

# THE BLIND HOMEMAKER CLOSURE

## A Multivariate Analysis

---

---



Mississippi State University

Giesen • McBroom

# **The Blind Homemaker Closure: A Multivariate Analysis**

## **Executive Summary**

**J. Martin Giesen, Ph.D., Principal Investigator  
Lynn W. McBroom, M.A., Research Technician**

**Mississippi State University  
Rehabilitation Research and Training Center  
on Blindness and Low Vision**

**P.O. Drawer 5365, Mississippi State, MS 39762**

**September, 1986**

Copyright © 1986

All Rights Reserved

Mississippi State University  
Rehabilitation Research and Training Center  
on Blindness and Low Vision

P. O. Drawer 5365, Mississippi State, MS 39762

Development of this document was supported by the Rehabilitation Research and Training Center Grant G008103981 from the National Institute for Handicapped Research, Department of Education, Washington, D.C. Opinions expressed in this document are not necessarily those of the granting agency.

Mississippi State University does not discriminate on the basis of race, marital status, color, religion, national origin, sex, age or handicap.

## Background of the Research Project

Homemaking in the federal/state vocational rehabilitation system is one of three outcomes whereby a disabled person can be considered rehabilitated. The other two categories are competitive employment and sheltered workshop employment. The homemaker closure has been a legitimate outcome status since the 1920 Civilian Vocational Rehabilitation Act or, more commonly, the Smith-Fess Act (Goldner & Liebman, 1985). Each state agency chooses the way in which it will implement and justify homemaker closures.

Given the social and personal importance of gainful employment, this report focuses on the individual who is blind or severely visually impaired, who is a client of a state vocational rehabilitation agency, and, more specifically, who was closed as a homemaker. The Rehabilitation Services Administration's (RSA) Program Regulations Guide (1976) lists the following reasons that the homemaker closure is of interest as a focus of rehabilitation research: (1) the relatively large numbers of homemaker closures among successful closures, (2) the heavy concentration of homemaker closures in some state agencies, (3) claims of success for clients with disabilities so severe that homemaking activities are doubtful, (4) reported changes to a client's Individualized Written Rehabilitation Plan (IWRP) for the purpose of receiving credit for a successful closure, (5) the expenditures of large sums of money on persons whose post-rehabilitation activities do not generate income, and (6) the tacit encouragement of dependency on public support.

The Rehabilitation Service Manual states, "In order for homemaking to be considered as a gainful occupation, work activities must be performed by the individual and there must have been benefits derived from vocational rehabilitation services which improve the client's ability to function in these tasks" (RSA, 1982, p. 2). In practice, however, "significant contribution" and "socio-economic benefits" were difficult to quantify (RSA, 1982; Kirchner & Peterson, 1982).

Reduction of unemployment and the increase of successful case closures of blind persons served by a vocational rehabilitation agency necessitates that administrators examine services and other factors in terms of their contribution to the outcome of the rehabilitation process. The present study was designed to assist vocational rehabilitation agencies to better serve blind and visually impaired persons in program planning and allocation of agency resources to increase gainful employment closures of blind persons by providing an extensive analysis of the homemaker closure. This study reviewed relevant literature and provides empirical information on the antecedents of the homemaker case closure so that client characteristics and rehabilitation process patterns which lead to homemaker closures can be identified early and appropriate service patterns can be established. Thus, this study identifies the characteristics of clients closed as homemakers and establishes which factors differentiate this outcome from other outcome groups. The four client employment outcomes examined were competitive employment, sheltered workshop employment, homemaker closures, and unemployed closures. The categories of factors used to predict employment outcome of blind clients included rehabilitation process, personal, financial, environmental, occupational, and counselor-related variables.

Literature review shows that there are relatively few outcome studies for blind and visually impaired clients of state rehabilitation agencies, and almost

a complete lack of outcome studies specifically dealing with blind and visually impaired vocational rehabilitation (VR) clients closed as homemakers. For blind and visually impaired client populations several factors have been associated with a homemaker outcome. As compared to the other three closure groups, characteristics of the homemaker group include, but are not limited to: late age of onset of blindness, likely to be currently married or widowed, predominantly female, low in years of education, generally underserved by state vocational rehabilitation agencies, more frequently receiving public financial support, less likely to have primary financial support from personal or private sources, and unemployed somewhat longer prior to referral.

Methodological shortcomings of previous research on blind populations in general were avoided in this study. Some of these shortcomings were that (1) outcome was viewed in an imprecise, "successful" vs. "unsuccessful" classification, which results in an underestimation of client improvement and misinterpretation of factors associated with a particular type of outcome (the homemaker client does not differ in the same way from the competitive client as he or she differs from the sheltered closure client), (2) samples employed, and hence generalizability, were restricted, and (3) data, usually from standard forms on computer tapes, could not be checked for accuracy.

The study was designed to achieve the following objectives:

1. Identify those factors in the rehabilitation service delivery system process that differentiate the homemaker closure from other employment outcomes;
2. Identify those factors or characteristics of the client, including those related to disability and to personal/biographical characteristics, that differentiate the homemaker closure from other employment outcomes;
3. Identify those factors related to the financial status of the client that differentiate the homemaker closure from other employment outcomes;
4. Identify those factors related to the occupational history of the client that differentiate the homemaker closure from other employment outcomes;
5. Identify environmental factors that differentiate the homemaker closure from other employment outcomes;
6. Identify those factors related to the rehabilitation counselor that differentiate the homemaker closure from other employment outcomes.

Thus, this study attempted to overcome omissions and methodological problems of previous research on blind populations and to provide results which can assist state agencies in identifying services and allocating resources to maximize rehabilitation outcomes, particularly for the client likely to be closed as a homemaker.

## Overview of Methodology

Subjects were 619 blind or severely visually impaired cases in the Mississippi State University Rehabilitation Research and Training Center National Blindness and Low Vision Database who were closed status 26 (rehabilitated) or status 28 (not rehabilitated) during federal fiscal years 1978, 1979, and 1980 from Florida, Kansas, Mississippi, and Ohio. The choice of states was guided by efforts to obtain a rural/urban, geographic, agency structure, and size representation, and by fiscal constraints. The number of cases selected by systematic quota sampling from each state was proportional to the number of status 26 and status 28 closures in each state. The resulting sample sizes for each state were as follows: Florida 146, Kansas 42, Mississippi 124, and Ohio 307.

Data were collected directly from examination of case files by a trained research team. Three categories of specific factual information were obtained. Data were abstracted from the R-300 reporting form (71 variables); case file information (32 variables) was obtained, such as disabilities, use of aids, mobility training, occupational history, and proximity; and financial records provided 28 specific service expenditure variables. These and other data with alternative codings, recodings, and construction of indicator variables formed the Mississippi State University (MSU) Rehabilitation Research and Training Center (RRTC) National Blindness and Low Vision Database with over 270 client variables on each case.

After the screening of variables, 108 quantitative candidate predictor variables were identified for use in "predicting" four outcome categories. The employment outcome groups were as follows: Competitive (CPT) - competitive employment, self-employed, and business enterprise; Sheltered (SHL) - sheltered workshop closures; Homemaker (HMK) - homemaker, unpaid family worker, and homebound industry closures; Unsuccessful (UNS)- status 28 closures. The study used stepwise multiple discriminant analysis to identify which variables were best able to discriminate between the homemaker closure group and each of the other three employment groups in three separate analyses.

## Results

The discriminant analysis between the homemaker and competitive groups showed a correct classification of 84.4%, which was significantly better than chance. Compared to the competitive group, the homemaker clients were more likely to be female, had a lower skill level of their IWRP vocational goal, were less likely to have their primary means of support from personal or private sources, spent a little more than half as long in the rehabilitation process (acceptance to closure), were more likely to receive diagnostic services, were more likely to have a severe secondary disability, were less likely to have received institutional training, were an average of 21 years older at referral, were much less likely to change their occupational goal, were less likely to have been referred by an individual, were more likely to be currently married, were an average of about 27 years older in age of onset of blindness, spent an average of almost 3 years longer between their last work and referral, were more recently successfully closed (for those previously in the VR system), were less likely to have received maintenance, and were less likely to be Social Security recipients at referral.

The discriminant function for the homemaker and sheltered groups classified clients significantly better than chance at an overall rate of 88.1%. Compared to the sheltered group, the homemaker clients were twice as likely to be currently married, an average of 34 years older at onset of blindness, incurred a much smaller expenditure for PAT-VAT, were more likely to be female, were more likely to have been previously married, lived an average of 12 miles farther from the nearest sheltered employment, were more likely to be white, were less likely to have received maintenance, had only one third the expenditure for Rehabilitation Facilities, were disabled for about 9 years less prior to referral, spent only one fourth as much time in training, and had a greater expenditure for prostheses.

The discriminant function for the homemaker and unsuccessful groups classified clients significantly better than chance at an overall rate of 78.5%. Compared to the unsuccessful group, the homemaker clients were more likely to be female, had a lower skill level of their IWRP occupational goal, were referred when over 16 years older, were more likely to have received restoration services, lived farther from their VR counselor, were in training for less time, were more likely to receive noninstitutional training, were more likely to be currently married, were less likely to have been referred by an educational institution, received a lesser amount of public assistance at referral, and were less likely to receive maintenance services.

### Implications and Conclusions

The findings of this study have implications for policies and delivery of rehabilitation services by rehabilitation agencies which will help enhance the employment and reduce underemployment of blind and visually impaired clients, particularly those clients likely to be closed as homemakers.

### Profile

The typical (or "average") client entering the vocational rehabilitation system who finally is closed as a homemaker is married and female; is about 56 years of age -- from 16 to 24 years older than nonhomemaker closure clients; has by far the latest age of onset of blindness when compared to the other closure groups, occurring at about age 46; is some 18 years older at onset than the average age in the next latest group; and is second lowest in educational level of all closure groups. While this group does not have more multiple eye diagnoses than nonhomemakers, over half have two visual disorders and about one in five have three visual disorders. The homemaker closure client is also typically multiply disabled and taking the greatest number of different types of medications: over eight in ten have at least one nonvisual disability in addition to blindness and half have two nonvisual disabilities of which cardiovascular disease and diabetes mellitus are the most prevalent.

### Observations

1. Previous research based on the traditional successful (26) vs. unsuccessful (28) closure dichotomy obscures important differences among employment outcomes of homemakers and other outcome groups. At a minimum, future agency evaluation research must separate outcome categories into competitive, sheltered, homemaker, and nonworking groups to understand the interplay of factors impacting on employment outcomes of blind clients.

2. The relatively large proportion of homemaker closure cases found with retinal disorders (36%) and cataracts (23%) indicates that physical restoration services, optical aids, and other related services can be expected to continue and increase as major services of state rehabilitation agencies.
3. In contrast to nonhomemaker employment outcome groups clients (CPT, SHL, UNS), the homemaker closure client is not difficult to characterize. Because of the relative homogeneity of homemaker closure clients, their characteristics can be described by indicating how the homemaker group differs from each nonhomemaker outcome group. It is possible to determine which of the nonhomemaker closure groups the homemaker group most closely resembles. This is indicated by the tendency for the classification phase of the discriminant analysis to misclassify the HMK client. The HMK client was misclassified as an UNS client most often (12.4%), next most often as a CPT client (7.8%), and least often as a SHL client (4.6%). One interpretation of these misclassification percentages is that in the HMK client group there are individuals who, with a maximally effective set of vocational services, are capable of becoming competitive closures. Thus, there is at least modest potential for a wage earning outcome within the homemaker group. Another more tenuous interpretation is that some clients in the homemaker group may have been more appropriately closed as unsuccessful.
4. The main factors that differentiate homemaker and competitive closure clients relate to (a) homemakers' late onset of blindness, and (b) transfer payments and gender. Relative to the competitive closure group, the homemakers are characterized by late onset and elderly referral as the strongest characteristics. Having a severe secondary nonvisual disability and being married were also associated with the homemaker group. It seems likely that these biographical and disability factors are likely to lead to the rehabilitation process variables associated with this group, including lower vocational goals, shorter time in the rehabilitation process, lower rates of institutional training, and less maintenance support. The homemaker group, relative to the competitive group, were less likely to be receiving SSDI during service and SSI at referral, and were less likely to be male. The pattern suggests that homemaker closures were less likely to have a work history and reiterates the stereotypical bias for the acceptability of a nonwage earning closure (homemaker) for female clients.
5. The main factors differentiating homemaker from sheltered closure clients relate to training and adjustment, age of onset of blindness, and marital status. Higher expenditures for training in a rehabilitation facility, more expenditure for personal and vocational adjustment training, higher expenditure for maintenance, and longer overall time in training characterize the sheltered closure client. The homemaker client lies at the other extreme on each of these variables. The homemaker clients tend to have a late onset of blindness and a short time between onset and referral and are more likely to be married.
6. The main differences between homemaker closure clients and unsuccessful closure clients concerned age at referral and age of onset of blindness, types of disabilities, and work history. The cluster of



characteristics associated with age and late onset of blindness lead to the differences in VR services received by the homemaker group. The homemaker group tended to have disabilities more amenable to restoration than the unsuccessful and other outcome groups. When members of the homemaker group did receive training, it was usually noninstitutional (OJT and miscellaneous). Since the homemakers were mostly female, the types of jobs for which training was received are those in the service-related occupational category.

### Policy/Administrative and Practice Issues

1. Diabetes mellitus. This disorder was the most frequently reported non-visual disability or secondary disability of the homemaker group (30%). Few cases were observed to include documentation of comprehensive diagnostic evaluation, medical rehabilitation or treatment programs, or other diabetic supportive services. Because these kinds of services are likely to minimize the impact of diabetes mellitus on the role performance of the diabetic homemaker client, policies are needed which assure that the total rehabilitation needs of these clients are being met. Such policies could reduce the likelihood of homemaker closures and increase the rate of wage earning closures.  
Rehabilitation counselors should be encouraged to arrange for comprehensive medical diagnostic studies of the diabetic blind referral. Also, dietary counseling by appropriately trained personnel should be included to help ameliorate or minimize the effect of diabetes on the behavioral functioning of the blind client.
2. Causes of blindness and restoration. Since unspecified cataract disorders, diabetic retinopathy, and glaucoma appear to be the leading causes of blindness for clients likely to be closed as homemakers, the delivery of physical restoration services is likely to be frequently recommended by the rehabilitation counselor. Rehabilitation counselors should be encouraged to arrange for the effective and efficient delivery of these services to shorten the period of unemployment between referral and receipt of the restoration services. Rehabilitation professionals need to understand the etiology, treatment, and procedures for each of these types of diseases as well as associated nonvisual disorders. Also, rehabilitation professionals need to know about the availability and uses of both optical and nonoptical adaptive aids and devices that may be employed in the rehabilitation programs of clients with such disabilities, especially those likely to be closed as homemakers.
3. Female clients. The largest category of closures investigated was that of homemaker. Persons in this closure group were predominately female. Rehabilitation agencies need to have programs to address the needs of the female blind client. Rehabilitation agencies may find displaced homemaker programs to be effective as a service or resource for this group.
4. Gender bias. The present study observed that the homemaker group was predominantly female. Rehabilitation professionals need to be aware that stereotyped low expectations about the work capabilities of female blind clients likely do not reflect the real potential of each client.

Counselors need to weigh each case on its own merits and be sensitized to possible sex bias in expectations for employment outcomes, particularly with respect to elderly female blind clients likely to be closed as homemakers.

5. Severe disability. Clients having the characteristics of the homemaker are likely to be multihandicapped. The presence of severe secondary disability was more than twice as great (almost 40%) for the homemaker closure group compared to the competitive and sheltered closure groups. Given the gestalt of the potential homemaker closure client, VR policy and practice must recognize that incoming clients who fit this configuration are likely to need special rehabilitation efforts to overcome the drawbacks of severe secondary disability and enhance the outcome of such clients. Agencies need to be aware of the greater need for comprehensive medical evaluation and appropriate restorative and rehabilitative services for these clients due to their higher incidence of multiple disabilities. Case management procedures should be initiated which thoroughly identify all visual and nonvisual disabilities of the blind client and specify in the development of the IWRP how the impact of the additional disabilities on functioning will be eliminated or minimized.

To adequately serve this group, rehabilitation professionals are likely to need additional training in and knowledge of new technology. Such skills and knowledge can be used in vocational training and evaluations, rehabilitation teaching, and orientation and mobility programs for this population. Without these kinds of resources, a non-wage outcome for the multihandicapped client is likely to be the result of the rehabilitation process.

6. Age. Homemaker closure clients were in their mid fifties, in contrast to nonhomemaker closure clients who were in their mid to late thirties in the present study. This pattern suggests that blind persons referred later in life (and having a later onset of blindness) are likely to be closed as homemakers. This trend may reflect the lack of employment opportunities in competitive occupations for older workers. Systematic efforts by counselors and agency administrators are needed to find creative and realistic vocational alternatives to homemaking for blind clients who enter the rehabilitation system late in life.
7. Age of onset. The present study is consistent with previous research in finding that the homemaker closure client has a much later age of onset of blindness than competitive and other closure groups. Persons whose onset of blindness occurs while the individual is at an appropriate age for the educational system likely will learn skills which assist them in entering the world of work. Persons who become blind after this education-appropriate age range, such as the homemaker closure client, often miss the opportunity to learn, practice, and acquire proficiency at those skills transferable to an employment setting that are taught to blind youth in an educational environment. Clients with late age of onset of blindness, such as those likely to become homemaker closures, need more opportunities for training and acquisition of skills which are in demand in employment settings. Agency service training needs to adopt this goal in order to move more homemaker closures into wage earning closures. Also,

administrators need to include age at onset of blindness in their agency management information systems.

8. Time since last employment. In this study the homemaker group spent about three and one-half years between last employment and referral, at least a year and one-half longer than the nonhomemaker groups. This finding suggests the existence of a "barrier" or inertia preventing prompt referral of homemaker closure clients after they stop work. Programs to identify individuals, regardless of age, who stop work as a result of visual impairment need to be established as a funding priority and implemented as a means to enhance rehabilitation outcomes for potential homemaker closure clients as well as for other outcome groups.
9. Vocational goal. The vocational objective of the client, expressed as a skill level index, was substantially lower for the homemaker group compared to the competitive outcome group. Given the importance of the IWRP vocational goal, it should be given definite attention by counselors and administrators alike. In practice, counselors need to be sensitized to the probable tendency to set less ambitious vocational goals for older, female clients who have not worked in a relatively long time. Tendencies toward expecting less, in terms of vocational potential, from persons with homemaker closure characteristics are likely to result in a self-fulfilling prophecy phenomenon, which diminishes the client's motivation toward a wage earning closure.
10. Diminished rehabilitation "effort." Associated with lowered vocational goal are the findings that the homemaker closure client spends a relatively short time in the VR system (little vocational training is required for the homemaker goal) and receives college or vocational school (institutional) training at a very low rate (3%) and much less often than the competitively closed client (34%). This is a continuing part of the pattern whereby clients who are estimated to have low vocational potential have low goals, and thus little vocational rehabilitation effort is invested in them. Counselors need to be aware of and guard against the influence of possible low expectations for these clients leading to less than optimal service delivery and outcomes for clients in this group.
11. Unrealized vocational potential. The HMK group client apparently is not given or is not deemed as needing as much time in training activities as the other outcome groups. The low level of training is part of a pattern associated with homemaker closure that is consistent with homemaking as the occupational goal. The question remains, however, whether this occupational goal is appropriate for all those clients who accumulate in this outcome group. It is realistic to expect that SOME of the clients in this group are correctly assigned the homemaker goal. It is also realistic to expect that a significant number of clients in the homemaker group could succeed at a wage earning vocation. A new attitude on the part of administrators and counselors alike is needed to stimulate identification of those clients who possess the pattern of the homemaker closure but who could succeed at a wage earning occupation. Appropriate programs and staff training are needed to achieve this goal.

12. Identification of vocational potential. An issue for policy is whether some of these homemaker closures have vocational potential for wage earning closure and how best to identify and successfully rehabilitate them to wage earning vocations. Sex bias is closely related to this issue. One possible test for sex bias might be for the counselor to ask him or her self if the same vocational goal would be set if the client were male instead of female. Male clients with the homemaker client configuration apparently are assigned to more ambitious occupational goals and are consequently expected to achieve a wage earning closure.
13. Stagnant vocational goal. Another associated finding is that the homemakers change their vocational goal very rarely relative to those in other outcome groups. This suggests that this group either does not need or simply is not getting the attention of the counselor in terms of reexamination and reevaluation of the client's vocational goals. This finding, again, suggests that homemaker clients receive less vocational counseling efforts and attention from their counselors. Agencies seeking to reduce homemaker closures and in turn increase wage earning closures are likely to need to provide more time for the rehabilitation counselor and blind client to develop and monitor the appropriateness of the vocational goal of the client.

In order to facilitate appropriate goal choices, the rehabilitation counselor needs to be aware of the vocational choice process and realistic alternatives to the homemaker goal. In-service and pre-service training programs need to include vocational goal development with emphasis on vocational alternatives to homemaking in case management and training curriculums.
14. Health care - seeking motivation. Homemaker closures appear to enter the rehabilitation service delivery system seeking health care services rather than rehabilitation services which lead to job placement. This is particularly apparent when the homemaker and competitive groups are compared. It is important for rehabilitation counselors during the initial interview to assess the individual's reasons for seeking rehabilitation services. If it is clear that the individual seeks only health care services, for example, cataract surgery, the rehabilitation counselor should assist the individual to locate another source of payment for the health care. By not accepting this type of case, the rehabilitation counselor's rate of homemaker and status 28 closures is likely to be reduced, and the counselor will have more time to assist blind and visually impaired persons whose goals are congruent with the vocationally oriented mission of the vocational rehabilitation program.

## REFERENCES

- Goldner, N., & Liebman, J. (1985). Homemaking as a vocation: A dilemma for rehabilitation agencies. Journal of Rehabilitation, 51, 41-46.
- Kirchner, C., & Peterson, R. (1981). Statistical brief #15, Men, women and blindness: A demographic view. Journal of Visual Impairment & Blindness, 75, 267-270.
- Rehabilitation Services Administration. (1976). Program regulations guide. Washington, DC: Author.
- Rehabilitation Services Administration. (1982). An assessment of the validity of the homemaker closure. Washington, DC: Division of Program Administration, Basic State Grants Branch.