

CLIENT PERCEPTIONS OF THE MICROCOMPUTER EVALUATION AND SCREENING ASSESSMENT (MESA)

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Abstract

This study explored client perceptions of the Microcomputer Evaluation and Screening Assessment (MESA). Clients reported greater enjoyment and more difficulty learning how to do the computer exercises when compared to the hardware exercises. In addition, the instructions for the computer exercises were reported as easier to understand by clients. Differences in perceptions of the MESA are also reported as a function of client demographic variables.

In recent years, client participation in the rehabilitation process has increased significantly as a result of legislation (Rehabilitation Act of 1973), heightened consumerism (Bowe, 1980), and concern for professional ethics (Cottone, Simmons, & Wilfley, 1983). Research on client perceptions (Reagles, Wright, & Thomas, 1972; Spreitzer, 1975) has tended to focus on program results or outcomes rather than satisfaction with how program services/activities were delivered. While client perceptions about rehabilitation counseling (Emener & Placido, 1982), sheltered employment (Cooley, Sewell, & Rich, 1985), and supported employment (Lam, 1986) have been examined, little has been empirically documented about client perceptions of vocational evaluation, in general, or specific commercial vocational evaluation systems.

The Microcomputer Evaluation and Screening Assessment (MESA) was introduced in 1982 by VALPAR International as a vocational screening assessment. It is composed of individualized computerized assessment (i.e., software) and hardware (i.e., work samples including a block assembly a wobbleboard assembly, and a wiring box) sections. Vocational interests and awareness exercises are also included. The computer exercises are generally directed at exploring perceptual motor skills, academic skills, and problem solving ability; while the hardware exercises are targeted at manual skills, tool usage, and physical capacities. The computer and hardware exercise required approximately 30 and 50 minutes to complete, respectively. While considerable research has been directed at establishing general population and criterion referenced norms for the MESA (Valpar International, 1984), little attention has been directed at client (i.e., consumer) opinions about the system. The purpose of this research project is to explore client perceptions of the MESA.

Method

Fifty-seven rehabilitation clients undergoing vocational evaluation at a large rural comprehensive rehabilitation facility participated in the study. They volunteered to participate after being explained the purpose of the project. After being evaluated on the MESA system, each client completed a self-report questionnaire assessing their perceptions of the computer and hardware exercises. Specifically, the clients were asked to indicate (a) their level of enjoyment, (b) the degree of learning difficulty, and (c) the clarity of the instructions for both the computer and hardware exercises. In addition, the clients were asked to indicate the degree that the computer academic tasks are more difficult than paper and pencil academic tests and the similarity of the hardware tasks to "real work." All questions were measured on a four point Likert-type scale anchored with appropriately labeled endpoints.

Results and Discussion

Client Demographics. The mean age for the clients was 27 years and they reported, on the average, an 11th grade educational level. Most of the clients were male (73.1%) and (39.2%) indicated mental illness as their primary disability; followed by orthopedic (17.6%), learning (15.7%), developmental (9.8%), visual (2.0%), and other (15.7%)

disabilities.

MESA Perceptions. In general, verbal feedback revealed that the clients had positive perceptions of the MESA system. On the questionnaire, the clients reported greater enjoyment with the computer ($M = 3.59$) than the hardware ($M = 3.32$) exercises, $t(52) = 2.52, p < .02$. They also indicated more difficulty learning how to do the computer ($M = 1.93$) than the hardware ($M = 1.63$) exercises, $t(52) = 2.44, p < .02$. In contrast, the participants reported that the instruction for the computer exercises ($M = 3.76$) are easier to understand than those for the hardware exercises ($M = 3.49$) $t(52) = 2.37, p < .05$. In addition, 47% of the clients indicated that the computer academic exercises are more difficult than conventional paper and pencil tests of academic assessment; while 70% reported that the hardware exercises were similar to "real work."

Correlational analyses revealed that the client's age was positively related to the belief that the MESA computer exercises were more difficult than paper and pencil academic assessment, $r(52) = .35, p < .02$, and to reported problems learning how to do the computer exercises, $r(52) = .47, p < .01$. In other words, older clients indicated that these exercises were harder than traditional academic testing and more difficult for them to learn. Educational level, on the other hand, was negatively related to reported problems learning how to do the MESA hardware exercises, $r(48) = -.32, p < .05$, suggesting that clients with more schooling reported less difficulty learning these exercises.

The female clients were more likely ($M = 3.58$) to indicate the hardware exercises were like "real work" than male clients ($M = 2.80$), $t(45) = 2.76, p < .01$. No other statistically discernible differences were found as a function of the participant's gender or disability status.

In summary, vocational rehabilitation clients appear to have positive perceptions about the MESA system. In support of VALPAR's (1984) claim, clients reported to be more challenged and enjoyed the computer exercises more than the hardware exercises. They also reported more difficulty understanding the instructions for the hardware exercises suggesting the need to explore the possibility of modifying this part of the system. For the most part, perceptions of the MESA did not vary as a function of the client's gender or disability type. Generalizations from this pilot study must be guarded, however, due to the limited overall sample size and the small number of clients in each disability group. Our data do suggest, however, that clients were very positive in their assessment of the MESA thus supporting the utility of computers in vocational evaluation (Chan & Questad, 1981; Shainline, 1984). The data also support the premise of using consumer (i.e., client) input in the development and modification of commercial vocational evaluation systems.

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