COMPARING FIDELITY SCORES OF THE SUPPORTED EMPLOYMENT MODEL AND SUBJECTIVE OUTCOMES WITHIN COMMUNITY MENTAL HEALTH CENTERS IN THE STATE OF HAWAI'I

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By
Kim M. Schaper

Thesis Committee:

Deborah B. Altschul, Co-chairperson
John J. Steffen, Co-chairperson
Stephen N. Haynes
Keith H. Claypoole

We certify that we have read this thesis and that, in our opinion, it is satisfactory in scope and quality as a thesis for the degree of Master of Arts in Psychology

THESIS COMMITTEE

Deborah B. Hattori, Ph.D.

Co-Chairperson

Co-Chairperson

Abstract

This study investigated the Supported Employment (SE) program within the State of Hawai'i using fidelity scores and subjective consumer outcomes. Participants included a corporation that uses the SE model, agencies that host the program, and consumers who use the program. Six fidelity scores were collected along with demographic information. Outcomes were measured using a consumer questionnaire targeting employment service satisfaction, impact of working on quality of life and perception of service delivery. Four fidelity scores indicated partial implementation of SE, two indicated non-SE programs. Score comparison to national data indicated a significant difference between the groups. Participants provided positive attitudes towards work and quality of life and indicated that employment services were generally present. Results indicated that the SE fidelity scale is a reliable tool for assessing SE and provided a baseline for future fidelity assessments. Future studies should include a comparison group and inclusion of work-related outcomes.

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CHAPTER 1
INTRODUCTION

The movement towards the deinstutionalization of mental health consumers in the 1960s and 1970s led to increased need for community support for consumers discharged from psychiatric inpatient facilities (Anthony, 1993). Due to the diverse needs of individuals with serious mental illness, this major transition prompted a re-examination of the method in which community-run services are organized and delivered.

Deinstitutionalization required an emphasis on community-based services for consumers. Initially, these services were inadequate, which led to the conceptualization of a community support system (CSS) in the mid-1970s (Anthony, 1993). The CSS guidelines described various services needed by the consumers as provided by the mental health system. Anthony (1993) stated that it was this system along with a growing understanding of serious mental illness and its implications that led to the emergence of a recovery-oriented philosophy in mental health service delivery. Recovery is an overarching concept that is reflected in some specific psychological treatments, including supported employment.

Recovery

Recovery has been defined as "…living a satisfying, hopeful, and contributing life even with limitations caused by illness" (Anthony, 1993, p. 15). Similarly, Townsend, Boyd, Griffin, & Hicks (1999) defined recovery as "a personal process of overcoming the negative impact of a psychiatric disability despite its continued presence" (p. 2). Both definitions infer that recovery from a serious mental illness is a highly individualized process. It consists of more than a cessation of symptoms or suffering; and

may include recovering from the effects of stigma, the iatrogenic effects (induced by medical treatment) of treatment settings, or effects of being unemployed (Anthony, 1993).

Through the process of recovery, consumers are not denying the experience of the illness; rather, they are moving past dwelling on the illness by considering other interests and activities (Anthony, 1993). The process means (in part), "...moving beyond illness to establish functional, satisfying lives to the greatest extent possible" (Substance Abuse and Mental Health Services Administration [SAMHSA], 2002, What is the project's philosophy, ¶ 1).

Goals of recovery include: attaining and maintaining one's highest level of functioning and perhaps using and/or giving support to entities beyond the mental health system (Townsend, Boyd, Griffin, & Hicks, 1999). The Substance Abuse and Mental Health Services Administration [SAMHSA] (2002) described goals based on consumer choice, desire, and opportunity (What is the project's philosophy, ¶ 1).

Evidence-Based Practices

One class of treatments reflecting the recovery philosophy is Evidence-Based Practices (EBPs). An Evidence-Based Practice is an intervention for which scientific evidence has shown to help consumers attain sought after goals (Drake et al., 2001; SAMHSA, 2002). The emergence of EBPs in serious mental illness treatment arose in part from work done in the United Kingdom using Evidence-Based Medicine (Chambless, 2001). The adaptation to serious mental illness is partly due to the American Psychological Association's appointment of a Task Force on the Promotion and Dissemination of Psychological Procedures. From this Task Force, an identification of

empirically validated treatments emerged (Chambless, 2001). In addition, Drake et al. (2001) found that research supporting interventions which specifically target serious mental illnesses (e.g., Schizophrenia, Bipolar Disorder, etc.) resulted in better overall outcomes. Moreover, Goldman (2001) noted that consumers have the right to the most effective treatment and EBPs have been shown to achieve the most consistent outcomes. SAMHSA (2002) has identified and supported six Evidence-Based Practices in the treatment of serious mental illness, including: Illness Management and Recovery, Family Psychoeducation, Medication Management Approaches in Psychiatry, Assertive Community Treatment, Integrated Dual Disorders Treatment, and Supported Employment. These EBPs emphasize more than just objective outcomes such as prevention of rehospitalization or treatment compliance; they also focus on individual consumer goals consistent with recovery.

Implementing EBPs faithfully requires attendance to the quality of service delivery. In order to be considered evidence-based, programs undergo rigorous investigation including randomized clinical trials to indicate efficacy over other interventions. By definition, assessment of the program through fidelity monitoring and investigation of the program outcomes is part of the concept of an EBP (Goldman et al., 2001). EBPs are explicit about the limits of the supporting research and state that results should not be generalized beyond the EBP under investigation (Drake et al., 2001).

Despite the evidence supporting EBPs, implementation is limited (Drake et al., 2001; Torrey et al., 2001). Often, the problem with implementation lies with gaining consensus among stakeholders (Bond et al., 2001). This lack of consensus may be due to clinicians' questioning the worth of the intervention and administrators needing clearly

defined interventions for determining a potential fit with pre-existing programs (Goldman et al., 2001; Torrey et al., 2001).

Lack of implementation may also be due to stigma as existing health care programs may see mental health services as less important than general health care (Goldman et al., 2001). Programs may also be hesitant in accepting a specific model of treatment without definitive answers on effectiveness (Torrey et al., 2001). Furthermore, evidence of effectiveness across diverse populations is scarce, and more research is needed across ethnicities, treatment settings, and diagnoses (Drake et al., 2001; Surgeon General's Report, 1999).

Difficulty with implementation may also lie within the practices themselves. For example, some stakeholders may feel that these models do not transfer, and each must be adjusted to local circumstances. The concern is that these adjustments may compromise the effectiveness of the treatment and therefore hinder outcomes for consumers (Drake et al., 2001).

In response to these concerns, efforts are being made to make these practices more accessible for implementation and maintenance. The Evidence-Based Practice Project began in New Hampshire, Maryland, and in Ohio in an effort to support implementation of EBPs (Torrey et al., 2001). The goal of the Evidence-Based Practice Project was to develop and disseminate standardized guidelines and training materials for each of the SAMHSA-supported Evidence-Based Practices in the form of implementation toolkits (Drake et al., 2001). The hope was to help stakeholders (consumers, families, providers, and administrators) gain a better connection to EBPs through utilization of services, service provision, and maintenance of services (SAMHSA, 2002). An

implementation toolkit was created by SAMHSA for each of the six EBPs. The toolkits consist of information in various mediums for all stakeholders regarding the consistent delivery of effective services (Torrey et al., 2001).

Supported Employment

The concept of supported employment started within the developmental disability discipline and was later adopted by the mental health field (Bond, 1992; Drake, McHugo, Becker, Anthony, & Clark, 1996). This concept focused on rapid job placement and providing on-the-job training and support. Within the developmental disability literature, much of the research supported place-train models (placing consumers in jobs and then providing on the job training) of vocational rehabilitation over sheltered employment (work in placements designed for consumers) or transitional employment (time-limited placements).

Historically, vocational services in mental health settings have not been a priority, as they were often offered at agencies separate from community mental health centers (CMHCs) (Bond et al., 2001; Newman, 1970). These early approaches trained consumers for specific environments such as sheltered workshops and transitional employment (Bond, 1992). Vocational services first assessed the consumer's capacity to work. This approach was very subjective, depending on the vocational specialist's opinion of the individual's past social functioning and work history (Newman, 1970). Newman stated that vocational specialists often relied on the employability of the individual (i.e., personal attributes, community attitudes toward mental illnesses, availability of jobs), feasibility of finding a job (acceptability of the individual to the employer), and the stability of the individual (ability to manage major life issues) in order to assess readiness

for work. Newman speculates that because of the subjective nature of these measures many individuals were probably eligible for vocational rehabilitation, but were not encouraged to participate.

In a literature review conducted by Bond (1992), vocational programs implemented after deinstitutionalization indicated a progression from institutional approaches (sheltered workshops) to industry-integrated approaches (job clubs). During the late 1970s to the early 1980s vocational services began to focus on decent pay for consumers and community integration (Wehman, 1986). Models of vocational rehabilitation that prevailed during the 1980s and early 1990s stressed some sort of pre-vocational training before finding a job (Bond, 1992).

Supported Employment in mental health was first defined in the 1980s. In the Rehabilitation Act of 1986, the Federal Register defined supported employment as consisting of the following features: (1) a paid job; (2) work in an integrated setting; (3) publicly subsidized, on-going support through the consumer's life of employment; and (4) severe disability necessitating this form of support in order for employment to occur (Wehman, 1986).

Before the acceptance of this definition of supported employment, vocational services had gone through many changes and resulted in the emergence of several models. Some of the models include Sheltered Workshops, Transitional Employment, Group Skills Training, and the Program of Assertive Community Treatment.

Sheltered workshops are programs in which consumers are placed in employment settings created especially for consumers. For example, a rehabilitation facility may create a restaurant in order to help their clients obtain work experience. However, these

types of workshops keep consumers away from the competitive workforce. Sheltered workshops peaked in popularity soon after deinstitutionalization, however research regarding this service slowed after 1968 as this method was shown to be relatively ineffective in helping consumers gain competitive employment skills (Bond, 1992). One major reason for the ineffectiveness was that consumers were consistently isolated from the mainstream workforce (Wehman, 1986), which may actually reinforce dependency (Becker & Drake, 1994).

Transitional employment is defined as temporary placements in the community consistent with the consumer's stamina and stress tolerance (Bond, Drake, Mueser, & Becker, 1997). It is ultimately designed to give the consumer experience in work and help build resumes (Bond, 1992; Bond, Drake, Mueser, & Becker, 1997). Often, transitional employment models are hosted in clubhouses. Clubhouses are meeting places for "members" to socialize. Members are consumers of mental health services who help to run the clubhouse as part of a work-ordered day (Bond, Drake, Mueser, & Becker, 1997). Although this model may enhance members' work skills, it has been suggested that the step from clubhouses or transitional employment positions to competitive employment may be difficult due to difficulty transferring skills learned in the clubhouse to a competitive employment position in the community (Bond, 1992).

Group Skills Training (GST) involves pre-employment training in a group format followed by placement of individuals in jobs paired with on-going support. This training involves helping consumers gain awareness and skill in choosing, getting, and keeping jobs (Drake, McHugo, Becker, Anthony, & Clark, 1996). A study conducted by Harrison and Perelson (as cited in Drake, McHugo, Becker, Anthony, & Clark, 1996) indicated

that this model has some empirical support via one open clinical trial which resulted in a 35% employment rate for those participants who completed the program.

Similar to the GST, Boston University's psychiatric rehabilitation model emphasizes the choose-get-keep model. This model emphasizes consumer choice, career exploration, and pre-vocational training (Bond, 1992; Danley, Sciarappa, & MacDonald-Wilson, 1992). In a study evaluating the Boston University model, Goering, Wasylenki, Farkas, Lancee, and Ballantyne (as cited in Bond, 1992) found an employment rate of 20% for an experimental group whose case managers were trained in the model. Additionally, a significantly higher number of the experimental subjects were considered to have the ability to function in an instrumental role (e.g., employee, student, volunteer). Boston University's model assumes extended prevocational career exploration is beneficial in obtaining competitive employment. Prevocational exploration, however, has been found to lead to better consumer satisfaction with choices, rather than successful employment (Bond, 1992).

The Program of Assertive Community Treatment (PACT) consists of a team of professionals trained in a variety of disciplines who provide intensive, individualized, time-unlimited services to persons with serious and persistent mental illnesses. Services are generally provided in community settings rather than professional offices (Ahrens, Frey, & Burke, 1999; Bond, Drake, Mueser & Becker, 1997). The employment specialist on the team offers vocational services that assess, place, train, and support the consumer on an on-going basis. In a study conducted by Aherns, Frey, and Burke (1999), 35 of 63 individuals receiving PACT services in addition to services through the Department of Vocational Rehabilitation (DVR) were successfully discharged (i.e., successfully

working the minimum number of days) by DVR. The authors suggested that PACT services (e.g., team approach, unlimited support) may have contributed to helping individuals with serious and persistent mental illness find employment.

It should be noted that each of the aforementioned models have their place in vocational rehabilitation. Some may find only minimal or moderate success with competitive employment as specific goals of vocational models may differ. For some models, any type of work experience is the goal regardless of duration or location. Perhaps establishing a routine in one's day may be important to consumer recovery, and work of any type can help achieve this goal. However, other models, such as IPS deserve closer examination due to proven effectiveness.

Individual Placement and Support (IPS)

In 1990 the New Hampshire Division of Mental Health introduced employment as an outcome in its community support programs (Drake, 1998). Due to this implementation many vocational programs appeared and grew in New Hampshire, including the aforementioned models. Many of these programs integrated vocational services using the supported employment definition with mental health services. In an effort to draw upon the best approaches to obtaining work, Becker and Drake (1993) developed a comprehensive model. Drake (1998) credits Deborah R. Becker with the description and naming of this approach, the Individual Placement and Support (IPS) model. Individual Placement and Support is defined as a community-based approach to help consumers find and keep competitive employment through rapid job placement and on-going support (Becker et al., 1998; Becker & Drake, 1993, 1994; Drake et al., 2001; SAMHSA, 2002). Importantly, this model is focused on the strengths and choices of

consumers, not on the needs of the agency (Becker & Drake, 1993). Drake (1998) describes IPS as emerging from the recovery philosophy of normal functioning rather than simply symptom reduction.

Drake and Becker (1996) do not view IPS as a unique model of vocational rehabilitation but rather as an adaptation and standardization of other ideas and areas including: supported employment as described by Wehman (1986), assertive community treatment, the consumer movement, integrative approaches to clinical and rehabilitative services, and skills training. The goal of the model is to improve standardization, provide a description of supported employment, encourage scientific study, and promote implementation (Bond et al., 2001).

The IPS model draws upon the influences of the PACT program, job coaching, clubhouses and transitional employment, the choose-get-keep model, and the supported employment movement in general (Becker & Drake, 1994; Bond, Drake, Mueser, & Becker, 1997). Specifically, it follows the Newman (1970) concept of instant placement, defined as placing individuals in employment positions without extensive training or testing. This method of placement provides a direct means of assessing employability rather than relying on interviews or past history. In addition, it draws on Wehman's (1986) idea to minimize the importance of pre-vocational training, and support a focus on integrated work settings and time-unlimited support.

IPS is also derived from the choose-get-keep model used by the Boston University Center for Psychiatric Rehabilitation which emphasized consumer choice in choosing, getting, and keeping jobs (Danley, Sciarappa, MacDonald-Wilson, 1992). The Clubhouse concept of giving all members an opportunity to work regardless of work or

psychiatric history was also incorporated into IPS (Bond, Drake, Mueser, & Becker, 1997). In addition, Becker and Drake (1993) stated IPS goals similar to ACT: integration in the community; improved social and vocational functioning; reduction of primary symptoms as well as reduction in severity and frequency; and increased satisfaction with life. Finally, from PACT, the concept of an integrated treatment team was added to the model (Bond, 1998).

From these influences, the IPS model was developed and consists of eight core principles or critical components (Drake & Becker, 1993; Becker & Drake, 1994; Becker & Drake, 2003). These components include, first, rehabilitation is an integral component of mental health treatment (Becker & Drake, 1994; Becker & Drake, 2003). Work can be a part of therapy; each can influence the other. Second, the goal is to ensure competitive employment in integrated settings (Becker & Drake, 1993; Becker & Drake, 1994; Drake & Becker, 1996; Bond, Drake et al., 1997; Bond, 1998; Bond et al., 2001; SAMHSA, 2002; Becker & Drake, 2003). Third, rapid job placement is crucial. Extensive initial assessments and pre-vocational training are absent (Becker & Drake, 1993; Becker & Drake, 1994; Drake & Becker, 1996; Bond, Drake et al., 1997; Bond, 1998; Bond et al., 2001; Becker & Drake, 2003). As soon as the consumer expresses an interest in working, the search begins with no pre-job screening or training. Fourth, vocational assessment is continuous (Becker & Drake, 1993; Becker & Drake, 1994; Becker & Drake, 2003). Every job provides work experience, job endings are viewed positively and failure does not exist regarding job duration (Becker & Drake, 1993; Drake & Becker, 1996). Thus, from each experience the consumer gains more knowledge of preferences and strengths, which may influence the next job.

The fifth principle is that follow-along supports are continuous (Becker & Drake, 1993; Becker & Drake, 1994; Drake & Becker, 1996; Bond, 1998; Bond et al., 2001; SAMHSA, 2002; Becker & Drake 2003). Follow-along supports require employment specialists to provide on-going support services in the community and on the job. The employment specialist meets with the consumer as often as needed to make sure everything is going smoothly at the work site and the consumer feels comfortable with the position. The consumer receives support from the employment specialist as long as necessary (SAMHSA, 2002). The sixth component is that jobs are based on consumer choice; the employment specialist helps the consumer find a job to match individual goals, strengths, preferences, and experiences (Becker & Drake, 1993; Becker & Drake; 1994; Drake & Becker, 1996; Bond, 1998; Bond et al., 2001; SAMHSA, 2002; Becker & Drake; 2003).

The seventh principle states services are provided in the community (Becker & Drake, 1993; Becker & Drake, 1994; Becker & Drake, 2003). Previous pre-vocational training relied on the transfer of skills from a workshop to a mainstream work position which was not always feasible (Becker & Drake, 1994). With IPS, skills needed are learned on the job and the consumer gets support from the employment specialist out in the community (SAMHSA, 2002). Also, observing the consumer in the work setting gives the employment specialist a clearer picture of the consumer's needs. The final principle states a team approach promotes integrated services. The employment specialist coordinates plans and decisions with the case manager, psychiatrist, and anyone integral to the consumer's treatment (Becker & Drake, 1993; Becker & Drake, 1994; Drake &

Becker, 1996; Bond, Drake et al., 1997; Bond, 1998; Bond et al., 2001; SAMHSA, 2002; Becker & Drake, 2003).

Literature Supporting the IPS Model

Initial studies using this model occurred in the New England states. For example, Drake et al. (1994) compared two programs run by the same mental health center when one program decided to convert its day treatment program into an IPS supported employment program. During the follow-up year, the IPS program's rates of employment increased (25.4 % to 39.4%) compared to the day treatment program (13.4% down to 12.5%). The individuals who were unemployed at baseline benefited most from this service. Based on the findings of this study, administrators of the comparison day treatment program decided to convert that program to the IPS supported employment model. This study demonstrated that the IPS program was successful in obtaining competitive employment for those individuals who may have not been work "ready" as defined by previous standards or opinions.

In 1996 Rhode Island began a pilot project to convert day programs into the IPS model. This change came about in part from the findings of a 1986 survey of a sample of community support program (CSP) consumers which indicated that the mental health system was providing three times the day treatment services and less than 10% of supported employment services needed (McCarthy, Thompson, & Olson, 1998). This finding was alarming as research by Bond and Dincin (1986) suggest that day treatment programs are ineffective in meeting clients' needs and may actually perpetuate the patient role which limits consumer empowerment (as cited in McCarthy, Thompson, & Olson, 1998).

The conversion included three components: (1) building consensus for a new paradigm, (2) developing funding mechanisms to support the new service, and (3) creating a group of skilled clinicians able to implement the new service (McCarthy, Thompson, & Olson, 1998). Findings indicated positive results in all three areas. From a systemic level, the IPS program was integrated into mental health programs and reimbursable mental health services were re-worked to include employment services. In addition, IPS programs were operating in two of the eight CMHCs in Rhode Island with employment rates of 54% and 74%, respectively. McCarthy and associates concluded that individuals with serious mental illnesses have the capacity to engage in competitive employment. This study demonstrated that statewide community mental health services can be re-structured resulting in positive outcomes.

In 1996 Drake, McHugo, Becker, Anthony, and Clark conducted a study in New Hampshire comparing two programs: the Group Skills Training (GST) and the Individual Placement and Support (IPS) program. Hypotheses stated that individuals in the IPS program would initially have higher employment rates due to the rapid job search component, and that after skills training, the GST group would have a higher job rate, keep these jobs longer, work more hours, get better jobs, and be more satisfied. These outcomes were monitored over an 18 month period. This study differed from others as it randomly assigned clients to either the GST or IPS group. It also investigated non-vocational outcomes for participants (e.g., global functioning, quality of life, self-esteem).

Interestingly, results favored the IPS model, which demonstrated participants were twice as likely to obtain competitive employment (78.1% versus 40.3%) and work

20 or more hours per week (46.6% versus 22.4%). On an annual basis, they also averaged more hours (600 to 800 hours versus 200 to 400 hours) worked and higher wages earned than the GST group ($3000 to $5000 versus $1000 to $2000). Non-vocational outcomes such as global functioning, satisfaction with finances, and satisfaction with vocational services were significantly related to employment outcomes for the entire sample.

Findings suggest that the advantage of the IPS model was the integration of mental health and vocational services within one agency. Because the GST model was brokered (i.e. separate agencies for mental health services and vocational services) consumers may have had trouble transitioning from one program to another, perhaps due to loss of cohesive support from the whole treatment team. Problems also may have existed between the mental health and vocational staff. This study provides substantial evidence for the efficacy of the IPS model as compared to the GST model and the positive effect of employment for consumers in general.

To examine the persistence of the IPS program, McHugo, Drake, and Becker (1998) followed the IPS and GST groups for an additional two years after the initial experimental phase. Overall, rates of employment did not fall for either group, but the IPS group had a higher percentage of employed consumers throughout the duration of the study. Those consumers receiving vocational support services were more likely to work than those who received no services. In addition, the IPS group was twice as likely to work when receiving services (64% versus 37%). Some GST individuals were transferred to "IPS-like" programs (not full implementation of IPS) but findings did not indicate a benefit from the transfer (i.e., no significant differences in competitive job rates between the original GST group and those who transferred from GST to "IPS-like" programs).

This may be due to the fact that the "IPS-like" programs did not fully implement the IPS program. Interestingly, all data were gathered via self-report from participants, which may include some level of bias. However, these findings lend evidence to the notion that receiving continuous vocational supports appears to be important to maintenance of competitive employment rates and suggests that full fidelity to the IPS model may be needed for positive outcomes.

Another New Hampshire study examined a group of consumers transferred to an IPS program and a group of consumers in a CSP over one year (Bailey, Ricketts, Becker, Xie, & Drake, 1998). The IPS program was introduced into a well established day treatment program that reduced the breadth of services and introduced the Supported Employment program, Intensive Case Management, and a Dual Diagnosis team. Specifically, the investigators were interested in determining if individuals with a long history of day treatment and limited vocational experience (the IPS group) could benefit from supported employment. The CSP group was assumed to be more stable as they were not in day treatment. Groups were followed for one year and interviewed twice, once at baseline and again at 12 months. Results indicated a steady increase of employment rates for the IPS group while the control group remained constant (Bailey, Ricketts, Becker, Xie, & Drake, 1998). Although a small study, these findings support the IPS model and provide data indicating that individuals with long histories of day treatment and high service utilization can be successful in IPS supported employment programs.

The first meta-analysis of supported employment was conducted by Bond, Drake, Mueser, and Becker (1997) who examined studies of vocational programs offering supported employment regardless of specific program features. A meta-analysis of non-

experimental (i.e. no manipulation of the independent variable) studies (n=11) identified an unweighted mean employment rate of 55% with a range of 23%-84%. In studies identified as experimental (n=6) the meta-analysis yielded an unweighted mean employment rate of 58% for the experimental group with a range from 32% to 78%, and a 21% employment rate for the control with a range from 6% to 40%. Clearly, these studies suggest that consumers benefit from direct assistance in finding and keeping jobs. Additionally, models that place consumers in jobs and training appear to result in increased competitive employment rates over gradual placement models. Finally, Bond and his associates determined that an integration of vocational and clinical services is more effective than the brokered service models. This overall examination of the IPS program suggested that community mental health was moving in the right direction in providing consumers with effective employment services. Due to the consistency of results and extensive description of IPS, Bond and his associates have deemed IPS the standard for supported employment. SAMHSA has identified IPS as the evidence-based practice of supported employment in its national project. To ensure clarity, the term supported employment used hereafter refers specifically to the IPS model.

Supported Employment Supported by SAMHSA

The Evidence-Based Practice Project supported by SAMHSA has adopted the IPS model as the Evidence-Based Practice of Supported Employment. SAMHSA has defined supported employment with six critical components, similar to Becker and Drake's description. The first, eligibility is based on consumer choice. No one who wants to participate in the program is excluded. This is known as the zero exclusion policy (SAMHSA, 2002). The second component is that supported employment is integrated

with treatment. The employment specialist is an integral part of the treatment team and coordinates plans and decisions with the case manager, psychiatrist, and anyone integral to the consumer's treatment (Bond, Drake et al. 1997; Bond, 1998; Bond et al., 2001; SAMHSA, 2002). Third, competitive employment is the goal (Bond, Drake et al., 1997; Bond, 1998; Bond et al., 2001; SAMHSA, 2002). Competitive employment refers to jobs that anyone can apply for and payment at the prevailing rates, that is, wages commiserate with the type of position in which a person is applying. Competitive employment differs from some traditional job positions consumers have historically held such as time-limited transitional employment positions or sheltered workshop positions. These types of positions segregated consumers from the competitive work force, whereas competitive employment places consumers in jobs out in the community for competitive rates.

Fourth, the job search starts soon after a consumer expresses interest in working with no pre-job screening or training. This idea is referred to as rapid job placement (Bond, 1998; SAMHSA, 2002). The fifth component is that follow-along supports are continuous (Bond, 1998; Bond et al., 2001; SAMHSA, 2002). With supported employment, job skills required for the position are learned on the job and the consumer receives support from the employment specialist as long as necessary (SAMHSA, 2002). This support can come in the form of visits to the worksite or periodic phone calls to check-in, with the type of support decided by the consumer. Lastly, consumer preferences are important (Bond, 1998; Bond et al., 2001; SAMHSA, 2002). Any job sought by the consumer will be consistent with his or her desires, preferences, or past work experience. The consumer makes the ultimate decision on what types of jobs to seek, how many hours he or she wants to work, or if he or she wants to leave a job.

According to SAMHSA (2002), the overall supported employment model addresses a top priority of consumers and their families. This priority is to help the consumer move past the patient role and into an employment role. The goals of a supported employment program are unique to each consumer partaking in the program. The model also helps to decrease the stigma of mental illness by placing consumers in the community, and provides benefits such as competitive employment.

Barriers for Implementing Supported Employment

In a 2001 report, Bond et al., cited specific barriers for implementing supported employment programs in mental health settings. One barrier is limited access to services. This limitation refers to vocational assistance of any type, let alone supported employment. This barrier also includes a shortage of staff to supply the services. Limited access may be a result of disproportionate distribution of public funds allocated for mental health services. Bond, Drake, Mueser, and Becker (1997) suggest this limited availability is also due to the long held notion that professionals should decide readiness for vocational services. Perhaps depending on their subjective criteria for readiness, professionals may feel that the consumer is not employment-ready, thus leading to the false belief that resources are not wanted or needed when funds are allocated. Further, agencies may be hesitant to implement supported employment programs, because no specific consumer factors (e.g., symptoms or diagnosis) have been identified that predict better outcomes.

Additionally, public funding for mental health provides monetary resources for employment services, but this amount is only a small percentage of the budget. Funding for employment services primarily comes from the federal-state vocational rehabilitation

system. When public funds disburse only a small proportion to mental health services, this proves to be a large barrier, especially when the amount of funding received is not sufficient (Bond et al., 2001). According to Bond et al., for instance, supported employment is absent when consumers are enrolled in fee-for-service reimbursement systems. It is believed that these types of systems have contributed to the maintenance of services that are not evidence- based.

Bond et al. (2001) also identified several problems faced by program administrators wanting to implement supported employment. These problems include finding money to start up and support the on-going costs of a supported employment program; managing the organizational change; and handling the political consequences of the change. Program administrators often may not be informed or have knowledge of supported employment. Some may doubt the viability of consumers working. Therefore, program administrators' lack of willingness to change may result in practitioners' disinclination to do so.

Another barrier is that clinicians and supervisors may underestimate the need for vocational services (Bond et al., 2001). Clinicians may be more focused on providing psychotherapy and may believe that consumer improvement is due to their clinical skills. When changes stem from external sources, such as involvement in employment, clinicians may view this as a criticism of their work and may be less likely to support the changes. In addition, supervisors may have limited staff to serve the target population and therefore insufficient time to effectively carry out supported employment (Bond et al., 2001). Therefore, an essential component of supported employment is the presence of employment specialists who do not provide other services.

Yet another barrier identified by Bond et al., (2001) is that families, with inadequate information, may discourage their consumer family members from working based on the belief that job-related stress will be overwhelming. In addition, consumers can become barriers themselves when choosing not to work because of a fear of losing Social Security or Medicaid benefits.

Due to the aforementioned barriers, the need for supported employment programs often goes unidentified. This in turn may reinforce the belief that these services are not wanted, resulting in less attention from administrators, practitioners, and clinicians, and movement of funding away from employment programs. However, efforts have been made to help overcome these barriers. Among these efforts is the implementation of incentives, sufficient training, opportunities for families and consumers to become involved in funding decisions, and assessment of outcomes through fidelity monitoring (Bond et al., 2001).

Fidelity

Before providing resources to support evidence-based practices, stakeholders want assurance that these evidence-based practices are effective. Part of the hesitancy with supported employment is the fact that no specific consumer factors predict better outcomes (Bond et al., 2001). Thus, in an effort to convince stakeholders of the importance of supported employment, a major component of SAMHSA's implementation toolkit project is to provide the tools to maintain and enhance any improvements gained from the implementation of the evidence-based practice (Torrey et al., 2001). Particular to ensuring faithful implementation, fidelity scales have been developed for each of the six EBPs supported by SAMHSA.

Fidelity is defined as the degree to which a program adheres to a program model (Bond, Becker, Drake, & Vogler, 1997; Bond, Evans, Salyers, Williams, & Kim, 2000). Goldman et al. (2001) described fidelity as means to an end, not an end itself. It is associated with the ideals and goals of validity. For example, maintaining internal validity is important if comparing the treatment to other treatments (Moncher & Prinz, 1991).

Moncher and Prinz (1991) identified three aspects of treatment fidelity: (1) prerequisite conditions, (2) adherence to a treatment protocol, and (3) utilization of fidelity data. Prerequisite conditions of fidelity include an operational definition of the treatment, proper implementer training, the existence of treatment manuals, and supervision of treatment providers. Adherence to a treatment protocol entails identifying which treatment features need verification and whether the implementers applied the features according to the protocol. Adherence to treatment protocols also means gathering verification data from sources which are most accurate and sampling for consistency (across sessions and cases). Finally, utilization of fidelity data requires identifying ways that data will be used to impact the system.

Fidelity measures are constituted by using accurate representations of program components that index the adherence to the implementation of program models (Bond, Evans, Salyers, Williams, & Kim, 2000; Becker, Smith, Tanzman, Drake, & Tremblay, 2001). The collection of these individual fidelity measures evaluating a specific program model is termed a fidelity scale.

An article by Bond, Evans, Salyers, Williams, and Kim (2000) suggested that the concept of fidelity assessments can be traced back to Rogers' client-centered therapy,

which identified three critical components to treatment: unconditional positive regard, genuineness, and empathy. Further, Bond et al., (2000) proposed that the idea of fidelity as it is currently conceptualized began in the 1960s. It was previously assumed that those psychotherapists who affiliated themselves with a particular form of therapy were performing the therapy as intended. However, it became clear that psychotherapies were not operationally defined, thus the assumption of replicated therapeutic strategies was challenged. In the 1970s treatment manuals began to emerge and data was recorded to ensure that treatment followed specific protocols. At this point, fidelity became a more important issue (Moncher & Prinz, 1991). During this time guidelines for community support programs appeared to help reform the services at community mental health centers, however, these early guidelines were often based on clinical consensus rather than empirical support (Bond et al., 2000).

For this reason, it is important to engage in the scientific investigation of differential treatment models. Actively researching treatment models may result in the identification of critical components (i.e., factors of a model which account for its effectiveness), and assist with defining interventions and initial implementation. Consistently researching and monitoring treatments can also help to maintain high standards of care.

Bond, Evans, Salyers, Williams, and Kim (2000) described two types of fidelity. The first type is treatment integrity, that is, the "degree to which a treatment condition is implemented as intended" (p. 76). The second is treatment differentiation, which refers to the differentiation of models based on the manipulation of the independent variable. In general, to help distinguish between pure and hybrid models, fidelity scales should cover

three content areas: (1) unique dimensions, (2) nonspecific treatment dimensions, and (3) treatment differentiation (Calsyn, 2000).

Bond, Evans, Salyers, Williams, and Kim (2000) also discriminated among four uses of fidelity, including: (1) ensuring model adherence in program evaluation; (2) facilitating communication in the literature; (3) synthesizing a body of research; and (4) identifying critical components. Additionally, Bond, Becker, Drake, and Vogler (1997) noted that fidelity scales can help in the implementation phase of a program by stipulating factors of an effective treatment model (Bond, Becker, Drake, & Vogler, 1997; Bond, Evans, Salyers, Williams, & Kim, 2000).

Despite the benefits of fidelity monitoring, progress in developing fidelity scales has been slow due to a lack of well-defined models and the intricacy of psychiatric rehabilitation services (Bond, Evans, Salyers, Williams, & Kim, 2000). Some mental health service providers argue that it is unknown which treatment works, how well treatment can be measured, whether a variety of models are necessary, and if local solutions are better than model programs (Becker, Smith, Tanzman, Drake, & Tremblay, 2001). However, treatment manuals have been developed that provide specific details on how a program should be organized and how providers should perform their responsibilities (Bond, Evans, Salyers, Williams, & Kim, 2000). Increased practice of fidelity monitoring is evidenced in a meta-analysis by Moncher and Prinz (1991) which indicated that 55% of 359 treatment studies in various disciplines conducted between 1980 and 1988 used no manual, did not supervise treatment providers, and did not evaluate adherence to protocols. This percentage is compared to the 5.8% who used all

three methods. However, by the end of the decade, the percentage of studies that used none of the methods decreased by 20 percent.

One suggested method to assess a treatment's efficacy is to monitor consumer outcomes. Consumer outcomes are the aspects of consumers' lives expected to be enhanced or managed by delivery of mental health services (SAMHSA Implementation Resource Kit, 2002). These outcomes can be direct, concrete, and observable (e.g., getting a job, number of days worked), or indirect, subjective and private (e.g., quality of life, satisfaction with vocational services). Outcomes are the bottom-line for mental health services; they include the effects of the services on consumers and their welfare. Thus, accurate adherence to guidelines of the treatment model is necessary for positive outcomes.

Monitoring outcomes is important at the policy and systems level as well. From the Office of Management and Budget, The Government Performance and Results Act of 1993 required all federal agencies to record their programs' outcomes and reorganize their management practices as needed to improve these outcomes. Actively monitoring a treatment model and client outcomes can also provide evidence of effectiveness, thus helping to break down implementation barriers.

Supported Employment Fidelity Scale

Supported employment fidelity scales started very basic with simple checklist items. Often, these scales reflected other aspects of the program rather than supported employment (Bond, Becker, Drake, & Vogler, 1997). Bond, Becker, Drake, and Vogler (1997) developed a fidelity scale for the IPS model with the intention of being more thorough. It is described as "a brief, easily-administered instrument, in which information

is obtained through a semi-structured interview with a knowledgeable staff worker of a vocational program" (p. 271). This scale is currently used by SAMHSA as the standard fidelity scale for Supported Employment.

Construct Validity. In the article describing the development and pilot implementation of the fidelity scale, Bond, Becker, Drake and Vogler (1997) reported that the items on the scale were developed based on description of the model from Becker and Drake's (1993) IPS manual, discussion among the authors who had experience in implementing the IPS model, and review of the supported employment literature. The anchor points for each item were developed with the intent to reflect the range of practice found in the field. Cutoff scores were initially determined as provisional based on review of the scale values and comparison with established IPS programs.

The authors used the known groups method to test the construct validity of the scale. This method determines if differences corresponding to a preexisting classification can be identified. The authors chose programs that identified themselves as IPS programs as well as other types of employment programs to serve as contrasting programs (i.e., vocational rehabilitation programs). Findings indicated that the fidelity scale reliably discriminated between the IPS programs and the other types of employment programs. Specifically, analysis of variance comparisons indicated significant differences between the programs (e.g., $F=17.9$, $p=.001$) for the total scale. Additionally, effect sizes were large (greater than .80) between the groups (e.g., comparing IPS to other SE programs $d=1.62$ for the total scale). Thus, the scale appears to have good construct validity.

Recent efforts have been made to determine critical components of supported employment (Evans & Bond, in press). A survey of experts and practitioners was

conducted to determine how important and how critical 59 items were to supported employment and to identify optimal conditions for implementation of 12 items. Items were drawn from publications, and fidelity scales and respondents had the opportunity to add items not found on the survey. Results indicated general endorsement of the IPS Fidelity Scale. Items were considered critical if they garnered a mean score of 6.0 or higher (on a Likert scale ranging from 1=very unimportant to 7=very important). Mean score of importance for the fidelity scale items was 6.14. Eleven additional items were determined to be critical (e.g., adequate funding, outcome collection, staff training). This study suggested that the IPS scale as it exists is adequate in capturing important components of Supported Employment; however, other factors may be also important to this practice and may need to be taken into consideration for addition to the fidelity scale.

Both of these studies used convenience samples for the participants, therefore introducing potential bias. Participants, for instance, may have responded positively because they knew what was being assessed. This underscores the necessity for including objective data to determine the validity and reliability of the fidelity scale and for determining fidelity scores.

Predictive Validity. Becker, Smith, Tanzman, Drake, and Tremblay (2001) conducted a study using the IPS fidelity scale and compared fidelity and specific components of supported employment in relation to competitive employment in 10 CMHCs in Vermont. Results found competitive employment was significantly related to two components of IPS—community-based services ($r=.82$; $p\leq.01$) and full-time employment specialists ($r=.69$; $p\leq.05$). The first correlation indicates that providing employment services in the community is related to better employment outcomes (i.e.,

competitive employment); the second correlation indicates that having employees who only provide employment services also correlate significantly to better employment outcomes. These results highlight the importance of community based services, and the presence of employment specialists. This study offered preliminary validation of the scale as a whole.

In a recent study Becker, Xie, McHugo, Halliday, and Martinez (2006) found fidelity scores to be significant predictors of competitive employment rates. This study examined 26 sites in seven states to determine factors that affect access to supported employment services (those receiving services) and efficiency of employment services (those receiving services who are working). Results indicated that fidelity scale scores and job market were significantly related to efficiency. The authors conclude that high fidelity is an important step in attaining positive outcomes. Although promising, this study only used data during one period in time; a longitudinal study would provide more convincing data to support the predictive validity of the scale.

McGrew and Griss (2005) conducted a study to assess the concurrent and predictive validity of the IPS fidelity scale and the Quality of Supported Employment Implementation Scale (QSEIS). This latter scale was developed to measure implementation of general supported employment principles and differs from the IPS scale as the IPS scale only measures the Individual Placement and Support program. One goal of this study was to determine if an association existed between fidelity and outcome. Via telephone interviews 23 sites were interviewed by at least two assessors. Results indicated that correlations between the IPS scale and outcome were not significant although mean fidelity scores indicated at least adequate implementation. This

is in contrast for findings using the QSEIS, which found significant results in the correlation between fidelity and outcome. These results fail to provide support for the validity of the IPS scale. However, the authors note that the sites under investigation may be biased toward fidelity to the QSEIS as the scale was modeled at the same sites examined for the study. Thus, varied findings suggest the need for further research into the psychometric properties of the Supported Employment Fidelity Scale.

Purpose of the Current Study

The purpose of the current study was to implement the Supported Employment Fidelity Scale within the state of Hawai'i to assess fidelity of the supported employment program to the national model. One program in the state of Hawai'i identifies itself as using the SAMHSA-recognized supported employment program. This program indicates that its practices follow the evidence-based practice of supported employment (i.e., IPS employment model). Thus, this program was the focus of this study. The majority of the existing research was conducted in New England states with a mostly Caucasian population. Because of Hawai'i's diverse population, this study assessed the usefulness of the model with culturally diverse consumer populations. In assessing fidelity within the state of Hawai'i by using the Bond, Becker, Drake, and Vogler 1997 Supported Employment Fidelity Scale, the study investigated the utility of the scale as a valid and reliable instrument for assessing supported employment fidelity.

The study was exploratory as it was one of the first to investigate this topic within the state of Hawai'i. The state is currently in the first phase of exploring supported employment and results from this study may serve as a springboard for examining potential relations between employment and outcomes such as living situation or social

relations. This exploration sought to explore indirect, subjective outcomes by gathering information on how consumers perceive the delivery of services and satisfaction of services using a consumer survey developed by the principal investigator.

Research Questions

1. Does the fidelity scale demonstrate interrater reliability?
2. Does the supported employment program in Hawai'i achieve a high level of fidelity as demonstrated by cutoff scores on the fidelity scale?
3. Is there a difference between fidelity scores from Hawai'i and fidelity scores from the national project?
4. Is there a relationship between fidelity scores and consumer satisfaction with employment services?

4a. Do participants perceive an effect of employment on quality of life?

4b. How do participants rate the frequency of appropriate employment services?

5. Is there a relationship between ethnicity and consumer satisfaction with employment services?

5a. Is there a relationship between ethnicity and perception of cultural sensitivity in delivery of employment services?

CHAPTER 2
METHOD

Sample

SHDC Supported Employment Program. Steadfast Housing Development Corporation (SHDC) is an independent corporation dedicated to helping individuals with serious mental illnesses attain suitable housing. In December 2000, it expanded its scope of services by initiating the SHDC Supported Employment Program (in this text referred to as Steadfast SEP). This program offers employment services based on the Individual Placement and Support model. The Steadfast SEP currently contracts with the State of Hawai'i's Adult Mental Health Division to provide employment services to the Division's consumers. The Steadfast SEP hires employment specialists who are contracted out to host agencies (e.g. CMHCs) via a memorandum of agreement to provide employment services. Decisions on assigning employment specialists to host agencies are based on the experience of the employment specialist.

Host Agencies. Host agencies are places that currently retain memorandums of agreement with the Steadfast SEP. These agencies serve as an initial location for Steadfast SEP's employment specialists to meet with consumers interested in work. A total of six agencies within the State of Hawai'i served as the sample for this study, including five CMHCs located on the island of Oahu and one CMHC on the island of Maui. The CMHCs on Oahu have had contracted services with the Steadfast SEP since the inception of the employment service component (December 2000); Maui initiated its agreement in November 2002.

Participants. Seventy-two consumers from the six host agencies agreed to participate in the study. A total of 365 consumers were called, however not all were eligible and many were not contacted due to wrong or disconnected telephone numbers. Eligible consumers were those who were either currently working in competitive placements or were discharged by the Steadfast SEP within the past two years. Because of the difficulty contacting consumers, the later criterion was included to maximize the number of potential participants. Numbers of consumer participants from each agency are displayed in Table 1.

Table 1.

Number of Consumer Participants by Agency

	Total
Agency #1	11
Agency #2	17
Agency #3	2
Agency #4	6
Agency #5	22
Agency #6	14
All Agencies	72

Complete demographic information was not obtained for every participant due to the Steadfast SEP's incomplete database. Thus, demographic information is presented

with missing data included in the table. Participant mean age was 43 years and ranged from 21 years to 65 years. The sample included 51% males and 49% females. Thirty-five percent of the sample identified themselves as European-American, 7% African-American, 31% Asian-American, 19% Native Hawaiian, and 6% Other. Finally, 49% of the sample had a primary diagnosis of Schizophrenia or other psychotic disorder, 44% had an affective disorder (e.g., Bipolar Disorder, Major Depressive Disorder, Recurrent), 3% had Posttraumatic Stress Disorder, and another 3% had another disorder. The demographic information is displayed in Table 2.

Table 2.

Demographic Profile of the Study Sample

Variable	Mean	S.D.	n	Percent
Age (years)	43	11	66	
Missing			6	
Gender				
Male			37	51
Female			35	49
Ethnicity				
European-American			25	35
African-American			5	7
Asian-American			22	31
Native Hawaiian			14	19
Other			4	6
Missing			2	3
Axis I				
Psychotic Disorders			35	49
Affective Disorders			32	44
PTSD			2	3
Other			2	3
Missing			1	1

Note. n=72

Instruments

Supported Employment Fidelity Scale. The Supported Employment Fidelity Scale is a 15-item measurement of adherence to the supported employment model (see Appendix A). It consists of 3 subscales: Staffing (3 items), Organization (3 items), and Service (9 items). Each item is worth a total of 5 points based on a Likert-type scale ranging from 1 (lack of representation for that standard) to 5 (faithful representation of

the standard). A total score of less than 56 points indicates a non-supported employment model; 56-65 indicates partial consistency with the model; and greater than 65 indicates a program consistent with the supported employment model.

A pilot test of the scale by Bond, Becker, Drake, and Vogler (1997) indicated high interrater agreement for each item (at least .80). Internal consistency for the total scale using Cronbach's alpha was .92. Only one item (the vocational unit item under the subscale Organization) fell below this value (.67). The study accurately distinguished between the 27 sites in their program identification (IPS, somewhat IPS, not IPS) giving evidence for construct validity. In an effort to investigate predictive validity, Becker, Smith, Tanzman, Drake, and Tremblay (2001) compared fidelity scores to specific outcomes (e.g. competitive employment rates, average hours worked) in 10 Vermont CMHCs. Results indicated significant correlations between competitive employment rates and community-based services and presence of employment specialists. This study was considered exploratory due to the small sample size, but offers support for the predictive validity of the scale.

Steadfast SEP Database. The Steadfast SEP database contains demographic and vocational information about the participants in their program. Upon consumer consent, demographic information including date of birth, program enrollment date, gender, ethnic identification, marital status, and Axis I diagnosis was collected.

Behavioral Health Information System (BHIS). The BHIS is a management information system that contains clinical data on consumers who are receiving services from agencies which are State owned and operated (e.g., the Hawai'i State Hospital and CMHCs). Information regarding demographics, hospitalization rates, incarcerations, and

current living situation are routinely gathered for all consumers at intake, 6-month intervals, and discharge. This information system was used to provide data not found in the Steadfast SEP database.

Consumer Survey. A 16-item survey was administered to participants in the study regarding the vocational services they receive (see Appendix B). This survey was created by the principal investigator in order to gauge the consumers' perception of presence of appropriate employment services as well as to provide an index of satisfaction with services and an evaluation of how employment has influenced their lives. The survey was divided into three sections. The first section consisted of two questions, one inquiring about satisfaction with employment services, the other about cultural sensitivity of services. This item was included due to the diverse population of Hawai'i . Items in this section are rated on a Likert-type scale from 1 to 5, (1=strongly disagree; 5=strongly agree).

The second section included eight items inquiring how employment has influenced the participant's individual life. Five questions were from a national survey, the Mental Health Statistics Improvement Program (MHSIP) consumer survey. The MHSIP consumer survey is a 28-item survey used in the public domain designed to provide measures of consumers' perception of and experience with: access to services, appropriateness of services, outcome of services, satisfaction of services, and participation in treatment planning (Altschul & Urbanc, 2004). The other three items on the survey were from an unpublished mental health employment services report card developed by a consumer (Tracy, 2002). This report card is similar to a checklist which rates items on a Likert-type scale. Items in this section are rated on a scale from 1 to 5,

(1=strongly disagree; 5=strongly agree). Each question was chosen to reflect general life domains (e.g., living situation, family relations) found in many quality of life interviews (Lehman, Ward, & Linn, 1982).

The third section consisted of six items and was designed to assess consumer perception of the implementation of the six critical components of the supported employment model. Five of these questions were taken from the IPS+ (enhanced) Fidelity Scale developed by Paulson, Post, Herinckx, & Risser (2002). The principal investigator designed one additional question reflecting community-based services. Items in this section were rated on a scale from 1 to 5 (1=never [i.e., absence of services or services not fully implemented as outlined by the model]; 5= always [i.e., presence of services as outlined by the model]).

Comparison Data

Supported Employment Fidelity Scale Consensus Ratings. The data that served as the comparison group for the fidelity scale scores came from the Evidence-Based Practices Project, a national study sponsored by SAMHSA and the Robert Wood Johnson Foundation. The project was launched in an effort to help agencies faithfully implement EBPs via implementation toolkits. This project was in the second phase, which involved assessing the utility of implementation toolkits. Fidelity was assessed a total of five times during the course of the second phase. Each fidelity assessment involved conducting interviews with supervisors, practitioners, and clients, chart reviews, observation of team meetings and intervention (e.g., shadowing a practitioner) (McHugo, et al., in press). This national data collected from agencies that implemented Supported Employment was used

as the comparison group in order to assess Hawai'i 's Supported Employment fidelity scores.

Procedure

Participant Recruitment. A list of current and discharged eligible consumers from the Steadfast SEP was obtained. The list was available for this study because of the memorandum of agreement between the Adult Mental Health Division (AMHD) and the Steadfast SEP. With the agreement, the AMHD had authority to request specific information from the Steadfast SEP database, thus a list with names, telephone numbers, and assigned CMHC was acquired.

The AMHD's Consumer Assessment Team (CAT) was trained by the principal investigator about the study, how to gain consent from participants, and how to administer the survey via telephone. The CAT is a team of consumers employed by the AMHD who have been trained in aspects of conducting research including the subject of confidentiality. Eligible consumers were contacted by the CAT using a telephone script developed by the principal investigator (see Appendix C). This telephone script included instructions to allow the eligible consumer to give oral consent for participation and for verifying receipt of services from the Steadfast SEP and affiliation with the appropriate CMHC. Telephone messages were left if the eligible consumer was not available. These messages were developed to protect the confidentiality of the consumer. A total of four attempts at contact were made, and if the eligible consumer was not reached, he/she was not contacted again. The total recruitment period lasted approximately one month. Each telephone call was supervised by the principal investigator to ensure conformity with instructions and to answer any questions.

The CAT member confirmed receipt of employment services from the Steadfast SEP, verified involvement with mental health services from a CMHC, and explained the purpose of the study. The eligible consumer was informed that as a thank you, he or she was entitled to a $10.00 gift certificate to a local drug store. He or she was then asked if he or she would like to participate in the study. Upon agreement, the participant was assured confidentiality of responses and no change in services. The participant was also advised that he or she could end the survey at any time or choose not to answer any question. The survey was then administered reading each question and possible response, with the administrator marking each response. If the participant was unable to understand a question, the administrator was permitted to clarify. Upon termination of the interview, the participant's mailing address was gathered to provide the gift certificate. The participant was also provided with contact information for the principal investigator, her supervisor, and the Committee on Human Studies. The participant was thanked and the call was terminated.

As telephone calls were terminated, the gift certificates were sent out by the principal investigator. Included in the envelope was a thank you letter along with the contact information for the principal investigator and the Committee on Human Studies (see Appendix D).

The principal investigator accessed individual information from the consenting consumers from the Steadfast SEP database and the BHIS database. Consumer ID numbers were used in place of names on all materials. All material was kept in a locked cabinet which was under the supervision of the principal investigator.

Fidelity Assessment. To assess the fidelity of the program, fidelity scoring information was gathered by interviewing the Employment Specialist assigned to the specific agency. The questions used in the interview were those included in the Supported Employment Fidelity Scale developed by Bond, Becker, Drake, and Vogler (1997) (see Appendix A). Each item on the fidelity scale has specific questions and the responses guide the rater to assign a score. The principal investigator created an interview protocol which expanded the questions included with the Fidelity Scale to facilitate tracking responses (see Appendix E). Two separate raters were present at the interview, each with her own fidelity scale and protocol to assign a score. One interviewer was designated as the principal interviewer who asked all questions on the protocol. The second interviewer was entitled to ask clarifying questions. Each rater used a scoring sheet to tabulate the total fidelity score (see Appendix E).

Raters were graduate research assistants who were trained in the areas of evidence-based practices, supported employment and fidelity. This training was presented in the form of a training manual developed by the principal investigator. The manual consisted of articles on the aforementioned topics as well as including the fidelity scale, protocol, and other relevant materials. The principal investigator met with the interviewers for a total of six hours over a period of four weeks to explain the topics and conduct three mock interviews.

The total amount of time to collect data was approximately one hour per site. All interviews were face to face and took place at the Steadfast SEP office with the exception of the Maui which required the interviewers to travel to Maui. One employment specialist was affiliated with two CMHCs and for this individual one interview was completed to

assess both the CMHCs. In this situation, each question was asked once, and the employment specialist answered regarding each agency independently. This interview also lasted approximately one hour because answers were often the same for both agencies.

Upon termination of the interview the Employment Specialist was thanked and fully debriefed about the study. Any questions and concerns were addressed. They were then informed that results of the study would be available to them if they were interested and written results would be provided to the Steadfast SEP upon completion of the study.

Analyses

Given the small sample size and nature of the ordinal data, descriptive and non-parametric statistics were used. General demographic data was reported including gender, ethnicity, age, and diagnosis.

Research Question #1: Does the fidelity scale demonstrate interrater reliability? To investigate the interrater reliability of the fidelity scale, Cohen's kappa test statistic was calculated for each interview for a total of six indices. The mean score was determined to provide an overall index of interrater reliability for the study. Cohen's kappa is a statistic used to assess interrater reliability when using categorical variables. In mental health research, the .6 criterion is generally accepted as a sufficient standard for acceptable interrater reliability.

Research Question #2: Does the supported employment program in Hawai'i achieve a high level of fidelity as demonstrated by cutoff scores on the fidelity scale? To investigate the adherence of Hawai'i 's Supported Employment program to the national

model, the Supported Employment Fidelity Scale was implemented at each of the six agencies to garner a score which represented an index of adherence to the national model.

Research Question #3: Is there a difference between fidelity scores from Hawai'i and fidelity scores from the national project? To determine if a relationship existed between the distribution of the fidelity scale scores from each agency and the distribution of the national fidelity scale scores, a Wilcoxon-Mann-Whitney test was computed. This statistical test is used to determine whether two independent groups have been drawn from the same population (Siegel & Castellan, 1988). This test assumes random and independent sampling with independent groups as well as a continuous dependent variable and at least an ordinal measurement scale. In this case, the two samples, X and Y represented Hawai'i's fidelity scores and the national fidelity scores, respectively. Within sample X, *m* represented the number of cases. Here, *m*=6, the number of agencies used in this study. Within sample Y, *n* represented the number of cases. Here, *n*=8, the number of agencies used in the national project. The statistic U is given by:

$$U_{obs} = n_x n_y + \frac{n_x(n_x+1)}{2} - T_a$$

in which n_x and n_y are the numbers of cases in the samples X and Y and T_a equals the total of the ranks for sample X.

Research Question #4: Is there a relationship between fidelity scores and consumer satisfaction with employment services? To determine if a relationship existed between fidelity scores and consumer satisfaction with employment services in each of the six agencies a chi-square was computed comparing each agency with the item from the consumer survey regarding satisfaction with services from the Steadfast SEP. The chi-square test statistic can be used when the data obtained fall into discrete categories.

This test can be used to determine if a significant difference exists between independent groups (Siegel & Castellan, 1988). In this case, the chi-square was used to determine if consumers were differentially reporting satisfaction with services delivered by the Steadfast SEP based on agency.

The chi-square was set up in an *r* x *c* contingency table where *r* represents rows and *c* represents columns. Specifically, *c* represented the frequency of each categorical response for each of the *r* different agencies. In this case, *c* represented the 1-5 Likert-type scale used to answer the question, "I am satisfied with the services I receive from Steadfast", where satisfaction incrementally increases with each number (e.g., 1=strongly disagree, 5=strongly agree). The chi-square statistic is given by:

$$X^2=\sum_{i=1}^{r}\sum_{j=1}^{c}\frac{(n_{ij}-E_{ij})^2}{E_{ij}}$$

in which

n_{ij}=the observed frequency in the cell corresponding to the intersection of the *ith* row and *jth* column

E_{ij}=the expected frequency in the cell corresponding to the intersection of the *ith* row and *jth* column

r=number of rows

c=number of columns

Degrees of freedom *(df)* was determined using the formula:

$$df = (r-1)(k-1)$$

given r=columns and k=rows. Thus, (5-1)(6-1) equals 20 degrees of freedom.

To determine if differences existed between those agencies that scored high and low, a second chi-square was calculated. This grouping collapsed the three lowest scoring

agencies into one group and collapsed the three highest scoring agencies into another. This grouping was chosen because scores were not expected to vary greatly because scores ultimately reflect the single Steadfast SEP model. Degrees of freedom *(df)* was determined using the formula:

$$df = (r-1)(k-1)$$

given r=columns and k=rows. Thus, (5-1)(2-1) equals 4 degrees of freedom.

A sample size of 60 was targeted for number of consumers to participate in this study. However, as of October, 2004, the number of employed consumers with the Steadfast SEP was 80 with 100 searching for work. Although a sample of 131 was established using statistical power analysis (Cohen, 1977), the total number was not large enough to meet this minimum. Thus, non-parametric statistics was utilized for this study.

Research Question #4a: Do participants perceive an effect of employment on quality of life? To determine these ratings, mean scores from each question of the second section of the consumer survey were tabulated for each agency.

Research Question #4b: How do participants rate the frequency of appropriate employment services? To determine these ratings, average scores from each question of the third section of the consumer survey were tabulated for each agency.

Research Question #5: Is there a relationship between ethnicity and consumer satisfaction with employment services? To determine if a relationship existed between satisfaction with services and ethnicity, one chi-square test statistic was computed. The chi-square was set up in an $r \times c$ contingency table where r represented rows and c represented columns. Specifically, c represented the frequency of each categorical response for each of the r different ethnicities. The ethnicities to be used for this analysis

were based on the Steadfast SEP's categorization of ethnicity, which include Hispanic/Latin, American Indian, Alaskan Native, Black/African-American, White, Native Hawaiian/Pacific Islander, Asian, and Other. However, due to low frequencies per category, the Hispanic/Latin, American Indian, Alaskan Native, and Other categories were collapsed into one group ("Other"), totaling five classifications. In this case, *c* represented the 1-5 Likert-type scale used to answer the question, "I am satisfied with the services I receive from Steadfast", where satisfaction incrementally increases with each number (e.g., 1=strongly disagree, 5=strongly agree). The chi-square statistic is given by:

$$X^2=\sum_{i=1}^{r}\sum_{j=1}^{c}\frac{(n_{ij}-E_{ij})^2}{E_{ij}}$$

in which

n_{ij}=the observed frequency in the cell corresponding to the intersection of the *ith* row and *jth* column

E_{ij}=the expected frequency in the cell corresponding to the intersection of the *ith* row and *jth* column

r=number of rows

c=number of columns

Degrees of freedom *(df)* was determined using the formula:

$$df=(r-1)(c-1)$$

given r=rows and c=columns. Thus, (5-1) multiplied by (5-1) equals 16 degrees of freedom.

Research Question #5a: Is there a relationship between ethnicity and perception of cultural sensitivity in delivery of employment services? To determine if a relationship existed between ethnicity and perception of culturally sensitive service delivery, one chi-

square test statistic was computed. The chi-square was set up in an *r* x *c* contingency table where *c* represented the frequency of each categorical response for each of the *r* different ethnicities. In this case, *c* represented the 1-5 Likert-type scale used to answer the question, "My employment specialist is sensitive to my cultural/ethnic background when providing services", where satisfaction incrementally increases with each number (e.g., 1=strongly disagree, 5=strongly agree). The chi-square statistic is given by:

$$X^2=\sum_{i=1}^{r}\sum_{j=1}^{c}\frac{(n_{ij}-E_{ij})^2}{E_{ij}}$$

in which

n_{ij}=the observed frequency in the cell corresponding to the intersection of the *ith* row and *jth* column

E_{ij}=the expected frequency in the cell corresponding to the intersection of the *ith* row and *jth* column

r=number of rows

c=number of columns

Degrees of freedom *(df)* was determined using the formula:

$$df = (r-1)(c-1)$$

given r=rows and c=columns. Thus, (5-1) multiplied by (5-1) equals 16 degrees of freedom.

CHAPTER 3
RESULTS

Due to the small sample size, missing data were excluded on an analysis by analysis basis to maximize the analyzable data. Also, because of the small number of participants in some agencies, some analyses were collapsed.

Research Question #1: Does the fidelity scale demonstrate interrater reliability?

To investigate the interrater reliability of the Fidelity Scale, a Cohen's kappa test statistic was calculated for each interview. Each Kappa value from each agency met the .6 criterion, indicating adequate agreement. The results from these calculations are presented in Table 3.

Table 3.

Interrater Reliability for Each Agency

	Kappa Value
Agency #1	.62
Agency #2	1.00
Agency #3	.84
Agency #4	.84
Agency #5	.70
Agency #6	.83
All Agencies	.81

Research Question #2: Does the supported employment program in Hawai'i achieve a high level of fidelity as demonstrated by cutoff scores on the fidelity scale?

To investigate this research question, the Supported Employment Fidelity Scale was implemented at six CMHCs in the state of Hawai'i. Overall, the supported employment program in Hawai'i did not achieve a high level of fidelity as scores generally fell within the category of "Fair Supported Employment" as indicated by a total score of 56 to 65 points. Two (Agencies #3 and #4) of the six agencies fell within the "Not Supported Employment" category which is indicated by a score of 55 points or less. These total fidelity scores are indicated in Table 4.

Means for each question from the fidelity scale generally fell within the 3 to 4 point range on a scale from 1 to 5. Of note were the scores from the Organization subsection. These scores were lower than the other items with two questions scoring one point indicating that item is not consistent with the Supported Employment model. All scores are indicated in Table 4.

Table 4.

Fidelity Scale Scores for Six Agencies in the State of Hawai'i

	A1[a]	A2	A3	A4	A5	A6	Mean
Staffing							
Caseload Size	5.0	5.0	5.0	5.0	4.0	5.0	4.8
Vocational Services Staff	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vocational Generalists	4.5	5.0	4.5	4.5	4.5	4.5	4.6
Organization							
Integration w/MH team	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Vocational Unit	3.0	3.0	2.0	2.0	3.0	5.0	3.0
Zero-Exclusion	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Services							
On-going Assessment	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Rapid Job Search	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Individualized Job Search	5.0	5.0	1.0	5.0	5.0	5.0	4.3
Diversity of Jobs	5.0	4.0	1.0	1.0	3.5	5.0	3.6
Permanence of Jobs	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Jobs as Transitions	5.0	5.0	4.5	4.5	5.0	5.0	4.8
Follow-Along Support	4.0	5.0	5.0	5.0	5.0	5.0	4.8
Community-Based Services	5.0	3.0	5.0	1.0	4.0	5.0	3.8
Engagement and Outreach	3.0	5.0	3.0	3.0	2.5	3.0	3.6
Total Mean	4.1	4.1	3.5	3.5	3.9	4.3	4.0
Total Fidelity Score	61.5	62.0	53.0	53.0	58.5	64.5	

Note. 66-75=Good Supported Employment Implementation; 56-65=Fair Supported Employment Implementation; 55 and below=Not Supported Employment.
[a]A1=Agency #1, A2=Agency #2, etc.

Research Question #3: Is there a difference between fidelity scores from Hawai'i and fidelity scores from the national project?

To investigate if a relationship existed between the distribution of the fidelity scale scores from each agency and the distribution of the national fidelity scale scores, a Wilcoxon-Mann-Whitney test was computed. The test was significant with a Z-value of -

2.989 and p=.001. However, because the statistics program did not correct for tie scores, a Kolmogorov-Smirnoff test was also calculated. Similar to the Wilcoxon-Mann-Whitney test, this test can determine if two independent samples have been drawn from the same population (Siegel & Castellan, 1988). However, rather than using rank order scores, this test uses cumulative distributions. Results from this test also indicated a significant difference with a Kolmogorov-Smirnov Z score of 1.62 and p=.005. Because this question was simply investigating presence of a relationship and the study is exploratory in nature, a two-tailed test was used setting the alpha level at .10 ($\alpha = .10$). This alpha level was set somewhat large to capture any relationship. These scores are indicated in Table 5.

Table 5.

Relationship of Fidelity Scale Scores between Hawai'i and National Data

	Total Scores
Mann-Whitney Test	
Z	-2.989
Exact Significance (2-tailed)	.001[a]
Two-Sample Kolmogorov-Smirnov Test	
Kolmogorov-Smirnov Z	1.620
Exact Significance (2-tailed)	.005

[a]Not corrected for ties.

These results indicate that the distribution of the fidelity scores garnered for this study and the distribution of national fidelity scale scores differed significantly and were not drawn from the same population. This may suggest that the employment programs from which the scores were garnered differed significantly. Because this research question only implied presence of a relationship, direction of the relationship was not determined. Table 6 indicates the total fidelity scores from this study (n=6) as well as the fidelity scores used in this analysis from the national project (n=8). In general, the overall mean scores from the national project are higher than those gathered for this study.

Table 6.

Total Fidelity Scores from Hawai'i's Program and the National Project

	Hawai'i	National
Agency #1	61.5	71
Agency #2	62	69
Agency #3	53	71
Agency #4	53	70
Agency #5	58.5	68
Agency #6	64.5	64
Agency #7		69
Agency #8		71

Note. 66-75=Good Supported Employment Implementation; 56-65=Fair Supported Employment Implementation; 55 and below=Not Supported Employment.

Research Question #4: Is there a relationship between fidelity scores and consumer satisfaction with employment services?

To determine if a relationship exists between fidelity scores and consumer satisfaction with employment services, a chi-square was computed comparing each of the six agencies with the item on the consumer survey regarding satisfaction with services from the Steadfast SEP. However, upon running this analysis, 83.3% of the cells in the matrix did not have the minimum expected count, violating an assumption of the test, thus making the calculated results invalid. An extension of this research question was to calculate the chi-square again dividing the agencies into the highest and lowest scoring groups. This grouping may also correct the expected count violation. Agencies 3, 4, and 5 were included in the lowest scoring group and Agencies 1, 2, and 6 were collapsed into the highest scoring group and the chi-square calculated. Unfortunately, the minimum expected count assumption was also violated.

To resolve this problem, the responses to the satisfaction question were collapsed into two categories (Disagree, Agree). The responses of Strongly Disagree, Disagree, and Neutral were collapsed into a Disagree (unsatisfied) category, and the Agree and Strongly Agree responses were collapsed into an Agree (satisfied) category. This collapsing was intended to group similar responses together, and to increase counts for each cell. The majority of responses for this question fell within the Agree and Strongly Agree response options, thus it seemed reasonable to group the remaining responses together to maximize the count so the statistical test would produce valid results. This collapsing created a contingency table with two rows and two columns, changing the degree of freedom from 16 (all agencies and all response options) to 1. This chi-square analysis did not violate

any assumption, and results indicated non-significance with a chi-square value of .195 and p=.66. These non-significant results indicate that satisfaction with services and fidelity scores appear to be independent. That is, receiving mental health services from a particular agency did not seem to influence responses to the question. However, it should be noted that these scores did not vary considerably across sites.. Therefore, categorizing agencies into highest and lowest scores may have had limited minimal utility. Descriptively, the majority of the participants agreed that they were satisfied with the services they received from the Steadfast SEP. Results from this 2x2 analysis are presented in Table 7.

Table 7.

Satisfaction among Participants Divided by Location

Scoring	Agree (n = 57)	Disagree (n = 15)	X^2
Lowest	23	7	.195*
Highest	34	8	

*p=.66

Based on results, two agencies scored within the "Not Supported Employment" range. It would seem logical to run this analysis dividing the agencies into those that scored within the "Not Supported Employment" and those that scored within the "Fair Supported Employment" range. This post-hoc analysis was calculated but was invalid due to the aforementioned violation of the minimum expected cell count.

Research Question #4a: Do participants perceive an effect of employment on quality of life?

To investigate this research question, each question from the second part of the consumer survey was averaged within each agency. This section of the survey inquired about general quality of life domains such as finances, leisure time, housing, and family. Total mean scores for each item ranged from 3.7 to 4.3 with a possible range of 1=strongly disagree to 5= strongly agree. Regarding total mean scores, the highest mean score (4.3) involved feeling better about oneself and the lowest mean score (3.7) involved symptom improvement. Total mean scores regarding having more money to spend, knowing more about skills and limitations, and making some new friends, all fell within the Agree category. Items regarding doing better with leisure time, improved housing situation, and improved family relations fell on the cusp of Neutral and Agree.

Looking across agencies, total mean scores across agencies ranged from 3.8 to 4.2 indicating that participants within each agency generally agreed with the statements posed to them. Individual item mean scores ranged from 3.0 to 4.5. Agency #3 had the highest mean scores for having more money to spend, feeling better about oneself, knowing about skills and limitations, and making new friends. Agency #4 had the highest mean scores for having more money to spend, doing better with leisure time, improved housing situation, and improved family relations. Finally, Agency #6 had the highest mean score for the item inquiring about symptom improvement.

Because participants could choose not to answer any question, some questions had missing data, thus varying the number of cases used in each question. This was done rather than remove all participant's data from all analyses to maintain consistency with

the decision to use the analysis by analysis option for missing data and maximize sample size. The average agency scores are found in Table 8.

Table 8.

Means by Agency for Each Question Pertaining to Quality of Life

	A1[a] (n=11)	A2 (n=17)	A3 (n=2)	A4 (n=6)	A5 (n=22)	A6 (n=14)	All (n=72)
	M(S.D.)	M(S.D.)	M(S.D.)	M(S.D.)	M(S.D.)	M(S.D.)	M(S.D.)
More Money to Spend	4.0(1.1)	3.9(1.1)	4.5(0.7)	4.5(0.5)	4.2(1.0)	3.9(1.3)	4.1(1.0)
Feel Better about Myself	4.2(0.9)	4.3(0.6)	4.5(0.7)	4.2(0.8)	4.4(1.0)	4.4(0.5)	4.3(0.8)
Do Better with Leisure	4.1(1.1)	3.8(1.2)	3.5(0.7)	4.3(0.8)	3.8(0.9)	4.1(0.7)	3.9(1.0)
Housing Has Improved	3.7(1.1)	3.7(1.2)	3.0(1.4)	4.3(0.8)	3.7(1.0)	4.1(0.8)	3.8(1.0)
Know Skills/Limitations	4.3(0.6)	3.9(1.0)	4.5(0.7)	4.3(0.8)	4.0(1.2)	4.3(0.8)	4.1(1.0)
Made New Friends	3.8(1.1)	3.9(1.2)	4.5(0.7)	4.0(0.6)	4.0(1.1)	4.4(0.5)	4.0(1.0)
Symptoms Better	3.8(1.1)	3.7(1.0)	3.0(1.4)	3.8(1.2)	3.4(1.4)	4.1(1.0)	3.7(1.1)
Family Relations Improved	3.9(0.9)	3.5(0.9)	4.0(1.4)	4.2(0.8)	3.8(1.1)	3.9(0.8)	3.8(0.9)
Total Mean	4.0	3.8	3.9	4.2	3.9	4.2	4.0

Note. 1=Strongly Disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly Agree
[a] A1=Agency #1, A2=Agency #2, etc.

Research Question #4b: How do participants rate the frequency of appropriate employment services?

To investigate presence of services, each question of the third section of the consumer survey was averaged among participants within each agency. These items were intended to capture the principles of the Supported Employment model. Total mean scores for each item ranged from 3.8 to 4.4 with a possible range of 1=never to 5=always. Looking at these total mean scores, the highest mean score (4.4) pertained to convenience of meetings. The lowest total mean score (3.8) pertained to support for job change. The remaining four items all fell within the "Usually" range.

Total mean scores across agencies ranged from 3.9 to 4.3 indicating that participants within each agency generally answered that services were "Usually" present. Individual item mean scores across agencies, ranged from 3.0 to 4.8. Agency #3 had the highest mean scores for necessary supports and support for job change. Agency #5 had the highest mean scores for convenience of meetings, community-based services, and client job preferences. Finally Agency #6 had the highest mean scores for interests, skills assessed and necessary supports.

Similar to Research Question #4a, some participants chose not to answer some questions, thus the missing data was treated on an analysis by analysis basis. The results of these calculations are found in Table 9.

Table 9.

Means by Agency for Each Question Pertaining to Presence of Services

	A1[a] (n=11)	A2 (n=17)	A3 (n=2)	A4 (n=6)	A5 (n=22)	A6 (n=14)	All (n=72)
	M(S.D.)	M(S.D.)	M(S.D.)	M(S.D.)	M(S.D.)	M(S.D.)	M(S.D.)
Convenience of Meetings	3.9(1.5)	4.4(0.8)	4.5(0.7)	4.2(1.3)	4.8(0.4)	4.6(0.8)	4.4(0.9)
Community-Based Services	3.6(1.6)	4.1(1.2)	3.0(2.8)	3.3(1.6)	4.5(1.0)	4.1(1.5)	4.1(1.4)
Interests, Skills Assessed	4.1(1.2)	4.2(1.1)	4.5(0.7)	4.2(1.0)	4.3(0.9)	4.6(0.8)	4.3(1.0)
Client Job Preferences	4.2(1.0)	4.2(0.9)	3.0(1.4)	4.0(1.2)	4.3(1.0)	3.8(1.5)	4.1(1.1)
Necessary Supports	4.4(0.7)	4.1(1.3)	4.5(0.7)	4.3(0.8)	4.1(0.9)	4.5(0.7)	4.3(0.9)
Support for Job Change	3.4(1.5)	4.2(1.3)	4.5(0.7)	3.2(1.5)	3.6(1.5)	4.2(1.3)	3.8(1.4)
Total Mean	3.9	4.2	4.0	3.9	4.3	4.3	4.2

Note. 1=Never; 2=Rarely; 3=About half the time; 4=Usually; 5=Always.
[a] A1=Agency #1, A2=Agency #2, etc.

Research Question #5: Is there a relationship between ethnicity and consumer satisfaction with employment services?

To investigate this research question, one chi-square test statistic was computed. However, when including all ethnicity groups and question responses 80.0% of the cells had an expected count less than the minimum expected count, violating an assumption of the test statistic, and making the results unreliable. Thus both variables were collapsed into two groups each creating a 2x2 contingency table and changing the degrees of freedom from 16 to 1. Again satisfaction responses were collapsed into two categories, Agree and Disagree, combining the Agree and Strongly Agree responses into the Agree category, and combining the Neutral, Disagree, and Strongly Disagree responses into the Disagree category. Ethnicity was divided into two groups, including the Asian-American group, and the other including the European-American, African-American, Pacific Islander/Native Hawaiian, and Other groups. This separation was based on using the group which comprises the population with the greatest majority in the state of Hawai'i (U.S. Census Bureau, 2005).

Despite this grouping, a percentage (25.0%) of the cells did not meet the minimum expected cell count making the results unreliable. Because results were unreliable, no conclusions can be drawn.

Research Question #5a: Is there a relationship between ethnicity and perception of cultural sensitivity in delivery of employment services?

To investigate this research question, one chi-square test statistic was computed. Similar to findings in the aforementioned analysis, results were invalid due to 76.6% of the cells not having the expected cell count. Again, both variables were collapsed into

two groups to create a 2x2 contingency table and changing the degrees of freedom to 1. Ethnicity was collapsed into two groups, one including the Asian-American group and the other including the European-American, African-American, Pacific Islander/Native Hawaiian, and Other groups. The item responses pertaining to culturally sensitive services were collapsed into two groups, one with the Agree and Strongly Agree responses included in the Agree group and the Neutral, Disagree and Strongly Disagree responses included in the Disagree group. Despite this re-grouping, 50.0% of the cells did not meet the minimum expected cell count. Thus results were considered invalid.

CHAPTER 4
DISCUSSION

This study was exploratory largely due to the fact that Hawai'i 's Supported Employment program has never been formally examined.

Research Question #1: Does the fidelity scale demonstrate interrater reliability?

Results indicated that the scale has adequate interrater reliability properties. These results provide further support of the Supported Employment Fidelity Scale as a reliable instrument. These results also suggest that the training provided to the fidelity raters was sufficient to attain interrater reliability.

Research Question #2: Does the supported employment program in Hawai'i achieve a high level of fidelity as demonstrated by cutoff scores on the fidelity scale?

Findings from this study indicate that the Supported Employment program in Hawai'i did not achieve a high level of fidelity. Specifically, four of the six fidelity ratings scored within the "Fair Supported Employment" range, and two scored within the "Not Supported Employment" range. The "fair" rating indicates that the program is only partially consistent with Supported Employment principles. Interestingly, the two ratings which scored in the "Not Supported Employment" range had the same score and the same employment specialist. These two agencies also had the fewest number of participants (two and six, respectively, compared to at least ten from the other agencies), which may have impacted the fidelity scores. Importantly, these agencies had fewer supported employment clients than the others, and thus had fewer potential participants. It would be beneficial to sample an equal number of participants across agencies to eliminate this potential confound in the future.

These scores only provide a snapshot of the Steadfast SEP. This was the first formal assessment since the program's inception in December, 2000. Therefore, these findings could serve as a baseline for future studies, and individualized agency fidelity reports can provide important feedback to the Steadfast SEP.

Upon examination of individual item scores, it appears that the Steadfast SEP scored low in the Organization section. Specifically, the questions regarding integration with the mental health treatment team and the zero-exclusion criteria were consistently scored low. Perhaps these scores are related to the fact that the employment service office is separate from the CMHC. If the employment specialist is not on-site, then it may be more difficult to be integrated into the mental health treatment team and to include all consumers in the supported employment program.

Research Question #3: Is there a difference between fidelity scores from Hawai'i and fidelity scores from the national project?

Results from both the Wilcoxon-Mann-Whitney test and the Kolmogorov-Smirnov test indicated that the local and national programs differ significantly. One potential source of variance could be the time frame with which the data were collected. The local program was in effect for six years before this evaluation, whereas time between inception and fidelity assessment for the national project ranged from six to 18 months. Perhaps the newer programs are taking more care to adhere to the principles of the Supported Employment model whereas the Steadfast SEP's adherence to the model may have declined over time, especially without the presence of fidelity monitoring.

It is also possible that the difference in scores is due to the location of the employment office. Looking at the local scores, across all agencies, the score from this

item on the fidelity scale (Item 1, Organization subscale) consistently confirmed that the employment service is separate from the mental health treatment (i.e., score of 1 on a 1 to 5 scale where 1=not implemented to 5=fully implemented). Separate offices may reinforce the employment specialist's role as only providing employment services, and remove the possibility of collaboration on the treatment team. According to the model, the employment specialist should be part of the treatment team, working closely with the consumer as well as the psychiatrist, social worker, or whoever is involved with treatment. Integration with the mental health treatment team was moderately (.35) correlated with consumer outcomes in a study by Becker, Smith, Tanzman, Drake, and Tremblay (2001).

It is also possible that the programs differ because the national scores were from a national project which was devoted to assessing the utility of a Supported Employment implementation toolkit. Being involved in such a project, the participants may have worked harder to maintain all facets of the Supported Employment model. Finally, differences in scores could be due to differential modes of data collection. The current study relied on interviews with Supported Employment specialists whereas the national project utilized data from consumer and practitioner interviews, chart reviews, and site visits to determine program fidelity. Thus, the methodology differences may have resulted in significantly different scores.

Research Question #4: Is there a relationship between agency and consumer satisfaction with employment services?

Results suggested no significant differences across agencies in terms of satisfaction with services. Valid results were only obtained after collapsing the agencies

into two groups, lowest and highest scoring groups, and collapsing question responses into two groups, Agree and Disagree. Perhaps some potential variance was lost in combining the agencies and responses.

This question was conceptualized to determine if participants were differentially reporting satisfaction with employment services based on the agency fidelity to the Supported Employment model. Findings suggest fidelity score and satisfaction with services appear to be independent and may suggest that employment services are being uniformly provided by each employment specialist, particularly for those agencies with similar fidelity scores.

Examining simple frequencies, the majority of participants (57 of 72) seemed to agree that they were satisfied with the employment services they received. Despite the fact that the Steadfast SEP did not achieve a high level of fidelity, participants appeared to be generally satisfied with the employment services. These consumers may perceive services to be satisfactory despite fidelity to the Supported Employment model.

Inquiring about satisfaction would be an important outcome to measure because Supported Employment services are intended to be individualized. For example, an index of a successful traditional employment program is evidence of increased number of hours worked or wages. However, in a Supported Employment program, each client has his/her own work goals which may not include earning large amounts of money. Thus, in some respect, gauging satisfaction with services is a more accurate indicator of the success of a Supported Employment program.

While these results are positive, the results are based on one general question. It may be worthwhile to examine which components of the Supported Employment model

make the service satisfactory. Subjective identification of important components may be useful to create an effective employment program.

Research Question #4a: Do participants perceive an effect of employment on quality of life?

Participants appeared to generally agree that working helped to improve some aspects of their life with total means across agencies for each statement falling between 3.7 and 4.3 (total range 1.0 to 5.0). Simply comparing highest and lowest means from all agencies combined, the highest mean (4.3) involved participants agreeing that employment helped them to feel better about themselves. This is consistent with other studies that have found that consumers who work had significantly higher self-esteem than those who did not work (VanDongen, 1996).

Results suggest that participants agreed employment was a positive influence in feeling better about themselves. This may indicate that working gives someone a sense of purpose or feeling like he or she contributes to the community. Often, psychosocial rehabilitation programs focus on the mental illness by teaching medication management or symptom reduction. However, employment focuses on the person and the Supported Employment program is not illness-driven. Perhaps this shift in focus reminds the consumer he or she is capable of being more than just an "illness" and thus employment may in part increase feelings of self worth.

The lowest mean (3.7) score fell between Neutral and Agree on the idea that employment helped symptoms related to mental illness. Considering this score as positive, the improvement in symptoms may be due to the notion that employment takes the focus away from the mental illness and provides distraction from symptoms.

However, this score also represents some disagreement about the effect of work on improving symptoms. Thus, it would be important to examine the relationship between employment and symptom reduction in future research.

Research Question #4b: How do participants rate the frequency of appropriate employment services?

Based on total mean scores averaged across agencies, participants generally rated the employment services as "Usually" present. The "usual" presence of services may be considered positive, given the Steadfast SEP has been in service for six years and service delivery can fall from standards when not consistently assessed. Additionally, the opinion that services are "Usually" present may provide complementary support to the accuracy of the fidelity scores which fell within the "Fair" implementation range. For example, if there was disagreement between fidelity scores and client perception of service frequency (e.g., "Fair" implementation and services "Never" present), that finding may be an indicator that the assessment instrument is faulty or perhaps services are not being provided as indicated in the interviews. If findings indicate the same level of implementation it may suggest that services are being provided as indicated by the fidelity scores.

This "Usually" present response may also suggest that those agencies which scored in the "Not Supported Employment" range have some level of Supported Employment. These suggestions are based on the notion that the items from the consumer survey measure the constructs in which they were intended. However, the consumer survey used in this study has no psychometric properties, thus, findings should be interpreted with caution.

Examining total means by item, the highest mean (4.4) was associated with the item pertaining to convenience of meetings and the lowest mean (3.8) pertained to support for job change. The highest mean may indicate that this item was most consistently implemented based on the opinions of the consumer participants. The lowest mean may indicate this item was the least consistently implemented. Interestingly, the corresponding item regarding support for job change on the Fidelity Scale had a mean score of 4.8 (on a 5-point scale) indicating close to full implementation of the component. Thus, consumers and employment specialists appear to have very different views on this item.

Although scores did not seem to differ greatly in the present study, it may be worthwhile to investigate if services differ by agency. For example, Agency #5 had three of the highest means among agencies. Even though findings may reflect the individual employment specialist, and the Fidelity Scale was not intended to evaluate individuals, results may provide useful information for individual performance improvement, as well as program improvement.

Research Question #5: Is there a relationship between ethnicity and consumer satisfaction with employment services?

Results from the chi-square analysis were invalid due to an assumption violation of the test statistic. To bypass this problem in future research, more participants should be recruited so all assumptions of the test statistic will be met. Ideally, a diverse sample should be targeted so collapsing of ethnic groups will not be needed. Collapsing these groups may occlude differences that may exist within each group and among agencies.

Research Question #5a: Is there a relationship between ethnicity and perception of cultural sensitivity in delivery of employment services?

Results from the chi-square analysis were invalid due to an assumption violation of the test statistic. Future research should target to recruit more participants so no test statistic assumptions will be violated. Recruiting more participants would likely increase ethnic diversity thus not requiring the collapsing of groups. Representation of ethnic groups may highlight differences that may exist within groups which may have been obscured with the collapsing of groups.

Examining simple frequencies, the majority of participants (64 of 69) seemed to agree that their employment specialist was sensitive to their cultural background when working with them. Given this finding, it may be worthwhile to investigate what these participants believe the employment specialists are doing to be culturally competent. Identification of relevant actions may then help to ensure delivery of culturally appropriate employment services.

Limitations

A large limitation of this study was the use of only one program. Although six fidelity interviews were conducted in six different agencies, they were conducted with employment specialists employed by the Steadfast SEP. Thus, scores ultimately reflected the Steadfast SEP and the employment specialist assigned to that agency. Other employment agencies were contacted for participation in the study, but declined for confidentiality reasons. The participation of other employment programs would provide more convincing evidence for the effectiveness of the Supported Employment model as well as stronger psychometric properties for the Fidelity Scale.

In addition, the sample size for this study was small. Sample size could have been increased with the inclusion of any client of the Steadfast SEP, as the program provides employment services in agencies other than AMHD-funded ones. A larger sample would have also increased the power of the study. Increasing sample size may also have been possible if the Steadfast SEP was examined as a whole and compared to another employment program.

The sample only included CMHCs located on Oahu and Maui although the Steadfast SEP exists on the Island of Hawai'i . This program was not included in this study because of the recency of program implementation and minimal number of eligible consumers. To get a more accurate evaluation of the Steadfast SEP as it is implemented in CMHCs, inclusion of this CMHC would be important. The inclusion of this program would also serve as another example of services provided in a rural area.

This study did not include outcome measures in the form of work data such as hours worked, number of jobs worked, or wages earned. Only subjective outcomes were gathered. Although opinions from consumers who are receiving services are a valuable gauge of satisfaction, to establish effectiveness of the program and the model, the inclusion of objective data would also be beneficial. Additionally, this inclusion is important because depending on the measure under investigation, the subjective data may be positively or negatively skewed. Direct, observable outcomes are less vulnerable to bias.

This study only garnered fidelity information via interviews with the employment specialists. Each item on the Fidelity Scale is followed by a listing of possible sources to get information for that item (e.g., interview, vocational logs, management information

system). At the time of fidelity monitoring, interviewing was determined the best method for gathering information due to the unavailability of other sources. In fact, the database that was used did not have adequate information to properly contribute to a fidelity score. Additionally, although the Fidelity Scale was created to be as objective as possible by incorporating behavior-based anchor points, interviews by nature may provide biased results. For example, the social desirability bias suggests a tendency to present oneself favorably, and job performance, in particular, may encourage this tendency. In this study, interviews were ideal and scores did vary; however, using interviews as the sole source of information was less reliable and valid than using multiple data sources to corroborate scores.

Another limitation of the study was the use of a consumer survey which has no established psychometric properties. It was created specifically for this study by the principal investigator. Although the quality of life section was adapted from a standardized national survey as well as an unpublished scale developed by a consumer, there was no measure of reliability or validity. However, some research suggests that instruments developed specifically for a research purpose may be more effective in detecting the criterion under investigation than any standardized or published measures (Wilson & Lipsey, 2001).

Future Directions

An important component for future research would be the inclusion of a comparison group. This addition would attest to the effectiveness of the Steadfast SEP in finding competitive employment for consumers. Additionally, the use of a comparison program would lend support for the Supported Employment model in general. The

inclusion of other programs would also help to confirm the validity and reliability of the Supported Employment Fidelity Scale, especially in establishing its use in Hawai'i .

It would also be helpful to include actual work data in future research. Although consumer opinions about service is a useful and important outcome, unbiased data such as total hours worked or length of time in an employment position would provide objective evidence for the effectiveness of the program over other approaches to employment services. Additionally, given the goals of the Model, such as rapid job search, objective data can support that the principles are being met.

Additionally, using other sources of data to determine fidelity scores would be important to ensure reliability of scores. Although the interviews performed for this study garnered a reliable score, they introduce a level of subjectivity. Data from documents such as policies and procedures may provide an objective source of information. In particular, interviews with consumers would be helpful. Not only would these interviews provide information for an overall fidelity score, but they could serve as an outcome measure. For example, in this study the consumer survey was developed to capture the principle of Supported Employment. In future studies, perhaps this survey could be re-worked to reflect the nine items from the Services subsection of the fidelity scale and a correlation between consumer scores and agency scores could be investigated. This study would provide a picture of consumer and agency perceptions of fidelity to the model, and highlight differences.

This study, like others discussed, only used one fidelity assessment, which provided a "snapshot" of how the supported employment program is adhering to the model at one point in time. To improve the validity and reliability of the scale, a

longitudinal study would be useful to track changes over time. The current data may provide a useful baseline for follow-up studies.

Finally, providing participants the opportunity for comments via qualitative interviewing may help illuminate differences between consumer and employment specialist scores. Soliciting specific opinions can also help to improve the employment services model.

Appendix A

Supported Employment Implementation Questions and Fidelity Scale

Supported Employment

Supported Employment Fidelity Scale—Implementation Questions
(Bond, Becker, Drake, & Vogler, 1997)*

Score Sheet

To complete the supported employment fidelity scale the rater obtains objective information from a variety of sources, including agency records, employment specialists, other practitioners and supervisors, program managers, and consumers. Individual meetings are recommended. Listed below are suggested questions that can be used to elicit information. The rater tries to obtain accurate information and not lead respondents to the desired answers that may not reflect the actual practice at the site. The format for interviewing is conversational and the questions listed here are not meant to be used as a structured interview. Information to make the ratings is not necessarily obtained in the order that the items are listed on the scale.

Staffing

1. Caseload size

- Does each vocational staff person have a discreet caseload?
- How many clients does each vocational staff person (full-time equivalent) have on his/her caseload?
- How often does the vocational staff person meet with each person on the caseload? Approximately how long do clients stay on the caseload? When is a client removed from the caseload?

2. Vocational services staff

- Does any of the vocational staff provide other services besides vocational, such as case management, day programming, or residential services?
- How much of their time do they provide non-vocational services?

3. Vocational generalists

- Do different vocational staff persons provide different aspects of the vocational service? For example, one person only does job development or one person only does job support. What different aspects of the vocational process does each provide?

* retrieved February 10, 2005 from
http://mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/employment/SEfidelityscale.asp

Organization

1. Integration of rehabilitation treatment with mental health treatment

- Do vocational workers interact with case managers about their mutual clients?
- In what situations do they interact and how regularly (meetings, telephone, etc.)?
- Are vocational workers assigned to work with specific case managers or case management teams?
- Do they participate in shared decision making about client services? Who (staff) makes the final decision?
- Where are the offices located for case managers and for vocational workers?

2. Vocational unit

- Do the vocational workers have the same supervisor?
- Do the vocational workers meet as a group for supervision? How often?
- Do the vocational workers provide services for each others' clients?

3. Zero exclusion criteria

- What are the criteria to be eligible to receive vocational services?
- Who makes referrals?
- Who conducts the screening?
- Are there provisions made for being sure no one is excluded?
- What is the rate of referral?

Services

1. On-going, work-based vocational assessment

- Does the program include vocational evaluation procedures?
- What type of assessment procedures do you use and in which settings?
- Are their certain assessment procedures that must be completed prior to obtaining a competitive job, e.g. testing, prevocational work adjustment?
- How much preplacement assessment do you do?
- How much time is spent on vocational assessment?

2. Rapid search for competitive job

- What is the average length of time between when a person begins the program and the first contact with a competitive employer? What is the range of time?
- What is the philosophy of the program about when to start the job search? Are there steps in the program that people take before starting to look for a job?

3. Individualized job search

- How is it decided which jobs are identified in the job search? Who makes these decisions? What information is it based on?
- How has the nature of the job market affected the type of jobs clients obtained?

4. Diversity of jobs developed

- Does the vocational worker ever suggest to clients that they work at the same job setting as other clients? What percentage of clients works in the same job settings?
- Does the vocational worker ever suggest to clients that they obtain the same type of job as other clients? What percentages of clients have the same type of work?

5. Permanence of jobs developed

- What percentage of the jobs that the vocational worker suggests to clients are permanent, competitive jobs?
- Does the vocational worker ever suggest jobs that are temporary, time-limited, or volunteer? How often?

6. Jobs as transitions

- Do vocational workers help clients to find another job when one ends?
- What percentage of the vocational worker's clients who have ended jobs have been provided assistance in finding another job?
- What are reasons a vocational worker would not help a client find another job when one has ended? (e.g., client was fired due to poor attendance, problems with substance abuse?)

7. Follow-along supports

- Does the vocational worker provide follow-along supports to the client and the employer? What kind of supports?
- What percentage of working clients has follow-along supports provided?
- Is there a time limit for providing supports?

8. Community-based services

- Where do the vocational workers spend most of their time?
- What percentage of their time is spent outside the mental health facility? (Ask the vocational worker to review how she spends her time over the last couple of days to determine location of services.)

9. Assertive engagement and outreach

- Does the vocational worker provide any outreach if a client does not engage or drops out of services?
- What kinds of outreach are provided? How often are outreach attempts made? Is there a time limit to providing outreach if a client stops attending? What is the time limit?

SUPPORTED EMPLOYMENT FIDELITY SCALE*

(Bond, Becker, Drake, & Vogler, 1997)**

Rater:

Site:

Date:

Total Score:

Directions: Circle one anchor number for each criterion.

*Formerly called IPS Model Fidelity Scale

**retrieved February 10, 2005
from http://mentalhealth.samhsa.gov/cmhs/communitysupport/
toolkits/employment/SEfidelityscale.asp

*** See end of document for key

Criterion	Data Source***	Anchor
STAFFING		
1. Caseload size: Employment specialists manage vocational caseload of up to 25 clients.	VL, MIS, DOC, INT	1 = Ratio of 81 or more clients/employment specialist. Or Cannot rate due to no fit. 2 = Ratio of 61-80 clients/employment specialist. 3 = Ratio of 41-60 clients/employment specialist. 4 = Ratio of 26-40 clients/employment specialist. 5 = Ratio of 25 or less clients/employment specialist
2. Vocational services staff: Employment specialists provide only vocational services.	MIS, DOC, INT	1 = Employment specialists provide non-vocational services such as case management 80% of the time or more. Or Cannot rate due to no fit. 2 = Employment specialists provide non-vocational services such as case management about 60% of the time. 3 = Employment specialists provide non-vocational services such as case management about 40% of the time. 4 = Employment specialists provide non-vocational services such as case management about 20% of the time. 5 = Employment specialists provide only vocational services.

3. Vocational generalists: Each employment specialist carries out all phases of vocational service, including engagement, assessment, job placement, and follow-along supports.	VL, MIS, DOC, INT	1 = Employment specialist only provides vocational referral service to vendors and other programs. Or Cannot rate due to no fit. 2 = Employment specialist maintains caseload but refers clients to other programs for vocational service. 3 = Employment specialist provides one aspect of the vocational service (e.g. engagement, assessment, job development, job placement, job coaching, and follow-along supports). 4 = Employment specialist provides two or more phases of vocational service but not the entire service. 5 = Employment specialist carries out all phases of vocational service (e.g. engagement, assessment, job development, job placement, job coaching, and follow-along supports).

ORGANIZATION

1. Integration of rehabilitation with mental health treatment: Employment specialists are part of the mental health treatment teams with shared decision making. They attend regular treatment team meetings (not replaced by administrative meetings) and have frequent contact with treatment team members.	VL, MIS, DOC, INT	1 = Employment specialists are part of a vocational program, separate from the mental health treatment. No regular direct contact with mental health staff, only telephone or one face to face contact per month. Or Cannot rate due to no fit. 2 = Employment specialists attend treatment team meetings once per month. 3 = Employment specialists have several contacts with treatment team members each month and attend treatment team meeting once per month. 4 = Employment specialists are attached to one or more case management treatment teams with shared decision making. Attend weekly treatment team meetings. 5 = Employment specialists are attached to one or more case management treatment teams with shared decision making. Attend one or more treatment team meetings per week and have at least three client-related case manager contacts per week.

2. Vocational unit: Employment specialists function as a unit rather than a group of practitioners. They have group supervision, share information, and help each other with cases.	MIS, INT	1 = Employment specialists are not part of a vocational unit. Or Cannot rate due to no fit. 2 = Employment specialists have the same supervisor but do not meet as a group. 3 = Employment specialists have the same supervisor and discuss cases between each other. They do not provide services for each other's cases. 4 = Employment specialists form a vocational unit and discuss cases between each other. They provide services for each other's cases. 5 = Employment specialists form a vocational unit with group supervision at least weekly. Provide services for each other's cases and backup and support for each other.

3. Zero exclusion criteria: No eligibility requirements such as job readiness, substance abuse, no history of violent behavior, minimal intellectual functioning, and mild symptoms.	DOC, INT	1 = Clients are screened out on the basis of job readiness, substance use, history of violence, low level of functioning, etc. Referrals first screened by case managers. Or Cannot rate due to no fit. 2 = Some eligibility criteria. Screened by vocational staff who make client referrals to other vocational programs. 3 = Some eligibility criteria. Screened by vocational staff of the program that will provide the vocational service. 4 = All adult clients with severe mental disorders are eligible, including dual disorders of substance abuse and mental illness. Services are voluntary. 5 = All clients are encouraged to participate. Referrals solicited by several sources (self-referral, family members, self-help groups, etc.).

SERVICES

1. <u>Ongoing, work-based vocational assessment:</u> Vocational assessment is an ongoing process based on work experiences in competitive jobs.	DOC, INT	1 = Vocational evaluation is conducted prior to job placement with emphasis on office-based assessments, standardized tests, intelligence tests, work samples. Or Cannot rate due to no fit. 2 = Client participates in a prevocational assessment at the program site (e.g. work units in a day program). 3 = Assessment occurs in a sheltered setting where clients carry out work for pay. 4 = Most of the assessment is based on brief, temporary job experiences in the community that are set up with the employer. 5 = Vocational assessment is ongoing. Occurs in community jobs rather than through a battery of tests. Minimal testing may occur but not as a prerequisite to the job search. Aims at problem solving using environmental assessments and consideration of reasonable accommodations.

2. Rapid search for competitive job: The search for competitive jobs occurs rapidly after program entry.	DOC, INT, ISP	1 = First contact with an employer about a competitive job is typically more than one year after program entry. Or Cannot rate due to no fit. 2 = First contact with an employer about a competitive job is typically at more than nine months and within one year after program entry. 3 = First contact with an employer about a competitive job is typically at more than six months and within nine months after program entry. 4 = First contact with an employer about a competitive job is typically at more than one month and within six months after program entry. 5 = First contact with an employer about a competitive job is typically within one month after program entry.

3. Individualized job search: Employer contacts are based on clients' job preferences (relating to what they enjoy and their personal goals) and needs (including experience, ability, health, etc., and how they affect a good job and setting match) rather than the job market (i.e., what jobs are readily available.	DOC, INT, ISP	1 = Employer contacts are based on decisions made unilaterally by the employment specialist. These decisions are usually driven by the nature of the job market. Or Cannot rate due to no fit. 2 = About 25% employer contacts are based on job choices which symptomatology, and reflect client's preferences, strengths, symptoms, etc., rather than the job market. 3 = About 50% employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market. 4 = About 75% employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market. 5 = Most employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market.

4. Diversity of jobs developed: Employment specialists provide job options that are different settings.	DOC, INT, ISP	1 = Employment specialists provide options for either the same types of jobs for most clients, e.g., janitorial, or jobs at the same diverse and are in work settings most of the time. Or Cannot rate due to no fit. 2 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 75% of the time. 3 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 50% of the time. 4 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 25% of the time. 5 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings less than 10% time.

5. Permanence of jobs developed: Employment specialists provide competitive job options that have permanent status rather than temporary or time-limited status.	DOC, INT, ISP	1 = Employment specialists usually do not provide options for permanent, competitive jobs. Or Cannot rate due to no fit. 2 = Employment specialists provide options for permanent, competitive jobs about 25% of the time. 3 = Employment specialists provide options for permanent, competitive jobs about 50% of the time. 4 = Employment specialists provide options for permanent, competitive jobs about 75% of the time. 5 = Virtually all of the competitive jobs offered by employment specialists are permanent.
6. Jobs as transitions: All jobs are viewed as positive experiences on the path of vocational growth and development. Employment specialists help clients end jobs when appropriate and then find new jobs.	VL, DOC, INT, ISP	1 = Employment specialists prepare clients for a single lasting job, and if it ends, will not necessarily help them find another one. Or Cannot rate due to no fit. 2 = Employment specialists help clients find another job 25% time. 3 = Employment specialists help clients find another job 50% time. 4 = Employment specialists help clients find another job 75% time. 5 = Employment specialists help clients end jobs when appropriate and offer to help them all find another job.

7. Follow-along supports: Individualized follow-along supports are provided to employer and client on a time-unlimited basis. Employer supports may include education and guidance. Client supports may include crisis intervention, job coaching, job counseling, job support groups, transportation, treatment changes (medication), networked supports (friends/family).	VL, MIS, DOC, INT	1 = Follow-along supports are nonexistent. Or Cannot rate due to no fit. 2 = Follow-along supports are time-limited and provided to less than half of the working clients. 3 = Follow-along supports are time-limited and provided to most working clients. 4 = Follow-along supports are ongoing and provided to less than half the working clients. 5 = Most working clients are provided flexible follow-along supports that are individualized and ongoing. Employer supports may include education and guidance. Client supports may include crisis intervention, job coaching, job counseling, job support groups, transportation, treatment changes (medication), networked supports (friends/family).

8. Community-based services: Vocational services such as engagement, job finding, and follow-along supports are provided in natural community settings.	VL, DOC, INT	1 = Employment specialist spends 10% time or less in the community. Or Cannot rate due to no fit. 2 = Employment specialist spends 11-39% time in community. 3 = Employment specialist spends 40-59% time in community. 4 = Employment specialist spends 60-69% time in community. 5 = Employment specialist spends 70% or more time in community.

9. <u>Assertive engagement and outreach</u>: Assertive engagement and outreach (telephone, mail, community visit) are conducted as needed.	VL, MIS, DOC, INT	1 = Employment specialists do not provide outreach to clients as part of initial engagement or to those who stop attending the vocational service. Or Cannot rate due to no fit. 2 = Employment specialists make one telephone or mail contact to clients as part of initial engagement or to those who stop attending the vocational service. 3 = Employment specialists make one or two outreach attempts (telephone, mail, community visit) as part of initial engagement and also within one month that client stops attending the vocational service. 4 = Employment specialist makes outreach attempts (telephone, mail, community visit) as part of initial engagement and at least every two months on a time limited basis when client stops attending. 5 = Employment specialists provide outreach (telephone, mail, community visit) as part of initial engagement and at least monthly on a time unlimited basis when clients stop attending the vocational service. Staff demonstrate tolerance of different levels of readiness using gentle encouragement.

***Data Sources:

VL	Vocational Logs
MIS	Management Information System
DOC	Document Review: clinical records; agency policy and procedures
INT	Interviews with clients, employment specialists, mental health staff
ISP	Individualized Service Plan

Appendix B

Consumer Survey

Please evaluate the following statements regarding the services you are receiving from Steadfast. Please indicate your response for each item by circling the response that best represents your opinion. Try to answer all the questions. If you are unsure what a word means or what a questions is asking, you may ask for help. You may stop the survey at any time if you choose to do so.

	1	2	3	4	5	
1. I am satisfied with the services I receive from Steadfast	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
2. My employment specialist tried to understand my values and cultural background when working with me	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	

FOR THESE NEXT QUESTIONS, PLEASE THINK ABOUT HOW WORKING IN GENERAL HAS AFFECTED YOUR LIFE. AS A RESULT OF WORKING,

	1	2	3	4	5	9
1. I have more money to spend	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
2. I feel better about myself	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
3. I do better with leisure time	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
4. My housing situation has improved	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
5. I know more about my skills and limitations	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
6. I have made some new friends	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
7. Symptoms don't bother me as much	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable
8. I am getting along better with my family	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	Not Applicable

Please evaluate the following statements regarding the services you are receiving from Steadfast. Please indicate your response for each item by circling the response that best represents your opinion. Try to answer all the questions. If you are unsure what a word means or what a questions is asking, you may ask for help. You may stop the survey at any time if you choose to do so.

FOR THIS NEXT SET OF STATEMENTS, YOU HAVE 6 DIFFERENT CHOICES TO SELECT FOR AN ANSWER. THE CHOICES ARE: "NEVER", "RARELY", "ABOUT HALF THE TIME", "USUALLY", AND "ALWAYS"

	1	2	3	4	5	9
1. An employment specialist meets with me at times and places convenient to me	Never	Rarely	About half the time	Usually	Always	
2. I meet my employment specialist in the community for services (as opposed to the CMHC)	Never	Rarely	About half the time	Usually	Always	
3. I was asked about my skills, strengths and interests to help me determine what kind of work I wished to do	Never	Rarely	About half the time	Usually	Always	
4. I chose the kind of work I wanted	Never	Rarely	About half the time	Usually	Always	
5. I am provided supports that I need to successfully find and keep work	Never	Rarely	About half the time	Usually	Always	
6. I am supported if I change jobs	Never	Rarely	About half the time	Usually	Always	

Appendix C

Telephone Script

PHONE SCRIPT FOR SUPPORTED EMPLOYMENT STUDY

HELLO, MAY I PLEASE SPEAK TO (CONSUMER'S NAME)?
(Because of confidentiality, Do not mention that you are calling from the Adult Mental Health Division, Department of Health, etc. until you talk to the consumer)

If the consumer is not available, say: MAY I LEAVE A MESSAGE FOR (CONSUMER'S NAME)? PLEASE HAVE HIM/HER CALL 539-3732 **and give no other information. If the person other than the consumer insists on knowing more, say:** WE ARE CONDUCTING A STATEWIDE SURVEY OF RANDOM PEOPLE, **but do not discuss the topic. If the person still insists on knowing more, say:** I'M SORRY, BUT I AM ONLY ALLOWED TO DISCUSS THE DETAILS OF THE SURVEY WITH (CONSUMER'S NAME).

When the consumer gets on the phone, say: HELLO _____. THIS IS (YOUR NAME). I AM PART OF A CONSUMER EVALUATION TEAM WITH THE DEPARTMENT OF HEALTH, ADULT MENTAL HEALTH DIVISION. WE WOULD LIKE TO ASK YOU TO PARTICIPATE IN A RESEARCH STUDY TO HELP THE ADULT MENTAL HEALTH DIVISION LEARN ABOUT EMPLOYMENT SERVICES IN HAWAI'I. YOU WILL ONLY BE CONTACTED THIS ONE TIME. IF YOU CHOOSE TO PARTICIPATE, AS A THANK YOU, WE WILL SEND YOU A $10 SUPERMARKET GIFT CERTIFICATE. ARE YOU CURRENTLY RECEIVING EMPLOYMENT SERVICES FROM THE STEADFAST SUPPORTED EMPLOYMENT PROGRAM?

- **If yes, continue with script**
- **If no, ask,** WHO ARE YOU CURRENTLY RECIVING EMPLOYMENT SERVICES FROM? **then continue with script**

  _____
  (fill in here)
- **If they say they've never received employment services, say,** OKAY, I'M SORRY TO HAVE DISTURBED YOU. THANK YOU FOR YOUR TIME.

ARE YOU CURRENTLY RECEIVING SERVICES FROM (PROVIDER AGENCY)?

- **If yes, continue with script**
- **If no, ask,** WHO ARE YOU CURRENTLY RECEIVING SERVICES FROM? **then continue with script**

  _____
  (fill in here)
- **If they say they've never received mental health services say,** OKAY, I'M SORRY TO HAVE DISTURBED YOU. THANK YOU FOR YOUR TIME.

YOUR PARTICIPATION IN THIS STUDY INVOLVES ANSWERING QUESTIONS ABOUT YOUR EMPLOYMENT SERVICES. ALL SURVEY RESPONSES WILL BE KEPT PRIVATE, YOUR SERVICES WILL NOT BE AFFECTED BY YOUR PARTICIPATION IN THE SURVEY AND THE STAFF WILL NEVER SEE YOUR ANSWERS. PARTICIPATION IN THE STUDY IS VOLUNTARY AND YOU CAN CHOOSE TO END THE SURVEY AT ANY TIME. THE SURVEY SHOULD TAKE 5-10 MINUTES TO COMPLETE. THE RESULTS FROM THIS STUDY WILL BE USED TO CREATE A REPORT ABOUT STEADFAST'S EMPLOYMENT SERVICES.

WILL YOU BE WILLING TO PARTICIPATE? (circle one) YES NO

I AM GOING TO READ A LIST OF STATEMENTS AND YOU HAVE 5 CHOICES TO SELECT FOR AN ANSWER. THE CHOICES ARE: "STRONGLY DISAGREE", "DISAGREE", "NEUTRAL", "AGREE", AND "STRONGLY AGREE".

DO YOU HAVE ANY QUESTIONS ABOUT WHAT I JUST SAID? **Answer any questions. Go to survey.**

THIS CONCLUDES THE SURVEY. AS I MENTIONED EARLIER, AS A THANK YOU, WE'D LIKE TO SEND YOU A $10 SUPERMARKET GIFT CERTIFICATE. IF YOU HAVE QUESTIONS ABOUT THE STUDY, YOU CAN CALL KIM SCHAPER AT 539-3824, OR HER SUPERVISOR, DEBORAH ALTSCHUL AT 539-3943. IF YOU CANNOT GET SATISFACTORY ANSWERS TO YOUR QUESTIONS OR HAVE COMMENTS OR COMPLAINTS ABOUT YOUR TREATMENT IN THIS STUDY, YOU CAN CONTACT THE COMMITTEE ON HUMAN STUDIES AT (808) 956-5007.

MAY I PLEASE HAVE YOUR MAILING ADDRESS FOR US TO SEND YOU THE GIFT CERTIFICATE?

_____

Name

_____

Street Address or P.O. Box #

_____

City Zip Code

DO YOU HAVE A FOODLAND OR SACK & SAVE NEAR YOU?

If no, ask, WHICH SUPERMARKET IS CLOSE TO YOU? _____

Appendix D

Thank You Letter

Date

Dear Participant,

Thank you for participating in our research study. Your responses will provide us with valuable information in preparing our report on employment services. Enclosed you will find a supermarket gift certificate as a thank you for participating in the study. If you have any questions about the study, including the results, you may contact Kim Schaper at (808) 539-3824 or her supervisor Dr. Deborah Altschul at (808) 539-3943. If you cannot obtain satisfactory answers to your questions or if you have comments or complaints about your treatment in this study you may contact the Committee on Human Studies at (808) 956-5006. You may also contact the committee at: Committee on Human Studies, University of Hawai'i, 2540 Maile Way, Honolulu, HI 96822.

Thank you,

Kim Schaper

Enclosure

Appendix E

Supported Employment Fidelity Scale Implementation Questions and Scoring Sheet

Supported Employment Fidelity Scale Implementation Questions

STAFFING

1. Caseload size: Employment specialists manage vocational caseload of up to 25 clients.

   - Do you have your own caseload at this agency?

     _____

     _____

     _____

   - **How many clients do you have on your caseload?

     _____

   - How long does a client remain on a caseload? When is a client removed?

     _____

     _____

     _____

     _____

     _____

Notes:_____

_____

_____

_____

_____

_____

1 = Ratio of 81 or more clients/employment specialist. Or Cannot rate due to no fit.

2 = Ratio of 61-80 clients/employment specialist.

3 = Ratio of 41-60 clients/employment specialist.

4 = Ratio of 26-40 clients/employment specialist.

5 = Ratio of 25 or less clients/employment specialist

2. Vocational services staff: Employment specialists provide only vocational services.

   - At this agency, do you provide other services besides vocational services like case management, day programming, or residential services?

     _____

     _____

   - **If no, what percentage of your time is spent providing vocational services?

     _____

   - **If yes, what percentage of your time is spent providing non-vocational services? (For example, how many hours out of a 40 hour work week?)

     _____

Notes:_____

_____

_____

_____

_____

_____

_____

_____

1 = Employment specialists provide non-vocational services such as case management 80% of the time or more. Or Cannot rate due to no fit.

2 = Employment specialists provide non-vocational services such as case management about 60% of the time.

3 = Employment specialists provide non-vocational services such as case management about 40% of the time.

4 = Employment specialists provide non-vocational services such as case management about 20% of the time.

5 = Employment specialists provide only vocational services.

3. Vocational generalists: Each employment specialist carries out all phases of vocational service, including engagement, assessment, job placement, and follow-along supports.

   - What are your duties as an Employment Specialist?

     _____

     _____

     _____

     _____

     _____

     _____

   - **What steps do you provide in helping a client find a job?

     _____

     _____

     _____

     _____

   - **Do other Employment Specialists provide different steps of the vocational service?

     _____

     _____

   - **Do you refer clients to other vocational programs?

     _____

Notes:_____

_____

_____

_____

_____

_____

_____

1 = Employment specialist only provides vocational referral service to vendors and other programs. Or Cannot rate due to no fit.

2 = Employment specialist maintains caseload but refers clients to other programs for vocational service.

3 = Employment specialist provides one aspect of the vocational service (e.g. engagement, assessment, job development, job placement, job coaching, and follow-along supports).

4 = Employment specialist provides two or more phases of vocational service but not the entire service.

5 = Employment specialist carries out all phases of vocational service (e.g. engagement, assessment, job development, job placement, job coaching, and follow-along supports).

ORGANIZATION

1. Integration of rehabilitation with mental health treatment: Employment specialists are part of the mental health treatment teams with shared decision making. They attend regular treatment team meetings (not replaced by administrative meetings) and have frequent contact with treatment team members.

   - Do you have an office at the CMHC?

     _____

     _____

   - **Are you assigned to work with specific case managers or treatment teams? Are you part of a treatment team?

     _____

     _____

     _____

     _____

   - **Do you interact with the case managers about your mutual clients?

     _____

   - **If yes, how often? In what types of situations?

     _____

     _____

     _____

     _____

   - **Do you participate in shared decision making about client services? Who makes the final decisions?

     _____

     _____

     _____

     _____

     _____

Notes:_____

_____

_____

_____

_____

_____

_____

_____

1 = Employment specialists are part of a vocational program, separate from the mental health treatment. No regular direct contact with mental health staff, only telephone or one face to face contact per month. Or Cannot rate due to no fit.

2 = Employment specialists attend treatment team meetings once per month.

3 = Employment specialists have several contacts with treatment team members each month and attend treatment team meeting once per month.

4 = Employment specialists are attached to one or more case management treatment teams with shared decision making. Attend weekly treatment team meetings.

5 = Employment specialists are attached to one or more case management treatment teams with shared decision making. Attend one or more treatment team meetings per week and have at least three client-related case manager contacts per week.

2. Vocational unit: Employment specialists function as a unit rather than a group of practitioners. They have group supervision, share information, and help each other with cases.

   - **Do the Employment Specialists have the same supervisor?

     _____

   - **Do the Employment Specialists meet as a group for supervision? How often?

     _____

     _____

     _____

     _____

   - **Do the Employment Specialists provide services for each others' clients? Under what circumstances?

     _____

     _____

     _____

     _____

     _____

Notes:_____

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1 = Employment specialists are not part of a vocational unit. Or Cannot rate due to no fit.

2 = Employment specialists have the same supervisor but do not meet as a group.

3 = Employment specialists have the same supervisor and discuss cases between each other. They do not provide services for each other's cases.

4 = Employment specialists form a vocational unit and discuss cases between each other. They provide services for each other's cases.

5 = Employment specialists form a vocational unit with group supervision at least weekly. Provide services for each other's cases and backup and support for each other.

3. Zero exclusion criteria: No eligibility requirements such as job readiness, substance abuse, no history of violent behavior, minimal intellectual functioning, and mild symptoms.

   - **Who makes referrals for employment services?

     _____

     _____

     _____

   - How many referrals do you get from this agency?

     _____

     _____

   - **What are the criteria to be eligible to receive employment services?

     _____

     _____

     _____

   - If criteria exist, who conducts the screening in determining who is eligible?

     _____

     _____

     _____

     _____

   - **How do you make sure no one is excluded?

     _____

     _____

     _____

Notes:_____

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1 = Clients are screened out on the basis of job readiness, substance use, history of violence, low level of functioning, etc. Referrals first screened by case managers. Or Cannot rate due to no fit.

2 = Some eligibility criteria. Screened by vocational staff who make client referrals to other vocational programs.

3 = Some eligibility criteria. Screened by vocational staff of the program that will provide the vocational service.

4 = All adult clients with severe mental disorders are eligible, including dual disorders of substance abuse and mental illness. Services are voluntary.

5 = All clients are encouraged to participate. Referrals solicited by several sources (self-referral, family members, self-help groups, etc.).

SERVICES

1. On-going, work-based vocational assessment: Vocational assessment is an on-going process based on work experiences in competitive jobs.

    - After someone is referred, what does the process look like?

    _____

    _____

    _____

    _____

    _____

    - **Does the program include vocational evaluation procedures?

    _____

    _____

    - What type of assessment procedures do you use and in which settings?

    _____

    _____

    _____

    _____

    - How much time is spent on vocational assessment?

    _____

    _____

    _____

    _____

    - **Are there certain assessment procedures that must be completed prior to obtaining a competitive job? (e.g., testing, skills training)

    _____

    _____

    _____

    _____

Notes:_____

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_____

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_____

1 = Vocational evaluation is conducted prior to job placement with emphasis on office-based assessments, standardized tests, intelligence tests, work samples. Or Cannot rate due to no fit.

2 = Client participates in a prevocational assessment at the program site (e.g. work units in a day program).

3 = Assessment occurs in a sheltered setting where clients carry out work for pay.

4 = Most of the assessment is based on brief, temporary job experiences in the community that are set up with the employer.

5 = Vocational assessment is on-going. Occurs in community jobs rather than through a battery of tests. Minimal testing may occur but not as a prerequisite to the job search. Aims at problem solving using environmental assessments and consideration of reasonable accommodations.

2. Rapid search for competitive job: The search for competitive jobs occurs rapidly after program entry.

   - What is the philosophy of the program about when to start the job search?

     _____

     _____

     _____

     _____

   - Are there steps in the program that people take before starting to look for a job?

     _____

     _____

     _____

     _____

   - **What is the average length of time between when a person begins the program and the first contact with a competitive employer?

     _____

     _____

     _____

Notes:_____

_____

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_____

1 = First contact with an employer about a competitive job is typically more than one year after program entry. Or Cannot rate due to no fit.
2 = First contact with an employer about a competitive job is typically at more than nine months and within one year after program entry.
3 = First contact with an employer about a competitive job is typically at more than six months and within nine months after program entry.
4 = First contact with an employer about a competitive job is typically at more than one month and within six months after program entry.
5 = First contact with an employer about a competitive job is typically within one month after program entry.

3. Individualized job search: Employer contacts are based on clients' job preferences (relating to what they enjoy and their personal goals) and needs (including experience, ability, health, etc., and how they affect a good job and setting match) rather than the job market (i.e., what jobs are readily available.

   - How is it decided which jobs to look for? What information is it based on?

     _____

     _____

     _____

     _____

     _____

   - How has the nature of the job market affected the type of jobs clients you offer to the client?

     _____

     _____

     _____

     _____

   - **How often do you provide job offers similar to the client's choices? What percentage?

     _____

     _____

Notes:_____

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1 = Employer contacts are based on decisions made unilaterally by the employment specialist. These decisions are usually driven by the nature of the job market. Or Cannot rate due to no fit.

2 = About 25% employer contacts are based on job choices which symptomatology, and reflect client's preferences, strengths, symptoms, etc., rather than the job market.

3 = About 50% employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market.

4 = About 75% employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market.

5 = Most employer contacts are based on job choices which reflect client's preferences, strengths, symptoms, etc., rather than the job market.

4. Diversity of jobs developed: Employment specialists provide job options that are different settings.

   - What types of jobs do your clients have right now?

     _____

     _____

   - **What percentage of the jobs you offer are in the same job settings?

     _____

   - Do you ever suggest to clients that they work at the same job settings as other clients?

     _____

     _____

     _____

   - **What percentage of the jobs you offer are the same type of work?

     _____

   - Do you ever suggest to clients that they obtain the same type of job as other clients?

     _____

     _____

     _____

Notes:_____

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_____

1 = Employment specialists provide options for either the same types of jobs for most clients, e.g., janitorial, or jobs at the same diverse and are in work settings most of the time. Or Cannot rate due to no fit.

2 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 75% of the time.

3 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 50% of the time.

4 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings about 25% of the time.

5 = Employment specialists provide options for either the same types of jobs, e.g., janitorial, or jobs at the same work settings less than 10% time.

5. Permanence of jobs developed: Employment specialists provide competitive job options that have permanent status rather than temporary or time-limited status.

   - **What percentage of the jobs that you suggest to clients are permanent, competitive jobs?

     _____

     _____

   - How often do you suggest jobs that are temporary, time-limited, or volunteer?

     _____

     _____

Notes:_____

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1 = Employment specialists usually do not provide options for permanent, competitive jobs. Or Cannot rate due to no fit.

2 = Employment specialists provide options for permanent, competitive jobs about 25% of the time.

3 = Employment specialists provide options for permanent, competitive jobs about 50% of the time.

4 = Employment specialists provide options for permanent, competitive jobs about 75% of the time.

5 = Virtually all of the competitive jobs offered by employment specialists are permanent.

6. Jobs as transitions: All jobs are viewed as positive experiences on the path of vocational growth and development. Employment specialists help clients end jobs when appropriate and then find new jobs.

   - What is the process when a client decides to end a job? What do you do?

     _____

     _____

     _____

     _____

   - **What percentage of your clients who have ended jobs have been provided assistance in finding another job?

     _____

     _____

   - What are the reasons you would not help a client find another job when one has ended?

     _____

     _____

     _____

     _____

Notes:_____

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1 = Employment specialists prepare clients for a single lasting job, and if it ends, will not necessarily help them find another one.
Or Cannot rate due to no fit.
2 = Employment specialists help clients find another job 25% time.
3 = Employment specialists help clients find another job 50% time.
4 = Employment specialists help clients find another job 75% time.
5 = Employment specialists help clients end jobs when appropriate and offer to help them all find another job.

7. Follow-along supports: Individualized follow-along supports are provided to employer and client on a time-unlimited basis. Employer supports may include education and guidance. Client supports may include crisis intervention, job coaching, job counseling, job support groups, transportation, treatment changes (medication), networked supports (friends/family).

   - **What kind of support is provided to the client after placed in a job?

     _____

     _____

     _____

     _____

     _____

   - **What kind of support is provided to the employer?

     _____

     _____

     _____

     _____

     _____

   - **What percentage of working clients has follow-along supports provided?

     _____

   - **What is the time limit for providing services?

     _____

Notes:_____

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_____

1 = Follow-along supports are nonexistent. Or Cannot rate due to no fit.

2 = Follow-along supports are time-limited and provided to less than half of the working clients.

3 = Follow-along supports are time-limited and provided to most working clients.

4 = Follow-along supports are on-going and provided to less than half the working clients.

5 = Most working clients are provided flexible follow-along supports that are individualized and on-going. Employer supports may include education and guidance. Client supports may include crisis intervention, job coaching, job counseling, job support groups, transportation, treatment changes (medication), networked supports (friends/family).

8. Community-based services: Vocational services such as engagement, job finding, and follow-along supports are provided in natural community settings.

   - Where do you spend most of your time?

     _____

   - Walk me through a typical work day.

     _____

     _____

     _____

     _____

     _____

   - **What percentage of time is spent outside the mental health facility and the employment office?

     _____

     _____

Notes:_____

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1 = Employment specialist spends 10% time or less in the community. Or Cannot rate due to no fit.

2 = Employment specialist spends 11-39% time in community.

3 = Employment specialist spends 40-59% time in community.

4 = Employment specialist spends 60-69% time in community.

5 = Employment specialist spends 70% or more time in community.

9. Assertive engagement and outreach: Assertive engagement and outreach (telephone, mail, community visit) are conducted as needed.

   - **Are there outreach attempts for initial engagement? How often? Time limited?

     _____

     _____

     _____

     _____

     _____

   - What happens if a client does not engage or drops out of services?

     _____

     _____

     _____

     _____

   - **Are there outreach attempts when a client stops services? How often? Time limited?

     _____

     _____

     _____

     _____

     _____

Notes:_____

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_____

1 = Employment specialists do not provide outreach to clients as part of initial engagement or to those who stop attending the vocational service. Or Cannot rate due to no fit.

2 = Employment specialists make one telephone or mail contact to clients as part of initial engagement or to those who stop attending the vocational service.

3 = Employment specialists make one or two outreach attempts (telephone, mail, community visit) as part of initial engagement and also within one month that client stops attending the vocational service.

4 = Employment specialist makes outreach attempts (telephone, mail, community visit) as part of initial engagement and at least every two months on a time limited basis when client stops attending.

5 = Employment specialists provide outreach (telephone, mail, community visit) as part of initial engagement and at least monthly on a time unlimited basis when clients stop attending the vocational service. Staff demonstrate tolerance of different levels of readiness using gentle encouragement.

Fidelity Scale Score Sheet

Rater: _____

Site: _____

Date: _____

Staffing

1. Caseload _____
2. Vocational services staff _____
3. Vocational generalists _____

Organization

1. Integration of rehabilitation with MH treatment _____
2. Vocational unit _____
3. Zero exclusion criteria _____

Services

1. On-going, work-based assessment _____
2. Rapid search for competitive job _____
3. Individualized job search _____
4. Diversity of jobs developed _____
5. Permanence of jobs developed _____
6. Jobs as transitions _____
7. Follow-along supports _____
8. Community-based services _____
9. Assertive engagement and outreach _____

Total: _____

66-75 =	Good Supported Employment Implementation
56-65 =	Fair Supported Employment Implementation
55 and below =	Not Supported Employment

REFERENCES

Ahrens, C.S., Frey, J.L., & Senn Burke, S.C. (1999). An individualized job engagement approach for persons with severe mental illness. *Journal of Rehabilitation, 65,* 17-24.

Altschul, D.B., & Urbanc, K. (2004). *Consumer survey fiscal year 2004.* (Technical Report # 080415). Honolulu, Hawai'i: Mental Health Services Research and Evaluation Center of the University of Hawai'i.

Anthony, W.A. (1993). Recovery from mental illness: The guiding vision of the mental health service system in the 1990s. *Psychosocial Rehabilitation Journal, 16,* 11-23.

Bailey, E.L., Ricketts, S.K., Becker, D.R., Xie, H., & Drake, R.E. (1998). Do long-term day treatment clients benefit from supported employment? *Psychiatric Rehabilitation Journal, 22,* 24-29.

Becker, D.R., & Drake, R.E. (1993). *A working life: The individual placement and support (IPS) program.* New Hampshire: Dartmouth Psychiatric Research Center.

Becker, D.R., & Drake, R.E. (1994). Individual placement and support: A community mental health center approach to vocational rehabilitation. *Community Mental Health Journal, 30,* 193-206.

Becker, D.R., & Drake, R.E. (2003). *A working life for people with severe mental illness.* New Hampshire: Oxford University Press.

Becker, D.R., Smith, J., Tanzman, B., Drake, R.E., & Tremblay, T. (2001). Fidelity of supported employment programs and employment outcomes. *Psychiatric Services, 52,* 834-836.

Becker, D.R., Torrey, W.C., Toscano, R., Wyzik, P.F., & Fox, T.S. (1998). Building recovery-oriented services: Lessons from implementing individual placement and support (IPS) in community mental health centers. *Psychiatric Rehabilitation Journal, 22*, 51-54.

Becker, D.R., Xie, H., McHugo, G.J., Halliday, J., & Martinez, R.A. (2006). What predicts supported employment program outcomes? *Community Mental Health Journal, 42,* 303-313.

Bond, G.R. (1992). Vocational rehabilitation. In R.P. Lieberman (Ed.), *Handbook of Psychiatric Rehabilitation* (pp. 244-275). Boston, MA: Allyn & Bacon.

Bond, G.R. (1998). Principles of the individual placement and support model: Empirical support. *Psychiatric Rehabilitation Journal, 22,* 11-23.

Bond, G.R., Becker, D.R., Drake, R.E., Rapp, C., Meisler, N., Lehman, A.F., et al. (2001). Implementing supported employment as an evidence-based practice. *Psychiatric Services, 52,* 313-322.

Bond, G.R., Becker, D.R., Drake, R.E., & Vogler, K.M. (1997). A fidelity scale for the individual placement and support model of supported employment. *Rehabilitation Counseling Bulletin, 40,* 265-284.

Bond, G.R., Drake, R.E., Mueser, K.T., & Becker, D.R. (1997) An update on supported employment for people with serious mental illness. *Psychiatric Services, 48*, 335-345.

Bond, G.R., Evans, L., Salyers, M.P., Williams, J., & Kim, H.W. (2000). Measurement of fidelity in psychiatric rehabilitation. *Mental Health Services Research, 2,* 7-87.

Calsyn, R.J. (2000). A checklist for critiquing treatment fidelity studies. *Mental Health Services Research, 2,* 107-113.

Chambless, D.L. (2001). Empirically supported psychological interventions: Controversies and evidence. *Annual Review of Psychology, 52,* 685-716.

Danley, K.S., Sciarappa, K., & MacDonald-Wilson, K. (1992). Choose-get-keep: A psychiatric rehabilitation approach to supported employment. *New Directions for Mental Health Services, 53,* 87-96.

Drake, R.E. (1998). A brief history of the individual placement and support model. *Psychiatric Rehabilitation Journal, 22*, 3-7.

Drake, R.E., & Becker, D.R. (1996). The individual placement and support model of supported employment. *Psychiatric Services, 47,* 473-475.

Drake, R.E., Becker, D.R., Biesanz, J.C., Torrey, W.C., McHugo, G.J., & Wyzik, P.F. (1994). Rehabilitative day treatment vs. supported employment: I. vocational outcomes. *Community Mental Health Journal, 30*, 519-531.

Drake, R.E., Goldman, H.H., Leff, H.S., Lehman, A.F., Dixon, L., Mueser, K.T., et al. (2001). Implementing evidence-based practices in routine mental health settings. *Psychiatric Services, 52*, 179-182.

Drake, R.E., McHugo, G.J., Becker, D.R., Anthony, W.A., & Clark, R.E. (1996). The New Hampshire study of supported employment. *Journal of Consulting and Clinical Psychology, 64,* 391-399.

Drake, R.E., Mueser, K.T., & Becker, D.R. (1997). An update on supported employment for people with serious mental illness. *Psychiatric Services, 48*, 335-346.

Evans, L.J, & Bond, G.R. (in press). Expert rating on the critical ingredients of supported employment for people with severe mental illness. *Psychiatric Rehabilitation Journal.*

Goldman, H.H., Ganju, V., Drake, R.E., Gorman, P., Hogan, M., Hyde, P.S., et al. (2001) Policy implications for implementing evidence-based practices. *Psychiatric Services, 52,* 1591-1597.

Lehman, A.F., Ward, N.C., & Linn, L.S. (1982). Chronic mental patients: The quality of life issue. *American Journal of Psychiatry, 139,* 1271-1276.

McCarthy, D., Thompson, D., & Olson, S. (1998). Planning a statewide project to convert day treatment to supported employment. *Psychiatric Rehabilitation Journal, 22*, 30-33.

McGrew, J.H, & Griss, M.E. (2005). Concurrent and predictive validity to two scales to assess the fidelity of implementation of supported employment. *Psychiatric Rehabilitation Journal, 29,* 41-47.

McHugo, G.J., Drake, R.E., & Becker, D.R. (1998). The durability of supported employment effects. *Psychiatric Rehabilitation Journal, 22,* 55-61.

McHugo, G.J., Drake, R.E., Whitley, R., Bond, G.R., Campbell, K., Rapp, C.A., et al. (in press). Fidelity outcomes in the national evidence-based practices project. *Psychiatric Services.*

MHSIP Task Force on Mental Health Report Card Consumer Survey. Retrieved July 25, 2004 from http://www.mhsip.org/rptcard.html

Moncher, F.J., & Prinz, R.J. (1991). Treatment fidelity in outcome studies. *Clinical Psychology Review, 11,* 247-266.

Newman, L. (1970). Instant placement: A new model for providing rehabilitation services within a community mental health program. *Community Mental Health Journal, 6*, 401-410.

Office of Management and Budget. (n.d.) *Government performance and results act of 1993.* Retrieved January 27, 2005, from http://www.whitehouse.gov/omb/mgmt-gpra/gplaw2m.html

Paulson, R.I., Post, R.L., Herinckx, H.A., & Risser, P. (2002) Beyond components: Using fidelity scales to measure and assure choice in program implementation and quality assurance. *Community Mental Health Journal, 38,* 119-128.

Siegel, S., & Castellan, N.J. (1988). *Nonparametric statistics for the behavioral sciences* (2nd ed.). United States of America: McGraw-Hill, Inc.

Substance Abuse and Mental Health Services Administration (2002). Supported employment resource kit. Retrieved January 8, 2003, from http://mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/employment/default.asp

Torrey, W.C., Drake, R.E., Dixon, L., Burns, B.J., Flynn, L., Rush, J.A., et al. (2001). Implementing evidence-based practices for persons with severe mental illness. *Psychiatric Services, 52*, 45-50.

Townsend, W., Boyd, S., Griffin, G., & Hicks, P.L. (1999). *Emerging best practices in mental health recovery.* Columbus OH: The Ohio Department of Mental Health.

Tracy, B. (2002). *Mental health employment services report card.* Unpublished scale. Lebanon, NH: New Hampshire-Dartmouth Psychiatric Research Center.

United States Census Bureau. (2005). American FactFinder. Retrieved January 13, 2007 from http://factfinder.census.gov

United States Department of Health and Human Services. (2001). Supported employment fidelity scale. Retrieved February 10, 2005 from http://mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/employment/SEfidelityscale.asp

United States Department of Health and Human Services. (2001). Supported employment fidelity scale—implementation questions. Retrieved February 10, 2005 http://mentalhealth.samhsa.gov/cmhs/communitysupport/toolkits/employment/SEfidelityquestions.asp

United States Public Health Service. (1999). *Mental health: A report of the surgeon general.* Washington DC: Department of Health and Human Services.

VanDongen, C.J. (1996). Quality of life and self-esteem in working and nonworking persons with mental illness. *Community Mental Health Journal, 32,* 535-548

Wehman, P. (1986). Supported competitive employment for persons with severe disabilities. *Journal of Applied Rehabilitation Counseling, 17*, 24-29.

Wilson, D.B., & Lipsey, M.W. (2001). The role of method in treatment effectiveness research: Evidence from meta-analysis. *Psychological Methods, 6,* 413-429.