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Assessing socially skilled behaviour for vocational tenure in adults with developmental disability

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ASSESSING SOCIALLY SKILLED BEHAVIOUR

FOR VOCATIONAL TENURE

IN ADULTS WITH DEVELOPMENTAL DISABILITY

By

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ABSTRACT

Socially skilled behaviour is a critical factor in an individual's ability to secure and maintain employment. Due to the very nature of their handicap, persons with mental retardation often exhibit social skills deficits, thus restricting access to competitive employment and the status of full membership in society that such employment facilitates. Previous attempts to train socially skilled behaviour in persons with mental retardation have been hampered by the lack of a valid assessment tool to evaluate program effectiveness and inform program content. The purpose of this paper was to develop such an instrument by extending work done by Lagreca, Stone & Bell (1982) which utilized Goldfried & D'Zurilla's (1969) behaviour-analytic model of social skill assessment. This research was to also evaluate the validity of the assessment tool developed. However, data collected from the first phase of the study suggested that within the workshop setting, individuals responsible for placement of trainees in competitive employment rated situations distinctly different than did those individuals who were responsible for counselling or instructing trainees. This finding jeopardized the validity of the project and it was therefore halted. In recognition that the two groups within the workshop setting, placement staff and counsellor/instructors, would need to understand their differing perspectives of persons with mental retardation before a social skills program could be developed, a further review of the literature was conducted. It was argued that motivational contingencies were different between competitive placements and the workshop environment and this could influence the behaviours observed in the two environments. Further, organizational contingencies could also influence the perspectives of the two groups, placement vs. counsellor/instructors. While data from this study could not support either argument, it did indicate that placement staff viewed the potential of mentally retarded to resolve difficult situations more positively than did the counsellors/instructors. Previous research has based inventories of problematic situations on either competitive employers input or on counsellor/instructors input. The resulting emphasis of one group or the other fails to a) recognize the importance of social validity of the training program in both the competitive and workshop; and, b) fails to address the motivational and organizational contingencies influencing the behaviours of both the individuals with mental retardation and the staff serving them. The final outcome of the study for the workshop was the recognition that a social skills training program was necessary but that the two groups would need to negotiate the objectives for the program more clearly.

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Vocational training and normalization.

In a society that grants status according to an individual's ability to secure employment, thereby gaining access to goods and services, vocational training for persons with mental retardation is a critical step towards normalization (Pomerantz & Marholin, 1980; Wehman, 1981; Wolfensberger, 1972). Employment has been described as a major aspect of normal, adult living (Foss & Peterson, 1981). With it comes self-sufficiency and self-respect; without it, dependency, basic subsistence and poor self-esteem (Salzberg, Likens, McConaughy, & Lignigaris/Kraft, 1986). With the change in care for the developmentally delayed from a custodial approach to one that emphasized de-institutionalization and normalization (Stacey, Doleys, & Marholin, 1979), the need for vocational training for people with mental retardation has been recognized and realized in one form by workshops (Edgerton, 1967, Edgerton & Bercovici, 1976; Wolfensberger, 1980). These workshops simulate industrial settings to provide realistic training aimed at eventual graduation to competitive employment for individuals with mental retardation. Workshops range widely in the kind of work

in common that contracts are won in the open market. Individuals with mental retardation will complete the contracts under the close supervision and training of instructors whose background is most often in social service delivery, not industry. In addition, workshops usually have a complement of counsellors whose mandate is to help the individuals with mental retardation adjust to the workshop environment. Although these workshops are a relatively new phenomenon (Matson & Lagrow, 1983), they have already been heavily criticized. They have been accused of being a babysitting service (Shelton & Lipton, 1983), a dumping ground (Zdriluk, 1983) and a debilitating experience (DeFazio & Flexer, 1983).

Less than 12% of those persons presently participating in a workshop will ever graduate to competitive employment (U.S. Dept. of Labour, 1979). Further, any person who has spent more than two years in a workshop setting has less than a 3% chance of ever leaving that setting (Shelton & Lipton, 1983). For those that do leave the workshop, underemployment, low wages, and frequent lay-offs/termination are the future (Mithaug, Horiuchi, & Fanning, 1985). In fact, an estimated 50-75% of all handicapped people are unemployed (U.S. Commission on Civil Rights, 1983; Wehman, 1981).

<u>Social skill training and vocational competence</u>.

Obviously, many factors enter into the poor track record of vocational workshops. Such issues as society's resistance to seeing the handicapped as vocationally competent, even after training, or, a tight employment market due to economic conditions, will certainly have a serious impact on the employability of persons with mental retardation.

However, the most important factor influencing whether or not an individual is able to secure and maintain employment is still the vocational competence of that individual (Salzberg, et al., 1986). Proposed changes to improve the vocational competence of workshop graduates have included: adjusting the skills being taught and learning to teach them better (Gifford, Rusch, Martin, & Karlan, 1983; Levy, Pomerantz, & Gold, 1977), improving the equipment and supplies (DuRand & Newfeldt, 1975, Greenliegh Ass. Inc., 1975), and placing an emphasis on treating the trainees as employees instead of clients (DeFazio & Flexer, 1983). All of these changes have the potential to make some improvement in the employability of the workshop graduates. However, there is a growing body of literature that argues that these changes will not be enough to significantly alter the present situation.

Besides lacking the specific work skills necessary for competitive employment, workshop trainees often exhibit social interaction styles that would be inappropriate or unacceptable in

a normal work setting. Unless social skill training is also offered to workshop trainees, the prognosis for future employment will remain poor (Davies & Rogers, 1985; Foss & Peterson, 1981; Fulton, 1975; Niziol & DeBlassie, 1972; Ohwaki, 1974; Shalock & Harper, 1978; Snart, Barton, & Hillyard, 1983; Wehman, 1975). Persons with mental retardation, by virtue of their very handicap, are limited in their ability to informally learn from their environment those social skills necessary to promote adjustment and integration in the competitive work setting. Factors such as poor perceptual and attentional abilities and slow, or limited cognitive skill development may lead the individual to misunderstand or miss entirely the subtle cues informing an appropriate social response, or, just as problematic, to respond to those cues too late to be relevant (Robertson, Richardson, & Youngson, 1984). The result is often neglect, rejection, isolation, or, under the best of conditions, misunderstanding or paternalism (Bates, 1980; Kelly, Furman, Phillips, Hathorn, & Wilson, 1979a; Kelly, Wildman, Urey, & Thurman, 1979b).

The literature linking social skills deficits with psychopathology is extensive (Argyle & Kendon, 1967; Arkowitz, 1981; Lentz, Paul & Calhoun, 1971; Libet & Lewinsohn, 1973; Sylph, Ross & Kedward, 1978; Zigler & Phillips, 1961). It is a very short jump to also link social skill deficits with poor job tenure and unemployment (Brickey, Campbell, & Browning, 1982; Ford, Dineen, & Hall, 1984; Wehman, 1981). Studies conducted by

Edgerton (1967), Edgerton and Bercovici (1976), Foss and Bostwick (1981), Greenspan and Shoultz (1981), and Niziol and DeBlassie (1972) provide evidence that difficulties that an individual with developmental disabilities encounters in securing or maintaining a vocational placement are often directly related to that individual's lack of ability to effectively interact at the interpersonal level. The individual may have been quite capable of doing the work required but his/her behaviour with other employees or supervisors was unacceptable in the work environment.

Individuals entering a training program in a segregated workshop most often do so with a severely limited repertoire of social skills. Once in that setting, they are confronted daily with extensive opportunities to observe the inappropriate and ineffective interactions of other individuals who also have limited social skills (Robertson et al., 1984). Within this environment, poor social skill, as defined by general society, is the norm, not the exception. Certainly there are counselors and staff members present who can model more appropriate responses, but they are far outnumbered by fellow trainees. It is not surprising that individuals in these segregated settings often appear to deteriorate over time in their ability to interact with members of the wider society in a socially appropriate manner. The individual who enters the workshop setting already displaying poor social skills becomes worse, not better. The segregated workshop is iatrogenic. The word iatrogenic is originally a

medical term and refers to the symptoms or diseases produced by a medical treatment (Hanks, Long, & Urdang, 1979). In this context, it refers to the deterioration of social skills that is often observed in individuals who are admitted to vocational workshops. While these workshops are intended to facilitate normalization and fuller integration of the individual into mainstream society, they can in fact become a stumbling block to those goals. This iatrogenic phenomenon observed in workshop settings is referred to by Nirje (1980) as "acquired retardation", and it can 've a devastating impact on the quality of life for that individual. Acquired retardation can condemn the individual to a life of marginality. Because these individuals lack the social skills necessary to secure or maintain employment outside the segregated setting, they are excluded from the very environments necessary for learning appropriate social behaviour. Until those skills are learned, they are restricted to that segregated setting (Bijou, 1966; Davies & Rogers, 1985; Wehman, 1981).

A possible way to break this "Catch-22" would be to formally introduce training in those social skills that are critical to the vocational environment. This has been tried but with limited effects (Bramston & Spence, 1984; Davies & Rogers, 1985; Rychtarik & Bornstein, 1979; Twentyman & Zimering, 1979). The major reasons for these discouraging results centre around two issues: a) how to define social skills and, b) how to measure them (Arkowitz, 1981).

Definition of social skills.

It has been noted that most people think they know what social skills are and that they can recognize them when they occur (Arkowitz, 1981; Conger & Conger, 1982; Curran, 1979). When this is put to a test and people are asked to rate behaviour samples for skillfulness, inter-rater reliability will often be very good. However, when asked to identify what made one sample more skillful than the other, the subjective criteria used by the raters either cannot be verbalized or range greatly between judges (Arkowitz, 1981; Curran, 1979).

The word skill refers to an ability or proficiency. Social skill then must refer to an ability or proficiency in social behaviours, social behaviours being "those behaviours that directly influence the behaviours of others" (Salzberg, et al., 1986, p.227). The terms ability and proficiency imply that there are some criteria against which behaviours can be compared. If a behaviour satisfies or surpasses those criteria, then it will be deemed skillful. The issue is then to identify those criteria for inclusion in the category. Libet and Lewinsohn (1973) describe socially skilled behaviour as behaviour that maximizes reinforcement and minimizes negative consequences. Keller and Carlson (1974) also describe social skill in terms of reinfo.cement. According to them, socially skilled behaviour is the "use of generalized reinforcers in the peer group" (1974, p.60).

Conger and Conger (1979), however, criticized Lewinsohn's and Carlson & Keller's definitions as being too simplistic. More recently, definitions of social skill have attempted to provide a more comprehensive scope, including themes of non-aggression and appropriateness to the context or situation within which a behaviour occurs (Combs & Slaby, 1977; Davies & Rogers, 1985; Rinn & Markle, 1979). A good example is Jackson, King, and Heller's (1981) definition: "(the) ability to express both positive and negative feelings in the interpersonal context without suffering consequent loss of social reinforcement. Such skill is demonstrated in a large variety of interpersonal contexts...and it includes the co-ordinated delivery of appropriate verbal and non-verbal responses. In addition, the socially skilled individual is attuned to the realities of the situation and is aware when he is likely to be reinforced for his efforts." (p.114).

This definition gives a good description of what socially skilled behaviour should look like, but words like effective and appropriate continue to be included. These words imply that a behaviour is evaluated against some standard and is then recognized as socially skilled or not. The necessity of defining social skills in terms of social norms cannot be avoided (Conger & Conger, 1982; Twentyman & Zimering, 1979), but much of the early research in social skill training attempted to do just that. The clinical utility of having, as proposed by Conger and Conger (1982), a scientifically established hierarchical table of

discrete skills that together constituted socially skilled behaviour was irresistible. If such a table existed, a clinician could assess a client for the specific skill deficits and, like a chemist, build in the missing blocks to create skilled behaviour. Early work focused on observeable, motoric behaviours such as level of eye contact, level of self disclosure, lapses between verbal responses, frequency of conversation initiation, use of generalized reinforcers (e.g. compliments, smiles), and so on (Bramston & Spence, 1984; Davies & Rogers, 1985; Robertson,et al., 1984; Rychtarik & Bornstein, 1979).

Social skill research has expanded to include physiological, cognitive and even affective behaviours. While the acceptance of this expansion was not unanimous among researchers (Curran, 1979), it is now generally agreed that socially skilled behaviours will include an integration of several factors (Arkowitz, 1981; Goldfried & D'Zurilla, 1969; Trower, 1982). This acceptance developed because studies that focused on increasing the level of discrete motoric behaviours have been unable to demonstrate any reliable generalization to the non-laboratory environment (Davies & Rogers, 1985; Robertson et al., 1984). Individuals assessed as having significantly improved on one or more specific component behaviours over pre-training level are not perceived by significant others as any more socially skilled, post-training. As Goldsmith and McFall (1975) point out, training in specific "response skills" does not address the life problems faced by clients in that it does not

offer valid solutions. Training of this sort is therefore doomed
to failure (p.51). Individuals are trained to emit particular
behavioural responses but there is nothing inherently skilled
about those responses.

Skill is an evaluative term and to be a "social" skill it
must be socially evaluated (Conger & Conger, 1982; Kazdin, 1977).
Therefore, a behaviour is only a social skill if it is evaluated
as such by other individuals in the environment (Twentyman &
Zimering, 1979). Arkowitz (1981) cites studies by Eisler,
Hersen, Miller & Blanchard (1975), and Himadi, Arkowitz, Hinton,
& Perl (1980) that demonstrate that social skill is
situation-specific. Their findings are not surprising. Timing,
sequence, context, rules, roles and goals of the situation all
have an impact on the evaluation of skillfulness (Argyle &
Kendon, 1967; Arkowitz, 1981). It is not the content of a
behaviour that makes it socially skilled, but rather its
consequences (Arkowitz, 1981). Training that is content-focused
is argued to be arbitrary (Trower, 1982) and inefficient.

Cognitive approach to social skill training.

It is the recognition that there exists an interaction
between the individual's behaviour and the environment that has
led to the more recent emphasis on the cognitive aspect of social
skill. It is argued that individuals need to be trained to
assess their environment for the important cues that will inform

an appropriate social response for the specific situation.
Rather than teach specific single responses or component skills
(e.g. eye contact), individuals need to be taught how to generate
socially skilled behaviour (Trower, 1982). Generative skills
permit the individual to monitor his/her environment for the cues
indicating that a modification in his/her behaviour will achieve
a desired outcome. McFall's (1982) problem-solving model is a
good example of training individuals in the process of generating
socially skilled behaviour. McFall divides the process into
three skill groups and each skill group is further divided into
sub-skills. His model presents socially skilled behaviour as the
outcome of, first, Decoding cues from the environment (Reception,
Perception, and Interpretation); then, making a Decision as to
how to respond (Response Search, Response Test, Response
Selection, Repertoire Search, Utility Evaluation); and finally,
Encoding the selected response (Execution, Self-Monitoring).

If socially skilled behaviour is in fact situation-specific,
and the literature provides ample support for this argument
(Arkowitz, 1981; Curran, 1979; Conger & Conger, 1982; Trower,
1982), the cognitive approach to social skill training is an
attractive one. Each situation that an individual is confronted
with has its own peculiar set of contingencies and no two
situations can ever be precisely the same. The cognitive
approach accepts the situation-specificity of social skills and
offers clients the tools to cope with it.

However, acceptance of the cognitive approach to social

skill presents a major problem for assessment. McFall's (1982) sequence of cognitive steps for processing information and emitting a social behaviour are logical and comprehensive. But, they also occur privately (meaning that they are not observable by others), and the entire sequence can conceivably be completed in a fraction of a second. McFall and his colleagues have attempted to separate out some of the various steps for purposes of assessment (McFall, 1982), but a comprehensive measurement of an individual's proficiency at each level, as advocated by McFall, has not been systematically undertaken. Part of the reason that this endeavour has not been undertaken may be that, conceptually, McFall's steps may not be separable.

Social skill vs. social competence.

Developing such a test as McFall suggests is not likely to contribute significantly to the art or science of social skill training, however. Such an approach divides social skill into a series of discrete component skills and attempts to measure the level of skillfulness of each, separately. Underlying such a strategy is the assumption that socially skilled behaviour is the mathematical product of several components. However, as McFall himself (1982) argues, a person can have all the pre-requisites for skilled behaviour and yet not be perceived by others as socially skilled. Because the term social skills has become so heavily associated with the component, molecular approach, the

term social competence has been introduced. Social competence, as defined by Goldfried and D'Zurilla (1969), is "the effectiveness or adequacy with which an individual is capable of responding to the various problematic situations which confront him..." (p.161). Social competence is an evaluative term (Conger & Conger, 1982; Farber, 1968; McFall, 1982); use of words such as effectiveness or adequacy in the definition of the construct imply a comparison with and a judgement against some criteria. The term social competence recognizes that the same behaviour emitted by two different people, or by the same person in two different environments, can be perceived and therefore evaluated very differently (Eisler, Hersen, Miller, & Blanchard, 1975). To be socially competent, a behaviour is measured against criteria specific to the context or situation and judged to be effective or adequate in accomplishing a positive outcome and avoiding negative consequences.

Assessing an individual's social skill proficiency as though it is a discrete event (e.g. how an individual greets people when they enter a room, or, how frequently an individual makes eye contact during a conversation) does not guarantee any knowledge about competence. Earlier attempts to operationally define social skills in terms of concrete, observable behaviours served to inadvertently remove social skills from the situational context and thereby lose sight of the evaluative aspect critical to the concept of social skills. Hence, the introduction of the term social competence. Social competency and social skill are

often used interchangeably in the literature (Conger & Conger, 1982), and that is not surprising, s'nce the separation of the two is a contrived one. To improve the quality of an individual's social interactions requires a two-pronged approach: a) training in the specific component skills, particularly the generative skills, that will increase the probability of emitting a competent behaviour, and, b) improved proficiency in matching the specific component skills with the contingencies of the specific context that will influence the evaluation of competency.

Social skill training and problematic situations.

In earlier research and training programs, the term social skill was separated from the essential evaluative aspect of the construct. This research tried to treat social skill as if it was the same as a potato peeling skill. Objective criteria for measuring "skill" were established and evaluation of the behaviour's appropriateness for the context was ignored. This was a major flaw and, not surprisingly, these research and training studies did not demonstrate clincal significance. Recognizing this, the shift to teaching cognitive skills that permit the individual to 'read the environmental cues and tailor his or her response addresses the situation-specificity aspect of social skill. However, the very nature of the developmentally

-delayed individual's disability is the severe difficulty experienced in mastering cognitive tasks. For this reason, some authors proposed that social skill training could and should occur within the context of selected problematic situations that are specifically relevant to the client. Problematic situations are defined as situations that require "a solution to a problem or some decision for appropriate action" and have an element of "novelty or conflicting demands" such that an effective response is not immediately or readily apparent (Goldfried & D'Zurrilla, 1969, p. 159). Since no two situations can ever be identical the number of possible situations to be trained is infinite.

Obviously then, there must be some selection process. Individuals cannot be trained for all possible contingencies, nor does it make sense to prepare them for situations they will never confront. Goldfried and D'Zurilla provide a behavioural-analytic model for developing an assessment device and training program that selects those situations that are most frequently problematic for a particular population. This process ensures that selection will be germane to the client group. This model includes the following steps:

a) Situational analysis - a survey of situations that individual members of a target group are confronted with in their environment. To be competent the individual must be able to cope with these situations. A situational analysis would require two steps: a) an inventory of situations, and, b) an evaluation of

those situations for frequency and difficulty.

b) Response enumeration - an inventory of possible responses to those situations selected as being sufficiently problematic and frequent is then obtained from a sample group. This can be done either through a paper and pencil test, simulation or natural observation.

c) Response evaluation - each problematic situation should produce several response alternatives. Some of these responses would be more effective than others. Judges familiar with the target population and their environment would rate these alternative responses on a continuum from least to most effective, effective being defined as "resolve(ing) the problematic nature of the situation and avoid(ing) possible negative consequences." (Goldfried and D'Zurilla, 1969, p.166).

d) Development of measuring instrument format - the first three steps have specified content of items and empirically derived criteria for scoring. A decision must then be made as to how data will be collected. Possibilities include: natural observation, self-report, ratings by significant others, or, simulation (role-plays, in vivo situations, verbal description, video presentation).

c. Evaluation of the measure - determining reliability and criterion-related validity. There are a variety of ways this can be done, none of which is unique to this model.

Basing their work on this model, LaGreca, Stone, and Bell (1982, 1983) developed a comprehensive list of problematic situations relevant to vocational tenure. This list was based on actual observations of individuals in sheltered workshops and in specialized training programs, as well as a questionnaire completed by staff in these settings. It is organized into three categories: 1. situations that involve relationships with co-workers (e.g. being teased or bossed around); 2. situations that involve relationships with a supervisor (e.g. being criticized or asking for help); 3. situations that are caused by internal states (e.g. being sleepy at work or needing to use the bathroom). A complete list of problematic situations is given in Appendix A. Work done by Foss and Peterson (1981) validates LaGreca et al.'s inventory. Foss and Peterson conducted a survey of job placement personnel in 93 sheltered workshops, asking them to review a list of social/interpersonal skills, as developed by Walls and Werner (1977) and from the literature. The participants were then asked to select from the comprehensive list the five skills that they believed to be most relevant to vocational tenure and the five least relevant skills. Their list of 21 skills compares well with LaGreca et al.'s inventory of problematic situations.

After carefully developing this empirical inventory of problematic situations in a vocational setting, however, LaGreca et al. diver ed from Goldfried and D'Zurilla's model. Rather than developing a list of alternative responses to these situations and evaluating them for effectiveness, they repeated the first step and developed a second inventory of problematic behaviours. They then used this second list, which they refer to as the Vocational Problem Behavior Inventory (VPBI) (1983), as an assessment tool. Individuals are rated by their supervisors as exhibiting specific problematic b viours on a four point Likert scale, ranging from 0-never to 3-always. This is a confusing strategy because, as previously argued, a behaviour is not inherently problematic. It is only within the context in which it occurs that it will be evaluated so. An example of this is "Talking to fellow employees while working". This is listed as a problematic behaviour and is weighted in the inventory equally with hitting or pushing other co-workers. It is easy to imagine a number of possible contexts within a work environment when talking with a fellow employee while working would not be problematic. Even when it is problematic to the work environment, it would not jeopardize future employment to the same degree that hitting a co-worker would. The complete VPBI is presented in Appendix B.

Measuring social skill.

The development of a Vocational Problem Behavioral Checklist, such as LaGreca et al.'s is another example of the desire to define social skill as discrete behaviours that can be easily measured through frequency or significant others' perceptions of frequency. It attempts to side-step the issue of social norms or evaluation of appropriateness. Goldfried and D'Zurilla's model offers a way of sampling behaviour in situations that are personally relevant to the client and establishes norms for the environment within which it occurs. Goldfried and D'Zurrila's model samples demonstrated social competence, not the level of component skills. Social competence, as defined by Goldfried and D'Zurilla (1969) is "the effectiveness or adequacy with which an individual is capable of responding to the various problematic situations which confront him..." (p.161).

According to their model, effectiveness is measured by empirically established social norms. They propose that for any problematic situation there are many possible responses, some of them more effective than others, and these can be arranged on a continuum. An individual can be assessed on X number of these situations and a summary score can be obtained. That summary score can then be interpreted as an indicator of either the average or the total effectiveness of an individual's responses

over X number of situations. This summary score is a reflection of the potential level of social competence, given the situations presented. Since the situations presented are the situations most likely to be encountered in the client's environment, the summary score gives a meaningfu estimate of the proficiency level likely to be observed outside of the testing condition. Using an empirical i .se for establishing the scoring system improves the likelihood that the summary score obtained from assessment would correspond to the perceptions that others have of that client's social competence.

McFall (1982) argues that the use of summary scores as an indicator of social competence risks a trait approach to social competence/skill. While his point is well taken and is a good argument against the use of many of the self-report inventories and other tests frequently used in social skill/competence research, it is not a good argument against Goldfried and D'Zurri_la's model. According to their model, a continuum of alternative responses to problematic situations is _empirically_ established by those with intimate knowledge of the possible contingencies of the situation in which the response is likely to occur. The model is antithetical to an approach that sees competence as residing in the individual alone, as opposed to the environment and the individual. It incorporates an awareness of the situation in every step of formulation and is based on social validity, as opposed to face va'idity. Social validity, as used by Kazdin (1977) and Wolf (1978), means that the training is

clinically significant, i.e., that the client or others in the client's environment can see that a change in the client's behaviour has occurred and that change makes an improvement in the quality of life for either the client or others in the client's environment. Face validity refers to the observation that the activity would appear to be training social skills to a casual observer.

Assessing social skill/competence through role-play.

Goldfried and D'Zurilla's model gives some clear direction as to what to measure and how to establish the criteria against which to measure. It does not specifically detail how to collect the data to measure.

For the study of social skill/competence, valid assessment has been a difficult issue. Essentially, there are three dominant strategies used: 1. self-report; 2. ratings by significant others; 3. observation by a trained judge. A fourth strategy used in one study was to test the knowledge base of the client.

Setting aside the ongoing issues of whether or not a self-report measure is a good indicator of behaviour in the real world, it is an inappropriate strategy for individuals with developmental disability. Many of these individuals are illiterate or are reading at a primary level only. Further, the introspection necessary to complete such an assessment is a

cognitive skill, and difficulty with cognitive tasks is integral to developmental disability. Unfortunately, much of the social skill research is based on the use of self-report inventories. Such instruments as Watson and Friend's (1969) Social Avoidance and Distress Scale (SAD), Rehm and Marston's (1968) Situation Questionnaire (SQ), Twentyman and McFall's (1975) Survey of Heterosexual Interactions (SHI), or, Christensen and Arkowitz's (1974) Social Activity Questionnaire (SAQ) are not appropriate for use with the population being addressed in this study.

Another strategy is to ask significant others in the environment to complete an assessment. The AAMD Adaptive Behavior Scale (ABS) (Nihara, Foster, Shellhaus, & LeLand, 1975) uses this strategy. This particular test is not useful for this study because it does not specifically measure social skill/competence. Although some of the items on the test could be argued to be related to social skill/competence, many other items that would be relevant to vocational tenure are missing. Further, there remains the issue of the questionable validity of an assessment completed by third parties (Guilford, 1954; McFall, 1982; Wiggins, 1973).

Bullis and Foss (1986) developed the Test of Interpersonal Competence for Employment (TICE), which at first glance appears to be an ideal assessment tool. It is based on Goldfried and D'Zurilla's model and, unlike that of LaGreca et al., remained faithful throughout each phase of the research. However, Bullis

and Foss opted for a knowledge based assessment. Their test
requires that the tester read each situation and three
alternative responses to the participant. The participant is
then asked to choose the best alternative. Problems of response
bias, the possibility of the tester inadvertently giving clues as
to correct response, social desirability influences, and so on,
are a concern with this strategy. Putting these aside, there
remains the question as to whether knowledge of the most
appropriate alternative to a problematic situation will translate
to actual behaviour in the real world. Bullis and Foss present
as criterion validity, data that demonstrate a correlation of
high TICE scores with work productivity. However, the TICE is a
measure of cognitive skill and higher cognitive ability may be a
confound in this study. Cognitive skills may be a strong
correlate of job skills.

Observations in the natural environment would be ideal but
have thus far been unrealistic. Social interactions often occur
in contexts not open to public observation, and even when they do
not, they are highly sensitive to overt observation (Arkowitz,
1981). Also, ethical considerations prevent most covert sampling
procedures (Conger & Conger, 1981). Even if these issues are
resolved, social interactions also tend to occur sporadically and
at unpredictable intervals. Capturing a complete set of data
would be an expensive proposition and time sampling would miss
many incidents. For these reasons, simulated samples in the form
of role-playing have become the "sine qua non" of social skill

assessment (Conger & Conger, 1982). Bellack, Hersen and Turner (1978, 1979) did some research that questioned the validity of role-play assessment. However, as argued by Arkowitz (1981) and Curran (1978), Bellack et al.'s finding can be questioned on the basis that the role-play samples bore little resemblance to the natural environment. Arkowitz (1981) and Twentyman and Zimering (1979) cite other articles that support the validity of role-play as an assessment technique. It is generally recognized that the closer the role-play situation is to those encountered by the client in his or her own environment, the better the validity of the assessment (McReynolds & DeVoge, 197ɔ; Twentyman & Zimering, 1979).

In the literature a number of social skill assessment tools that rely on role-play have been developed. Two of the more frequently used are Bellack, Hersen, and Turner's (1978) Behavioral Assertiveness Test - Revised (Bat-R) and, Curran's (1982) Simulated Social Interaction Test (SSIT). Examination of the items on both of these tests indicates that they are not appropriate for the purpose of this research. They were specifically developed for use with a psychiatric population with an IQ in the normal range. These tests do not include items that have specific relevance for vocational tenure and are focused on issues that do not have as much relevance in the daily life of an individual with mental retardation.

Social validity of treatment.

Social validity refers to the concept that a change in
behaviour makes a positive difference in the quality of life
experienced by the client or significant others in the client's
environment. If, as a result of treatment, this objective is met
(i.e. quality of life has improved), then the treatment can be
argued to be socially valid or, to use another term, clinically
significant. The need for training in social skills to be
socially valid, to improve the placement and maintenance of
individuals with mental retardation in competitive employment, is
clear. However, evaluation of programs has been hampered by the
lack of reliable and valid assessment tools (Robertson et al.,
1984; Twentyman & Zimering, 1979). Effective evaluation can
inform improvements in program content (Arkowitz, 1981). It is
critical that program content be relevant to the needs of clients
and that they are trained in skills that can significantly
improve the quality of their lives (Kazdin, 1977). Using
Goldfried and D'Zurilla's (1969) model, an assessment tool can be
developed that will be specifically relevant to the needs of
those individuals with mental retardation who are seeking full
integration in a vocational environment.

Purpose.

Social skills training is critical for individuals with

mental retardation if they are to be integrated in competitive employment. This integration is necessary if these individuals are to become accepted members of society with equal access to goods and services. A valid assessment tool will both evaluate and inform those changes necessary to improve the social validity, or clinical significance, of the social skills training program. To date, such an assessment tool does not exist. The purpose of this research was to develop such an assessment tool, based on Goldfried & D'Zurilla's behaviour-analytic model, that would be specifically tailored to the needs of a vocational training centre. This tool could permit the assessment of social skills within the context of the environment where they occur, thus incorporating in the evaluation the specific contingencies that influence competency. The assessment tool could also guide the content of a new social skills training program.

Further, this research was designed to demonstrate the social validity of the assessment tool developed by comparing it with ratings of social competence done by significant others.

Method

Participants.

The participants for this study were drawn from a vocational training centre located in Metropolitan Toronto. The choice of

this setting was based ón a referral made by the workshop to
Surrey Place Centre for behaviour management services for a
specific trainee. During the course of exploring the needs of
this trainee and the specific behaviours that were jeopardizing
his continued placement within the setting, it became apparent
that this client was demonstrating difficulty with situations
that required some social skill. The workshop was also aware
that many of the other trainees could not secure or had trouble
maintaining a competitive vocational position because of their
poor interpersonal skills. The workshop staff expressed a strong
interest in developing a social skill training program to address
this problem and a willingness to approach their Director for
permission to undertake such a project. (See Appendix C for a
face sheet summary of the project submitted to the Manager of the
Employment Training Centre). A meeting was arranged with the
Director of the workshop in October, 1987 to discuss practical
issues associated with the research project. It was explained to
me that, due to staffing requirements, it would be difficult to
arrange for me to meet personally with workshop staff, but that
the supervisors could make themselves available and would serve
as a liaison. The Director agreed, however, that at least one
initial meeting was necessary to personally explain the project
to the staff and request volunteers to participate. Once an
assessment tool was developed, and a preliminary evaluation of
the validity of the tool completed, the workshop was to assume
full responsibility for the operation of the social skill

training program within the centre.

The purpose of the study was explained to the entire placement and counsellor/instructor staff during a regularly scheduled staff meeting, the first week of November, 1987. All were given the option of declining participation. All twenty staff members (12 males and 8 females) chose to participate. Due to vacations and schedule conflicts, only 14 staff members actually participated in the direct observation of behaviours in the workshop (8 males and 6 females). There were nine placement staff (6 males and 3 females) and eleven counsellor/instructor (6 males and 5 female) staff members who participated in the evaluation of the problematic situations. Placement staff served as a liaison between competitive employers and the workshop. These individuals were responsible for locating possible employment opportunities for individuals with mental retardation in the competitive market and then co-ordinating the placement of trainees from the workshop into these employment positions. Placement staff would do whatever was necessary to help the trainees and the employment environment adjust to each another. Instructors were those individuals responsible for teaching the trainees the hands-on skills required to complete the tasks in the workshop setting and served as work supervisors in the work area. Counsellors were those individuals who were responsible for intake of new trainees. This included the initial interview, maintaining regular communication with caretaking individuals in the homes or residences of the trainee, and, facilitating the

adjustment of the trainee to the expectations and routines of the workshop environment.

The total sample needed for Phases 2 - 5 of the study was to be 50 - 75 young adults, between the ages of 21 and 30, who had been assessed as being moderately to mildly retarded and were trainees in the centre at the time the study was to be conducted. Further criteria were that the clients demonstrate verbal skills at least equivalent to those demonstrated by an average Grade 3 child, and that they be independently mobile. The number of men and women in the sample group would be approximately equal. All trainees of the vocational training centres who met these criteria and agreed to participation in this study were to be included. See Appendix D for cover letters and consent forms.

When Phase 2 of the study was begun, letters to significant caretakers in the trainee's home environment (parents or staff of group homes) were sent to explain the purpose of the study. Caretakers were invited to ask questions or discuss any concerns that they might have with the project. Two parents responded to the invitation. Both were concerned that participation in the project might produce information about their child that would compromise a future recommendation by the workshop for graduation to competitive employment. When measures for confidentiality were explained to the parents, both subsequently supported their child's involvement in the project.

Role playing with trainees was to be conducted over several days. A consent form was distributed to all trainees who met the

criteria described above. The text of this form stressed that participation in the project was entirely voluntary. Individuals who chose to participate brought their signed consent with them when they came for their role play interview. The consent was re-explained verbally and again, the voluntary nature of participation was stressed. However, after the first session was completed and thirteen participants had been interviewed (5 males and 8 females all between the age of 21 and 30), it was observed that several of the participants were noticeably anxious. Visible trembling was observed in four of the trainees and a fifth entered the interview room with tears. The responses of the trainees to the role plays demonstrated very little variance and appeared to be heavily influenced by a desire to be socially acceptable to the interviewer. See Appendix E for a summary of the responses. This observation was discussed with the workshop supervisor of Counsellors in a brief summary meeting that followed the first set of interviews. It was agreed that, in spite of the best efforts, trainees may have participated because they were afraid not to. Given this possibility, it was decided that further interviewing of participants must be abandoned.

Procedure.

Phase I.

Situational analysis:

  a)   A copy of LaGreca, Stone, and Bell's (1982) inventory of problematic situations was circulated amongst all staff.

(See Appendix A.) Over a period of five consecutive working days, staff were asked to note on a separate sheet any problematic situations they observed which were not already included in LaGreca et al.'s (1982) inventory. The following criteria defined a problematic situation:

* The situation involves some sort of interaction between two people, or one person's behaviour imposes on others (e.g., loudly blowing one's nose);

* The situation requires a solution to a problem or some decision for appropriate action;

* The situation is different on at least one variable from situations previously confronted by a trainee, or the situation places conflicting demands; and,

* An effective response is not immediately or readily apparent.

b) A committee of three, consisting of myself, the workshop supervisor of counsellors, and the workshop supervisor of instructors, then compared the additional situations nominated by the workshop staff with these criteria. Thirteen of the nominated situations satisfied the criteria and were added to LaGreca, et al.'s (1982) original list of thirty-six. (See Appendix F for the list of added problematic situations.)

c) The new list of forty-nine problematic situations was then circulated amongst the placement and counsellor/instructor staff and they were asked to rate these situations on a 5

-point Likert scale for frequency and difficulty (1=Not at all frequent, 5=Very frequent; 1=Not at all difficult, 5=Very difficult). Frequency referred to the estimated frequency, over the last six months, that they observed this situation to occur in their work environment. Difficulty rating represented how difficult the rater believed it would be for an individual with mental retardation to respond effectively. An effective response was defined as one that maximizes reinforcement from the environment and minimizes punishment. (See Appendix G for complete inventory list of problematic situations).

d) Seriousness scores were to be averaged across raters. Any problematic situation that scored at or below 2 on the seriousness scale was to be discarded because an average rate of less than two means that the situation was not viewed by the raters as a threat to vocational tenure.

e) Frequency scores were to be averaged across raters, as well.

f) In order to ensure that the assessment tool developed was not unnecessarily time consuming to administer, the list of problematic situations used was to be restricted to a maximum of 35. The selection of the situations to be discarded was to have been based on first, the seriousness score and second, the frequency score. As described earlier, any situation scoring less than a 2.0 average across raters on the seriousness scale would have been discarded. In addition, any problematic situation that scored between 2.0

and 3.0 on the seriousness scale would have also needed to score at the 40th percentile or higher on the frequency scale or it would have been discarded.

Phase II.

Response Enumeration

a) Ten staff members were selected from the entire staff of counsellors and instructors by the same committee of three who reviewed and selected the additional situations in Phase I. The selection was based on their experience with placing individuals with developmental disabilities in competitive employment. These 10 staff members were then asked to generate a list of response alternatives for each problematic situation included in the list developed. These staff members were asked to include in their lists of response alternatives both responses they have frequently observed in the vocational training centre, as well as alternatives they would expect to observe in a competitive employment environment.

b) Thirteen trainees of the vocational setting were asked to role-play a response to 10 problematic situations that were randomly selected from the pool by using a random numbers table. No situation was selected more than 15 times. It was to be explained to participants that they were to pretend that they were working. I would describe in one sentence a situation, and they were to show me exactly what they would do. Each participant's response to the one line prompt

(You're in the lunch room and someone asks you buy them a drink of pop; what would you do?) would be audio recorded. As preparation for the role-plays each participant was asked to respond to practise prompts that were not recorded. These practise trials were drawn from the list of problematic situations that were not randomly selected for this participant.

Instruction to the participants included an explanation of the purpose of the research in language that was straightforward and simply understood. Participants were asked to imagine that a situation was actually occurring and to respond as they would normally. They were then prompted with one sentence that would set the scene (I just threw something at you). If the participant did not immediately respond to the prompt, one further prompt was given (show me what you would say or do). Bullis and Foss (1986) refer to work done by Peterson (1982) that found that use of a one to one interview situation like the one described above is a good vehicle for generating reponse alternatives.

Phase III.

Response evaluation.

a) The series of responses generated by staff members was examined and five to 10 of these responses were selected for each problematic situation. The selection was based on the frequency of occurrence in the 10 lists generated. All responses role-played by participants that were not already

included in the five to 10 responses selected from the staff lists were to be added.

b) All staff (counselors and instructors) were then asked to rate the responses on a five point Likert scale (0 = ineffective; 1 = not very effective; 2 = neutral; 3 = effective; 4 = very effective). Effectiveness is defined as the degree to which the response will resolve the problematic situation such that reinforcement is maximized and negative consequences are minimized. Scores were to be averaged across raters and responses would then be rank ordered according to their rated effectiveness.

Phase IV

Development of measuring instrument format.

Instructions to those participants selected for the evaluation phase of this research were to have included an explanation of the purpose of the assessment and an assurance that the information gained would be kept confidential. Instructions for role-plays would have closely approximated those used in Phase II. Participants were to have been given a problematic situation and asked to respond. The number of possible responses for a particular situation would not have been uniform across all situations. The participant's response would have been compared with the list evaluated and, if it was not included in that list, would have been scored as a "no response" and that problematic situation would have been discarded in his/her assessment. If the response was one that had been

evaluated for effectiveness, it would be scored according to the rating (the average score across raters as obtained on the Likert scale). Two separate observers would have scored the response to provide a check on inter-rater reliability. A summary score would be calculated by dividing the individual's total score across all problematic situations, as scored by each observer, by the number of problematic situations responded to. This would have represented the individual's social skill score, as measured by this test.

Phase V

Evaluation of the measure.

a) Inter-rater reliability would be calculated for the ratings of seriousness and effectiveness of response.

b) Criterion-related validity would be asessed by administering the developed test to 15 - 20 participants. These 15 - 20 participants were to be drawn trom the original group of 50 - 75 participants and would have been selected by the committee of three. Those 15 - 20 participants chosen would have been demonstrating difficulty in their interpersonal interactions in the work environment and should therefore benefit from a social skill training program. These participants would have been asked to respond to the entire set of problematic situations included in the test. Their responses were to be scored as outlined in Phase IV.

c) From the group of staff members who participated in the earlier phase of this research, five staff members

(counsellors and supervisors) were to be selected based on their level of daily interaction with the 15 - 20 participants selected (those staff members who have the opportunity to observe the participants most frequently in any given day). These staff members were to rate each of the participants on a seven point Likert scale, according to the level of social competence they perceive the participants to be demonstrating in their regular interactions in the workshop environment. Workshop environment would include all areas normally used by trainees for lunch and coffee breaks (7=very competent, 1=very incompetent). A correlation between an individual's score on the assessment test and his/her average score on the seven-point Likert scale, as rated by the staff members, was to be calculated, as well an an inter-rater reliability score.

Results

Phase 1 -

Thirteen of the nineteen situations nominated by workshop staff matched the criteria identifying problematic situations. These 13 were added to LaGreca et al.'s original inventory of 36.

Mean frequency and difficulty as well as standard deviations for all problematic situations, are detailed in Appendix H.

Independent group, t-tests were calculated on the mean values of all 49 situations. The results are detailed in Tables 1 and 2.

Table 1.
Independent Variance t-test of mean scores for each problematic situation.
Placement vs. Counsellor/instructor staff

Difficulty

Problem	Mean Couns/Instr	Place	t value	Sign of t
1	3.455	2.375	-1.73	.101
2	4.182	2.250	-4.41	.000**
3	3.364	2.000	-2.67	.016*
4	3.273	2.250	-2.29	.035*
5	3.091	2.375	-1.47	.161
6	2.909	2.125	-1.49	.154
7	4.273	2.750	-3.41	.003**
8	2.545	2.000	-.89	.386
9	3.455	3.000	-1.16	.261
10	3.545	2.000	-3.75	.002**
11	3.182	2.250	-2.28	.036*
12	3.545	2.125	-2.71	.015*
13	3.455	2.125	-2.22	.040*
14	3.727	2.000	-4.44	.000***
15	2.545	2.750	.65	.526
16	2.727	2.000	-1.26	.224
17	2.636	2.250	-.65	.526
18	2.909	2.500	-.68	.509
19	2.455	2.000	-.90	.379
20	2.727	2.625	-.02	.982

Table 1 cont'd.

Problem	Mean Couns/Instr	Place	t value	Sign of t
21	3.182	2.750	-.93	.368
22	2.364	2.125	-.71	.487
23	2.273	2.000	-.16	.874
24	2.909	3.375	.72	.480
25	2.545	2.750	.34	.737
26	2.636	2.625	-.02	.984
27	2.909	2.750	-.40	.694
28	3.000	3.000	.00	1.00
29	2.909	2.500	-.76	.459
30	3.273	2.875	-.81	.430
31	3.000	2.625	-.75	.466
32	2.545	2.875	.63	.538
33	3.364	1.875	-2.16	.045*
34	3.000	1.875	-1.69	.109
35	2.000	2.125	.27	.790
36	3.091	2.500	-1.01	.326
37	3.182	2.625	-1.02	.322
38	2.636	2.375	-.54	.596
39	3.273	2.000	-2.51	.022*
40	2.909	2.625	-.44	.665
41	3.636	2.500	-1.96	.067
42	3.091	2.500	-1.05	.308
43	2.364	3.`25	1.14	.272
44	3.455	3.250	-.45	.658
45	2.909	2.750	-.30	.769
46	2.909	2.250	-1.10	.288
47	3.727	2.750	-1.65	.118
48	2.545	2.375	-.51	.614
49	2.455	2.750	.51	.615

n = 19, df=17
* = p<.05
* = p<.01

Eleven out of 49 situations demons: `d significantly differenc means between groups. Although thi. number is not high, it is more than would be expected by chance.

Table 2.
Independent Pooled Variance t-test of mean scores for each problematic situation.
Placement vs. Counsellor/instructor staff

Frequency

Problem	Mean Couns/Instr	Place	t value	Sign of t
1	2.727	1.111	-3.69	.002**
2	4.364	2.222	-5.04	.000**
3	3.000	1.000	-5.40	.000**
4	3.273	1.778	-3.56	.002**
5	2.273	2.000	-.60	.554
6	2.273	1.667	-1.52	.146
7	4.727	2.000	-8.07	.000**
8	2.091	1.444	-1.83	.084
9	3.818	2.889	-1.94	.069
10	3.727	1.778	-5.90	.000**
11	3.364	1.889	-3.54	.002**
12	3.455	1.556	-4.98	.000**
13	2.636	1.111	-3.66	.002**
14	2.091	1.000	-2.69	.015*
15	4.000	2.111	-3.32	.004**
16	2.091	1.000	-2.49	.023*
17	3.364	1.556	-3.75	.001**
18	3.545	1.556	-3.92	.001*
19	3.273	1.111	-6.13	.000**
20	4.182	1.889	-5.68	.000**
21	3.455	1.667	-3.54	.002**
22	2.909	1.000	-5.42	.000**
23	2.364	1.111	-4.09	.001**
24	4.364	4.000	-.36	.726
25	3.636	2.111	-2.61	.018*
26	3.636	1.889	-3.26	.003**
27	3.455	3.111	-.21	.833
28	2.727	2.444	-.14	.888
29	3.727	2.444	-3.37	.003**
30	3.727	1.889	-4.67	.000**
31	3.545	2.222	-1.93	.069
32	3.000	2.111	-1.46	.161
33	1.909	1.556	-1.21	.242
34	1.182	1.111	-.42	.679
35	2.727	1.444	-2.57	.019*
36	3.636	3.111	-.63	.534
37	3.545	2.556	-1.68	.110
38	3.000	1.889	-3.39	.003**
39	3.545	1.222	-7.07	.000**
40	3.727	1.889	-3.34	.004**
41	3.909	2.333	-2.98	.008**

Table 2 cont'd.

Problem	Mean Couns/Instr	Place	t value	Sign of t
42	3.545	2.222	-2.65	.016*
43	4.000	2.667	-2.47	.024*
44	3.727	2.444	-3.44	.003**
45	2.818	1.556	-4.25	.000**
46	3.182	1.778	-2.45	.025*
47	3.636	1.444	-4.54	.000**
48	2.909	1.333	-3.62	.002**
49	3.909	2.222	-2.64	.017*

n=20, d.f.=18
*= p <.05
**= p <.01

Thirty-six of the 49 situations demonstrated significantly different means between groups.

Table 3 compares the rank order of each situation, as rated by placement staff vs. counsellors/instructors on frequency and difficulty. Items with the highest ranks (ie. 1,2,3) demonstrated the highest mean score. Ties were broken by first, the lower standard deviation and second, the lower standard error of measurement.

Table 3.
Rank order of each situation as rated on frequency and difficulty.

Problem #	Counsellors/ Instructors Diff	Freq	Placement Diff	Freq
1	11	39	29	43
2	2	3	30	11
3	12	33	43	42
4	14	29	32	27
5	20	44	26	19
6	29	43	38	30
7	1	1	9	18

Table 3 cont'd.

Problem #	Counsellors/ Instructors		Placement	
	Diff	Freq	Diff	Freq
8	41	45	40	38
9	9	9	3	4
10	6	11	42	26
11	17	27	31	24
12	7	24	35	34
13	10	41	36	44
14	3	46	41	48
15	43	6	12	15
16	35	47	45	49
17	38	28	34	35
18	31	23	25	31
19	45	30	46	41
20	34	4	17	21
21	18	25	10	29
22	47	35	39	47
23	48	42	47	45
24	33	2	1	1
25	40	15	15	17
26	36	16	20	25
27	27	36	8	2
28	24	38	5	9
29	32	13	21	8
30	16	12	6	20
31	23	21	16	13
32	39	43	7	16
33	13	48	48	33
34	25	49	49	46
35	49	40	37	36
36	22	18	23	3
37	19	22	18	6
38	37	32	27	22
39	15	19	44	40
40	26	14	19	23
41	5	7	22	10
42	21	20	24	12
43	46	5	3	5
44	8	10	2	7
45	30	37	11	32
46	28	31	33	28
47	4	17	14	37
48	42	36	28	39
49	44	8	13	14

The Spearman rank order coefficient for the placement and counsellor/instructor rankings of 49 situations was r =.02 for difficulty and r =.68 (p<.005 level) for frequency.

Phase II -

The list of response alternatives to the problematic situations generated by the selected group of 10 staff members appears in Appendix I. The responses of the 13 trainees who participated in the role plays appear in Appendix E.

Discussion

A distinct difference in ratings between the two groups for both frequency and difficulty is evidenced in the pattern of scoring problematic situations. The placement staff consistently reported seeing problematic situations less often than the counsellors/instructors. However, the most frequently and least frequently observed situations in one setting tended to also be the most and least frequently observed in the other setting. This is supported by the Spearman correlation coefficient of rank orders for the frequency data. Ratings of difficulty also showed a difference in rating between groups but the pattern is not as consistent as it was for frequency. The Spearman correlation coefficient supports the statement that what one group rates as difficult, the other does not. As a whole, the placement group tended to score situations as less difficult than the counsellors/instructors and this is consistent with the rating

pattern for frequency.

The t-tests demonstrated that the two groups were significantly different in their ratings of frequency. Again, the conclusion is not so clear cut for difficulty, but more situations did demonstrate significance than would have occurred by chance. Given the small sample group of raters (nine placement staff and 11 counsellors/instructors) and the number of significant outcomes, it could be argued that the two groups were also different on their ratings of difficulty.

The lack of correlation in the difficulty rating patterns of the two groups, counsellor/instructors versus placement staff, indicates that they are two truly distinct groups operating within the same agency. This finding was entirely unanticipated and severely jeopardized the validity of completing the remainder of the study. The purpose of the study was twofold. The primary purpose was to develop a valid social skills assessment tool that would be tailored specifically to reflect the context of the environment in which the behaviour occurs and focused on skills necessary for vocational placement. The second purpose of the study was to demonstrate that the assessment tool was socially valid. Since the groups were rating situations so differently, when a mean score for each problematic situation was calculated for frequency and difficulty, all problematic situations tended to demonstrate a mean score close to the mid-point of 2.5. Selecting which 35 of the 49 situations would be most relevant for a social skills training package based on the frequency and

difficulty scores was extremely difficult since the mean scores of problematic situations demonstrated little variance from one another. Two alternatives remained: either implement Phase II with all 49 situations, or, disregard the scores of one group and make the selection of situations based on the scores of the other group. Forty nine situations would make a very lengthy assessment tool and would therefore make it impractical for regular use, once completed. In addition, the length of the assessment could potentially jeopardize validity through fatigue or boredom on the part of the tester or the individual being tested.

The second alternative was not reasonable either. The issue of whose scores should be disregarded, the placement staff vs. the counsellors/instructors, was very difficult. Strong arguments could be made for either group. Placement staff know, firsthand, what behaviours are needed in the competitive work environment, while the counsellors/instructors know the problems that occur in the workshop setting. Selecting priority situations based on counsellor/instructor ratings would mean that a social skills program might be very good at training individuals with mental retardation to get along with others much better in the workshop and thus be perceived by the individual trained, workshop staff, or other trainees, as having made a significant improvement in the quality of life. Therefore, the program would undoubtedly demonstrate social validity when put to the test. However, this same social skills program would

probably miss the mark entirely for a competitive environment and, therefore, not achieve the primary purpose of training individuals in the social skills they need to graduate to competitive employment.

On the other hand, selecting situations based on the placement staff's ratings would have a better chance at producing something tailored to the needs of the competitive market but would not address the behavioural issues occurring in the workshop setting. Social validity would thus be seriously compromised and, if so, support for such a program would undoubtedly wane. A workshop administration is unlikely to invest time and money in a program that does not produce observable results.

In an effort to complete the project as originally planned, in February, 1988, I attempted a compromise and, independently of the workshop, selected a total of 35 situations. Seventeen of these situations had been rated, according to the planned criteria, as most serious/frequent by the placement staff. The other 18 situations were the most serious/frequent situations as rated by the counsellors/instructors. This new inventory of 35 situations was then the base for Phase II. However, when you try to please all, you please no-one. Although staff were still willing to complete Phase II, the informal feedback that they gave their supervisors indicated that they did not feel that an assessment based on this inventory would be satisfactory. Individuals from both groups, when asked to suggest responses to

situations for phase two, expressed concerns to their particular
supervisor that situations that they felt were very important had
been discarded or questioned the inclusion of situations that
they felt unnecessary. An indicant of their dissatisfaction with
the compromise that I had made was that interest in continuing
with the project waned and completion of Phase II - Generating
Response Alternatives to Problematic Situations was very slow.

In March, 1988, a meeting was held with the supervisors of the
two groups. On the completion of Phase I, I gave the supervisors
a summary of the ratings which appears as Table 3 in the results
section of this paper. This had been circulated amongst all
staff and both supervisors had gathered some comments from their
staff regarding the differences in scoring styles between the two
groups. During my meeting with the supervisors this feedback was
discussed. The supervisor of the counsellors and instructors
reported that her group was not surprised that a difference in
scoring pattern existed between the two groups. Her staff had
expressed some frustration with the placement staff because they
often felt that they had to "advocate" for a trainee to get the
placement people to accept him/her for a competitive placement.
The supervisor of the placement staff responded to this by
stating that individuals recommended by the counsellors were
often very dependent, passive individuals who would not be able
to function in a competitive environment. It was clear to both
supervisors that they were operating on different assumptions
regarding appropriate behaviour and, as a result,

they were not helping each other very well.

Neither supervisor wanted to see efforts towards a social skills program abandoned but both recognized that they needed to understand better why the two groups were different if a co-ordinated effort towards a social skills program was to be achieved. Both supervisors felt that a simple combination of the two groups' ratings was unlikely to produce an assessment tool that would be valid and therefore useful to the workshop. It was agreed that developing an assessment tool that would satisfy both the placement staff and the counsellors/instructors would require an understanding of why these two groups would rate situations so differently. It was therefore agreed that further phases would not be completed. The entire research project was halted and it was agreed that I would explore the literature for help in discovering an explanation for the difference in rating styles of the two groups.

The literature does not differentiate between placement staff and counsellors/instructors in workshop settings. However, when inventories of situations based on surveys of competitive employers are compared with inventories based on surveys of workshop staff, they are different. This difference in inventories could have been attributed to differences in the actual surveys. However, a study done by Rusch, Schutz, and Agran (1982) directly compared competitive employers' versus workshop staff (counsellors' or supervisors') evaluation of an inventory of problematic situations. Rusch et al. reported that

competitive employers and workshop staff did rate the frequency
or difficulty of situations differently. This finding might
indicate that differences in inventories might not be strictly
the result of differences in surveys, but that competitive
employers may actually be evaluating things differently from the
workshop staff.

However, a counter argument to this might be that selection
bias is responsible for Rusch et al.'s (1982) finding of a
different rating pattern between groups. Individuals with severe
social skills deficits do not leave the workshop and therefore a
competitive employer sees a skewed sample. In addition, the
competitive employer sees only a small number of individuals with
mental retardation and smaller sample groups normally exhibit
narrower ranges in variability than do large groups (Rusch,
Weithers, Menchetti, & Schutz, 1980). Since placement staff in
the workshop have frequent opportunities to observe trainees of
the workshop, selection bias does not explain the differences in
rating patterns between them and the counsellor/instructor staff.
For this reason, the possibility that the placement people might
rate problematic situations distinctly differently than their
colleagues within the same environment was not considered when
this study was planned.

An alternative explanation for the difference between
competitive employers' inventories of problematic situations and
workshop staff inventories is that the environment itself may
influence the behaviour of individuals with mental retardation.

Work done by Landesman-Dwyer, Sackett, and Kleinman (1980), and by Nisbet and Vincent (1986) suggests that it is not selection bias nor limited access to the range of behaviours that is responsible for the differences in behaviour. Specifically, Nisbet and Vincent (1986) examined the behaviours of two matched groups in two environments, the workshop and a supported work program in a competitive setting. Assignment to group was based on geographic residence, not on an estimation of appropriate behaviour. Nisbet and Vincent found significant differences in behaviour. Individuals in the workshop setting demonstrated much higher rates of off-task behaviour and inappropriate social interactions than did those individuals working in the competitive setting. They argue that in an environment that offers heightened access to peer social interaction and lowered work expectations, it could be expected that an individual would behave differently than in an environment that provided very few opportunities for an individual to interact with his or her peers and placed serious demands on work quality and quantity.

Nisbet and Vincent's comments are important to consider. Although the workshop is designed to simulate a factory work setting, the similarities are more apparent than real. The dominant relationship within a workshop setting is not employer-employee, but rather counsellor-client (DeFazio & Flexer, 1983). Powerful motivational contingencies operating in the competitive environment are not present in the simulated workshop setting. To understand the differences in motivational contingencies

between a workshop and the competitive market, a few examples will help.

In the competitive environment, a major reason for an individual to get up in the morning and go to work, even when he/she would rather not, is because he/she is being paid to do so, and having a place to sleep and food to eat depends on having money. In the competitive environment, an individual who does not like something about his place of employment is free to seek alternative employment. Competitive employers can expect that employees will be on time for work and, if not, will either adjust the pay accordingly or dismiss the individual entirely. Employees who prefer to chat with a fellow employee, sleep or daydream, play with equipment, and so on, instead of working, can also be dismissed. Valued employees are rewarded with recognition, increased responsibility or autonomy, or increases in pay.

None of the contingencies described above is present in the workshop. According to the Operant Organizational Behavioural model, this lack of contingencies in the workshop would have severe implications for work behaviour observed in this setting (Frederiksen & Johnson, 1981). According to this model, behaviour that is rewarded is likely to re-occur and behaviour that is punished is likely to decrease. The form that the reward or punishment takes varies widely, but the critical point is that the individual values the reward and wants to avoid the punishment.

In the workshop setting, individuals are often not paid for their work and when they are, it is not at fair market value. If an individual produces more than his/her neighbour, the only reinforcement is the promise of some nebulous graduation in the distant future, easily jeopardized by a host of other factors not understood or often not under the control of the individual who produced more. Inappropriate behaviour is punished by movement to a less preferred task, loss of break time, being sent to "talk" to a counsellor, a letter being sent to parents, or in extreme cases, a temporary suspension. In the case of suspension, it is questionable that an individual would find suspension from a tedious or boring task very punishing. Indeed, any of the strategies used to control inappropriate behaviour in the workshop could be argued to be either very weak compared to being fired in the competitive world or, in fact, to contain an element of reinforcement.

These "punishers" used in the workshop setting are far more typical of the kind of relationship that is encountered in an elementary educational setting than that of a work setting. In fact, trainees of the workshop are required to bring notes from home explaining absences or requesting time away. It is unlikely that a Ford employee, for instance, is subject to this kind of expectation.

Added to this lack of external motivational contingencies is a lack of internal motivation. Many individuals will work long hours at a task simply because the task is intrinsically

reinforcing for them, i.e., they _like_ doing it so working at the task brings them pleasure. In a workshop setting the work is often a "make-work project" because there is a shortage of contracts. Whether it is "make-work" or a real contract, the task is often repetitious and monotonous. Work offers little meaning or feeling of accomplishment for the trainee. It is not, therefore, surprising that the trainee does not take his work responsibilities seriously and may choose to avoid them through various strategies such as socializing, or daydreaming. The issue of avoiding work in the workshop setting through socializing or daydreaming may explain why the counsellors/instructors rated certain situations as occurring more frequently and being more difficult to resolve than did the placement people. For example, being teased is rated as the second most difficult situation and the third most frequently occurring situation, while the placement group rated it thirty and eleven, respectively. In the same manner, someone talking to you from across the room was ranked by the counsellor/instructor group as sixth most difficult and the placement people rated it as the forty-second most difficult. In contrast, knowing how to cope with needing to use the bathroom during work time is considered by the counsellor/instructor group to be a relatively easy problem to resolve (46th in rank order), whereas the placement people viewed this as being very difficult (3rd in rank order). Placement people also felt that the trainees had much more difficulty coping with being told to work faster or follow

instructions, than did the counsellors/instructors (work faster: placement (8) vs. couns/instr (27); follow instructions: placement (1) vs. couns/instr (33)).

Various organizational theories such as Herzberg's Two Factor Theory (Herzberg, 1966) and Theory X and Theory Y (McGregor, 1960) could also be used to analyze the source of different behaviour in different work environments. These alternative theories, however, are variants of one theme, employees need motivation to be productive. Given that many effective contingencies for motivating work behaviour are not present in the workshop, it would be predictable that individuals in such a setting would engage in high rates of non-work behaviour. If ..his is the case, the workshop is failing to teach its trainees the work habits that will be necessary in a competitive placement and is instead providing an arena for learning other, alternative behaviours, some of which will be counter-productive to securing and maintaining competitive employment. In this sense the workshop setting may be iatrogenic. The issue is, then, why are motivational contingencies not part of the workshop structure?

Within any human service agency, certain organizational contingencies are present. While normalization is the dominant ideology expressed in agency mission statements, society continues to resist the integration of "deviants" into the mainstream and expects that human service agencies will continue to serve their historical role of social control by providing a

custodial function (McCord, 1982; Riley & Frederiksen, 1984). This custodial function is accomplished under the name of treatment/training. The manifest (normalization) and latent (social control) goals of the human service agency are in direct contradiction (Kaswan, 1982; Riley & Frederiksen, 1984). However, funding arrangements based on number of clients in the program versus numbers of clients graduated to competitive employment place emphasis on the latent function, custodial care. Further, recognition and promotion goes to those managers who can generate additional resources by attracting profitable contracts from the public sector. Frequent turnover through graduation to competitive employers of the most productive trainees will not contribute to satisfactory completion of such contracts. In times of tight economics and increased demands for service, workshop managers are under pressure to serve more clients with the same or less resources. The additional resources generated through work contracts with the public sector become a priority for agency survival. Under such conditions, any organization will typically invest more energy on activities that will contribute to survival and the result is an "illusion of change" (McCord, 1982). Energy is placed on "helping" individuals adapt to the workshop setting, arranging contingencies to produce those behaviours that would make graduation difficult, then "blaming the victim" (Ryan, 1971). Staff who enter the human service arena are often attracted by the ideals expressed in the manifest functions of such agencies. Contradictions in manifest

and latent functions contribute to burnout, absenteeism, turnover, and most important pessimism.

Although this study does not provide the data from which accurate conclusions can be drawn, the data does indicate that the Placement group felt that trainees were better able to solve the difficult situations they would encounter than did the instructor/counsellors. A possible explanation for the more positive perception of trainees abilities of the placement group versus the counsellor/workshop staff may be that motivational and organizational contingencies may be different for the placement group than for the counsellors/instructors. The placement group are actually working with and for graduates. These graduates are now influenced by more typical employee motivational contingencies. Work is real and paid for, and lack of work is punished through dismissal. The placement group is mandated to accomplish their ideal (helping individuals to be self-sufficient). In a concrete manner, they can see the results of their work and know when they have made a difference. The counsellor/instructors' contribution towards self-sufficiency is much more difficult to identify than the contribution of the placement person who finds the placement and helps the individual to adjust to it and maintain it. The placement staff would be at less risk of burnout or pessimism and more concretely aware of the potential of the developmentally-disabled individuals to work in a competitive setting.

The lack of consensus regarding what should be trained in a

social skills program has some interesting implications. First, given that contingencies in the workshop itself may be heavily influencing inappropriate behaviour, a social skills training program prior to entry to a competitive environment may be an unnecessary service. Second, if the training program is based on the input of counsellors/instructors, it may be teaching responses to situations that are not as difficult to resolve in the competitive setting as they are in the workshop. The corollary of basing a training program on the input of counsellors/instructors is to base it on the input of placement staff. In this case, the training program will not be teaching responses to situations that are more difficult to resolve in the workshop setting.

The simple solution to the dilemma of deciding how to select problematic situations is to advise that all social skills training programs be based on the input of competitive employers and that an individual not be required to demonstrate improved behaviour before being given access to competitive employment. This kind of advice, however, totally disregards the social validity issue. Recommendations for graduation to competitive employment are often based on an estimation of an individual's appropriate behaviour (Bernstein & Karan, 1979). If, in the estimation of the workshop counsellors, an individual's social skills have not obviously improved as the result of a training program, the likelihood of him/her being recommended for graduation to competitive employment is diminished. Further, a

social skills program that does not address some of the more
serious behavioural issues in the workshop setting will not be
supported, financially or otherwise, by the workshop
administration or staff. Without support from the workshop
environment, the training program is doomed to fail.

It may be that in some cases, a social skills program is
unnecessary. The very act of removing the individual from the
workshop environment may alter his/her social behaviour
significantly because the individual is sensitive to the change
in motivational contingencies. However, it is more likely that
many of these individuals have learned some inappropriate
behaviours in the workshop setting that will, unless more formal
"unlearning" occurs, be carried into the new work environment.
The fact that graduates do return to the workshop at ·n
unacceptably high rate suggests the need for "unlearning", and
that a social skills program is necessary. If the intention is
that a social skills program will improve the employability of
individuals with developmental disabilities, it is clear that the
program may have to emphasize different content than staff from
the workshop would choose. However, the workshop's own needs
cannot be ignored. All previous work did one or the other.
Either the content of a program was based on competitive
employers' opinions or it was based solely on the opinions of
workshop staff. Either way, a major flaw in the research is
introduced. How to negotiate this compromise will require
further research. Until such systematic exploration is

undertaken, selection of appropriate content for a social skills program is problematic. Either the program is structured to satisfy competitive employment needs and risks poor social validity within the workshop setting, or it is structured to satisfy workshop needs and risks that the program does not satisfy the needs of the competitive employer. If a compromise is attempted, selection will be arbitrary and it is very possible that neither the competitive employer nor the workshop will be satisfied. This possibility was demonstrated very clearly in this project.

However, attempting to identify social skills training content that will satisfy both competitive employers and workshop staff without also questioning why competitive employers and workshop staff differ cannot be successful. The issue of contradiction of goals within a workshop setting and its impact on contingencies within the setting that contribute to the workshop becoming iatrogenic appears to be a very important area of research. It is as important as identifying appropriate content for social skills training programs. Unquestionably, some individuals with mental retardation will need direct intervention to improve their social skills if they are to secure or maintain competitive employment. However, improvements in the environment to minimize the development of inappropriate behaviours must also be made. Improved social skills training programs are important if individuals with developmental disabilities are to be integrated into the mainstream employment

environment; however, structural changes to the workshop
environment are just as critical.

In a final discussion with the supervisors of the workshop,
possible explanations for the differences between the group,
based on information from the literature, were reviewed. The
supervisors agreed that management of the workshop has been aware
for some time that structural changes must be addressed and the
results of this study had served to highlight this for them. How
to address the necessary changes was not yet clear. The
supervisor of counsellors and instructors was not comfortable
with the idea that the workshop setting could actually be
contributing to the unemployability of trainees in the
competitive market. The final outcome of this study for the
workshop was:

1. The lack of appropriate motivational contingencies within the
workshop for trainees was recognized as an issue but, given the
present funding circumstances, major changes in the near future
could not be forseen. However,

2) as the supervisor of placement staff pointed out, energy has
been invested in developing innovative competitive employment
alternatives to workshop employment and this will continue to be
pursued.

3. Although simply changing environments from the workshop to
competitive employment may improve the social skills of some
trainees, it is unlikely that the majority of trainees will
demonstrate such a tremendous improvement. Therefore, a social

skills training program must still be developed as part of the training for competitive vocational placement.

4. Before this social skills training program could be developed, Placement staff, Instructors and Counsellors will need to negotiate the objectives for the program.

The results of this research project served to highlight what had been suspected, added further incentive to continue in the direction of developing employment alternatives to the workshop setting. It also served to generate some interest in the workshop staff to explore with each other their different perspectives of the trainees abilities and the impact this differing perspective has on the selection of content for a social skills training package. A social skills program should be an important part of the preparation for competitive vocational training but, as discussed in the final meeting with the supervisors, Placement staff, Instructors and Counsellors will need to "get together" on what such a program will include.

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APPENDIX A

Common Problem Situations which Occur
In Vocational Workshop Settings

Relationships with Co-workers:
1. Someone throws something at you.
2. Someone is teasing you, calling you names.
3. Someone hits you or bumps into you on purpose.
4. Someone hits you or bumps into you accidentally.
5. Someone asks you for money.
6. Someone asks you to buy them a drink.
7. Someone asks you for your lunch, or a cigarette.
8. Someone is being noisy and it's hard for you to concentrate.
9. Someone bosses you around.
10. Someone talks to you from across the room.
11. Your friend is working across the rcom and you want to tell him/her something.
12. Someone is teasing or bothering your friend.
13. You accidentally bump intc a co-worker and he/she yells at you.
14. You accidentally bump into a co-worker and he/she hits you.
15. A co-worker is praised by the supervisor.
16. Someone challenges you to throw something across the room (or do something that's against the rules).

Relationship with Supervisor:
17. Your supervisor asks you to do something for him/her.
18. Your supervisor tells you to get back to work while you are resting.
19. Your supervisor tells you to get back to work while you are daydreaming.
20. Your superviosr tells you to work faster.
21. Your supervisor tells you to work faster and you're already doing the best you can.
22. You are talking to the person next to you while working and the supervisor tells you to stop talking.
23. You want to ask your supervisor something and he/she is talking to someone else.
24. You want to ask your supervisor something and he/she is not at the desk.
25. You want to ask your supervisor something and he/she is working.

26. Your supervisor yells at you for being late but it wasn't your fault.
27. Your supervisor yells at you for spilling something that you didn't spill.
28. Your supervisor asks you to pick up something that you didn't drop.

Internal States:
29. You are sleepy and can't concentrate well; you begin to talk to the person next to you.
30. You're tired of sitting down; you decide to get up and walk around the room.
31. You're thirsty and would like a drink.
32. You can't keep your mind on your work.
33. You aren't feeling well.
34. You need to use the bathroom.
35. You are tired of your job and want to switch.
36. You forget what you should be doing.

(LaGreca, A.M., Stone, W.L., & Bell, C.R. (1982). Assessing the problematic interpersonal skills of mentally retarded individuals in a vocational setting. Applied Research in Mental Retardation, 3, 37-53.)

APPENDIX B

Vocational Problem Behaviour Inventory

Inappropriate Interpersonal Behaviours (Co-workers and supervisors).
    Verbal
        -Talking to co-workers while working (sitting down)
        -Talking to co-workers instead of working (sitting down)
        -Talking to anyone walking by
        -Panhandling
        -Asking the supervisor personal questions
        -Asking the supervisor many questions about how to do the job right
        -Asking the supervisor how you are doing with ;your job
        -Talking to the supervisor about things not pertaining to work
        -Interrupting the supervisor during a conversation
        -Interrupting the supervisor while he/she is talking to someone else.
        -Interrupting the supervisor while he/she is working
  Non-verbal
        -Looking at co-workers instead of working
        -Walking over to co-workers
        -Distracting co-workers by clowning around
        -Touching the supervisor

Aggressive Interpersonal Behaviours (Co-workers and Supervisors)
    Physical
        -Throwing things at co-workers
        -Getting into physical fights with co-workers
        -Hitting or pushing co-workers
        -Hitting or pushing the supervisor
    Verbal
        -Teasing co-workers
        -Arguing with co-workers
        -Threatening co-workers
        -Using nasty language to co-workers
        -Talking back to the supervisor when given instructions
        -Talking back to the supervisor when reprimanded (for talking or not working)
        -Arguing with the supervisor when told to do something
        -Using nasty language with the supervisor
        Threatening the supervisor

Inappropriate Reaction to Frustration or Anger
Aggressive
-Throwing or slamming things when upset or frustrated
-Throwing things when angry
-Yelling or having a tantrum when angry

Non-Aggressive
-Getting upset when teased by co-workers
-Crying when upset or frustrated

Attention/Memory Problems
-Sleeping during work hours
-Forgetting how to do a job
-Being easily distracted
-Daydreaming

Inappropriate Personal Habits, Mannerisms
-Dressing sloppily
-Making unusual facial expressions
-Speaking in a very loud voice
-Talking or singing to him/herself while working
-Making noises while working

Inappropriate Work Habits
-Working slowl_
-Coming to work late
-Coming in from work breaks late
-Walking around or leaving the work area without permission
-Leaving the work area frequently without permission (for a drink or to use the bathroom)

(LaGreca, A.M., Stone, W.L., Bell, C.R. (1982). Assessing the problematic interpersonal skills of mentally retarded individuals in a vocational setting. Applied Research in Mental Retardation, 3, 37-53).

APPENDIX C

Letter to Manager of Training Centre
Re: Permission to conduct research

Dear   ;

I am a Behaviour Therapist with Surrey Place Centre, as well as a Masters candidate at Wilfrid Laurier University. I have had an ongoing interest in social skills development, particularly as it applies to individuals with mental retardation. Unfortunately, developing a good social skills training program has been consistently hampered by the lack of a valid assessment tool with which to evaluate such a program.

To satisfy my thesis requirement, I would like to extend some work done by LaGreca, Stone and Bell in 1983. Their work attempted to develop a social skill assessment tool that contained specific situations that were problematic for individuals with mental retardation in a vocational setting. Both the assessment took, and the social skill training program that is a natural sequel to the development of the took, are focused on only those social skills associated with the acquisition and maintenance of a vocational placement.

Obviously, the ideal place to conduct this project is in a vocational training environment. The advantage in participating in this project for your organization is the development of the assessment tool, as detailed in this proposal, also sets up the format and content of a later skill training program.

I have enclosed a brief summary of the proposed study, and have left a more detailed proposal with Ms. J. Orzy. Any questions you may have can be directed to myself or to my thesis supervisor, Dr. Mark Pancer. Telephone numbers have been added to the summary sheet attached. I look forward to discussing this with you.

Sincerely,

Paula M. Daoust

Summary of Research Project

Vocational training for persons with mental retardation is a critical step towards normalization. However, training individuals in only the specific work skills needed to achieve vocational competence is not enough. Persons with mental retardation often exhibit social interaction styles that are inappropriate or unacceptable in a competitive work setting. Without social skill training as well as specific work skill training, the prognosis for future employment is poor for persons with mental retardation. Several studies indicate that the difficulties individuals with mental retardation encounter securing or maintaining a vocational placement are often directly related to that individual's ability to effectively interact at the interpersonal level.

Previous attempts to train socially skilled behaviour in persons with mental retardation have been hampered by the lack of a valid assessment tool to evaluate program effectiveness and to inform program content.

Purpose:

a) to develop a valid assessment tool to evaluate and inform future content of a social skills training program. This tool must be specifically tailored to the needs of individual's with developmental disability and address those skills most critical for vocational tenure (securing and maintaining a vocational placement).

b) to do a preliminary evaluation of the validity of the assessment tool.

Method:

Phase I: Situational Analysis.

The problematic situations as developed by LaGreca, Bell and Stone, will form the base of the data sheet. Counsellors and supervisors will be asked to check off the occurrence of any problematic situation, as listed on their data sheet, within their designated observation area, for a fifteen minute period, twice per day. This will continue for five successive days.

Counsellors and supervisors will be asked to rate a list of problematic situations on a 5-pt. Likert scale for seriousness (ie. threat to vocational placement) and again for frequency.

Phase II: Response Enumeration

10 staff members will generate a list of possible response alternatives to each problematic situation.

50 - 75 trainees will respond to 10 role-played situations.

Phase III: Response Evaluation

5 - 10 of the most frequently cited responses will be selected for each problematic situation. Staff will then be asked to rate each response on a 5-pt. Likert scale for effectiveness.

Phase IV: Development of a measuring instrument format.

Each problematic situation will be listed with its response alternatives and their score value.

Phase V: Evaluation of the measure.

The assessment measure will be administered to 15 - 20 trainees. Five staff members will rate these same trainees on a 7-pt. Likert scale according to their demonstrated level of social skill in the work environment. The average of this rating will be compared with the score obtained from the assessment measure.

Informed Consent and Confidentiality

All participants in the research project will be voluntary. The purpose of the project, as well as what will be asked of them if they choose to participate, will be explained verbally and on a consent form Participants will be assured that confidentiality will be maintained. It will also be explained to participants that if, at any time they should change their mind about participating, they may withdraw. Further, outline this same information a letter will be sent to the families of participants who are being trained at the centre.

Researcher:

Paula M. Daoust
Surrey Place Centre: 925-5141
Home: 454-5310

Supervisor:

Dr. M. Pancer
Wilfrid Laurier University: (519) 884-1970

APPENDIX D
CONSENT FORM AND PARENT INFORMATION

Parent Information:(Daughter)

November 20, 1987

Dear   ;

Your daughter is being invited to participate in the development of an assessment tool for social skills. Your daughter will be asked to participate in 10 role plays. For each role play a situation that requires a social response will be described and your daughter will be asked to show how he would respond to that situation. The verbal response will be audio recorded, transcribed later, and the tape will then be erased. Your daughters' individual responses will be coded such that confidentiality and privacy can be ensured. Her responses will not be released to anyone outside this research project. The entire project will take place on the premises of the Foster Employment Training Centre and during regular working hours.

We sincerely appreciate your daughters' participation in this project. She can give us valuable information that will improve the queality of future social skills training programs. Since socially skilled behaviour is a very important factor in securing and maintaining competitive employment, improving the quality of social skills training programs is a priority.

If you have any questions about the research project, please call me at 925-5141 and I would be happy to discuss this further. You may also direct any questions you might have to Dr. M. Pancer who is serving as Thesis supervisor.

Sincerely,

Paula M. Daoust
Masters Candidate - Wilfrid
Laurier University.

Dr. M. Pancer
Wilfrid Laurier University
(416) 884-1970

APPENDIX D (cont'd)

Parent Information: (Sons)

November 20, 1987

Dear   ;

    Your son is being invited to participate in the development of an assessment tool for social skills. Your son will be asked to participate in 10 role plays. For each role play a situation that requires a social response will be described and your son will be asked to show how he would respond to that situation. The verbal response will be audio recorded, transcribed later, and the tape will then be erased. Your sons' individual responses will be coded such that confidentiality and privacy can be ensured. His responses will not be released to anyone outside this research project. The entire project will take place on the premises of the Foster Employment Training Centre and during regular working hours.

    We sincerely appreciate your sons' participation in this project. He can give us valuable information that will improve the queality of future social skills training programs. Since socially skilled behaviour is a very important factor in securing and maintaining competitive employment, improving the quality of social skills training programs is a priority.

    If you have any questions about the research project, please call me at 925-5141 and I would be happy to discuss this further. You may also direct any questions you might have to Dr. M. Pancer who is serving as Thesis supervisor.

Sincerely,

Paula M. Daoust
Masters Candidate - Wilfrid
Laurier University.

Dr. M. Pancer
Wilfrid Laurier University
(416) 884-1970

APPENDIX D (cont'd)

Parent Information: (Group Home)

November 20, 1987

Dear   ;

             is being invited to participate in the
development of an assessment tool for social skills.
     will be asked to participate in 10 role plays. For
each role play a situation that requires a social response
will be described and   will be asked to show
how (s)he would respond to that situation. The verbal
response will be audio recorded, transcribed later, and the
tape will then be erased.   individual
responses will be coded such that confidentiality and
privacy can be ensured.   responses will not be
released to anyone outside this research project. The
entire project will take place on the premises of the Foster
Employment Training Centre and during regular working hours.
     We sincerely appreciate   participation
in this project. (S)he can give us valuable information that
will improve the queality of future social skills training
programs. Since socially skilled behaviour is a very
important factor in securing and maintaining competitive
employment, improving the quality of social skills training
programs is a priority.
     If you have any questions about the research project,
please call me at 925-5141 and I would be happy to discuss
this further. You may also direct any questions you might
have to Dr. M. Pancer who is serving as Thesis supervisor.

                              Sincerely,

                              Paula M. Daoust
                              Masters Candidate - Wilfrid
                              Laurier University.

                              Dr. M. Pancer
                              Wilfrid Laurier University
                              (416) 884-1970

APPENDIX C (cont'd)

Participants Consent:

November 20, 1987

Dear   ;

    You are being invited to participate in the development
of an assessment tool for social skills. You do not have to
agree to participate and if you start and change your mind,
you can stop anytime. If you decide you want to be a part
of this, you will be asked to participate in 10 role plays.
For each role play a situation that requires a social
response will be described and you will be asked to show how
uou would respond to that situation. Your answer will be
tape recorded and written out later. Once it has been
written, your answer on the tape will be erased. Your
answers will be coded so that no one except myself, Judy
Orzy and John McNicholas will know how you answered. Your
answers will not be given to anyone outside this research
project. The entire project will take place on the premises
of the Foster Employment Training Centre and during regular
working hours.
    We sincerely appreciate your participation in this
project. You can give us valuable information that will
improve our ability to teach social skills. We believe that
if people can improve their social skills it will help them
to find and keep a job.
    If you want to participate in this project, please sign
this form and return it to your counselor. If you have any
questions about the research project, please call me at
925-5141 and I would be happy to discuss this further. You
may also direct any questions you might have to Dr. M.
Pancer, Thesis Supervisor.

                        Sincerely,

Dr. M. Pancer   Paula M. Daoust
Wilfrid Laurier Univ.   Masters Candidate - Wilfrid
(416) 884-1970   Laurier University.

I agree to participate in the above described research
project and I understand that I can withdraw my involvement
at any time.

Dated:_____   Signed:_____

                               Witnessed:_____

.

APPENDIX E

Common Problem Situations which Occur
In Vocational Workshop Settings

Relationships with Co-workers:
1. Someone throws something at you.
2. Someone is teasing you, calling you names.
3. Someone hits you or bumps into you on purpose.
4. Someone hits you or bumps into you accidentally.
5. Someone asks you for money.
6. Someone asks you to buy them a drink.
7. Someone asks you for your lunch, or a cigarette.
8. Someone is being noisy and it's hard for you to concentrate.
9. Someone bosses you around.
10. Someone talks to you from across the room.
11. Your friend is working across the room and you want to tell him/her something.
12. Someone is teasing or bothering your friend.
13. You accidentally bump into a co-worker and he/she yells at you.
14. You accidentally bump into a co-worker and he/she hits you.
15. A co-worker is praised by the supervisor.
16. Someone challenges you to throw something across the room (or do something that's against the rules).

Relationship with Supervisor:
17. Your supervisor asks you to do something for him/her.
18. Your supervisor tells you to get back to work while you are resting.
19. Your supervisor tells you to get back to work while you are daydreaming.
20. Your superviosr tells you to work faster.
21. Your supervisor tells you to work faster and you're already doing the best you can.
22. You are talking to the person next to you while working and the supervisor tells you to stop talking.
23. You want to ask your supervisor something and he/she is talking to someone else.
24. You want to ask your supervisor something and he/she is not at the desk.
25. You want to ask your supervisor something and he/she is working.
26. Your supervisor yells at you for being late but it wasn't your fault.

27. Your supervisor yells at you for spilling something that you didn't spill.

28. Your supervisor asks you to pick up something that you didn't drop.

Internal States:
29. You are sleepy and can't concentrate well; you begin to talk to the person next to you.
30. You're tired of sitting down; you decide to get up and walk around the room.
31. You're thirsty and would like a drink.
32. You can't keep your mind on your work.
33. You aren't feeling well.
34. You need to use the bathroom.
35. You are tired of your job and want to switch.
36. You forget what you should be doing.

(LaGreca, A.M., Stone, W.L., & Bell, C.R. (1982). Assessing the problematic interpersonal skills of mentally retarded individuals in a vocational setting. Applied Research in Mental Retardation, 3, 37-53.)

APPENDIX F

Problematic Situations Added to Inventory Based on Nominations by Workshop Counsellors/Instructors

1. Someone stands too close to you.

2. Someone interrupts your conversation.

3. Someone steps ahead of you in the cafeteria line.

4. Your co-worker has stopped working.

5. Your co-worker is doing a job incorrectly.

6. Your co-worker plays with work materials.

7. A co-worker announces break before the time.

8. Your supervisor passes by and you want to say hello.

9. You want your supervisor's help and he/she asks you to wait a few minutes.

10. Break or lunch is over and you don't feel like going back to work.

11. During break or lunch you feel angry or frustrated with someone.

12. Someone asks to borrow work supplies.

13. You run out of work supplies.

APPENDIX G

INSTRUCTIONS TO RATERS

Rating of Frequency and Difficulty of
Problematic Situations

Attached you will find a data sheet that lists all the problematic situations, as suggested by LaGreca et. al., and those situations nominated by staff in your workshop. Please circle a number for each situaion on the F scale and then again on the D scale.

F represents the estimated frequecny that you boserved this situaion occurring in your work setting in the last six months.

D represents how difficult you believe the situation is for an individuals with matal retardation to respond effectively. (An effective response is one that mazimizes reinforcement from the environment and minimizes punishment.) It is expected that your estimation of divvidulty will be influenced by your experience with individuals with mental retardation in the vocational environment.

Please complete your data sheet independently of your co-workers. You may write your name on the data sheet but it is not essential. Please return tne sheet to either Judy or John as soon as you can.

Example:

	Very		Neutral		Not At All	
17. Someone stands too close to you.	5	4	3	2	1	F
	5	4	3	2	1	D

APPENDIX H

MEANS AND STANDARD DEVIATIONS FOR FREQUENCY AND DIFFICULTY

PLACEMENT AND COUNSELLOR/INSTRUCTORS GROUPS

	DIFFICULTY				FREQUENCY			
	Couns/Instr		Place		Couns/Instr		Place	
Problem	Mean	Sd	Mean	Sd	Mean	Sd	Mean	Sd
1	3.455	1.293	2.375	1.408	2.727	1.272	1.111	3.333
2	4.182	.982	2.250	.886	4.364	.924	2.222	.972
3	3.364	1.027	2.000	1.195	3.000	1.000	1.111	.333
4	3.273	.786	2.250	1.165	3.273	.786	1.778	1.093
5	3.091	1.044	2.375	1.061	2.273	.905	2.000	1.118
6	2.909	1.044	2.125	1.246	2.273	.786	1.667	1.000
7	4.273	.905	2.750	1.035	4.727	.467	2.000	1.000
8	2.545	.934	2.000	.926	2.091	.831	1.444	.726
9	3.455	1.036	3.000	1.195	3.818	1.079	2.889	1.054
10	3.545	.934	2.000	1.195	3.727	.647	1.778	.833
11	3.182	.874	2.250	.886	3.364	.809	1.889	1.054
12	3.545	1.128	2.125	1.126	3.455	.934	1.556	.726
13	3.455	1.214	2.125	1.126	2.636	1.206	1.111	.333
14	3.727	1.191	2.000	1.195	2.091	1.044	1.000	000
15	2.545	1.273	2.750	1.165	4.000	1.414	2.111	1.054
16	2.727	1.272	2.000	1.195	2.091	1.136	1.000	000
17	2.636	1.362	2.250	1.165	3.364	1.120	1.556	1.014
18	2.909	1.300	2.500	1.309	3.545	1.440	1.556	.527
19	2.455	1.368	2.000	1.195	3.273	1.009	1.111	.333
20	2.727	1.191	2.625	.916	4.182	.982	1.889	.782
21	3.182	.982	2.750	1.035	3.455	1.214	1.667	1.000
22	2.364	1.362	2.125	1.246	2.909	.944	1.000	000
23	2.273	1.191	2.000	1.195	2.364	.924	1.111	.333
24	2.909	1.446	3.375	1.302	4.364	.809	4.000	1.000
25	2.545	.820	2.750	1.753	3.636	1.120	2.111	1.364
26	2.636	.809	2.625	1.589	3.636	1.120	1.889	1.167
27	2.909	.831	2.750	.886	3.455	1.293	3.111	1.269
28	3.000	1.414	3.000	1.195	2.727	.786	2.444	1.014
29	2.909	1.300	2.500	.926	3.727	.905	2.444	1.014
30	3.273	1.104	2.875	.991	3.727	.905	1.889	.601
31	3.000	1.183	2.625	.916	3.545	1.214	2.222	1.202
32	2.545	.820	2.875	1.458	3.000	1.414	2.111	1.269
33	3.364	1.748	1.875	.991	1.909	1.044	1.556	.527
34	3.000	1.549	1.875	1.246	1.182	.405	1.111	333
35	2.000	.894	2.125	1.126	2.727	1.555	1.444	.527
36	3.091	1.300	2.500	1.195	3.636	1.502	3.111	1.364
37	3.182	1.680	2.625	1.188	3.545	1.440	2.556	1.130
38	2.636	1.027	2.375	1.061	3.000	.775	1.889	.928
39	3.273	1.009	2.000	1.195	3.545	.820	1.222	.441
40	2.909	.375	2.625	1.408	3.727	1.348	1.889	1.054
41	3.636	1.362	2.500	1.069	3.909	.944	2.333	1.414

| | DIFFICULTY | | | | FREQUENCY | | | |
| | Couns/Instr | | Place | | Couns/Instr | | Place | |
Problem	Mean	Sd	Mean	Sd	Mean	Sd	Mean	Sd
42	3.091	1.221	2.500	1.195	3.545	1.214	2.222	.972
43	2.364	1.206	3.125	1.727	4.000	1.183	2.667	1.255
44	3.455	1.036	3.250	.886	3.727	.647	2.444	1.014
45	2.909	1.221	2.750	1.035	2.818	.751	1.556	.527
46	2.909	1.044	2.250	1.165	3.182	1.401	1.778	1.093
47	3.727	1.272	2.750	1.282	3.636	1.286	1.444	.726
48	2.545	1.036	2.375	1.188	2.909	1.136	1.333	.707
49	2.455	1.293	2.750	1.165	3.909	1.514	2.222	1.302