

DOCUMENT RESUME

ED 257 016

CG 018 238

AUTHOR Hwalek, Melanie; And Others
TITLE Assessing the Probability of Abuse of the Elderly.
SPONS AGENCY Administration on Aging (DHHS), Washington, D.C.
PUB DATE 18 Nov 84
GRANT AoA-90-AR-0042
NOTE 4lp.; Paper presented at the Annual Scientific Meeting of the Gerontological Society (37th, San Antonio, TX, November 16-20, 1984).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Elder Abuse; Family Relationship; *Family Violence; *Identification; *Older Adults; Stress Variables
IDENTIFIERS Caregivers; *Risk Assessment Tool

ABSTRACT

Investigators and service providers have indicated the need for a tool to identify elderly victims of abuse and neglect. Identifying factors related to the risk of elder abuse/neglect can be useful in planning services and targeting limited resources for preventing future problems. A 93-item Risk Assessment Tool was created and over 100 risk indicators were examined for their predictive value in classifying cases of elder abuse/neglect from comparable cases of elderly known not to be victims. Data were collected by nine social service/health agencies on 50 cases of abuse/neglect and 50 control cases. Through a series of discriminant function data reduction analyses, nine risk indicators were identified which were 94 percent accurate in classifying cases into abuse/neglect and control groups. Three questions directed to the elderly were significant (did anyone take money or property, did anyone threaten to hurt the elder, and are the elder's needs being met), as were two characteristics of the elder (no related cause of symptoms, elder seen as source of stress), and four characteristics of the caretaker (tried to make elder act against own best interest, inappropriate awareness of elder's condition, financial dependence on elder, and persistent lying). (The Risk Assessment Tool is appended.) (Author/NRB)

 * Reproductions supplied by EDRS are the best that can be made *
 * from the original document. *

ED257016

ASSESSING THE PROBABILITY OF ABUSE OF THE ELDERLY

Melanie Hwalek, Ph.D.
Mary C. Sengstock, Ph.D.
Renee Lawrence, M.S.

Institute of Gerontology
Wayne State University
Detroit, Michigan 48202

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

- X This document has been reproduced as received from the person or organization supplying it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official NIE or ERIC positions.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Melanie Hwalek

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

Paper presented at the 37th Annual Meeting of the Gerontological Society of America, San Antonio, Texas, November 18, 1984.

This research is supported by a grant from the Department of Health and Human Services, Administration on Aging (90-AR-0042).

CE 018238

ABSTRACT

Over the years several investigators and service providers have indicated the need for a tool to identify elderly victims of abuse and neglect. Identifying factors related to the risk of elder abuse/neglect can be useful in planning services and targeting limited resources for preventing future problems. In this study, over 100 risk indicators were examined for their predictive value in classifying cases of elder abuse/neglect from comparable cases of elderly known not to be victims. Data was collected by nine social service/health agencies on 50 cases of abuse/neglect and 50 control cases. Through a series of discriminant function data reduction analyses, nine risk indicators were identified which were 94% percent accurate in classifying cases into abuse/neglect and control groups. Implications of these findings for future research and for program planning are discussed.

Keywords: Elder Abuse, Adult Protective Services, Domestic Violence.

Abuse of the elderly by their families and other caretakers is becoming recognized as a serious problem. An ever-increasing life expectancy has resulted in many people living to an age in which they become more and more dependent upon their families (Perdick-Cornell and Gelles, 1981). For these families, caring for an older person, often for an extended period of years and at considerable expense, can create insuperable difficulties (Steimetz, 1981). Social agencies and medical facilities have only recently become aware that because of these stressful factors, aged persons may be in danger of being abused by family members, friends and service providers.

Proper identification is the first step in assisting elderly victims in dealing with an abusive situation. Agency workers report that they often do not learn of an abusive situation until after they have known a client and his or her family for many months. This delay in evaluating an abusive situation results in lost time as well as the concomitant expenditure of agency resources. Also, aged persons endure considerable pain -- often life-threatening in character -- which could be avoided if the abuse were identified at an earlier point.

The issues of identification have been dealt with in a variety of ways, by researchers. In most research on elder abuse, the service provider, who is usually the respondent in the study, is assumed to have the ability to clearly identify elderly victims of abuse (cf. Block & Sinnott, 1979; Douglass et al., 1980; Sengstock & Liang, 1982). Recognizing that service providers may have difficulty identifying victims, a number of published and unpublished indices of elder abuse have recently been developed. (cf. Block & Sinnott, 1979; Cash, 1982; Hamilton County Welfare Dept.; Hooyman & Tomita, 1982; Tomita, 1983; Douglas, 1981; Univ. of Mass, University Center on Aging; Shell, 1982).

However, as Sengstock et, al., (1983) have shown, none of these measures presents a comprehensive index of the multiple types of abuse and neglect perpetrated against the elderly. Furthermore, none of them give clear indications of scoring systems to be used to identify victims, nor have the measures been subjected to psychometric analyses. Thus, while identification techniques have been developed, their reliabilities and validities are still unknown.

In spite of the serious limitations in the development of identification techniques, research has proceeded on the topic. Over the years several studies have been undertaken with the aim of establishing factors predictive of elder abuse and neglect. Douglass et al., (1980), for example, gathered data from perceptions of service providers who saw elderly clients victimized by abuse or neglect. A few other studies arrived at predictors of abuse or neglect by gathering data directly from case files of older victims (cf. Lau & Kosberg, 1978; Rathbone-McCuan, 1980). Table One summarizes the results of these studies.

As this table indicates, the factors associated with abuse of the elderly vary across studies. Investigations used different indicators in their analyses, making them not directly comparable for determining a consistent set of predictors of the problem. Predictors were largely demographic factors, which are not very useful when designing programs for prevention, since these factors cannot be changed. In no case were the factors associated with abuse victims statistically compared with factors present in a sample of control cases.

In order to advance the state of the art in identifying victims of abuse and neglect these investigators focused on identifying those factors which best discriminate victims of elder abuse from a comparable group of elderly individuals known not to be victims of abuse or neglect.

TABLE ONE
SUMMARY OF RESEARCH ON ELDER ABUSE

RESEARCH AUTHORS>	LAU & KOSBERG (1978)	BLOCK & SINNOTT (1979)	HICKEY & DOUGLASS (1981)	RATHBONE McCUAN (1980)	CHEN ET AL (1982)	WOLF ET AL (1982)	SENGSTOCK & LIANG (1982)	DETROIT STREET (1983)	SCHULTZ (1983)	GIOGLIO (19??)	HWALEK & SENGSTOCK (1984)
SAMPLE LOCATION:	Cleveland	Baltimore	Michigan	Unclear	Boston	Boston & Worcester	Detroit Metro Area	Flint Michigan	West Virginia	New Jersey	Detroit Metro Area
SAMPLE SIZE:	39 case records screened	26 case records screened	228 respondents	10 cases	30 practitioners	127 case reports	77 case reports	Agencies reported 749 cases	80 Resp. from Agencies	23 from N = 400 Prob. Samp	50 abuse 50 contrl assessed
SOURCE OF DATA:	case records from: Chronic Illness Center	case records from: MDs, RNs, SWS, Sr. Ctrs, Psychol. Counsel. Legisltr Adminstr	past yr. exper. w/ clients from: MDs, RNs, aides, police, SW, clergy, morticians coroners	case histories qualitatively analyzed	open-ended survey of: Hospital VNA Homekr Legal & Soc. Serv Agencies	individ. case reports filled out by: health neigh. housng soc. serv legal MH, day care, church etc.	individual case reports filled out by: VNA, Hospitals, Sr. Cntrs, Soc. Serv. Police, Crisis Centers	Agencies' reports of N of cases seen in one yr. by type of abuse or neglect	Percep. of N of cases encour-tered by: Welfare, Sheriffs, MDs, AAAs Dom. Viol Centers, Health Clinics, Fam. Serv.	Vignettes read to household members w follow-up questions re: sound like any one you know? happened to you?	9 agency staff completed compreh. index on abused & non-abuse cases: Legal, Hospital, MH, DSS, NHS
FREQUENCY OF ABUSE BY TYPE:			Ranked by Frequency			Each City:			N cases	Of the 23 "yes":	Of the Abused:
Physical Abuse	28%	76% incl. neglect	#4	NA	NA	46% 48%	20%	16%	45	9%	34%
Physical Neglect (active)	49%		#3	NA	NA	13% 20%	23%	23%	165	22%	34%
Psych. Abuse (passive)			#1			32% 36%					
Psych. Abuse	33%	90%	#2	NA	NA	61% 53%	58%	22%	71	22%	46%
Psych. Neglect	21%	NA	NA	NA	NA	NA NA	23%	NA	NA	NA	42%
Material Abuse	31%	75%	NA	NA	NA	30% 29%	55%	21%	67	48%	58%
Viol. of Rights	18%	NA	NA	NA	NA	NA NA	NA	18%	NA	NA	34%

TABLE ONE CONTINUED
SUMMARY OF RESEARCH ON ELDER ABUSE

RESEARCH AUTHORS>	LAU & KOSBERG (1978)	BLOCK & SINNOTT (1979)	HICKEY & DOUGLASS (1981)	RATHBONE McCUAN (1980)	CHEN ET AL (1982)	WOLF ET AL (1982)	LIANG (1982)	DETROIT STREET (1983)	SCHULTZ (1983)	GIOGLIO (19??)	HWALEK & SENGSTOCK (1984)
CHARACTERISTICS OF ABUSED ELDERY											
Age	60+	75+	NA	65+	60-80	60-80/75+	60s & 90s	NA	60-75	75+	$\bar{X} = 72$
More Female?	yes	yes	NA	yes	yes	yes	yes	NA	yes	yes	yes
Race	White	White	NA	NA	White	White	Wh. & Non	NA	NA	White	More Blk.
Income	NA	Low & Mid	NA	NA	Lower	Lower	Lower	NA	NA	NA	$\bar{X} = \$10,000$
Impaired?	yes	yes	NA	yes	yes	yes	no	NA	NA	yes	not diff
CHARACTERISTICS OF ABUSER:											
Middle Aged?	yes	yes	NA	NA	40-60	under 60	over 40	NA	NA	yes	NA
Lives w/ Abused?	yes	yes	NA	yes	NA	yes	yes	NA	NA	no	NA
Relative?	yes	yes	yes	yes	yes	yes	yes	NA	yes	yes	NA
More Female?	yes	yes	NA	no (=)	no (<)	no(<)no(=)	no (=)	NA	NA	no	NA

Methodology

In order to define those variables which discriminate between elderly victims and control cases a Risk Assessment Tool was created by the research team. This tool included 4 general sections: (1) Questions asked directly to the elderly; (2) Demographics and background questions; (3) Professional evaluation by service providers about the case; and (4) Risk indicators. (Appendix A contains a copy of the risk assessment instrument used in the present investigation.)

Questions to be asked of the elderly. Based on the domestic violence literature, a series of questions was included to be asked directly to the elderly client. These questions were developed to represent each of six types of abuse/neglect of the elderly: physical abuse, physical neglect, psychological abuse, psychological neglect, material abuse and violation of personal rights. There were thirteen such items included in the front of the Risk Assessment Tool, which were ordered such that the least sensitive questions were asked to the client first, followed by more sensitive questions concerning physical abuse. Pretesting of this instrument indicated that it was feasible to ask these questions directly to elderly clients.

Demographics and background questions. Questions were asked to assess the age, sex, race and approximate total household income of the elderly client. Questions were also included to ascertain physical and mental impairment. These variables were included because previous literature suggests that they may be related to elder abuse (Block & Sinnott, 1979; Douglass et al., 1980; Sengstock and Liang, 1982).

Professional Evaluations by Service Providers. Items were presented to elicit a professional evaluation of the service providers concerning the type or types of abuse/neglect involved in the case and the characteristics of the situation.

Specifically, items were included to assess characteristics of the situation relevant to whether or not the abuse/neglect case was seen as: (a) victim precipitated (b) legitimate (c) instrumental (d) expressive and/or (e) mutual. These characteristics stemmed from the typologies of domestic violence suggested by Gelles (1974). Other characteristics of the situation included (1) whether any corrective action had been taken; (2) other agencies involved; (3) whether the service provider was able to see the caretaker; and finally, (4) if there were more than one caretaker.

Risk indicators. These items were derived from analyses conducted on 203 risk indicator items collected from previous measures of elder abuse. Twenty-nine service providers evaluated the pool of 203 risk indicators as to the importance of each item in assessing the risk of abuse and neglect. A subset of 93 items was derived from the analysis of service providers' rating of the items. Specifically, descriptive statistics were generated for each item, and factor analyses within subcategories of items were conducted to determine the subset of items which were most important to service providers in detecting elder abuse. One hundred items received a mean score of 4.0 or higher in ratings of importance (on a scale from 0 to 5). After the items were screened for (1) clarity of presentation (e.g. item wording) and (2) redundancy of predictive information and/or unclear role as a risk indicator, a total of 93 items remained.

Concern for redundancy involved identifying items that assessed the same information with the overlapping items being eliminated. The screening process also involved the elimination of items which did not focus directly on the risk of abuse. For example, the item "incapable of stopping exploitation" was believed to represent a conclusion or judgement about the ability level of the elder rather than an estimate of the level of risk from which the elder suffered.

Such items were dropped from the pool of Risk Indicators used in this study. Similarly, the presence of injuries, burns, etc., were seen as assessing the presence of physical abuse and not focusing on identification of potentially at risk elders. They are more appropriately categorized as items identifying existing abuse rather than Risk Indicators. After selecting the best subset of 93 items based on the aforementioned criteria, the Risk Indicators were conceptually divided into 3 major categories: characteristics of the elderly victim, characteristics of the caretaker, and characteristics of the situation.

Characteristics of the elderly person included such subcategories as signs of mental health (eg. depression, confusion), indications that the elder is unwanted, actions of the elderly (eg. not sharing in decision making) and physical indicators (eg. no illness related cause of symptoms). Characteristics of the caretaker included subcategories such as mental functioning (eg. drug abuse, alcohol abuse), legal actions, medical actions, statements made about the elderly and personality characteristics. Each subcategory within the major categories of elder and caretaker characteristics were represented by one or more specific item.

Characteristics of the situation were represented by one group of several environmental and social indicators such as alcohol/drug abuse in the family, marital discord and financial stress.

Participating Agencies

A total of nine agencies agreed to use the risk assessment instrument on their active caseloads. These agencies represented a wide range of service providers for the elderly, including medical social workers, home health aids, attorneys, case workers, and service providers working with nursing home clients.

They were located in a variety of environments, ranging from inner city Detroit to suburban and rural areas of Oakland County, Michigan.

Sample Selection. Each service provider was requested to select from his/her case load, active cases of elderly whom they believe to be victims of one or more types of abuse/neglect. For each active abuse case completed by the service provider, he/she was also requested to select a control case which resembles the abuse/neglect case to the greatest extent possible in terms of demographic characteristics.

After selecting active abuse and control cases, service providers were instructed to use the Risk Assessment Tool on both types of clients, first completing as much of the instrument as possible from their case files and from their recollections of the case. Then service providers were instructed to contact the client directly, if possible. During the client encounter, the first set of questions were to be asked, and the service provider was to obtain further information that was not available from the initial assessment. The scoring system ranged from 0 to 3, with a 0 indicating that the indicator was not present. Scores from 1 to 3 indicated the presence of the indicator as well as the extent to which it was important in defining the case.

Besides verbal instruction provided at a meeting on the use of the instrument, written instructions accompanied the Risk Assessment Tool. The written instructions detailed and further highlighted the procedures and types of information requested relevant to: (1) types of abuse included in the present investigation; (2) scoring the presence and seriousness of the indicators; and (3) identifying the sources of the data collected. Data collection took place between July and November, 1984.

Analysis Strategy

The initial phase of data analysis involved the calculation of frequency distributions of each item included in the Risk Assessment Tool. This phase also provided information relative to the frequency of responses, measures of central tendency and variability for each item. These data enabled the investigators to describe the nature of the abused/neglected cases collected by the service providers.

The next phase of data analysis centered on determining and evaluating differences between cases identified as involving some type of abuse/neglect and the control cases. Two broad strategies were used in this phase. Tests of statistical significance assessed whether there were differences between the groups on the demographic variables of age, sex, race and income. T-tests and chi-square analyses were used where appropriate to test the significance of the differences between means or proportions.

In order to determine those items which best differentiate targeted cases from the controls, a series of discriminant function analyses were performed. Discriminant function is a procedure that maximally discriminates or differentiates the members of groups, defined a priori, by generating a regression equation with the dependent variable representing group membership. Given the small number of cases and large number of items, data reduction techniques were required. Accordingly, three stages of discriminant function analysis were conducted to obtain the desired goal of weighting and combining the items that best define group membership.

The first stage was to perform discriminant function analysis within sub-categories on the Risk Assessment Tool. Separate discriminant function analyses

were conducted for each subcategory within the 2 sections entitled "Characteristics of the Elder" and "Characteristics of the Caretaker" in an effort to maximize differentiation between the groups without minimizing the theoretical significance of the subcategories included on the Risk Assessment Tool. Discriminant function analysis was performed on each subcategory having at least two items to assess the presence and importance of particular item(s) within the subcategory. This allowed each subcategory to be tested for inclusion of respective items in the final general discriminant function analysis.

The second stage of analysis was a discriminant function performed within each of the 4 major categories of indicators: For the questions asked directly to the elderly, all 13 items were used simultaneously. For characteristics of the elderly, the significant items within each subcategory and those subcategories represented by a single item were simultaneously analyzed. This same procedure was used to analyze simultaneously significant items located from the first stage discriminant function of subcategories defined under characteristics of the caretaker. Because of the small number of items describing the situation, these were analyzed simultaneously, without going through data reduction. The final stage of analysis combined all significant items from all four categories into one discriminant function.

Results

Comparison of Demographic Variables. T-tests and chi square analyses conducted on age, sex, race, income and degree of impairment indicated that these two groups were not significantly different. The mean age of both groups was approximately 72 years ($t=0.03$, $p<.97$). Their income was in the range of \$10,000 ($t=1.62$, $p<.11$). About one-fourth of the elderly in both groups were

male ($X^2=0.00$) These results highlight the importance of comparing abused victims with control cases. While the demographic characteristics of the victims are similar to those found in previous literature, they are not significantly different from other clients seen at the agencies. While slightly more elderly in the abused group were Black (39.6% vs. 23.4%) this difference was not significant ($X^2=5.45, p \leq .14$). Also, the two groups did not differ in the presence of physical ($X^2=1.98, p \leq .16$) or mental ($X^2=0.82, p \leq .37$) impairment. These findings indicate that the abused and control groups were adequately matched on major descriptive variables.

Description of Abuse Cases. Other characteristics of the abused elderly in this study can be seen by examining the frequency distribution from items describing their situations. Table Two illustrates these results.

The types of abuse encountered by the service providers is similar to those which are reported (about 45%) in other studies. Emotional abuse is one predominant type of abuse encountered, although material abuse was reported most frequently. Rarely included in other studies is material abuse, which was seen in 29 of the cases (or 58 percent). It is interesting to note that this type of abuse was encountered by providers of non-legal services, as well as the legal aid agency participating in this study.

In only 58 percent of the cases was the service provider able to see the caretaker. In 42 percent of the cases there was more than one caretaker involved. In the greatest number of cases, the service provider believed the abuse served expressive or instrumental purposes for the abuser (44 percent). About one-fourth were viewed by the caseworker as victim precipitated and one-fifth as "legitimate."

TABLE TWO
(TOTAL N=50)

Type of Abuse	N of Cases	%
Physical Abuse	17	34
Physical Neglect	17	34
Psychological Abuse	23	46
Psychological Neglect	21	42
Material Abuse	29	58
Violation of Rights	17	34
Perceptions of Situation		
Victim Precipitated	13	26
Legitimate	10	20
Instrumental	21	42
Expressive	22	44
Mutual	9	18
Able to see caretaker	29	58
More than one caretaker	21	42

Discriminant Function Analyses

As mentioned previously, items which best discriminated within a subcategory, as well as those situations where the subcategory was represented by only one item, were included in the second stage which involved performing discriminant function analysis for each of the four general areas of the Risk Assessment Tool. Table Three presents the results from the second stage of the discriminant function analyses. As this table indicates, the total pool of risk indicators was reduced to 17 items which, when subgrouped by the type of indicator, correctly discriminated between 69 percent and 87 percent of cases into the appropriate group.

As this table indicates, 3 items from the questions asked directly to the elderly significantly predicted group membership. Abused elderly were more likely to indicate to the service provider that someone had taken money or property from them, that someone had threatened to hurt them and that their needs were not being met by others. Six characteristics of the elderly, when taken together, accurately classified 82 percent of the cases into their appropriate groups. These were: the elderly showing fear, being unwanted, being a source of stress, not sharing in decisions, showing signs of depression, and having no illness related cause of symptoms. Five characteristics of the caretaker appear to be significant in classifying cases appropriately. These were evidence that the caretaker: tried to get the elder to act against his/her own best interest, showed inappropriate awareness of the elder's condition, misused alcohol, was dependent on the elder for financial support, and was a persistent liar. Three characteristics of the situation were significant in accurately classifying 69% of the cases. These were alcohol abuse in the family, marital discord and financial stress.

TABLE THREE
SECOND STAGE DISCRIMINANT FUNCTION ANALYSES

<u>DISCRIMINANT FCN & VARIABLE NAME</u>	<u>STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENT</u>	<u>WILKS' LAMBDA</u>	<u>SIGNIFICANCE OF WILKS' LAMBDA</u>	<u>% CASES CORRECTLY CLASSIFIED</u>
<u>QUESTIONS ASKED TO ELDERLY</u>				
Anyone taken \$ or property	.76	.68	.000	
Anyone threatened to hurt you	.66	.50	.000	
Needs being met by others	-.34	.47	.001	
				86.5%
<u>CHARACTERISTICS OF ELDERLY</u>				
Appears afraid of Caretaker	.21	.67	.000	
Elder is unwanted	-.31	.63	.000	
Source of stress	.27	.61	.000	
Does not share in decisions	.72	.60	.000	
Shows signs of depression	.28	.59	.000	
No illness related cause of symptoms	.24	.58	.000	82.1%
<u>CHARACTERISTICS OF CARETAKER</u>				
Tried to get elder to act against own best interest	.61	.70	.000	
Inappropriate awareness of elder's condition	.71	.63	.000	
Is misusing alcohol	.33	.60	.000	
Is dependent on elder for financial support	-.28	.59	.000	
Persistent liar	.31	.58	.000	83.7%
<u>CHARACTERISTICS OF THE SITUATION</u>				
Alcohol abuse in family	.48	.84	.001	
Marital discord	.44	.81	.001	
Financial Stress in family	.49	.77	.001	68.8%

For the final stage of the discriminant function analyses, those variables which proved to be significant discriminators from the previous analyses were simultaneously analyzed. Tables Four and Five summarize the results from this final stage of the analyses. Table Four presents the standardized discriminant function coefficients and their tests of statistical significance. Table Five elaborates on the classification results obtained from the final discriminant function.

As can be seen in Table Four, nine variables were selected before the addition to Rao's V became nonsignificant. No variables from the questionnaire section on "Characteristics of the Situation" entered the equation.

Three questions asked directly to the elderly were significant in the final discriminant function: did anyone take money or property; did anyone threaten to hurt the elder; and, are the elder's needs being met. Two characteristics of the elder were maintained in the final equation, namely no related cause of symptoms, and the elder seen as a source of stress. Finally, four characteristics of the caretaker remained significant predictors of group membership: the caretaker tried to get the elder to act against his/her own best interest, inappropriate awareness of the elder's condition, financial dependence on the elder, and being a persistent liar.

The percent of group-defined-cases correctly classified was 93.5 percent (Table Four). This percentage reflects the finding that 97.0 percent of the control cases (32 out of 33) and 90.9 percent of the abuse/neglect cases (40 out of 44) were correctly classified given the inclusion of nine variables in the discriminant function equation (Table Five). Only one control case was misclassified as abuse/neglect. Of the actual cases of abuse/neglect, 4 were misclassified as non-abuse/neglect.

TABLE FOUR
THIRD STAGE DISCRIMINANT FUNCTION ANALYSIS

<u>VARIABLE NAME</u>	<u>STANDARDIZED DISCRIMINANT FUNCTION COEFFICIENT</u>	<u>WILKS' LAMBDA</u>	<u>SIGNIFICANCE OF WILKS' LAMBDA</u>	<u>% OF CASES CORRECTLY CLASSIFIED</u>
(QUESTIONS ASKED TO ELDERLY)				
Anyone taken \$ or property	-.54	.70	.000	
Anyone threatened to hurt you	-.46	.32	.000	
Needs being met by others	.36	.36	.000	
(CHARACTERISTICS OF ELDERLY)				
No illness related cause of symptoms	.18	.43	.000	
Source of stress	.41	.38	.000	
(CHARACTERISTICS OF CARETAKER)				
Tried to get elder to act against own best interest	.45	.40	.000	
Inappropriate awareness of elder's condition	.39	.34	.000	
Is dependent on elder for financial support	-.26	.34	.000	
Persistent liar	.23	.31	.000	

93.5

TABLE FIVE

CLASSIFICATION RESULTS FOR FINAL STAGE
OF THE DISCRIMINANT FUNCTION ANALYSIS^c

ACTUAL GROUP MEMBERSHIP:	NUMBER OF CASES	PREDICTED GROUP MEMBERSHIP:			
		CONTROL No.	%	ABUSE/NEGLECT No.	%
CONTROL	33	32	97.0	1	3.0
ABUSE/NEGLECT	44	4	9.1	40	90.9

Discussion

This research examined a variety of indicators of risk of abuse and neglect of the elderly. Using 3 stages of discriminant function analyses on over 200 indicators, a set of 9 items were obtained which accurately group 93.5 percent of cases into abused or control groups. These indicators accurately predicted abused from control cases which had similar characteristics in terms of age, sex, race, income and physical and mental impairment. We feel that the delineation of these indicators represents a major breakthrough in the assessment of risk of elder abuse. Clearly they have an advantage beyond the traditional demographic indicators for predicting, preventing and ameliorating elder abuse and neglect.

Nine questions, fairly easy to understand, constitute a manageable procedure. We suggest that these questions be considered for use in assessment of elders who may possibly be at risk. Three major categories of indicators, including 3 questions to the elderly, 2 characteristics of the elderly and 4 characteristics of the caretaker significantly and accurately predicted membership in the abused/neglected group, as opposed to controls.

The results from this study have theoretical as well as practical implications. First, demographic variables are of questionable value in discriminating abused from non-abused elderly. Members of the two groups did not differ significantly on these factors. Likewise, characteristics of the family situation do not appear to be useful for assessing the probability of abuse. Predictive factors need to be more directly related to the elder and the caretaker. Results here suggest that frustration due to marital or financial stress in the family

may or may not be directed toward the elderly. Whether or not this stress is directed toward the elder is more dependent on other factors.

An important practical implication of this research is the fact that accurate and useful information for the assessment of abuse/neglect can be obtained through questions asked directly to the elderly. Although it is known that victims of domestic violence often try to hide their abuse, we found that certain questions assessing the risk of abuse can be asked effectively.

The importance of these nine indicators cannot be accurately assessed until they are used in a predictive way. Further research to ensure predictive validity is under way. Should the indicators survive such predictive assessment, they will have great value in a case management system. After total scores detect a high probability of abuse or neglect, individual indicators can be examined for their importance in characterizing the particular case. For example, the presence of an inappropriate awareness of the elder's condition in one case can suggest needs for education in caregiving. In another case, where the stress caused by the elderly is important, respite care services may be indicated in the treatment plan.

Should the indicators survive the next stage of research, they can alleviate the time-consuming and costly system of identification present in most agencies, and resources can be diverted to efforts in getting the elderly and the alleged abuser to treatment. Finally, after the validation of these items, they offer the possibility of conducting the first valid epidemiological study for assessing the prevalence of elder abuse and neglect.

These results should be viewed cautiously at this point, however, for two reasons. First, the appropriate weights to be given to each item in determining group membership are still under development. Second, abuse vs. control group was defined a priori in this study. Despite its limitations it is expected that these results will encourage a more accurate assessment of problems related to elder abuse.

REFERENCES

- Block, M.R. & Sinnott, J.D. "The Battered Elder Syndrome: An Exploratory Study." College Park, MD: University of Maryland Center on Aging, 1979. (Abuse Report Form)
- Cash, Tim. "Adult Protective Services Intake and Initial Contact Sheet." Department of Social Services, South Carolina, 1982.
- Chen, Pei N., Bell, Sharon L., Dolinsky, Debra L., Doyle, John., & Dunn, Moira. Elderly Abuse In Domestic Settings: A Pilot Study. Journal of Gerontological Social Work, 4:3-17, 1981.
- Douglass, Richard L. & Hickey, Thomas and Noel, Catherine. " A Study of Maltreatment of the Elderly and Other Vulnerable Adults." Final Report to the U.S. Administration on Aging, Department of Health, Education and Welfare and the Michigan Department of Social Services. Ann Arbor, Mich.: Institute of Gerontology, The University of Michigan, 1980.
- Gelles, Richard J. The Violent Home. Beverly Hills, California: Sage, 1974.
- Gioglio, G.R. Elder Abuse in New Jersey: The Knowledge and Experience of Abuse among Older New Jerseyans. Unpublished manuscript.
- Hamilton County Welfare Department, Adult Protective Services, 628 Sycamore Street, Cincinnati, Ohio 45202.
- Hooyman, N.R., & Tomita, S. "Intervention in cases of elderly abuse within medical settings. " Paper presented at the annual meeting of the Western Gerontological Society, San Diego, California, March, 1982.
- Hickey, T. & Douglass, R. Mistreatment of the elderly in the domestic setting: An exploratory study. American Journal of Public Health, 71(5):500-507, 1981.
- Lau, E.E. & Kosberg, J.I. "Abuse of the Elderly by Informal Care Providers," Aging, 299:10-15, 1979.
- O'Malley, H., Segars, H., Perex, R., Mitchell, V., and Knuepfel, G.M. "Elder Abuse in Massachusetts: A Survey of Professionals and Paraprofessionals". Boston: Legal Research and Services for the Elderly, 1979.
- Pedrick-Cornell, C and Gelles, R.J. Elderly Abuse: The Status of Current Knowledge, Family Relations, 31:457-465, 1982.
- Rathbone-McCuan, E. "Elderly Victims of Family Violence and Neglect" Social Casework, 296-304, 1980.
- Schultz, L.G. Elder Abuse in West Virginia: A Policy Analysis of System Response, Unpublished manuscript, 1983.

- Sengstock, Mary C., and Liang, Jersey. "Identifying and Characterizing Elder Abuse." Detroit: Institute of Gerontology, Wayne State University. 1982.
- Sengstock, M.C., Hwalek, M.A., & Barrett, S. Content Analysis of Measures for Identification of Elder Abuse. Paper presented at the 36th Annual Scientific Meetings of the Gerontological Society, San Francisco, 1983.
- Shell, Donna J. "Protection of the Elderly: A Study of Elder Abuse.: Manitoba: Manitoba Council on Aging, 1982.
- Steinmetz, S. "Elder Abuse." Aging, 6-10. 1981.
- Tomita, S.K. Detection and Treatment of Elderly Abuse and Neglect: A Protocol for Health Care Professionals. Physical & Occupational Therapy in Geriatrics 2(2): 37-51, 1983.
- Wolf, R.S., Stugnell, C.P., Godkin, M.A., "Preliminary Findings From Three Three Model Projects On Elderly Abuse." Massachusetts: University Center on Aging, 1982.

APPENDIX A

**RISK ASSESSMENT TOOL
USED FOR DATA COLLECTION**

INSTRUCTIONS TO CONSULTANTS

In this phase of our research on elder abuse, we are attempting to delineate those "risk indicators" that are most predictive of elder abuse. Risk indicators are items of information not meant to represent actual symptoms of abuse, but rather information which is highly correlated with the probability of abuse occurring. We are asking our consultants to select open cases from their caseload which they believe are cases of elder abuse, as well as cases they feel certain are not abusive/neglected. Remember, we are defining 6 types of elder abuse: physical abuse, physical neglect, psychological abuse, psychological neglect, material abuse, and violation of personal rights. Any given target case may, in fact, represent one or several types of elder abuse. We would like you to select an equal number of abuse (of any type or types) and non-abuse cases from your current caseload.

For each case, we would like you to write a number from 0 to 3 in the brackets provided after each item. A 0 indicates that the item does not apply or does not exist in the particular case you are rating. Scores of 1, 2, or 3 should be used to indicate the presence and seriousness of the indicator, with:

"1" representing the presence of the indicator which is of minimal importance to the case;

"2" representing a moderately important indicator of risk of abuse in this case;

"3" indicating that the indicator is obviously present and a major characteristic of this case.

Two columns are provided:

Column 1 represents information that came from either the case record or your recollection of the particular case.

Column 2 represents additional information that you have collected after completing column 1.

That is, after you have recorded as much information as you could get from your recollection and from case records, we are asking that you complete the remaining items on subsequent visit(s) or contact(s) with the target client. The first set of 12 questions are questions we would like you to ask each client, if possible. Please add any comments which you feel are needed to explain any responses on the back of the page.

We realize that a great deal of information is being requested at this stage, but your patience and cooperation with the length of the questionnaire at this point will help insure a valuable assessment tool of a more manageable length for your use in the future. Please feel free to expand upon or clarify your response to any or all of the items.

If you have any questions about this questionnaire or your role in this research, please call either Dr. Melanie Hwalek or Dr. Mary C. Sengstock at 577-2297.

THANK YOU FOR YOUR HELP

QUESTIONS TO BE ASKED OF ELDERLY
(BOTH CONTROL AND ABUSED)

(Add any comments on back of page)

I would like to ask you some questions about things that might have happened to you in the past few months.

- 1) Do you need assistance in getting or preparing food?
 YES[]¹ (5)
 NO[]²
- 2) What are your eating habits? (Service Provider Assess)
 ENOUGH[]¹ (6)
 NOT ENOUGH[]²
- 3) Have you needed any medical care (such as doctor visits, glasses, false teeth, hearing aid or medicine).
 YES[]¹ (7)
 NO[]²
- 4) Have you been left alone for long periods of time?
 YES[]¹ (8)
 NO[]²
- 5) Are your needs being met by others?
 YES[]¹ (9)
 NO[]²
- 6) Has anyone made you feel unimportant or unwanted in the past few months?
 YES[]¹ (10)
 NO[]²
- 7) Has anyone made decisions concerning your life such as where you would live or what should be done with your money, without asking your opinion?
 YES[]¹ (11)
 NO[]²

- 8) Has anyone tried to make you sign papers such as a will
or deed, that you did not want to sign? YES[]¹ (12)
NO[]²
- 9) Has anyone taken any money or property from you in the
past few months? YES[]¹ (13)
NO[]²
- 10) Has anyone misused your money or property? YES[]¹ (14)
NO[]²
- 11) Has anyone tried to hurt you in the past few months?
YES[]¹ (15)
NO[]²
- 12) Has anyone threatened to hurt you? YES[]¹ (16)
NO[]²
- 13) Are you afraid that someone will try to hurt you?
YES[]¹ (17)
NO[]²

QUESTIONS TO BE ANSWERED BY THE SERVICE PROVIDER

Please indicate:

1. the age of the elderly person _____ (ap- (18-19)
proximate, if you don't know for certain)

Young-Old[] ¹	(20)
Old-Old[] ²	
2. the sex of the elderly person

Male[] ¹	(21)
Female[] ²	
3. the race of the elderly person

Black[] ¹	
White[] ²	
Spanish-American[] ³	(22)
Asian[] ⁴	
Oriental[] ⁵	
Other _____ [] ⁶	
4. approximate total household income:

Less than \$4,000[] ¹	
\$4,000-\$10,000[] ²	
\$10,000-\$15,000[] ³	
\$15,000-\$25,000[] ⁴	(23)
\$25,000-\$30,000[] ⁵	
\$30,000-\$40,000[] ⁶	
\$40,000-\$50,000[] ⁷	
\$50,000 or more [] ⁸	
5. Is this elderly person physically impaired? YES[]¹ (24)
NO[]²
6. Is this elderly person mentally impaired? YES[]¹ (25)
NO[]²
7. Do you consider this case to be a case of
abuse/neglect, or a control group case? Control[]¹ (26)
Abuse/neglect[]²
8. The type (or types) of abuse/neglect involved is(are):
(CHECK ALL THAT APPLY)

Physical Abuse[] ¹	(27)
Physical Neglect[] ²	(28)
Psychological Abuse[] ³	(29)
Psychological Neglect[] ⁴	(30)
Material Abuse[] ⁵	(31)
Violation of Personal Rights[] ⁶	(32)
9. For cases of abuse/neglect, please indicate if you think:

A) this case of abuse/neglect is
Victim Precipitated (Did the victim provoke the
 violence/neglect in some way?)

YES[]¹

NO[]²

Don't Know[]³

(33)

Explain: _____

B) this case of abuse/neglect is
Legitimate (Is the violence/neglect seen by the abuser
 as justified?)

YES[]¹

NO[]²

Don't Know[]³

(34)

Explain: _____

C) this case of abuse/neglect is
Instrumental (Is the violence/neglect a means of
 achieving another end, e.g., violence/neglect
 is directed at the elder to force him/her to
 behave as the caretaker wishes?)

YES[]¹

NO[]²

Don't Know[]³

(35)

Explain: _____

D) this case of abuse/neglect is:
Expressive (Is the violence/neglect a goal in
 itself, e.g., acting out of frustration at
 some stressful situation?)

YES[]¹

NO[]²

Don't Know[]³

(36)

Explain: _____

E) this case of abuse/neglect is (Elder and caretaker are
 abusing/neglecting each other)

¹[] Mutual

or

²[] Not Mutual

or

³[] Uncertain

(37)

Explain: _____

10. Has any action been taken to correct the abusive situation?

YES[]¹
NO[]²

(38)

If yes, the type or types of action that have been taken are:

11. Do you know of any other agencies that are involved with this case?

YES[]¹
NO[]²

(39)

If yes, please indicate which agencies:

11. Were you able to see the caretaker?

YES[]¹
NO[]²

(40)

13. Is there more than one caretaker?

YES[]¹
NO[]²

(41)

If yes, please explain:

Please respond to each item. Indicate 0 if the item is not present or not applicable. Indicate 1 if the item is present but of minimal importance, 2 if it is present and a moderately important indicator in this case, and 3 if the indicator is present and of major importance. (Make any comments on the back of the pages.)

RISK INDICATORS

	EVIDENCE FROM CASE RECORDS	ADDI- TIONAL DATA	
<u>CHARACTERISTICS OF ELDER:</u>			
<u>Physical Health:</u>			
Engages in physical self-abuse	[]	[]	(42-43)
Is unconscious	[]	[]	(44-45)
Oversedated with medication.	[]	[]	(46-47)
No illness related cause of symptoms noted	[]	[]	(48-49)
<u>Elder's Dependence:</u>			
Is dependent on someone else for daily needs (food, medicine, financial assistance)	[]	[]	(50-51)
<u>Mental Health:</u>			
Signs of depression	[]	[]	(52-53)
Is suspected or has threatened suicide	[]	[]	(54-55)
Confused	[]	[]	(56-57)
<u>Elder's Actions:</u>			
Signs papers he/she hasn't read.	[]	[]	(58-59)
Does not share in decision making.	[]	[]	(60-61)
Wanders	[]	[]	(62-63)
<u>Indications of Elder's Fear:</u>			
Appears afraid of caretaker.	[]	[]	(64-65)
Overly aggressive when touched	[]	[]	(66-67)
Shows fear when others enter room (Specify who _____)	[]	[]	(68-69)
Has been threatened with force to perform some act.	[]	[]	(70-71)
<u>Response to Offers of Help:</u>			
Refuses to discuss situation	[]	[]	(72-73)
Alludes to problems with caretaker but drops subject	[]	[]	(74-75)
Refuses medical care	[]	[]	(76-77)
<u>Elder's Social Ties:</u>			
Is unwanted.	[]	[]	(78-79)
<u>Actions in the Family:</u>			
Is extremely provocative	[]	[]	(80-81)
Is a source of stress for caretaker or his/her family.	[]	[]	(82-83)

	EVIDENCE FROM CASE RECORDS	ADDI- TIONAL DATA
--	----------------------------------	-------------------------

CARETAKER'S CHARACTERISTICS:

Caretaker's Appearance:

Is clean and well dressed while elder is poorly dressed and/or dirty. . . .	[]	[]	(84-85)
---	-----	-----	-----------

Caretaker's Health:

In poor health	[]	[]	(86-87)
Is mentally disturbed.	[]	[]	(88-89)
Is misusing alcohol.	[]	[]	(90-91)
Is misusing drugs.	[]	[]	(92-93)

Caretaker's Expectations of Elder:

Expects/demands behavior beyond elder's ability	[]	[]	(94-95)
Blames patient (i.e. may insist that incontinence is a deliberate act) . .	[]	[]	(96-97)
Shows inappropriate awareness of elder's condition	[]	[]	(98-99)
Under-feeds elder.	[]	[]	(100-101)

Caretaker is Overly Aggressive:

Attacks others physically.	[]	[]	(102-103)
Attacks others verbally.	[]	[]	(104-105)
Engages in physical self abuse	[]	[]	(106-107)
Cruel.	[]	[]	(108-109)
Cannot tolerate frustrations	[]	[]	(110-111)
Violent temper	[]	[]	(112-113)
Believes in harsh punishment	[]	[]	(114-115)

Personal History of Caretaker:

Was abused as child.	[]	[]	(116-117)
Was neglected as child	[]	[]	(118-119)
Persistent liar.	[]	[]	(120-121)
Has been responsible for child abuse .	[]	[]	(122-123)
Has been responsible for spouse abuse	[]	[]	(124-125)
Is suspected of other abuse in past.	[]	[]	(126-127)

Caretaker Exhibits Abnormal Behavior Patterns:

Lacks control of behavior.	[]	[]	(128-129)
Behavior seems generally irrational. .	[]	[]	(130-131)



	EVIDENCE FROM CASE RECORDS	ADDI- TIONAL DATA	
Refuses to accept presence of worker.	[]	[]	(132-133)
Exhibits exaggerated denial.	[]	[]	(134-135)
Discourages social contact	[]	[]	(136-137)
Actively discourages services.	[]	[]	(138-139)
Overreacts to elder's condition.	[]	[]	(140-141)
<u>Personality of Caretaker:</u>			
Alienated.	[]	[]	(142-143)
Lacks self-worth	[]	[]	(144-145)
<u>Actions of Caretaker:</u>			
<u>Legal:</u>			
Misrepresented legal consequences of an action	[]	[]	(146-147)
Tried to get elder to act against his/her best interest	[]	[]	(148-149)
Refused to help elder unless he/she changes Will to favor them.	[]	[]	(150-151)
<u>Medical:</u>			
Refused to seek medical help for elder Prolongs the interval between injury/ illness and presentation for medical care.	[]	[]	(152-153)
Withholds necessary care	[]	[]	(154-155)
Delays in seeking care	[]	[]	(156-157)
Takes elder to different hospital each time	[]	[]	(158-159)
Blames others for elder's injuries	[]	[]	(160-161)
Refuses to provide needed medical at- tention	[]	[]	(162-163)
Takes elder to different doctor each time.	[]	[]	(164-165)
<u>Explanations:</u>			
Inconsistent explanations given.	[]	[]	(166-167)
Gives no explanation for elder's injuries.	[]	[]	(168-169)
Gives absurd explanations for elder's injuries.	[]	[]	(170-171)
<u>Planning Elder's Care:</u>			
Does not comply with medical recommendations	[]	[]	(172-173)
Incapable of caretaking.	[]	[]	(174-175)
			(176-177)

	EVIDENCE FROM CASE RECORDS	ADDI- TIONAL DATA	
<u>Regarding Home Care:</u>			
Does not buy items for special diet when needed	[]	[]	(178-179)
Does not purchase prescribed medication.	[]	[]	(180-181)
<u>Caretaker's Complaints:</u>			
Person cared for makes him/her feel very angry.	[]	[]	(182-183)
Caretaker is afraid he/she may lose control and really hurt the elder . .	[]	[]	(184-185)
Nothing caretaker does seems to satisfy the elder	[]	[]	(186-187)
<u>Response to Interviewer:</u>			
Will not allow you to talk to elder alone	[]	[]	(188-189)
Will not let elder answer questions. .	[]	[]	(190-191)
Refuses to let interviewer in the house/room.	[]	[]	(192-193)
<u>Caretaker's Relation to Elder:</u>			
Is dependent on elder for financial support.	[]	[]	(194-195)
<u>Caretaker's Responsibilities:</u>			
Is overworked.	[]	[]	(196-197)
Has multiple responsibilities.	[]	[]	(198-199)
Is forced by circumstances to care for patient	[]	[]	(200-201)
Has unrealistic expectations of own role.	[]	[]	(202-203)
Seldom used a substitute caretaker for relief from responsibilities. . .	[]	[]	(204-205)
<u>Caretaker's Social Ties/Supports:</u>			
Has no one to call when stress overwhelms him/her.	[]	[]	(206-207)
<u>Caretaker's Lifestyle:</u>			
Is known to be involved in anti- social behavior	[]	[]	(208-209)
Has lifestyle which would make it difficult to provide adequate care	[]	[]	(210-211)
Lives beyond his/her means.	[]	[]	(212-213)

	EVIDENCE FROM CASE RECORDS	ADDI- TIONAL DATA	
--	----------------------------------	-------------------------	--

GENERAL FAMILY SITUATION:

Alcohol abuse in family.	[]	[]	(214-215)
Large number of pets with no apparent means of care	[]	[]	(216-217) (218-219)
Has received eviction orders	[]	[]	(220-221)
Violence or abuse in home	[]	[]	(222-223)
Financial stress	[]	[]	(224-225)
Marital or family discord.	[]	[]	(226-227)
Recent family crisis	[]	[]	