of each person's understanding of the other (Bannister & Fransella, 1986).

Personal construct theory provides a well-developed framework for understanding the ways in which individuals organise information about the world and for investigating ways in which this organisation may change. Some authors have mentioned the personal construct system as being a similar concept to schemata (Markus, 1980; Markus & Smith, 1981; Tesser, 1978; Zajonc, 1968) and similarities between the descriptions of schemata and schematic processes previously presented and Kelly's (1955) personal constructs will be described.
Schemata and Personal Constructs

Facilitation of information processing

The schema and the personal construct system have both been suggested to exist as cognitive structures whose purpose is to facilitate and more efficiently organise the processing of information about the world.

The anticipation of future events according to previously encountered events forms the basis of personal construct theory (fundamental postulate and construction corollary) and this idea is also to be found in descriptions of the functions of schemata and such operations as selective attention or "gap-filling" referred to previously.

In the same way that schema theory suggests that an individual's perceptions of events give them a particular meaning to that individual (e.g., Anderson, 1977; Rumelhart & Ortony, 1977), personal construct theory suggests (Mancuso & Adams-Webber, 1982) that it is a person's anticipations of events, his or her "effort after meaning", which gives meaning and not the events per se.

Development

In both schema theory and personal construct theory the work of Piaget (as outlined previously with regard to schemata) figures prominently, with similar developmental processes being suggested for the two approaches. In the literature of personal construct theory Salmon (1970) and Adams-Webber (1970) have provided an
analysis of Piaget's theory in relation to personal constructs.

Based on previous experience

As noted, schemata have been described as being based on prior experience with information about the world and Kelly's (1955) notion of repeated experimentation with situational information, the experience corollary, echoes this idea.

Structure

A common theme in schema theory is the facilitation of information processing through the hierarchical organisation of information and this may be found in the organisation corollary of personal construct theory.

The concept of bipolarity of individual schemata has been mentioned in the work of Jessop (1986), Judd and Kulik (1980), Kuiper (1981), and Markus (1977). In personal construct theory bipolarity of individual constructs is a central issue (Bannister & Fransella, 1986) and is outlined in the dichotomy corollary which refers to a construct system as composed of a finite number of dichotomous constructs.

Range of convenience

Kelly's (1955) idea of constructs having a finite range of relevance compared with the many possible classes of stimuli (range corollary) may be seen as having parallels within schema
theory, Taylor and Crocker (1981) and Brewer and Nakamura (1984), for example, suggesting the need for different types of schema to deal with different classes of information. Markus (1977) defined her subjects as having a schema or as being aschematic for particular behavioural dimensions and this may be interpreted in personal construct theory terms as saying that for aschematic individuals the dimension under investigation was outside the range of convenience of their construct system.

Cognitive complexity

In both schema theory and personal construct theory researchers have referred to indications of cognitive complexity or simplicity in patterns of organisation of information. In a chapter discussing schemata, Stotland and Canon (1972) described cognitive complexity as having derived from personal construct theory. These authors defined a cognitively complex person as "one who uses a relatively high number of different dimensions", while a cognitively simple person would be "one who tends to use the same few dimensions in differentiating categories" in all cases (Stotland & Canon, 1972, p. 170). Landfield (1971), referring to personal construct theory, described a person using a large repertoire of concepts as construing an event in many different ways (complexly), while a person lacking a large repertoire of concepts will construe the same event in a few ways, perhaps in only one way (simply). In personal construct research the area of cognitive complexity received early attention from Bieri (Bannister & Fransella, 1986) and
subsequently from authors such as Adams-Webber (1969, 1979).

In personal construct theory terms, researchers have referred to
the concept of tightness or looseness of construing, tightness
referring to a construct's leading to an unvarying or a narrow
range of predictions, and looseness to varying predictions
(Fransella & Bannister, 1977). Bannister developed an Intensity
score to measure this (described in detail at a later stage),
suggesting that the lower the Intensity score the more disordered
(loose) is a person's thinking (Fransella & Bannister, 1977).

Bannister and Mair (1968) described tight constructs as being
very closely interrelated with other constructs, so that in the
extreme a system which is too tightly organized may be too
restricted and impermeable to change, while a system which is too
loose does not allow accurate prediction of outcomes. In a study
of trainee teachers with measures taken at the beginning, half
way through, and at the end of the training course, Runkel and
Damrin (1961) found a curvilinear relationship between intensity
of construing and time in training. These authors found that at
the beginning of training the trainee teachers used a large
number of loosely related dimensions in viewing children. At mid-
point in training this had narrowed to a simple, tight view using
only a few dimensions, but by the end of training the trainees
had again loosened their construct systems.

A similar process to that described by Runkel and Damrin (1961)
may be seen in the work of Davis (1979a, 1979b, Davis & Unruh,
1981) as previously mentioned in relation to self-schematic
change in depression. Davis suggested that the cognitive organisation of negative information varies in its structure with the duration of a depressive episode, moving from lesser to greater organisation.

Processes of change

Both schema and personal construct theories have been discussed in terms of the process of revision of the structure to accommodate new information (Anderson, 1977; Bannister & Fransella, 1986). The Piagetian concept of the accommodation process underlies Kelly's concept of man-the-scientist as previously described and the modulation corollary.

In relation to resistance to change, schema theorists (e.g., Anderson, 1977; Crocker, Fiske & Taylor, 1984) have suggested that more fully-developed schemata are more resistant to change and that higher level schemata are particularly resistant. This is in agreement with a suggestion made by Hinkle (Fransella & Bannister, 1977) that higher order constructs will have more implications for other constructs and the finding by Crockett and Meisel (1974) that constructs with more implications will be less likely to change.

Schema theory describes assimilative schematic effects on attention and recall, and the invention of schema consistent information, and these processes have been described as relating to personal constructs also. The two concepts of schemata and personal constructs were linked by Mancuso and Adams-Webber.
(1982) in a discussion of Kelly's fundamental postulate, focusing on anticipation. In this context these authors described schemata and schematic effects on perception, memory, and learning, summarising the fundamental postulate as meaning that "a person is continuously activated toward imposing an assimilating schemata [sic] onto input" (Mancuso & Adams-Webber, 1982, p. 31). The invention of information in a recall task to fill in a gap, for example, may be seen as resulting from the individual's anticipation of the event or story according to an existing construct.

Although schema theory describes schematic effects altering information which does not fit the cognitive structure no similar relationship between personal construct systems and incongruent information seems to have been described. It appears that while much of the focus of schema research has been on assimilative (information change) effects, that of personal construct research has been on accommodative (schema/construct change) effects, possibly reflecting the wider bias of schema research toward information processing models compared with the more social psychological bias of personal construct theory research.

Mancuso and Adams-Webber (1982) referred to Bartlett's (1932) contention that any perceived similarity between two or more events depends on underlying tendencies (schemata) which lead to the grouping together of items of input. Similarly, Neisser (1976) suggested that for two events to be perceived as similar common properties must exist in the two stimulus patterns which the cognitive processes are prepared to act upon, while Kuethe
(1962), referring to objects rather than events, claimed that when a person indicates that two objects "belong together" he has employed some schema or plan.

The comparison of two or more stimuli as being more or less alike underlies the major measure developed from personal construct theory, the repertory grid, and the above comments support the concept of constructs as schemata.

**Repertory Grid Technique**

Kelly developed repertory grid technique as a method for exploring personal construct systems (Fransella & Bannister, 1977) and as a clinical tool for use with individual clients (Bannister & Mair, 1968). A grid may be defined as a sorting task which involves the exploration of construct relationships and yields data in a matrix form, with its basic components being constructs and elements (Bannister & Mair, 1968).

In its original form the technique was titled the Role Construct Repertory Test, and involved the comparison, three at a time, of elements, in this case people assigned to role titles (e.g., mother, person you admire). The aim was to elicit the individuals's constructs through the perception of similarities between two of the elements which made them different from the third element (Bannister & Fransella, 1986; Bannister & Mair, 1968).

Many techniques developed from the original idea, varying in
methods of elicitation of constructs and in treatment of the relationship between the elements and the constructs. Descriptions of many of the variations which have been used are provided by Bannister and Mair (1968) and Fransella and Bannister (1977), however, Bannister and Fransella (1986, p.51) contended that all forms have certain general characteristics in common:

1. They are concerned with eliciting from a person the relationships between sets of constructs, either in terms of construing elements or by directly comparing construct with construct.

2. The primary aim is to reveal the construct patterning for a person and not to relate this patterning to some established normative data.

3. There is no fixed form or content. Repertory grids are a technique, not a test, and the selection of the form and content is related to each particular problem.

4. All forms are designed so that statistical tests of significance can be applied to the set of comparisons each individual has made.

Grid method has been implemented in many areas, including depression (Ashworth, Blackburn & McPherson, 1982; Axford & Jerrom, 1986; Hewstone, Hooper & Miller, 1981), schizophrenia (Bannister & Fransella, 1966), group therapy (Fransella, 1970; Morris, 1977), stuttering (Fransella, 1972), interpersonal interaction (Bender, 1969; Coleman, 1975; Duck, 1973), vocational
choice (Brown, 1987), and education (Runkel & Damrin, 1961; Salmon & Bannister, unpublished paper; Warren, 1966).

Of particular interest in relation to the present study was the application of repertory grid technique by Jonikis (1983) who used grid technique in investigating the relative effectiveness of components in an education programme for unemployed youth, administering the repertory grids at the beginning and end of the training programme. Baldwin (1972) similarly administered a measure derived from personal construct theory, in this case the Bieri Cognitive Complexity-Simplicity Scale, at the beginning and end of a training group to investigate changes in interpersonal cognitive complexity.

**Implication Grid**

The implication grid method was devised by Hinkle in 1965 and although his method was not published, Bannister and Mair (1968) provided a full description. Hinkle argued that constructs are defined by their implications, and designed the implication grid to investigate this relationship. The implication grid does not use elements, but directly compares constructs with each other in pairs to determine which constructs have implications for others. Comparing the implication grid method with the repertory grid, Honess (1978) stated that the former may generally be distinguished from the latter as a direct, as opposed to indirect, assessment technique.

Hinkle also suggested the procedure of 'laddering' constructs
during elicitation to indicate the hierarchical organisation of the construct system under investigation (Bannister & Fransella, 1986; Bannister & Mair, 1968). For each construct elicited the subject would be asked by which pole of that construct they would prefer to be described and why. This procedure may be repeated several times within a construct, the assumption being that laddering will lead to the elicitation of the more superordinate constructs (Bannister & Fransella, 1986).

As mentioned previously, Hinkle found that more superordinate constructs, as elicited by laddering, had more implications than subordinate constructs (Fransella & Bannister, 1977), and this finding has been supported by Crockett and Meisel (1974), Honess (1979), and Landfield's (1971) pyramid approach. Additionally, Hinkle suggested that more superordinate constructs will be more resistant to change, and developed the 'resistance to change' grid as a measure (Bannister & Fransella, 1986; Bannister & Mair, 1968).

Personal construct theory may be seen as being primarily concerned with evolution and change in construct organization (Honess, 1978), reflecting the constant formation and alteration of hypotheses about the world. Repertory grid methods have, therefore, been suggested as offering a framework for a systematic approach to detecting and defining predictable areas of stability and change in an individual's behaviour (Bannister & Mair, 1968; Honess, 1978), so that these methods could be employed in investigating self-schematic effects and change in an
applied setting. The present study proposed to apply repertory grid methodology to the study of self-schematic processes in relation to the experience of unemployment and the effects upon the self-schema of an event expected to alter this experience, a job-finding club.

UNEMPLOYMENT

Unemployment in Australia

In January 1983 unemployment in Australia exceeded 10% for the first time since the 1930's (Castle & Mangan, 1984) and it has become recognised as being a major social problem. At the end of June, 1987, a total of 843,703 Australians were recorded as being unemployed, with Western Australians accounting for approximately 9% of this figure (Commonwealth Employment Service Statistics, June 1987).

Much of the emphasis in government unemployment programmes has been on the younger age groups (Gregory, 1984), but there is evidence to suggest that although unemployment may affect any individual, those of approximately 45 years or older (Gregory, 1984), the unskilled, migrants with poor English skills (Smith, 1984) and the disabled are more likely to experience long term unemployment than younger age groups. In addition, it has been found that those who have been unemployed for a long time are more likely to continue to be unemployed, compounding the problem (Smith, 1984). Duration of unemployment by age group in Western Australia is given in Table 1, showing the higher proportion of
older age unemployed in the long term (>9 months) category relative to younger age groups.

Table 1. Length of unemployment by age group, Western Australia (CES Statistics, June 1987).

<table>
<thead>
<tr>
<th>Age</th>
<th>&lt;3 months</th>
<th>3-9 months</th>
<th>&gt;9 months</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19 years</td>
<td>49.1%</td>
<td>41.6%</td>
<td>9.3%</td>
</tr>
<tr>
<td>20-24 years</td>
<td>49.7%</td>
<td>37.9%</td>
<td>12.4%</td>
</tr>
<tr>
<td>25-44 years</td>
<td>46.8%</td>
<td>36.7%</td>
<td>18.5%</td>
</tr>
<tr>
<td>45+ years</td>
<td>37.0%</td>
<td>31.5%</td>
<td>31.5%</td>
</tr>
</tbody>
</table>

Although much has been written on various aspects of unemployment, with a marked focus on youth in Australian studies (Feather, 1985), the present discussion will focus on psychological aspects of unemployment, particularly as they are related to the older unemployed group.

Psychological Effects of Unemployment

"... being unemployed is something very different from having leisure time. The unemployed decreased their attendance of clubs and voluntary organizations, their use of the free library, their reading habits. Their sense of time disintegrated, having nothing to do meant that they became less able to be punctual for meals or other arrangements. Budgeting, so much more necessary than before, was
progressively abandoned. While family relations continued in established patterns longer than other relations and activities, there was some evidence that they, too, deteriorated and family quarrels increased." (Jahoda, 1982)

Jahoda (1982) was referring to the conclusions of a study carried out in Marienthal, Austria, in the 1930's when the village's major industry closed down. The researchers, led by Jahoda, lived among the unemployed people observing, and where possible measuring, behaviours of everyday life. Although this study was methodologically unsophisticated, as were many of the era (Viney, 1984), Fryer and Payne (1986) felt that it still towers above most other studies of psychological effects of unemployment in its thoroughness. More recent studies have employed standardized questionnaires in assessing unemployment effects, permitting the study of large numbers of people and comparisons across populations (Fryer & Payne, 1986).

Although based on research carried out in the 1930's, Eisenberg and Lazarsfeld's (1938) review of unemployment effects has continued to be influential in the area (Jonikis, 1983). These authors reported increased emotional instability, reduced self-confidence and morale, increased hopelessness, depression, passivity and anxiety.

In their book devoted to examining the social psychological effects of unemployment, Kelvin and Jarrett (1985, p.42) stated that "the most profound psychological effects of unemployment are
on the way in which the unemployed individual comes to see himself. These authors summarised the assertions of "all" who have written on unemployment as suggesting that being unemployed almost invariably undermines an individual's prior status, and damages his self-esteem and general concept of himself (it is interesting to note, as did Kelvin and Jarrett, the relative dearth of literature relating to unemployed women).

Reviewing the area, Warr (1984) reported unemployment research as demonstrating a significant deterioration in psychological health as a result of unemployment, at least in respect of men, and summarised the main areas in which this effect has been shown as happiness, life satisfaction, positive and negative affect, experience of pleasure, experience of strain, negative self-esteem, anxiety, depressed mood, psychological distress, diagnosed psychiatric illness (psychotic and neurotic), and increased risk of suicide.

O'Brien (1986) also provided a review of recent studies (cross-sectional and longitudinal) of psychological effects of unemployment, and although he found many inconsistencies between studies O'Brien summarised the research as showing that unemployment produces in most people dissatisfaction and distress, the degree of which depends upon factors such as previous job experience, work values, financial resources, age, social support, leisure activities, and length of unemployment.

In relation to factors mediating the effect of unemployment, Swinburne (1981) found that perceived control over becoming
redundant could affect the degree of negative reactions found in unemployed managers. Length of unemployment also appears to mediate the impact, as it seems that there is a gradual decline in psychological health during the first months of unemployment, with some stabilization at a lowered level after about six months (Warr, 1984). Aylward (1981), in a study of unemployed in Western Australia, suggested that self-esteem appeared to have direct impact on anger, depression, and attribution of causality, and that expectation of success mediated direct coping and anger.

It is often difficult to differentiate causative links in unemployment as psychological problems may cause or result from unemployment. Attempts have been made to deal with this problem through self-report of pre-unemployment status or through longitudinal design. In a self-report study, Finlay-Jones and Eckhardt (1981) administered the General Health Questionnaire to 401 unemployed subjects, with 72 of these being interviewed by a psychiatrist. Forty-nine percent of subjects were found to be suffering from severe psychiatric disorders, 75% of these being cases of depression. It was estimated that onset of the disorder occurred after unemployment in 70% of cases.

A longitudinal study with school leavers carried out by Feather and O'Brien (1986) suggested pre-existing differences between those who gained employment and those who did not. The unemployed generally had lower reported competence and activity levels, but higher stress and depressive affect. At approximately one year follow-up, the unemployed were found to have further diminished reports of competence, activity, and life satisfaction, with an
increase in depressive affect. Measures of 'psychological well-being' and self-regard were also lower. Gurney (1980), using a longitudinal design with school leavers, suggested that unemployment may act to retard development of self-esteem.

Findings from Kasl's (1979) longitudinal plant-closure study in the U.S.A. indicated greater depression and reduced self-esteem in the unemployed as compared with controls, though there was evidence of adaptation over time.

Cohn (1978) used as his sample 1080 individuals of whom 537 were employed at the time of first interview and unemployed at the subsequent interview. Significantly greater dissatisfaction with the self, as measured by the question "Are you more often satisfied or dissatisfied with yourself?", was found with the unemployed in comparison with controls and initial testing.

Lawlis (1971) reported his unemployed subjects to be less assertive than controls, while Tiffany, Cowan and Tiffany (1970) found the unemployed to have significantly lower self-esteem and self-confidence, and greater depression.

Hartley (1980) has cited several studies investigating the relationship between unemployment and self-esteem. The majority of these suggested deterioration of self-esteem, although, as Hartley pointed out, many of these were descriptive rather than systematic studies. Hartley's own study, using a Q-sort, failed to find differences in the self-esteem of unemployed as compared with employed managers, and it has been suggested by Warr and
Jackson (Fryer & Payne, 1986) that this inconsistency may have arisen because of the nature of different measures used. These authors found changes in negative self-esteem, but not in positive self-esteem, to be related to a change in status.

Viney (1984) reported unemployed subjects as experiencing more anxiety, depression, anger, and helpless than either 'low stress' (employed or full-time students) or 'high stress' (cardiac patients) controls. In contrast to the findings of other studies, however, Viney’s unemployed subjects maintained feelings of competence and self-confidence. A difference was found between unemployed youth and older subjects, in that the latter reported greater feelings of loneliness and alienation.

In relation to older unemployed subjects in particular, Warr (1979) found lower psychological well-being in the 45 to 54 year age group, while Warr and Jackson (1984) found a curvilinear relationship between age and General Health Questionnaire measures, with the middle-aged group experiencing poorer mental health than younger or older subjects. It should be noted that age and length of unemployment were correlated for Warr and Jackson's middle-aged, but not older or younger subjects.

Summary

Unemployment has generally been found to be related to psychological effects such as decreased self-esteem and assertiveness, and to greater likelihood of depression. These effects appear to be mediated by such factors as age, length of unemployment, or social support, with older unemployed
individuals having been found to remain unemployed longer, to experience greater feelings of loneliness and alienation, and to experience reduced psychological well-being as a result of unemployment.

A programme which has been found to be successful in returning the unemployed to the work-force, including the older unemployed and those in disadvantaged groups, such as the disabled or non-English speaking migrants, is the job-finding club.
JOB-FINDING CLUBS

The job-finding club has been described by Kenyon (1986, p.1) as "essentially a group-support, group-job-hunting technique" initially developed by Azrin and co-workers. Azrin, Flores and Kaplan (1975, p.17) noted that while unemployment was acknowledged to be a major problem for individuals as well as society, the typical job-seeker was "usually left to his own initiative", using only generally known procedures such as vacancy advertisements and personal contacts in an unstructured way.

In the current highly competitive labour market job-seeking has become a skill in itself (Mortimer, 1986) and, as Schiller (1984) points out, most people do not formally learn how to look for work so that generally the job-search tends to be undirected and uninformed, often prolonging the period of unemployment and resulting in unsatisfactory matches between job-seekers and vacancies. In addition, it has been found that as the duration of unemployment increases the amount of time spent in job-seeking decreases (Kenyon, 1986; Mortimer, 1986), with job-seekers experiencing loss of motivation to effectively compete as a result of constant rejection (Mortimer, 1986).

Azrin, Flores and Kaplan (1975) saw the need for a job-counselling programme to provide the unemployed with the skills and resources necessary for an extensive job-search which could...
be experimentally shown to be more effective than the typical efforts of the individual job-seeker. A job-counselling programme, the Job Club, was devised by Azrin et al. (1975) to meet this need, drawing upon various behaviour management techniques.

A learning experience approach to job-seeking is taken in job-finding clubs through an intensive and structured learning situation (Kenyon, 1986). Azrin and Besalel (1980) describe the job-finding club approach as an application of operant conditioning principles and, therefore, as behaviour therapy or behaviour modification, with the single objective of finding jobs for clients. Azrin and Besalel (1980) differentiate the job-finding club as an "outcome-oriented" approach from general vocational counselling, which is described as a "process-oriented" approach emphasising mentalistic procedures. The emphasis for the job-finding club is the identification, standardization and consistent arrangement of overt factors involved in obtaining employment (Azrin & Besalel, 1980).

**BEHAVIOURAL GUIDELINES FOR JOB-FINDING CLUBS**

Azrin and Besalel (1980) have applied behaviour modification guidelines to job-counselling in the job-finding club as follows:

1. Reinforcement. In line with the finding that behaviour change and motivation are increased with a strong reinforcer, given frequently over a long period, enthusiastic praise is given
for every correct response of the client throughout every session and during repeated sessions.

(2) **Multiple Reinforcers.** The job-finding club does not rely solely on praise from the club leader for reinforcement, but also arranges for peer reinforcement by other group members and support from the client's family.

(3) **Self-recording of behaviour,** permitting the leader and client to observe progress and allowing the leader greater opportunity for reinforcing progress.

(4) **Decreasing errors without criticism.** Extinction is used for incorrect responses with simultaneous positive reinforcement for correct responses.

(5) **Active responding versus passive listening.** The club leader does not lecture clients, but rather arranges for clients to immediately engage in the behaviour described after minimal instruction. Advantages of requiring overt behaviour which are not possible if the client is a passive listener are the promotion of learning through rehearsal of the skill being taught and the immediate provision of reinforcement for correct actions.

(6) **In vivo conditioning versus generalization.** Azrin and Besalel (p. 110) refer to behavioural studies showing that "learning is superior if the person is taught in the real-life situation rather than taught a skill in a single situation and hoping it will generalize". The employment interview is described as the only major activity which cannot be arranged to occur
within the job-finding club and extensive behavioural rehearsal is provided as a partial substitute.

(7) Reducing response effort. The job-finding club aims to minimize the effort required of the client by providing job-search materials and facilities, as behaviour is reported to be more likely to occur when the number of responses, or response effort, is not great.

(8) Reinforcement of component responses in a chain. Each step within an activity is reinforced, rather than withholding reinforcement to the end of the activity, to promote and encourage the behaviour.

(9) Behavioural contracting takes place between the club leader and client, as in standard behavioural counselling.

JOB-FINDING CLUB CONCEPTS

Kenyon (1986) outlines the key concepts of a job-finding club, stressing the need for the job-search to be a full-time job in itself. Clients attend regular sessions, usually daily, for at least four hours per session. During these sessions they examine and apply job-finding techniques, such as resume writing, application writing, job lead identification, and interview rehearsal. The remainder of the day is used to follow up job leads.

A trained group leader supervises the club, offering support,
information, and skills training, in addition to providing the continuous positive reinforcement previously mentioned. All club members receive individual attention on a rotating basis.

Group support is important, offsetting the loneliness of job-hunting and providing peer support and encouragement for job-seeking efforts. A positive atmosphere and expectations of success are fostered in the group. On the practical side, each club member also searches for job leads for other group members as well as for him or her self.

The job-finding club, with its behavioural emphasis, does not exclude any job-seeker as unemployable but accepts all job-seekers, presuming that intensive training can give the skills to make them successful. It is recognized that each client will need a different degree of training (Azrin & Besalel, 1980).

The job-finding club offers its members free clerical, postal, and telephone services, in line with Azrin and Besalel's (1980) concept of reducing response effort and to help with the financial costs of the job-search.

In designing the initial job-counselling programme Azrin et al. (1975) were mindful of the evidence that most jobs are not publicly advertised (Jones & Azrin, 1973; Murphy & Athanasou, 1987). Recent estimates suggest that more than 70% of vacancies are not advertised (Kenyon, 1986; Mortimer, 1986), but are a
"hidden" element of the labour market, so that an important aspect of the programme is to point this out to job-seekers, particularly younger job-seekers who generally seem to be unaware of the fact (Murphy & Athanasou, 1987), and to teach how to tap "hidden" vacancies.

**EVALUATION OF JOB-FINDING CLUBS**

Azrin, Flores and Kaplan's (1975) job-counselling programme was conducted in the United States with 60 clients who were described as fairly representative of the general job-seeking population, although clients who were found to be receiving unemployment compensation were excluded from the study as preliminary results had suggested that such clients would make little progress in the programme until their payments ceased. Matched controls were found for each subject.

Ninety per cent of job-seekers in the job-finding club obtained full-time employment within two months, in comparison with 55% of controls. After 3 months 92% of the counselled job-seekers and 60% of non-counselled job-seekers had found employment. The median time to start work was 14 days for the average counselled job-seekers and 53 days for the average non-counselled job-seekers. Azrin et al. (1975) reported that the speed of finding a job was greater for those clients who attended regularly than for those who attended irregularly, and that all who attended regularly obtained employment.
Azrin, Philip, Thienes-Hontos and Besalel (1980) investigated the use of the job-finding club with welfare clients, a group excluded from the study of Azrin et al. (1975). One thousand subjects in five cities in the U.S.A. with higher than national average unemployment rates at the time of the study (1976 to 1978) were randomly assigned to either job-finding clubs or to the usual method of aid including intensive job placement efforts, counselling, and training. Of the subject group 48% had not received a high school diploma, 22% were veterans, 39% were nonwhites, 15% were Spanish, 10% were under 22 years of age, 11% were handicapped and 54% were women. All were receiving welfare from the Aid to Families with Dependent Children programme.

Employment was obtained by 62% of the job-finding club members and 33% of the control group. Every subgroup of subjects experienced more success under the job-finding club condition, and the jobs obtained were comparable or superior to those of control clients. At 6 month followup 80% of job-finding club members were employed in comparison with 48% of non-club members, while at 12 month followup 85% of club members were employed in comparison with 59%. Regular attendance was found to be a major factor in obtaining employment.

A job-finding club conducted by Azrin and Philip (reported in Azrin & Besalel, 1980) with "job-handicapped" clients, such as those with a prison record, drug or alcohol problems, and mental or physical problems, found at least 90% employment for each
subgroup of club members with the exception of veterans who achieved 82% employment. Within the 6 month followup 95% of job-finding club members had obtained employment in comparison with a control group attending lecture-discussion sessions, which achieved an employment rate of 28%. Job maintenance at 4 months was 89% for job-finding club members and 23% for the comparison method.

Schiller (1984) reports the success of the "Crucible Club" in Pennsylvania during 1981 when several hundred workers were put on permanent layoff by the Crucible Steel plant. To help these workers find new jobs the company and a local Steelworkers' organization jointly developed a job-search club which was responsible for 77% of participants finding new jobs, in comparison with 57% of nonparticipants.

In the United Kingdom the job-finding club concept was first introduced to Jobcentres in 1984 with the setting up of three pilot schemes. These pilot clubs saw 70% of members obtaining employment and subsequently a further 29 job-finding clubs were set up for evaluation (Mortimer, 1986). From these clubs 63% of members obtained employment and a further 15% moved from the club into either a Community Programme or training (Mortimer, 1986).

Placement rates for job-finding club members in Canada between 1983 and 1986 have averaged approximately 80%, ranging from 55% to 100% (Woods, 1987).
Job-finding clubs have been piloted in Australia with promising results. Athanasou and Hickey (in Murphy & Athanasou, 1987), for example, conducted a job-finding club in the Western suburbs of Sydney obtaining a placement rate of 87% for club members. In Western Australia two pilot job-finding clubs were conducted late in 1986, one for adult migrant job-seekers at the Fremantle Migrant Resource Centre in conjunction with Joblink, a programme of the State Department of Employment and Training, and the other as a joint project of the Confederation of Western Australian Industry and the Department of Employment and Training. Both clubs achieved a success rate of greater than 50%, this figure increasing within a month of completion dates (Ross & Stall, 1987).

Woods (1987) describes a series of four job-finding clubs conducted during early 1987 at the Preparation for Employment Program in Perth as a comparison with the 14-week course usually run by the Program. The Preparation for Employment Program aims to assist unemployed people with a physical disability to obtain and maintain employment. Although the placement rate for job-finding club members at the completion of the club was less than that for the 14-week course (40% as compared with 53%) the job-finding club approach was found to be slightly more effective than the 14-week course at 3 month followup, with a placement rate of 65% compared with 61%.

In terms of "cost-benefit" the job-finding club was superior over
all on efficiency. For particular groups of disabled members, however, namely the visually impaired and the hearing impaired, the job-finding club was not as effective as the course and Woods (1987) suggested that people with sensory disabilities may have benefitted from the greater opportunity for extended individualized attention during the 14-week course.

THE JOB-FINDING CLUB USED IN THIS STUDY

Azrin and Besalel (1980) have cautioned against changes to the job-finding club method which lead to a nondirective, informal, discussion-oriented approach, describing such an approach as being at variance with their directive, outcome-oriented method.

However, following the experience of the job-finding clubs conducted at the Fremantle Migrant Resource Centre and with the Confederation of Western Australian Industry, Ross and Stall (1987) devised a Job Club kit based on a combination of Azrin and Besalel's model and Hopson and Scally's (1980) *Lifeskills Teaching Programmes. No.1*, which employs an interactive, non-directive approach in exploring issues related to employment and unemployment.

Ross and Stall felt that neither the American/Canadian model of Azrin and Besalel nor Hopson and Scally's model per se was ideal for the Australian situation, but that a combination of the two approaches appeared to best suit the requirements of Australian job-seekers. It was this combined programme which was used in the
The programme follows closely the procedures of Azrin and Besalel (1980), but with the addition of sessions from the work of Hopson and Scally (1980) covering assertion training for the job interview and self-esteem. A discussion of these areas in relation to unemployment and job-seeking follows. An outline of the programme, showing the components for each area, is given as Appendix A.

**ASSERTION TRAINING**

Heimberg, Montgomery, Madsen, and Heimberg (1977, p.953) have referred to assertion training as "a combination of behavioral techniques employed to remediate interpersonal problems", viewing it as teaching effective social problem solving, the main thrust being to help clients select the most effective response from available alternatives.

Definitions of assertion have included the idea of the expression of personal rights, feelings, and beliefs whilst acknowledging those of others (eg., Lange & Jakubowski, 1976; Delamater & McNamara, 1986), with the aim of maximising the reinforcement value of social interaction for all involved (Heimberg et al., 1977).

Lange and Jakubowski (1976) have described four basic procedures generally found in assertion training - (1) teaching the
difference between assertion and aggression, and between non-
assertion and politeness; (2) helping people identify and accept
their own personal rights and those of others; (3) reducing
cognitive barriers to acting assertively, and (4) active practice
of assertive skills. Jonikis (1983) reports that these four
elements, or similar, are common to most assertion training
programmes.

Gambrill (1981) reported that a major contributor to non-
assertive behaviour is internal dialogue or self-talk, in that
both assertive and non-assertive individuals possess the skills
to be assertive, but that the negative self-talk of the non-
assertive individual mediates the use or non-use of assertive
behaviour. Gambrill (1981), summarising the work of Schwartz and
Gottman, noted that non-assertive individuals engage in more
negative self-talk and make fewer positive self-statements. In a
study of socially anxious men, Valentine and Arkowitz (1975)
found that such men typically underestimated positive aspects of
their performance, while overestimating negative aspects, and
gave infrequent self-reinforcement for social behaviours.
Similarly, O'Brien and Arkowitz (unpublished report described in
Gambrill, 1981) found more accurate memory for negative
information and less accurate memory for positive information in
socially anxious men compared with less socially anxious men.

The findings of these studies show a close relationship with the
studies previously mentioned in relation to the self-schema, and
it would seem likely that while Kuiper and Derry (1981), for
example, have been demonstrating the depressive self-schema, Arkowitz and his associates have been tapping into the non-assertive self-schema. Such findings emphasise the pervasive nature of the self-schema and underline the importance of Lange and Jakubowski's (1976) third procedure, that of reducing the cognitive barriers to acting assertively. Gambrill (1981) points out the need, therefore, to measure the nature of a client's self-talk for assertion training.

The effects of assertion training are thought to be improved self-esteem, self-confidence, interpersonal relationships, and personal fulfillment (Delamater & McNamara, 1986). Training packages for these skills have been widely used and accepted as an important behavioural intervention for various settings and populations with problems such as anger, depression, resentment, and interpersonal anxiety (Davis, McKay & Robbins Eshelman, 1980). Comprehensive reviews of the many areas of application are provided by such authors as Gambrill (1981) or Twentyman and Zimering (1979).

ASSERTION AND THE EMPLOYMENT INTERVIEW

One of the areas in which assertion training has been used is in the development of employment interview skills, the rationale being that more assertive behaviour on the part of the interviewee will be more favorably received by an interviewer than will non-assertive behaviour. As Barbee and Keil (1973)
point out, the employment interview is a central procedure in personnel selection and it is important that applicants know not only what is expected in an interview, but how to present themselves, and their skills and experience, in an effective way. They need to know how to sell themselves legitimately and effectively (Barbee & Keil, 1973).

In an attempt to discover the relative importance of elements of the job interview, Tschirigi (1973) submitted a questionnaire to recruiters from 70 different firms, requesting them to identify the characteristics of a job candidate which they actually used in making employment decisions. The recruiters were found to consider the candidate’s ability to communicate as far more important than his academic performance or work experience.

Gambrill (1981) describes the early work in the area of developing skills training programmes for job interviews by Prazak in 1969, who developed a programme to teach participants to discuss their work skills, answer questions, develop appropriate self-presentation, appear enthusiastic, and to end interviews.

Barbee and Keil (1973) videotaped "culturally disadvantaged" subjects in an interview setting and subsequently examined the effectiveness of videotape feedback alone, videotape feedback combined with behaviour modification techniques, or no treatment on such ratings as "assertiveness and initiative", as judged by
experienced personnel judges. Although the combination of feedback and behaviour modification produced significant changes in subjects' behaviour in the interview setting as compared with feedback only or no treatment, there was no significant difference in "probability of hiring" rates between the groups.

Following on from this study, Keil and Barbee (1973) gave training to subjects in responding to questions, clarifying personal circumstances, relating educational and vocational experience to the desired position, and initiating questions about the position. Results were compared with those of a no-treatment control group. The findings were similar to those of Barbee and Keil (1973), in that subjects in the training group improved to a significantly greater degree on several rating scale items than controls, but no difference was found on the "probability of hiring" measure. The authors concluded, however, that increased assertiveness impressed the interviewers favorably, and that the area was a promising one for further study.

Building on the work of Keil and Barbee (1973), Hollandsworth, Dressel, and Stevens (1977) compared a traditional group discussion job-training course with a course including skills often emphasised in the assertion literature (e.g., eye contact, length of speaking, loudness of voice, fluency of speech). The finding was that both groups showed improvement, the traditional group more in verbal skills and the assertion group in nonverbal skills. Hollandsworth et al. (1977) concluded that both
behavioural and discussion group components would combine to form the most effective training course.

Schinke, Gilchrist, Smith, and Wong (in Gillen and Heimberg, 1980), working with a group of teenage mothers searching for employment, focused on answering questions clearly, highlighting specific strengths, and presenting succinct, positive summarizations of past employment. Subjects were videotaped before and after the training course, and were judged by experienced personnel specialists for probability of hiring in comparison with a discussion group. The training group were rated significantly more positively on interview dimensions such as positive self-statements, and received significantly more positive hiring recommendations from the personnel judges than the discussion group subjects.

An assertion training programme for job interviews was developed by McGovern, Tinsley, Liss-Levinson, Laventure and Britton (1975), in which information about the interview process was followed by the application of assertion skills (making positive self-statements, saying no, making a demand or seeking more information) through small group exercises. The rationale for the programme was that by integrating information about the interview with assertion skills subjects would be better able to respond to the anxiety of an interview and thus maximize their chances of communicating effectively. This programme also formed the basis of Lange and Jakubowski’s (1976) assertion training programme for
job interviews.

The main criticism which can be levelled at the programmes mentioned is that there is no testing of the effectiveness of training in the actual job interview situation, which, as Gillen and Heimberg (1980) point out, is the ultimate measure of the degree of success. Some of these studies (McGovern et al., 1975; Hollandsworth et al., 1977) report no measure of subsequent effectiveness in a job interview setting, while attempts to compare on a "probability of hiring" basis (Barbee & Keil, 1973; Keil & Barbee, 1973; Schinke et al., in Gillen & Heimberg, 1980), though better than no measure at all, do not compensate for the lack of testing in the "real world" (Gillen & Heimberg, 1980).

MEASUREMENT OF ASSERTION

A number of measures have been devised to measure change in assertiveness, including verbal reports, daily log or checklist, behavioural measures such as formulating role play situations related to the kind of behaviour focused on during training sessions (Lange & Jakubowski, 1976), or pen and paper measures.

Many of the pen and paper measures were developed for use with college student populations, such as the Assertiveness Schedule (Rathus, 1973), a 30-item schedule; the College Self Expression Scale (Galassi, Delo, Galassi & Bastien, 1974); or the Assertive Inventory (Lawrence, in Lange & Jakubowski, 1976).
For non-college adults, scales have been devised by Gay, Hollandsworth and Galassi (1975, The Adult Self-Expression Scale), and Gambrill and Richey (1975, The Assertion Inventory), among others. The Adult Self-Expression Scale (Gay et al., 1975) receives support from Lange and Jakubowski (1976) as covering a wide range of assertive behaviours, though Hersen and Bellack (1981) level at this scale their criticism of all such measures, which is that there exists thus far insufficient validational data.

The Assertion Inventory (Gambrill & Richey, 1975) also receives support from Lange and Jakubowski (1976) as it is useful for assessment of the type of assertion problem involved, as well as measuring change. The scale, a 40-item self-report questionnaire, allows the measurement of the degree of discomfort felt by subjects in relation to specific situations, the judged probability of subjects' engaging in a behaviour, and the identification of situations in which subjects would like to be more assertive. The items included in the scale fall into the following categories: (1) turning down requests; (2) expressing personal limitations such as admitting ignorance in some areas; (3) initiating social contacts; (4) expressing positive feelings; (5) handling criticism; (6) differing with others; (7) assertion in service situations; and (8) giving negative feedback. Gambrill and Richey (1975) found test-retest correlations over a 5-week period were .87 for discomfort and .81 for response probability.
The Gambrill and Richey Assertion Inventory was selected for use in the present study as it has been developed as a general scale, not simply for use with college students, and, as Jonikis (1983) points out, it is a general rather than specific measure, which may reduce the cultural problems of using an American test in an Australian setting.

The Assertion Inventory was used by Sanchez, Lewinsohn and Larson (1980) to assess change in depressed outpatients attending an assertion training group as compared with those attending a traditional psychotherapy group, finding significant decreases in discomfort and increases in probability of acting assertively in assertion group subjects relative to the traditional group.

In Britain the Inventory was studied with four other assertion inventories by Furnham and Henderson (1981), looking at sex differences in responding in non-undergraduate subjects (housewives, further education, schoolchildren, male teachers, other mixed occupations). It was found that the female subjects overall were significantly less assertive than the males on all measures.

Jonikis (1983) used the Inventory in Western Australia with Education Programme for Unemployed Youth (EPUY) participants as part of a study of the effectiveness of assertion training as a component of the EPUY programme. Jonikis adapted the Inventory for his subject sample, rewriting the directions and rewording or
rephrasing some items as many subjects found the vocabulary difficult. In addition a shortened version of the Inventory was derived through factor analysis, producing a 12-item scale. As in Furnham and Henderson’s (1981) study, males were found to be more assertive overall than females, with males increasing in assertiveness on post-test while females showed little change.

In the present study Jonikis’ (1983) adaptation of the Inventory, that is, the rewording of instructions and some items, was used as this was felt to be more relevant to the Australian setting than was the Inventory in its original form. It was also not known what would be the educational level of the job-finding club participants and Jonikis’ adaptation was felt to be more suited to those with a lower educational level, should this be required.

SELF-ESTEEM

It is not intended within this study to delineate self-esteem research in detail, but rather to describe some dimensions and measures which may be related to unemployment and which may be sensitive to change. It is proposed that self-schematic change would be reflected in changes on measures of self-esteem.

Rosenberg (1986) defined self-esteem as involving feelings of self-acceptance, self-liking, and self-respect, both conditional and unconditional. Such self-statements would be embedded within a person’s self-schema and while feelings of competence or efficacy are seen to contribute to self-esteem, they are not
identical with or responsible for self-esteem (Rosenberg, 1986).

Self-esteem has been, as Rosenberg (1986) pointed out, a popular topic in psychology literature and self-esteem measures abound (Lawson, Marshall & McGrath, 1979). Reduction of self-esteem has previously been mentioned in relation to unemployment, Hartley (1980), in particular, having reviewed this literature. However, as Jonikis (1983) noted, the literature has often employed "self-esteem" as a more or less unitary concept, though it is by no means clear that such use is valid and there is evidence to suggest that many factors have been subsumed under the self-esteem label.

Hartley (1980), for example, referred to eight terms which have been used to describe self-evaluation, including loss of self-worth, loss of self-respect, and deterioration in self-concept. Silber and Tippett (1965) used the categories of non-defensive and defensive high self-esteem, inconsistent self-esteem, ineffective defensive self-esteem, and low self-esteem, while Lundgren (1978) proposed a distinction between public and private self-esteem.

A further distinction has been suggested between global and specific self-esteem. Rosenberg (1965) developed a 10-item Guttman scale of global self-esteem, which has received wide usage, particularly in the youth area for which it was developed.
Schneider (1977), having reviewed seven studies supporting the concept of global/specific self-esteem, suggested that specific measures may be more accurate predictors of performance than global measures. Lawson, Marshall and McGrath (1979) similarly felt that in the light of difficulties with prediction of behaviour from global measures more specific measures may be useful and produced a self-esteem scale specific to social situations. These authors reported that most patients who have difficulties with self-esteem do so in social situations.

The Lawson et al. (1979) scale, the Social Self-Esteem Inventory, comprises a 30-item self-report measure, with 15 positively and 15 negatively keyed statements related to feelings of self-liking and competence in social settings. The scale was normed on 128 first year psychology students with factor analysis revealing a single general factor, and readministration four weeks later producing a re-test reliability of .88.

Self-esteem has also been investigated in terms of repertory grid measures, in the contrast between the self and ideal self. These may appear as elements in the grid or as constructs (Jonikis, 1983), and Fransella and Bannister (1977) provided a description of the use of the method. Maklouf-Norris and Jones (1971), for example, employed plots of "distance from self" and "distance from ideal" as a measure of alienation with obsessive-compulsive subjects.

Silber and Tippett's (1965) validation study of self-esteem
measures reported two repertory grid-based measures. Firstly, the subject may be required to give an estimation through the use of ratings from 1 to 4 of how satisfied he is with the way he sees himself on each construct elicited, producing a total Subjective Satisfaction score. A second measure, the Difference Between Self and Ideal Self, is based on comparison of the subject's ratings of himself and how he would like to be on each construct. This second method was used by Jonikis (1983) to investigate self-esteem change in unemployed youth, and a similar comparison was employed by Hartley (1980) with unemployed managers.

The self-esteem measures selected for use in the present study were the Lawson et al. (1979) Social Self-Esteem Inventory and the repertory grid Difference Between Self and Ideal Self measure. The repertory grid measure was chosen as it was felt that, as mentioned, repertory grid technique would be an effective and sensitive measure for investigating self-schematic change. Although the Social Self-Esteem Inventory does not appear to have received wide usage at the time of writing, this scale was felt to be useful as a short, specific measure of self-esteem sensitive to self-schematic change and as a comparison with the repertory grid-based measure. It was believed that this area would be affected by unemployment status and job-finding club attendance, the job-finding club programme including coverage of self-esteem issues.

SUMMARY AND HYPOTHESES
This study has discussed literature pertaining to the area of cognitive schemata, with a focus on development, change, and organisation of information. A number of similarities have been noted between the nature and functions suggested for schemata and those suggested for personal constructs, and it was proposed that personal construct theory offers a well-developed framework for the study of self-schemata.

A foundation of personal construct theory was described as being acknowledgement of the changing nature of the way in which an individual organises information about the world, and it was suggested that a personal construct theory framework may be particularly sensitive in investigating changes in cognitive processing. The repertory grid methodology based upon personal construct theory provides quantitative analysis procedures which may be usefully applied to the study of self-schematic change.

The present study proposed to apply this methodology to the study of self-schematic change and the experience of unemployment. In the preceding discussion unemployment was described as being related to such negative self-schematic effects as decreased self-esteem and depression. Assertive behaviour was also referred to as a component of the self-schema, and it has been related to success in obtaining employment. The job-finding club, in addition to teaching and developing new job-search skills such as interview technique and self-presentation, is concerned with the development of self-esteem and assertiveness, and would be
expected to produce a change in the negative self-schema related to unemployment. The aim of this study, therefore, was to investigate change in the self-schemata of unemployed subjects through assessment before and after the intervention of a job-finding club.

Hypotheses

1. That personal construct methodology would provide an effective measure of self-schematic change in unemployed subjects

2. Self-schematic change as a result of attending the job-finding would be seen in increased self-esteem and assertiveness

3. Job placement effects may be seen in relation to levels of self-esteem or assertiveness

4. That subjects would show a greater schematic organisation effect (tightness of construing) with increased duration of pre-job club unemployment and that a decrease in this organisation as a result of assimilating new information about the self would be greater for those with a longer history of unemployment

5. Constructs/schemata more highly placed in the organisational hierarchy would be less likely to show change.
METHOD
Recruitment of subjects. Initially advertisements were placed in local newspapers advising of the intention to run job-finding clubs (shown in Appendix B) but these produced no response. Subjects were then recruited through advertising in local offices of the Commonwealth Employment Service and through referral from the Salvation Army "Job-Link" programme.

A minimum age of 24 years was placed on attendance to provide a service to older job-seekers and because it was felt that older subjects would be less likely to experience uncontrolled changes in self-schema. No other restriction was placed on subject acceptance and subjects were not limited to those living in the area immediately surrounding job-finding club venues. All subjects attended voluntarily.

Subjects. Twenty-four unemployed men and women (N = 15 and 9 respectively) recruited to attend the job-finding clubs formed the subject group. The age range of subjects was 24 to 54 years (mean = 38.1 years, S.D. = 8.9, median = 40 years) and the length of unemployment between last position and prior to attending the job-finding club ranged from zero (i.e., subjects were working until commencing the club) to 10 years (mean = 19.7 months, S.D. = 33.4 months, median = 11 months). The distribution of age and unemployment duration is shown in Appendix C). Subjects were seeking a variety of positions and came from a range of backgrounds.
Each of the two job-finding clubs which took place in different metropolitan areas of Perth, Western Australia, was attended by twelve subjects. The clubs were conducted for 4 hours each weekday morning for three weeks, with content as outlined in Appendix A. The experimenter acted as club leader for the duration of both clubs.

DESIGN

A within-subject test-retest design was employed, with measures administered to subjects at the commencement of each job-finding club and at the end of the final week of the club. Although the presence of a no-treatment control group would have been preferable this was not possible within the resources available and it was proposed instead to use applicants for the second job-finding club as a waiting list control group. However, members for this club were not recruited until the week before commencement, the starting date having been delayed by one week due to lack of response, and so this control was not possible. A third possibility was to compare the results of subjects who were placed in employment and those who were unplaced by the end of each job-finding club, and this control was decided upon.

Dependent Measures

1. Gambrill and Richey's (1975) Assertion Inventory, as previously discussed (shown in Appendix D). The three sections of this measure were administered at the beginning of the first job-finding club, but it was discovered that subjects found the
procedure too lengthy when combined with other measures. On subsequent administrations only the first section of the Inventory, dealing with subjects' reported degree of discomfort in situations requiring assertiveness, was used. It was felt that this section of the Inventory would produce the most useful measure for this study, as compared with the other sections.

2. Social Self-Esteem Inventory (Lawson et al., 1979), as previously discussed (shown in Appendix E).

3. Repertory Grid measures.

4. Implication Grid measures.

**Repertory Grid Method**

1. **Elements**

Thirteen role title elements were supplied to subjects, including three elements related to the self. Nine of the 13 elements were concerned with employment/unemployment, while two, numbers 11 and 12, were chosen to give an indication of how other elements were related to the liked/disliked dimension.

1. Myself now  
2. Myself in job  
3. My ideal self  
4. Someone out of work  
5. Someone who has just got a job  
6. Someone who has been employed for a long time  
7. Someone in my ideal job  
8. Someone who does volunteer work  
9. An employed friend  
10. An unemployed friend  
11. An admired person  
12. A disliked person  
13. Someone who has been unemployed for a long time

2. **Elicitation of Constructs**

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The elements were combined into triads, each triad containing at least one of the three Self elements. All three Self elements were combined in one triad. For all other triads a Self element was chosen at random from the three, and was matched with two other randomly chosen elements, producing 13 triads in all.

The triads produced were:

(a)3 12 13  (b)1 4 7  (c)2 5 6  (d)3 11 12
(e)2 7 10  (f)1 2 3  (g)2 4 9  (h)3 4 12
(i)1 9 11  (j)1 5 10  (k)3 4 10  (l)2 9 11
(l)1 8 12

The same triads were presented to all subjects, in the same order, for elicitation of constructs. This was done in a group setting as a paper and pencil task. Instructions to subjects are given as Appendix F and an example of the sheets used is provided as Appendix G. Clarification of the constructs elicited was possible with each subject as the experimenter moved around the group and subjects felt free to clarify the issues involved for themselves in this way.

Subjects were initially requested to compare the three role titles in each triad and indicate how two were alike but different from the third (as described in Fransella and Bannister, 1977). Next, they were asked to give the opposite pole to the construct elicited. The constructs were then laddered, with subjects being asked by which pole of the elicited construct they would prefer to be described and why. Finally subjects gave the opposite pole to the laddered construct.
3. Selection of Constructs

The elicited and laddered constructs for each subject were examined to minimise overlapping of constructs and to select those which were more abstract, as some constructs produced were concrete and not easily generalised to other elements. The constructs for each subject were selected according to these criteria by two independent raters, with an inter-rater agreement in construct selection of 73%.

From the total possible 26 constructs a maximum of 15 was selected for each subject, attempting to keep a balance between numbers of initially elicited and laddered constructs within each. Where a subject had provided greater than the maximum number of constructs which fitted the selection criteria the first 15 elicited were selected. The mean number of constructs within each grid was 11.25 (S.D. = 2.67), with a range of 7 to 15.

The elicited constructs for each subject are given in Appendix H, with initially elicited and laddered constructs indicated.

4. Supplied Constructs

Five constructs which had previously been used by Jonikis (1983) in his repertory grid for unemployed youth were supplied by the experimenter in addition to subjects' elicited constructs. Although it may be argued from the individuality corollary of personal construct theory that elicited constructs will be expected to be more personally meaningful to the subject and
there is evidence to support this (reviewed in Fransella & Bannister, 1977), there seem to be some instances where supplied constructs are useful, such as with subjects who may not give constructs which are suspected to be important to them (Fransella & Bannister, 1977). Adams-Webber (1970) concluded that although individuals seem to prefer to use their own constructs they can use supplied constructs in approximately the same way. The supplied constructs were used to ensure that information on constructs of interest in the study would be obtained, and to provide for direct comparisons between subjects.

The five supplied constructs were:

1) Would probably give up if they received a few knock-backs - Wouldn’t give up even if they received a few knock-backs
2) Feels good about self - Doesn’t feel good about self
3) Uptight and nervous - Cool and relaxed
4) Feels good about how he/she spends time - Doesn’t feel good about how he/she spends time
5) Gets on with others - Doesn’t get on with others.

5. Rating of Constructs

Subjects were required to rate the 13 elements on a scale from 1 to 9, where 1 was equated to the emergent pole of the construct and 9 to the opposite pole. This was carried out for each construct within the grid. Instructions to subjects and an example of the rating sheet are shown in Appendix I.
Implication Grid

Constructs elicited from subjects by the triadic comparisons and the supplied constructs were used as the basis of the implications grids. This task was also given in a group setting as a paper and pencil task. Instructions to subjects are given as Appendix J, with an example of the sheets used for indicating implications between constructs given as Appendix K.

Using their individual construct comparison sheets, subjects compared each pair of constructs and indicated whether a change on one construct would imply a change on any other. Four ratings were possible for each comparison - (1) construct A would imply construct B; (2) construct B would imply construct A; (3) there would be a reciprocal implication between the two constructs; or (4) there would be no implication involved.

PROCEDURE

First Administration

On the first day of the job-finding club subjects completed the Social Self-Esteem Inventory, the Assertiveness Inventory, and the elicitation of constructs. Following this procedure subjects began the introductory session of the club, involving warm-up exercises to get to know each other and an introduction to the aims and methods of the job-club.

Following this session the experimenter examined the construct
elicitation sheets, selected constructs as outlined, and formulated the construct rating sheets and implication comparison sheets for each subject.

On the second day subjects were administered the construct rating sheet and the implication comparison sheet. From this point the job-finding club followed the outline presented in Appendix A.

Second Administration

At the end of the last week of the job-finding club subjects were again given the Social Self-Esteem Inventory, the Assertiveness Inventory, the construct rating sheets, and the implication comparison sheets. Repertory grid and implication grid constructs were the same as used on the first administration.

In most cases the measures and instructions (as previously administered) were mailed to subjects, with a stamped, addressed envelope for return. Subjects were invited to contact the tester should they have any queries regarding completion of the measures. It was emphasised that subjects should try to return the measures without delay to minimise intervening effects, and where these had not been received by the experimenter after one week subjects were contacted to ensure that there were no difficulties.
ANALYSIS AND RESULTS
Of the 24 subjects attending the job-finding club 17 were placed in employment (10 from the first group and 7 from the second), a placement rate of 70.8% overall.

Due to irregular attendance at the job-finding club by some subjects which meant that they were not present at times during the first two days of the club when measures were being administered, refusal to participate, and difficulty in obtaining follow-up measures, a complete set of data was available for only 10 subjects. A major reason reported by subjects for not completing measures was the length of time involved. Table 2 indicates the number of subjects from whom each measure was collected.

Table 2. Data collection figures.

<table>
<thead>
<tr>
<th>Measure</th>
<th>No data</th>
<th>Pre-test</th>
<th>Post-test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Esteem</td>
<td>1</td>
<td>23</td>
<td>14</td>
</tr>
<tr>
<td>Assertion</td>
<td>8</td>
<td>16</td>
<td>15</td>
</tr>
<tr>
<td>Rep. Grid</td>
<td>5</td>
<td>18</td>
<td>11</td>
</tr>
<tr>
<td>Imp. Grid</td>
<td>5</td>
<td>17</td>
<td>8</td>
</tr>
</tbody>
</table>

No follow-up data at all was available for 7 subjects, for reasons as shown in Table 3.
Table 3. Reasons for absence of followup data by placement status

<table>
<thead>
<tr>
<th>Reason</th>
<th>Placed</th>
<th>Not Placed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical problem</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Refusal</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Measures not returned</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

The fact that of the 7 subjects not placed in employment, only 1 completed all followup measures was problematic for the placed/not placed dimension of planned analyses of variance employing pre- and post-test measures for placed and unplaced subjects, as these would not be valid with such a small subject number. Consequently, analyses of pre- and post-test measures were carried out by t-test, and where placed/not placed comparisons were made only scores from the first administration were used.

General Results

An effect of age by placement in work was found \( t = 2.716, \ df = 22, \ p < .05 \) with subjects in the placed group having a lower mean age (35.39 years) than those in the unplaced group (mean age = 45.33 years). A non-significant correlation was found between age and length of unemployment prior to attending the job-finding club \( r = .447, \ p > .05 \).
Inventory Results

For the reasons outlined results from the Social Self-Esteem Inventory and the Assertion Inventory were analysed by t-test as opposed to analysis of variance. Individual subjects' results for these scales are presented in Appendix L.

Mean scores for the Self-Esteem Inventory were 117.53 at pre-test and 125.40 at post-test, a higher score indicating higher level of self-esteem. At pre-test the mean score for the Assertion Inventory was 81.73, while at post-test the mean was 79.87, a lower score indicating lower perceived discomfort in acting assertively. Comparison of pre- and post-test results yielded no significant difference for the Self-Esteem Inventory (t=1.2198, df=14, p>.05), nor for the Assertion Inventory (t=0.518, df=14, p>.05). Although non-significant, subjects showed a marginal increase in self-esteem and decrease in assertive discomfort.

At the commencement of the job-finding club means on the Self-Esteem Inventory were 122.65 for placed and 116.33 for unplaced subjects - this difference was not significant (t=0.472, df=22, p>.05). Means on the Assertion Inventory were 84.71 for placed and 77.0 for unplaced subjects, also non-significant (t=0.395, df=15, p>.05), and suggesting homogeneity of groups at the commencement of the job-finding club.
Repertory Grid Results

Data were collected on three repertory grid measures of cognitive organisation - an intensity score, a cognitive complexity score, and a consistency score. A repertory grid self-esteem measure was also calculated. Appendix M provides individual scores for all subjects on the intensity score and cognitive complexity score, with scores for the self-esteem measure shown in Appendix N. Full pre- and post-test data was available on 11 subjects, but the number of subjects is not equal in all following analyses and will be specified.

1. Intensity Score

Bannister (1960) calculated the intensity score of a repertory grid as the sum of all relationship scores for all constructs (\( \rho^2 \times 100 \)). This measure of the size of correlations between constructs was used to indicate the degree of tightness/looseness in the construct system, a larger intensity score reflecting tighter construing. In the present study repertory grids were analysed with the G-Pack computer program (Bell, 1987) which provides root mean square correlations for each construct. The mean of these correlations was calculated as the intensity score for each grid, a measure fundamentally equivalent to that of Bannister.

No difference in intensity measures was found on t-test analysis between placed and unplaced subjects (\( N=13,4 \)) on the first administration of the grid, with group mean correlations of .63 and .56 respectively (t=0.891, df=16, p>.05). The tendency,
though not significant, was for placed subjects to have a higher intensity score, suggesting tighter construing, than unplaced subjects.

The change in repertory grid intensity from pre- to post-test (N=11) produced a non-significant trend, with intensity scores increasing from a mean of .62 to a mean of .69 (t=2.079, df=10, p=.062), and suggesting a tightening of construing.

No significant relationship was found between intensity scores (N=17) and length of unemployment prior to the job-finding club (r=.196, p>.05), or between the amount of change in intensity score pre- to post-test (N=11) and unemployment length (r=-.066, p>.05).

2. Cognitive Complexity Score

The amount of variance accounted for by the first factor of principal components analysis of a repertory grid has been suggested to be a measure of cognitive complexity (Bannister & Mair, 1968), the greater the variance accounted for the less cognitively complex is the construct system (Emerson, 1982; Hudson, 1974; Jaspars, cited in Bannister & Mair, 1968 and Adams-Webber, 1979). In the present study this measure was derived from the amount of variance accounted for by the first factor of principal factor analysis by G-Pack and considered to be a measure of cognitive complexity.
A significant difference ($t=2.531$, $df=10$, $p<.05$) was found on the amount of variance accounted for by the first factor on pre- and post-testing (means 64.84% and 72.88% respectively), suggesting decreasing cognitive complexity ($N=11$).

No significant difference was found on this measure between placed and unplaced subjects on first administration ($N=17$), with means of 66.02% and 61.93% respectively ($t=0.486$, $df=16$, $p>.05$), the tendency being for placed subjects to show less complexity than did unplaced subjects.

4. Consistency Between Grids
The degree of consistency between construct ratings on repertory grids has been used to measure the degree of construct pattern stability between two grids (Fransella & Bannister, 1977), and is calculated through ranking correlations of the constructs within a grid and correlating these rankings over the two grids (Spearman rank order correlation). Consistency scores between first and second grids are shown for each subject ($N=11$) in Table 4.
Table 4. Consistency scores (rho) between grids

<table>
<thead>
<tr>
<th>Subject</th>
<th>Consistency score</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>.7545</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>B</td>
<td>.5242</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>D</td>
<td>.7182</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>E</td>
<td>.8303</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>F</td>
<td>.6242</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>G</td>
<td>.5727</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>H</td>
<td>.7000</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>I</td>
<td>.1939</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>J</td>
<td>.9788</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>K</td>
<td>.7697</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>L</td>
<td>.7667</td>
<td>&lt;.05</td>
</tr>
</tbody>
</table>

Significant construct intercorrelations, or consistency scores, were obtained for 8 of the 11 subjects, suggesting that the pattern of construct intercorrelations remained stable between first and second administrations of the grids for the majority of subjects. The mean correlation for all subjects was .7239. Although it was not possible to test differences between placed (N=10) and unplaced subjects (N=1) on this measure, it was observed that the mean of the placed subjects was .7239, while that of the unplaced subject was .1939.

3. Repertory Grid Measure of Self-Esteem

As mentioned, the distance on a repertory grid between ratings of the self and the ideal self have been seen as measures of self-
esteem. In the present study this relationship was calculated by means of the Euclidean distance between the elements, as provided by the G-Pack program. On this measure a lower score indicates a closer relationship between the two elements.

Group scores for the Euclidean distances between elements of interest on pre- and post-test are provided in Table 5, with individual scores for these comparisons presented in Appendix N. No significant differences were found on any of these measures for placed compared with unplaced subjects, as is shown in Appendix O.

Table 5. Euclidean distances between elements.

<table>
<thead>
<tr>
<th>Elements</th>
<th>Pre-test Mean</th>
<th>Post-test Mean</th>
<th>t value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Me Now - Me in Job</td>
<td>14.25</td>
<td>7.52</td>
<td>4.222**</td>
</tr>
<tr>
<td>Me Now - Ideal Me</td>
<td>17.00</td>
<td>12.01</td>
<td>3.351**</td>
</tr>
<tr>
<td>Me Now - Unemployed Person</td>
<td>13.70</td>
<td>17.89</td>
<td>2.805*</td>
</tr>
<tr>
<td>Me Now - Admired Person</td>
<td>15.94</td>
<td>11.43</td>
<td>3.752**</td>
</tr>
<tr>
<td>Me Now - Disliked Person</td>
<td>17.71</td>
<td>20.67</td>
<td>1.892</td>
</tr>
<tr>
<td>Me in Job - Ideal Me</td>
<td>7.75</td>
<td>8.38</td>
<td>0.721</td>
</tr>
</tbody>
</table>

** = p<.01
*  = p<.05

As may be seen in Table 5, significant differences were found in terms of subjects' ratings of themselves becoming closer to those
of themselves in a job, their ideal selves, and an admired person. Conversely, a non-significant trend \( (p=.085) \) was found in the relationship between self and a disliked person, with subjects' ratings becoming more distant. Subjects' ratings of self now compared with an unemployed person also became more distant, and as all but one had been placed this would be expected. It was interesting to note, however, that the unplaced subject also increased the distance between his ratings of self now and an unemployed person. Ratings for ideal self and self in a job were close on both administrations. No significant difference was found in distances between these ratings, although the means suggested some movement away from each other.

Implication Grid Results

1. General Implications Results

From the implications grid data the total possible number of implications between constructs was calculated for each subject. As the number of constructs for each subject had varied, the implications score was calculated to be the percentage of total possible implications which were actually implied, controlling for grid size. Percentage implication scores for subjects are shown in Appendix P. A higher implication score would indicate greater interrelationship between constructs.

No significant difference was found between placed and unplaced
subjects on the total percentage of implications ($t=0.252, df=15, p>.05$), suggesting homogeneity of groups on the first administration, means being 48.51% for placed and 45.15% for unplaced subjects ($N=12,4$).

The change in percentage implication score was calculated from pre- to post-test ratings ($N=8$), producing a non-significant effect ($t=1.067, df=7, p>.05$) with means of 56.82% on pre-test and 67.74% on post-test indicating some movement toward closer interrelationship between constructs.

2. Elicited and Laddered Implications
Hinkle (cited in Bannister & Mair, 1968) claimed that more superordinate constructs, or those which were laddered, will have more implications for other constructs than will subordinate constructs, and that those with more implications will be more resistant to change. In the present study the percentage of implications from the possible total implications was calculated separately for the initially elicited, laddered, and supplied constructs for each subject to control for varying construct numbers between subjects. A table of these percentages is presented for individual subjects in Appendix Q. Mean percentage scores by administration for the initially elicited, laddered, and supplied constructs are presented in Table 6. No significant difference was found on these measures between placed and unplaced subjects.
Table 6. Mean percentage of total possible implications for elicited, laddered and supplied constructs by administration.

<table>
<thead>
<tr>
<th></th>
<th>Initially elicited</th>
<th>Laddered</th>
<th>Supplied</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-test</td>
<td>53.50</td>
<td>58.44</td>
<td>60.00</td>
</tr>
<tr>
<td>Post-test</td>
<td>70.62</td>
<td>75.31</td>
<td>57.50</td>
</tr>
</tbody>
</table>

Two-way analysis of variance performed on this data yielded no significant differences between types of construct (F=1.025, df=1,7, p>.05) or between pre- and post-test scores (F=0.769, df=2,14, p>.05). The laddered constructs produced more implications than the initially elicited constructs, but not significantly so, with supplied constructs having least implications for subjects.

The interaction between type of construct and administration was non-significant (F=2.031, df=2,14, p>.05), although mean scores for the elicited and laddered constructs were observed to increase while mean scores for the supplied constructs decreased. Elicited and laddered constructs showed a parallel change in percentage of implications between first administration and second administration, as may be seen in Figure 1.

Also plotted in Figure 1 are the mean scores for the elicited and laddered constructs combined as "subjects' constructs". To test for significance between the change in subjects' own constructs and those supplied by the examiner 2-way analysis of variance was
carried out, the means for the subjects' constructs being 55.97 (pre-test) and 72.97 (post-test). This analysis was not significant \((F=2.153, \ df=1,7, \ p>.05)\). It was considered possible that post hoc analysis (eg., Tukey's multiple range test) would reveal no difference between supplied and elicited constructs on first administration, but a significant difference between these construct types on second administration. Unfortunately the GANOVA program which was employed for analyses in the present study did not produce such a statistic.

Figure 1. Percent of total possible implications for initially elicited (E), laddered (L), and supplied (S) constructs by pre- and post-test administration, including combined subjects' constructs scores (C).
DISCUSSION
In the present study it was proposed that personal construct theory methodology could be applied to the study of self-schematic change in unemployed people as a result of attending a job-finding club, an experience expected to produce such a change. The measures employed were a self-esteem and an assertion inventory, repertory grid measures of cognitive organisation (intensity score, cognitive complexity score, consistency score), a repertory grid measure of self-esteem, and implication grid measures of cognitive organisation and change.

Two major difficulties were encountered which impinged upon data analysis. Firstly, although it had been planned to include a control group in the study this did not prove to be possible. The control group which was decided upon (placed versus not placed in employment) could not be used as only one unplaced subject completed all measures. As a result no group comparison over the two administrations of measures was feasible, and it was not possible to measure the effects of job placement upon self-schematic measures.

Secondly, there were inconsistencies in the number of measures completed by subjects, with some subjects completing very few measures, decreasing the number and potency of possible analyses.

The effect of these difficulties was to limit the conclusions which can be drawn from the data collected, and this is a consideration in discussion of effects found.
It is proposed in this discussion to initially review the findings in relation to hypotheses two to five as the results of these findings have implications for the first hypothesis, that personal construct methodology would provide an effective measure of self-schematic change.

Hypothesis 2. Self-schematic change as a result of attending the job-finding club would be seen in increased self-esteem and assertiveness.

The self-report measures of these domains, the Social Self-Esteem Inventory (Lawson et al., 1979) and the Assertion Inventory (Gambrill & Richey, 1975), which were employed to ascertain whether a change in self-perception had occurred and as a comparison with the repertory grid measures, did not show any significant difference between subjects' first responses and responses following the job-finding club, suggesting that subjects did not change in these areas despite the inclusion of material in the job-finding club programme dealing with self-esteem and assertion.

The repertory grid measure of self-esteem, the Euclidean distance between self now and ideal self, however, showed a significant change, with subjects rating themselves more closely to their ideal self at the second administration of the grid. This was supported by a similar change in construing the self now as more like an admired person on the second administration than was
found on the first administration. Conversely the Euclidean distance measure between self now and a disliked person was found to increase between the first and second administration, indicating a less similar relationship.

It is possible to infer from these measures that subjects' self-esteem actually increased, supported by subjects' comments that they perceived increased confidence in themselves as a result of attending the job-finding club. The suggestion can be made that the repertory grid measure was in fact more sensitive in measuring change in subjects' self-perceptions, their self-schemata, than were the standard pencil and paper measures.

The measures chosen may have been unsuitable for measuring the change which did occur. For example, although Lawson et al. (1979) reported that self-esteem issues are likely to be related to social self-esteem, the change which did occur and was measured by the repertory grid measure may have been related not to social self-esteem, but more to competency areas. The specificity of the Social Self-Esteem Inventory may have been too great to allow for any other effect.

In personal construct theory terms, these inventories (particularly the more specific Social Self-Esteem Inventory) may be seen as having been outside subjects' ranges of convenience, while the repertory grid measure, being based for the most part on subjects' individualised perceptions, would be more personally relevant to them.
Hypothesis 3. Job placement effects may be seen in relation to levels of self-esteem or assertiveness.

The lack of complete data for unplaced subjects, as mentioned, meant that many of the analyses planned in relation to this hypothesis were not able to be carried out meaningfully. In analyses of data collected at the first administration no significant difference was found on either the Social Self-Esteem Inventory or the Assertion Inventory between placed and unplaced subjects. In relation to the repertory grid self-esteem measure, first administration, again no significant effect was found for placement in employment. It would seem that at least at the beginning of the job-finding club subjects who would be placed and those who would not be placed could not be differentiated on the basis of perceived assertion or self-esteem.

It was noted, in relation to placement in employment, that there was a significant age effect, with the mean age of unplaced subjects higher than that of placed subjects. A non-significant correlation was also found between age and length of unemployment, the older subjects having been unemployed for longer periods before commencing the job-finding club.

Hypothesis 4. Subjects would show a greater schematic organisation effect (tightness of construing) with increased duration of pre-job club unemployment and that a decrease in this
organisation as a result of assimilating new information about the self would be greater for those with a longer history of unemployment.

The hypothesised tightness of construing as a function of unemployment prior to attending the job-finding club did not receive significant support on the repertory grid intensity measure, nor was the hypothesised decrease in cognitive organisation, loosening of construing, found. Rather the repertory grid intensity score indicated a movement toward tightening of construct relationships.

A second repertory grid measure, the cognitive complexity measure (factor variance), supported this finding, with the amount of variance accounted for by the first factor significantly increasing and suggesting a decrease in cognitive complexity. Subjects would be seen as using fewer dimensions in construing as a result.

The implication grid measure of interconstruct relationships, the percentage of total possible implications, also was in support of subjects' construct systems tightening rather than loosening, with the percentage of implications between constructs showing a non-significant increase.

The unexpected tendency toward tightening rather than loosening of cognitive organisation may be explained in terms of the duration of the job-finding club intervention. Runkel and
Damrin's (1961) study of trainee teachers took place over 2 years, showing an initial tightening of construct systems, and it is possible that the 3-week course of the job-finding club was sufficient for subjects to tighten their construct systems in response to the new information, but not of sufficient length to allow them to loosen again. Davis & Unruh (1981) studied depressives of at least 6 months' duration, finding that cognitive organisation increased from this time. They did not study subjects who had been depressed for a lesser time, and it is possible that an initial reaction to new information about the self would be to tighten the organisational system, in an attempt to resist change or preserve cognitive consistency, as was discussed in relation to schemata in the introduction to this study.

The tightening effect may also be explained in terms of the job-finding club imposing structure upon subjects' cognitive systems through the formal discussion of self-esteem issues, rather than causing them to loosen to incorporate new information. Here again the study of Runkel and Damrin (1961) may be relevant, as the job-finding programme may have similarities with the formal training programme attended by these authors' trainee teacher subjects. The effect of the teacher training programme appeared to be to cause subjects to tighten their construct systems, and the job-finding club programme may have had a similar action.

The hypothesis that the amount of any change in tightness or looseness of construing would be related to the length of
unemployment prior to job-finding club attendance was not supported by the results.

Differences were noted between placed and unplaced subjects on the measures of cognitive organisation on the first administration, with the intensity score, cognitive complexity score, and implication percentage scores all indicating greater interrelatedness or tightness of construing in the grids of placed subjects. This effect was non-significant, however, and subject numbers were small, so that these observations were not followed further.

Hypothesis 5. Constructs/schemata more highly placed in the organisational hierarchy would be less likely to show change.

Although the implication grid analysis of the relative percentage of total implications for subjects' initially elicited (subordinate), laddered (superordinate), and for constructs supplied by the examiner suggested a greater number of implications for higher order constructs as proposed by Hinkle (cited in Bannister & Mair, 1968) the effect was not significant. Supplied constructs were found to be similar to elicited and laddered constructs in their percentages of implications at pre-testing, but to have decreased, not significantly, on post-testing in relation to the subjects' own constructs. The percentage of implications increased in parallel for elicited and laddered constructs on post-testing, with no significant difference between the two construct types. These results did not
support the hypothesis.

It appeared from these results that subjects' own constructs tended to become more interrelated, or superordinate according to Hinkle, with more implications between them, while the supplied constructs showed the opposite effect. It is possible that the supplied constructs no longer related to subjects' ranges of convenience to the same extent on post-testing as they had on pre-testing. One subject reported that he was unable to give ratings on his elicited constructs on post-testing as he could not relate to the constructs, referring to them as the examiner's constructs and not recognising them as his own from the previous administration. It is possible, then, that this process could occur for the supplied constructs which were less personally relevant, and may have had some effect on the absence of difference in change in implications for laddered compared with elicited constructs.

Hypothesis 1. That personal construct methodology would provide an effective measure of self-schematic change in unemployed subjects.

The results discussed are coloured by the small number of subjects on whose data analyses could be performed. However, there appears to be some promise in the use of repertory grid-based techniques in the study of self-perception. The amount of data analysed in relation to cognitive organisational change was
disappointingly small, with few significant effects found, however, it is possible that with increased data some of the effects which were non-significant but consistent with theoretical predictions would become clearer. The inclusion of control group data would also improve prediction and reliability of results.

Although it is difficult to make clear judgements on the basis of the data obtained, the results of the present study were considered to be supportive of the value of personal construct theory based measures in the study of self-schematic change, in particular in cases where it is important to consider the content of the self-schema. In the area of self-esteem measurement, for example, the repertory grid measure supported a change reported by subjects, but not reflected in the self-esteem inventory administered. The personal construct based measure has an advantage in such investigations as it contains information which is specifically relevant to the individual and would be expected to reflect more accurately the changes concerned.

In relation to the analysis of changes in cognitive organisation in the self-schema, however, it was considered that further investigation would be necessary to accurately assess the potential of applied personal construct measures. As a result of the present study, it was felt that some practical and experimental issues need to be considered in applying personal construct methodology to change studies.
For example, constructs employed for the first and second administrations in this study were the same, and although this allows for comparability of grids it is possible that by the second administration the subjects' construct systems have changed significantly, as had that of the subject mentioned previously, so that the issue of whether or not to elicit constructs anew on the second occasion may need to be addressed in order to obtain the most useful measure of schematic change.

As a second example, it was mentioned that subjects reported that they found the measures lengthy to complete, particularly the implication grid, and some were disinclined to do so on followup. This may be a further issue in the choice of repertory grid techniques for investigating cognitive change if repeated measures are required.

In summary, the use of personal construct methodology appears to offer a sensitive and valid approach to the assessment of change in self-schematic structures. However, in the present study failure to attain large subject numbers and controls limited the conclusions which can be drawn, and it is suggested that further research would be necessary to investigate potential application.
REFERENCES


Erlbaum Associates.


Kuiper, N., MacDonald, M., & Derry, P. (1983) Parameters of a


APPENDICES
<table>
<thead>
<tr>
<th>DAY</th>
<th>CONTENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Job follow up. IBE. Review yesterday's lesson. Why work? Handout &quot;Searching for a job ...&quot;. List job avenues. Discuss the CES, visit local CES. Self-esteem.</td>
</tr>
<tr>
<td>8</td>
<td>Job follow up. Good news time. IBE. Interview preparation. Interviews - show a film, video, etc. Interviews - role play.</td>
</tr>
<tr>
<td>9</td>
<td>Job follow up. Good news time. IBE. Review interview. Mock interviews. Discuss interviews.</td>
</tr>
</tbody>
</table>


13  Job follow up. Good news time. IBE. Job search after the club, community resources. Job searching.

14&15 Job follow up. Good news time. IBE. Positiveness. Starting work. Review course. Revise any aspects of the course the participants request.
OVER 25 AND OUT OF WORK

JOB FINDING CLUBS CAN BE YOUR TICKET TO EMPLOYMENT

The Job Finding Club is a group Job Hunting Programme which aims to help people develop confidence and enhance their employment prospects.

Two courses are to be run in September and October in the local area.

- **CLUB 1.** Bassendean Community Centre, 9am-1pm, 23 October for three weeks
- **CLUB 2.** Salvation Army Joblink, Morley 9am-1pm, 28th September — 16th October.

Both courses are 5 days per week for a 3 week duration. Vacancies are limited so immediate registration is advisable to avoid disappointment.

**CONTACT:**
- Peter Hopkins at Guildford Work Options Centre for the Bassendean/Lockridge Club PH: 279 9087.
- Bev Kerr at Salvation Army Joblink, Morley for the Morley Club PH: 275 3733.

The course is set up free of charge to participants as a joint venture by Eastern Region Mature Age Employment Committee, Salvation Army Joblink, Morley, Guildford Work Options Centre and funded by Department of Employment and Training.
<table>
<thead>
<tr>
<th>SUBJECT</th>
<th>AGE</th>
<th>LENGTH OF UNEMPLOYMENT (MONTHS)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A*</td>
<td>26</td>
<td>2</td>
</tr>
<tr>
<td>B*</td>
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(* indicates placement)
People often find it hard to handle situations in which they have to assert themselves in some way. For example, when turning down a request, asking a favour, giving someone a compliment, saying they definitely don’t like something or that they really do like something or someone.

**PART 1**

In this part of the questionnaire mark how uncomfortable you would feel in the situations which are listed. Do this by using numbers in a code where

1 = no discomfort
2 = a little uncomfortable
3 = a fair amount of discomfort
4 = a lot of discomfort
5 = very much discomfort

In the situations listed in this part of the questionnaire, if you really felt very uncomfortable in some of them you’d write the number 5 next to that situation. If you didn’t feel any discomfort at all in some of them you’d write the number 1 next to them. If you felt a fair amount of discomfort you’d write 3 and so on. Please think about each situation carefully and how you feel in it. Everyone feels differently in different situations.

Do all of this part of the questionnaire and then go on to Part 2. Mark every question with a number from 1 to 5. If you'd like some help to be clear about what a situation means, just ask. Remember, you're marking how you'd feel if you were in the situation.

1. Turning down a request to borrow a car (or something of yours that's really important to you) __
2. Compliment a friend __
3. Ask a favour of someone __
4. Resist sales pressure __
5. Apologies when you are at fault __
6. Turn down a request for a meeting or date __
7. Admit that you feel afraid and ask for consideration (like ask for them to take things a little easier with you) __
8. Tell someone close to you when he/she says or does something that bothers you __
9. Ask for a raise in pay __
10. Admit ignorance in some area __
11. Turn down a request to borrow money __
12. Ask personal questions __
13. "Turn off" a friend who's talking on and on too much __
14. Ask for constructive criticism __
15. Start a conversation with a stranger __

continued .../
When you finish this page, just check back that you haven't missed out any questions - then go to page 2.
PART 2

In this part of the questionnaire you'll find a list of the same situations as in the previous section. Go through this list and this time mark how much of the time you'd actually do what is described in each statement (if you were in that situation). That is, no matter how you feel about the situation, how often would you actually do it if you were in that situation.

1 = always do it
2 = usually do it
3 = do it about half the time
4 = rarely do it
5 = never do it

Use the number code again, so in question 1 if you'd always actually turn down a request to borrow something really important to you whenever you felt you didn't want to lend it, you'd write (1) next to question 1. If you rarely turn down requests like that even when you feel you didn't want to lend important things, write (4) next to question 1, and so on.

1. Turning down a request to borrow a car (or something of yours that's really important to you) ___
2. Compliment a friend ___
3. Ask a favour of someone ___
4. Resist sales pressure ___
5. Apologise when you are at fault ___
6. Turn down a request for a meeting or date ___
7. Admit that you feel afraid and ask for consideration (like ask them to take things a little easier with you) ___
8. Tell someone close to you when he/she says or does something that bothers you ___
9. Ask for a raise in pay ___
10. Admit ignorance in some area ___
11. Turn down a request to borrow money ___
12. Ask personal questions ___
13. "Turn off" a friend who's talking on and on too much ___
14. Ask for constructive criticism ___
15. Start a conversation with a stranger ___
16. Compliment a person you are romantically involved with or interested in ___
17. Request a meeting or date with a person ___
18. Your first request for a meeting is turned down and you ask the person again at a later time ___
19. Admit you feel confused about a point under discussion and ask for clarification (e.g., ask them to say it again more clearly) ___
20. Apply for a job ___
21. Ask whether you have offended someone ___
22. Tell someone that you like them ___

continued .......
23. Request to be served when no one has served you, e.g., in a coffee lounge
24. Discuss openly with the person his/her criticism of your behaviour
25. Return defective items, e.g., to a shop
26. Express an opinion that's different from that of the person you are talking to
27. Resist sexual advances when you are not interested
28. Tell the person when you feel he/she has done something that is unfair to you
29. Accept a date
30. Tell someone good news about yourself
31. Resist pressure to drink
32. Resist an unfair demand from someone who's important to you
33. Quit a job
34. Resist pressure to "turn on" by taking drugs or pot
35. Discuss openly with a person his/her criticism of your work
36. Request that someone returns items they've borrowed
37. Receive compliments
38. Continue to talk with someone who disagrees with you
39. Tell a friend or someone you work with when he/she says something that bothers you
40. Ask a person who's annoying you in a public situation to stop

PART 3

Being assertive about situations means that you take a firm stand when you need to or express what you really feel in a way that is fair to your feelings and also fair to the feelings of the other person. It really means that you are more confident in that situation.

Go back to Part 2 of this questionnaire and put a circle around the number next to the situations in which you'd like to be more assertive than you are now.

So, for example, if you'd like to be more assertive in being able to start a conversation with a stranger, you'd put a circle around situation number 15.
Appendix E

COMPLETELY UNLIKE ME 1 2 3 4 5 6 EXACTLY LIKE ME

Thus, for example, if you felt that a statement described you exactly, you would place a ‘6’ beside that item. If the statement was completely UNlike you, then you would place ‘1’ against the item. The numbers ‘2’ through ‘5’ represent varying degrees of the concept “like you”. Please choose the number that appropriately reflects your similarity to the position expressed in the statement.

1. * I find it hard to talk to strangers.
2. * I lack confidence with people.
3. I am socially effective.
4. I feel confident in social situations.
5. I am easy to like.
6. I get along well with other people.
7. I make friends easily.
8. I am lively and witty in social situations.
10. * I find it difficult to make friends.
11. * I am no good at all from a social standpoint.
12. I am a reasonably good conversationalist.
13. I am popular with people my own age.
14. * I am afraid of large parties.
15. I truly enjoy myself at social functions.
16. * I usually say the wrong thing when I talk with people.
17. I am confident at parties.
18. * I am usually unable to think of anything interesting to say to people.
19. * I am a bore with most people.
20. * People do not find me interesting.
21. * I am nervous with people who are not close friends.
22. I am quite good at making people feel at ease with me.
23. * I am more shy than most people.
24. I am a friendly person.
25. I can hold people’s interest easily.
26. * I don’t have much “personality.”
27. I am a lot of fun to be with.
28. I am quite content with myself as a person.
29. * I am quite awkward in social situations.
30. * I do not feel at ease with other people.

* These items are negatively phrased, and they are scored by subtracting the number placed against them from 7.
Construct Elicitation Instructions

"Everyone has different ideas and sees people in different ways. Right now I'd like us to look at some of the ways we see some people.

On the sheet in front of you, you will see the titles of 3 people, a minister of religion, a doctor, and a builder. What we are going to do is think of a way in which two of these people are alike that makes different from the third person. I have filled in this example to show you what I mean. This is just the way I reacted to these titles of people - your own ideas may be quite different. (Go through example sheet).

On the following pages you will find more people, again grouped in three's. What I would like you to do is follow the same procedure - think of a way in which two of them are alike that makes them different from the third, and write the opposite to that underneath. Then indicate which one of these you would prefer to be described by, and why. Finally write the opposite to being that.

While you are working on this I shall be moving around the room, so if you have any questions while you are going through I will be right with you. Are there any questions before we start?
Imagine the following three people (1, 2, and 3). Think of an important way in which two of the three people are alike that makes them different from the third person.

1. MY IDEAL SELF

2. A DISLIKED PERSON

3. SOMEONE WHO HAS BEEN UNEMPLOYED FOR A LONG TIME

1. Which are the two that are alike ___ & ___.

2(a) What makes them alike - ..........................................................

2(b) How would you describe the opposite to that - .............

3. Which would you prefer to be, 2(a) or 2(b) - ___.

   Why would you prefer to be this one - .........................

   How would you describe the opposite to being that - .......

   ..............................................................................
Imagine the following three people (1, 2, and 3). Think of an important way in which two of the three people are alike that makes them different from the third person.

1. MINISTER OF RELIGION
2. DOCTOR
3. BUILDER

1. Which are the two that are alike 1 & 2. 

2(a) What makes them alike - Their job is to help people in need

2(b) How would you describe the opposite to that - Less concerned with people's personal needs

3. Which would you prefer to be, 2(a) or 2(b) - 2a .

Why would you prefer to be this one - I find it rewarding to help people

How would you describe the opposite to being that - It would be boring
CONSTRUCTS

SUPPLIED CONSTRUCTS (administered to all subjects)
1. WOULD PROBABLY GIVE UP AFTER A FEW KNOCK BACKS - WOULDN'T GIVE UP
2. FEELS GOOD ABOUT HIMSELF - DOESN'T FEEL GOOD
3. UPTIGHT, NERVOUS - COOL AND RELAXED
4. FEELS GOOD ABOUT HOW HE SPENDS HIS TIME - DOESN'T FEEL GOOD
5. GETS ON WITH OTHERS - DOESN'T GET ON WITH OTHERS

ELICITED CONSTRUCTS
(Construct given first, followed by contrast)

SUBJECT A
ELICITED
1. Finding it hard to make ends meet - lotto winner
2. Happy in work - happy person
3. Willing to help - a heavy burden
4. Health - not healthy
5. Reliable - not reliable
6. Admired person - unhappy person
7. Out of work - Independent

LADDERED
1. Respect from people - being disliked
2. Not finding the right job - finding the right job
3. Happy and reliable employment - Too many hassles
4. Always on edge - become a nomad and travel
5. Health is important - not important
7. Feeling pressured - not feeling pressured

SUBJECT B
ELICITED
1. Energetic - bombastic
2. Positive - negative
3. Carefree - uptight
4. Confident - lack of confidence
5. Optimistic - Pessimistic
6. Hopeful - downtrodden
7. Content - discontent
8. Fulfilled - unfulfilled

LADDERED
1. Gets on with job - does not
2. Gets positive results from people - does not
3. Does job well - does not
4. A worrier - not a worrier
5. Happy with self - not happy
6. Happy outlook to life - not happy
7. Has peace within - does not

SUBJECT C
ELICITED
1. Disliked - want to be employed
2. Want employment quality - does not want employment quality
3. Works for no reward - does not work for no reward
4. Choose to be unemployed - want long term employment
5. Admired - not admired

LADDERED
1. Satisfied, happy - not satisfied, happy
2. Income earning, self esteem - not income earning
3. Financially secure - not financially secure
4. Disregards potential earning skills - does not ...
5. Long term security - no long term security
6. Looked down on - not looked down on
7. Have status - not have status
8. Measure up to social attitudes - not measure up to social attitudes

SUBJECT D
ELICITED
1. Unwilling - active
2. Frustrated - happy
3. Stable - unstable
4. Lack of luck - the right man
5. Serious and persistent - no hope for the future
6. Better communication - steps behind
LADDERED
1. Maintain progress - not maintain
2. Better living and job satisfaction - same as now
3. Good family life - not good family life
4. Give good result - not give good result
5. To look for better achievements - not to look
6. Looking forward to a higher level - not looking forward
7. Hesitating in front of obstacles - not hesitating

SUBJECT E
ELICITED
1. Unhappy with situation - happy with situation
2. Feels likable and positive about self - feels disliked and unsure about self
3. Feels rejected - feels accepted
4. Successful - unsuccessful
5. Find it rewarding to help others - less concerned with others

LADDERED
1. Life is how they want it to be - full of unhappiness, unsettled
2. Really feel secure - security which may not last
3. Feels good about self - feels bad about self
4. Secure, happy - Insecure, unhappy

SUBJECT F
ELICITED
1. Disliked - liked
2. Low self-esteem - confidence
3. In bad situation - in good situation
4. Doesn't like self - likes self

LADDERED
1. Feel it better to work - doesn't
2. Short of money - a lot of money
3. Has something to do - bored
**SUBJECT G**

ELICITED

1. In need of work and money - has meaning and able to do things
2. Able to do what they want - not able to do anything
3. In a spot and have to get out of it - life which is wanted

LADDERED

1. With friends - lonely without friends
2. Need to work to keep it together - doesn't need to work
3. Doesn't want to be disliked - a fool
4. Happy in work, happy in life - needing to work to do own thing
5. Able to get around - not able to get around
6. Do right by family - not worrying about anyone or anything
7. Done the best they can in life - haven't done what they can do in life
8. Do things with family - not able to do things
9. A life in which they are happy - not happy
10. Breadwinner - not breadwinner

**SUBJECT H**

ELICITED

1. Humble and caring - rude and full of own importance
2. Content with life - discontent with life
3. Happy - unhappy
4. Good self-esteem - lack of confidence

LADDERED

1. Happy just to be self - discontent with life
2. Know self and abilities - not know worth
3. Self-esteem - dependent
4. Know who they are and what they are capable of - ignorant and suppressed
5. Peace of mind - miserable person without worth
6. Feels good about self - feels unimportant and insignificant
7. Likes helping people - uncaring person
SUBJECT I
ELICITED
1. Someone to look up to - not paying tax
2. Jealous of people in employment - not jealous
3. Work is important - not important
LADDERED
1. Money coming in - no money
2. Secure - insecure
3. Nice person - terrible
4. Feeling useful - feeling useless
5. Trying - not trying

SUBJECT J
ELICITED
1. Low self-esteem - high self-esteem
2. Unhappy - happy
3. Financially able to support self - unable to support self
4. Confident - lacking in confidence
5. Busy - bored
LADDERED
1. Positive outlook - negative outlook
2. Relaxed, not a worrier - a nervous wreck
3. Confident, happy in self - depressed
4. Peace of mind - depression
5. Peace of mind, socially acceptable - on edge, uneasy

SUBJECT K
ELICITED
1. Not cooperative - helpful
2. Has position among friends - has no friends
3. Easy to be liked - not as likable
4. Someone in a rut - liked in the workplace
LADDERED
1. Has something to do - has nothing to do
2. People are standoffish with - people take notice of
3. Self confidence, self-esteem - no confidence
4. Has money - battling
5. Feels good - down and out

SUBJECT L
ELICITED
1. Works without pay - employed
2. Popular - unpopular
LADDERED
1. Does what wants to - doesn't do what wants to
2. High self-esteem - low self-esteem
3. Socially successful - not socially successful
4. Financially free - financially limited
5. Meets interesting people and makes friends - boring and lonely
6. Interesting person - boring person

SUBJECT M
ELICITED
1. Secure and financial - insecure
2. Puts self before anything else - sense of security and standards
3. Helps those in similar position - puts self before anything else
4. Not accepted in society - accepted in society
LADDERED
1. Peace of mind - depressed, don't care
2. Confident, self-esteem - feels whole weigh on shoulders
3. Confidence with society - no confidence, feels left out
4. Fits into society and makes friends - hard to fit in and become part of society
5. Confidence to accept every day problems - lack of confidence
6. Able to make decisions without burdening family - having doubt about decisions

SUBJECT N
ELICITED
1. Has a happy outlook - unpopular
2. Positive towards others - not positive ...
3. Cooperating with others at work - not cooperating
4. Willing to do anything to increase knowledge -
5. Looking forward to future goal - not looking forward
6. Creative and helpful - not creative and helpful

LADDERED
1. Positive reaction - negative reaction
2. Never gives up - gives up
3. Satisfied - not satisfied
4. Has confidence - does not have confidence
5. Like to help others - does not like to help others
6. Determined to succeed - not determined to succeed
7. Ambitious - not ambitious
8. Improved self-esteem - not improved self-esteem

SUBJECT _0

ELICITED
1. No manners - has manners
2. Frustrated - happy
3. Intelligent - not intelligent
4. Is not close to boss - is close to boss
5. Lucky - not lucky
6. Any comfort - some comfort
7. Thinking of jobs - not thinking

LADDERED
1. Have good relationships - not good relationships
2. To serve others - not to serve others
3. Generous - not generous
4. To share with others - not to share
5. Be helpful and preserve my job - not be helpful
6. Be a good worker - not be a good worker
7. Be in good condition - not to be
8. To bring light around - not to bring light around

SUBJECT _P

LADDERED
1. Cares for family needs - not able to cope with daily life
2. Has opportunity to demonstrate ability - has no chance to show self
3. Not discontented and discouraged - discontented and discouraged
4. Has nothing to learn - has lots to learn
5. Has respect of environment - disliked
6. Working with cooperation - noncooperative
7. Bring joy and happiness to family - disliked
8. Able to cope with the unexpected in life - not able to cope with the unexpected
9. Has charity and compassion - doesn't have charity and compassion
10. Has good relationships with friends - treats friends as enemies

SUBJECT Q
ELICITED
1. Passive - active
2. Lucky - unlucky
3. Unsuccessful - successful
4. Confident - unconfident
5. Socially active - not socially active
6. Hard work - not enough effort
7. Friendly - not so friendly

LADDERED
1. Achieves more in life - does not achieve
2. Has smooth family accord - does not have
3. Does not feel any difficulties - does feel difficulties
4. Proud of himself - not proud of himself
5. Has more respect and enjoyment - less respect and enjoyment
6. Very experienced - not very experienced
7. Hard worker and achiever - not a hard worker and achiever
Yesterday I asked you to compare 13 different people in groups of 3, and tell me how 2 of each group were alike. On the following pages you will find the similarities you gave and their opposites.

Each similarity has been put at one end of a Rating Scale, from 1 - 9, and its opposite is at the other end of the scale.

I would like you to imagine again each of the 13 people (they will be listed under each scale) and rate them according to where you would place them on the scale.

For example:

```
Rate each person on the following:

1  2  3  4  5  6  7  8  9
HELPS PEOPLE  DOESN'T

IDEAL SELF  [ 1 ]
MYSELF NOW  [ 9 ]
MYSELF IN A JOB  [ 5 ]
SOMEONE OUT OF WORK  [ ]
SOMEONE WHO HAS GOT A JOB  [ ]
ETC
```

By placing a 1 in the bracket next to IDEAL SELF this says that my IDEAL SELF helps people. The 9 next to MYSELF NOW says that MYSELF NOW doesn't help people. MYSELF IN A JOB is in between.

On the following pages I would like you to do the same thing, giving each person a number from 1 to 9 (remember, you can use any number between 1 and 9) for each of your similarities.
RATINGS

At the start of the Job Club I asked you to compare 13 different people in groups of 3, and tell me how 2 of each group were alike. On the following pages you will find the similarities you gave and their opposites.

Each similarity has been put at one end of a Rating Scale, from 1 - 9, and its opposite is at the other end of the scale.

I would like you to imagine again each of the 13 people (they will be listed under each scale) and rate them according to where you would place them on the scale.

For example:

Rate each person on the following:

1 2 3 4 5 6 7 8 9
HELPS PEOPLE  

IDEAL SELF [1 ]
MYSELF NOW [9 ]
MYSELF IN A JOB [5 ]
SOMEONE OUT OF WORK [ ]
SOMEONE WHO HAS GOT A JOB [ ]
ETC

By placing a 1 in the bracket next to IDEAL SELF this says that my IDEAL SELF helps people. The 9 next to MYSELF NOW says that MYSELF NOW doesn't help people. MYSELF IN A JOB is in between.

On the following pages I would like you to do the same thing, giving each person a number from 1 to 9 (remember, you can use any number between 1 and 9) for each of your similarities.
Rate each person on the following:

1  2  3  4  5  6  7  8  9

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Rate each person on the following:

1  2  3  4  5  6  7  8  9

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</table>
Rate each person on the following:

1    2    3    4    5    6    7    8    9

Uptight, nervous

Cool & relaxed

MYSELF NOW          [ ]
MYSELF IN JOB       [ ]
IDEAL SELF          [ ]
SOMEONE OUT OF WORK [ ]
SOMEONE WHO HAS JUST GOT A JOB [ ]
SOMEONE WHO HAS BEEN EMPLOYED FOR A LONG TIME [ ]
SOMEONE IN MY IDEAL JOB [ ]
SOMEONE WHO DOES VOLUNTEER WORK [ ]
EMPLOYED FRIEND [ ]
UNEMPLOYED FRIEND [ ]
AN ADMIRE PERSON [ ]
A DISLIKED PERSON [ ]
SOMEONE WHO HAS BEEN UNEMPLOYED FOR A LONG TIME [ ]

=================================

Rate each person on the following:

1    2    3    4    5    6    7    8    9

Feels good about how he spends his time

Don't feel good.

MYSELF NOW          [ ]
MYSELF IN JOB       [ ]
IDEAL SELF          [ ]
SOMEONE OUT OF WORK [ ]
SOMEONE WHO HAS JUST GOT A JOB [ ]
SOMEONE WHO HAS BEEN EMPLOYED FOR A LONG TIME [ ]
SOMEONE IN MY IDEAL JOB [ ]
SOMEONE WHO DOES VOLUNTEER WORK [ ]
EMPLOYED FRIEND [ ]
UNEMPLOYED FRIEND [ ]
AN ADMIRE PERSON [ ]
A DISLIKED PERSON [ ]
SOMEONE WHO HAS BEEN UNEMPLOYED FOR A LONG TIME [ ]
On the following pages you will find some of the constructs which you gave me at the beginning of the Job Club (similarities between 2 people and their opposites).
I have picked them out, one construct at a time and 2 to a page, and I would like you to tell me - if you woke up one morning and realized that you were best described by one side of this construct while the day before you had been best described by the opposite side - if you realized that you were changed in this one respect - which other constructs of the remaining 19 would be likely to be changed by a change in yourself on this one construct alone?

What I would like to find out is on which of the constructs do you probably expect a change to occur as the result of knowing that you have changed from one side to the other of the construct at the top of each section.

**EXAMPLE**

**HAVING FRIENDS _ Being without friends**

If you were to change from one side to the other of this construct which of these following constructs would also change as a result?

( ) HAS MONEY _ Has no money
( X ) ACTIVE SOCIAL LIFE _ No social life

The first construct, HAS MONEY _ Has no money, is left unmarked as changing from one side to the other on the EXAMPLE construct would not necessarily cause a change on this one.

The second construct, ACTIVE SOCIAL LIFE _ No social life, has been marked with a X to indicate that it could be expected to change as a result of changing on the EXAMPLE construct.

Please mark each construct which you would expect to change as a result of changing on the construct at the top of each section with a X, as in the example.
If you had to change from your PREFERRED END (IN CAPITALS) of this construct to the opposite end (not in capitals) which other constructs would you also change on? Place a X between the brackets ( ) of the constructs that would change as a result.

( ) ACHIEVES MORE IN LIFE - Does not achieve
( ) LUCKY - Unlucky
( ) HAS SMOOTH FAMILY ACCORD - Does not have
( ) SUCCESSFUL - Unsuccessful
( ) DOES NOT FEEL ANY DIFFICULTIES - does feel difficulties
( ) CONFIDENT - unconfident
( ) PROUD OF HIMSELF - not proud of himself
( ) SOCIALLY ACTIVE - not socially active
( ) HAS MORE RESPECT AND ENJOYMENT - less respect and enjoyment
( ) VERY EXPERIENCED - not very experienced
( ) HARD WORK - not enough effort
( ) FRIENDLY - not so friendly
( ) HARD WORKER & ACHIEVER - not hard worker & achiever
( ) FEELS GOOD ABOUT HOW HE SPENDS TIME - Doesn’t feel good
( ) COOL, RELAXED - Uptight, nervous
( ) WOULDN’T GIVE UP - Probably gives up after a few knockbacks
( ) FEELS GOOD ABOUT SELF - doesn’t feel good about self
( ) GETS ON WITH OTHERS - Doesn’t get on with others.

ACHIEVES MORE IN LIFE - Does not achieve

If you had to change from your PREFERRED END (IN CAPITALS) of this construct to the opposite end (not in capitals) which other constructs would you also change on? Place a X between the brackets ( ) of the constructs that would change as a result.

( ) ACTIVE - Passive
( ) LUCKY - Unlucky
( ) HAS SMOOTH FAMILY ACCORD - Does not have
( ) SUCCESSFUL - Unsuccessful
( ) DOES NOT FEEL ANY DIFFICULTIES - does feel difficulties
( ) CONFIDENT - unconfident
( ) PROUD OF HIMSELF - not proud of himself
( ) SOCIALLY ACTIVE - not socially active
( ) HAS MORE RESPECT AND ENJOYMENT - less respect and enjoyment
( ) VERY EXPERIENCED - not very experienced
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( ) FEELS GOOD ABOUT SELF - doesn’t feel good about self
( ) GETS ON WITH OTHERS - Doesn’t get on with others.
## INVENTORY DATA

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Range of possible scores:

30 to 180

40 to 200

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## REPERTORY GRID DATA

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(* indicates placement)

Empty cells indicate missing data
Repertory Grid  Self-Esteem  
(Euclidean Distances)

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Repertory Grid  Self-Esteem  
(Euclidean Distances)

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Empty cells indicate missing data.
EUCLIDEAN DISTANCES PLACED/NOT PLACED

Me Now - Me in Job
N=17 (13,4)
t=0.6412  df=16  p=0.537303701  N.S.
Means = 13.32, 11.33

Me Now - Ideal Me
N=17 (13,4)
t=0.8606  df=16  p=0.407308849  N.S.
Means = 15.47, 12.40

Me Now - Unemployed Person
N=17 (13,4)
t=0.1205  df=16  p=0.870061182  N.S.
Means = 14.29, 14.79

Me Now - Admired Person
N=17 (13,4)
t=1.0568  df=16  p=0.308052984  N.S.
Means = 14.60, 11.61

Me Now - Disliked Person
N=17 (13,4)
t=0.0518  df=16  p=0.912822842  N.S.
Means = 17.99, 17.82

Me Now - Someone Long Term Unemployed
N=17 (13,4)
t=0.3423  df=16  p=0.733261166  N.S.
Means = 15.87, 14.49

Me in Job - Ideal Me
N=17 (13,4)
t=0.487  df=16  p=0.661280661  N.S.
Means = 7.70, 6.40
# Implication Grid Data

Percent total possible implications, pre and post club

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(* Indicates placement)

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### Implication Grid Data - Percent implications for Elicited, Laddered and supplied constructs.

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<td>T*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U</td>
<td></td>
<td></td>
</tr>
<tr>
<td>V*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>W*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>X*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

ELIC - elicited, LADD - laddered, SUPP - supplied

(* Indicates placement)

Empty cells indicate missing data.