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MFI Technical Report 97-1

**Scope and Impact of
Personal Financial Management Difficulties
of Service Members on the Department of the Navy**

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August 1997

MILITARY FAMILY INSTITUTE
MARYWOOD UNIVERSITY, SCRANTON, PA

19970925 052



Military Family Institute
OF MARYWOOD UNIVERSITY

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Acknowledgement of Sponsorship

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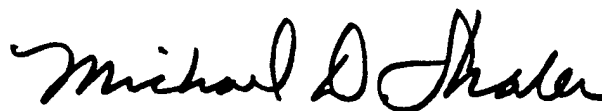
"The views and conclusions contained herein are those of the authors and should not be interpreted as necessarily representing the official policies or endorsements, either expressed or implied, of the Air Force Office of Scientific Research or the U.S. Government."

Foreword

This study was designed to investigate the effectiveness of the Personal Financial Management Program (PFMP) which has been instituted by the Department of the Navy to provide sound financial counseling to service members. There is a great deal of evidence in the research literature to indicate that people who are well informed and in control of their personal finances are more effective in their jobs and perform them more safely. They are also more self-confident and happier in their family relationships.

The Military Family Institute study team assembled for this project included members of the Marywood University faculty, consultants from other universities and research organizations, and staff experts from the Department of the Navy. The team, in the course of their research, outlined the substantial dollar and manpower costs to the Navy in processing letters of indebtedness and similar administrative actions. Additionally, the research team validated the finding that the impact of personal financial management difficulties on operational readiness is far greater than other quality-of-life issues such as housing, child care, employment opportunities, and health care. Further research is necessary to fully evaluate whether financial management difficulties are the root cause of the majority of the problems that relate directly to quality-of-life issues at large.

This report supports the efforts of the Department of the Navy in providing financial management assistance to their service members, and makes a number of recommendations in furthering the goals of the Personal Financial Management Program. The findings of this study are fully applicable to the other military services, whose service members are reflective demographically of those in the United States Navy.



Michael D. Shaler
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Acknowledgements

The authors wish to express their appreciation to those Navy personnel, both military and civilian, who have provided invaluable assistance in preparing this report, and who provided access to background information and research reports. We would also like to extend a special thanks to those Financial Educators and Command Financial Specialists who freely gave of their time. Without their support, this report would have neither the depth of research nor the statistical interpretation.

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Executive Summary

Purpose

The purpose of this study is to conduct a review of existing research findings that define the scope and impact on the U.S. Navy of poor personal financial management by service members. The objectives are to enable the Navy to determine the fiscal and functional costs of poor personal financial management practices, and to better understand the impact of poor financial management in order to enhance the quality of life of service members and their families.

Background

Personal financial mismanagement is one of the fastest growing problems in the American population today. In fact, increasing concerns in the financial community and in government have resulted in recent Congressional hearings regarding the problem. Since the Navy represents a cross section of the United States population, personal financial difficulties of service members are one of the fastest growing problems as well. As a result of growing concerns by senior Navy officials, a Personal Financial Management education, training and counseling Program was instituted in 1990. The goals of this program were to emphasize personal financial responsibility and accountability by providing basic principles and practices of sound money management, as well as reduce the impact and costs to the Navy. Despite a commitment by the Navy to aggressively address the mounting financial pressures faced by many service members, problems continued to persist and, in fact, increase. The challenge facing the Navy was to determine the costs and develop methods that best implement an effective Personal Financial Management Program (PFMP).

Discussion

This research project was initiated to examine the extent of financial mismanagement and its impact. It was designed to uncover existing civilian and military information, collate the available data, determine identifiable costs, and recommend parameters for development of a baseline longitudinal study. The primary objective was to formulate information on the scope and impact of personal financial management difficulties of service members in terms of costs to the Navy. A secondary objective was to review the existing PFMP and develop recommendations for training improvement.

Findings

This study found that the costs to the Navy of financial management difficulties are significant. A formula developed from civilian research which assumes that 10% of service members are experiencing financial difficulties yields a conservative estimate of \$172 million annually in overall lost productivity costs to the Navy (Brown, 1993). In fact, based on the figures summarized below, some experts believe that the percentage of Navy service members facing personal financial management difficulties may be at least 15%, an estimated cost of \$258 million. Direct costs alone are conservatively estimated at \$36 million, or 891 man years. Following is a summary of some of the aggregate figures found by this study outlining these financial difficulties:

- More than 123,000 Letters of Indebtedness are being processed in the Navy every year.
- An average of nearly 99,000 bad checks are written on the Navy Exchange System, and another 75,000 bad checks are received at the Commissaries each year.
- An estimated 35,000 Navy service members had their wages garnished in 1995.
- 43% of active duty personnel report facing problems paying monthly bills.
- Approximately 4,300 service members in the Navy filed for bankruptcy in 1996, where the Navy was the creditor.
- On average, 11.2% of enlisted members refused re-enlistment and 5.86% of officers discontinued services due to financial reasons.
- Of all the security clearances revoked, an average of 60% of these involved financial reasons.
- Through the period 1993-95, Navy-Marine Corps Relief Society (NMCRS) assistance averaged \$48 million in direct aid to an average of 91,000 financial assistance cases.
- Since the introduction of the Navy Exchange Card Program (NEXCARD), approximately 23,000 accounts with \$20 million outstanding has not been collected.
- The percentage of service members dissatisfied with various financial Quality of Life (QoL) issues such as income for essentials, income compared to cost of living, income for savings, standard of living, etc. range from 33% to 63%.
- Financial difficulties had more impact on operational readiness than housing, child care, health care, or partner's job.

Recommendations

The following recommendations are presented for consideration by the Department of the Navy following a review of existing research and data:

- Implement both an effective, proactive Personal Financial Management Program (PFMP) and life cycle model of Personal Financial Management Program curriculum.
- Promote command level involvement to present a standard and integrated Personal Financial Management Program, and fund it at a level consistent with service members' needs.
- Institute standard operating procedures in all commands and shift Command Financial Specialists (CFS) responsibilities from collateral to regular duty.
- Design and implement mandatory financial education training at both enlisted and officer accession points for all service members and their families. Training should occur throughout the career cycle into retirement planning.
- Improve methods of education dissemination and regularly update Command Financial Specialist training manuals. Where possible, manuals should be made available in modular electronic form.
- Command Financial Specialists and Financial Educators (FEs) should be certified in the content of personal financial management through the Association for Financial Counseling and Planning Education. Division Officers should also receive training in personal financial management leadership.
- Develop a Command Financial Specialist tracking system and implement a secondary Navy Enlisted Classification (NEC) designation for CFSs.
- Screen new recruits and deployment candidates for financial health.
- Investigate a salary reduction savings/pension plan.
- Fund mobile training teams to provide Command Financial Specialist training at CONUS and OCONUS sites.
- Develop a Management Information System (MIS) for indicators of service members' difficulties in personal financial management.
- Define proxy variables and implement a mechanism to measure the scope of personal financial management difficulties within regularly scheduled intervals.
- Assess the impact of personal financial management training and suggest recommendations after data comparison from several commands.
- Assess personal financial management difficulties and their possible relationship with other Quality of Life (QoL) issues.
- Conduct a Longitudinal Study to entail
 - • collection of primary data to assess the impact of the Personal Financial Management Program,
 - • tracking and comparison of personal financial management situations of service members before and after training, and
 - • assessment of personal financial management situations at different career points to examine the degree of change of personal financial management problems over time.

Scope and Impact of Personal Financial Management Difficulties of Service Members on the Department of the Navy

Contents

1. Introduction

1A. Overview.....	1
1B. Discussion.....	1
1C. Background of PFMP.....	3
1D. Tasking.....	4
Principal Team Members	4
1E. Report Organization	5

2. Methodology

2A. Navy Data Collection	6
2B. Civilian Literature and Data Collection	6
2C. Cost Estimation Process	6

3. Scope of Financial Difficulties

3A. Poor Management Indicators	9
3B. Interlinking and Cumulative Indicators	9
Employers Benefit when they Deal with Employee Problems.....	11
Employer Offered Programming: Recommended Focus	12
3C. Military Indicators of Financial Difficulties.....	13
Letters of Indebtedness (LOIs)	14
Bankruptcies	15
Bad Checks	16
Monthly Financial Obligations.....	17
Wage Garnishments.....	18
Impact on Re-enlistments and Augmentations	18
Security Clearance Revocations	19
NMCRS Assistance.....	19
NEXCARD Debts.....	20
3D. Indirect Factors	20
Satisfaction/Dissatisfaction with Quality of Life	20
Lack of Operational Readiness.....	22
Short Notice of Deployment Concerns	22
Lengthy Deployment Concerns	22
Increase in NMCRS Assistance	22

4. Financial Mismanagement Costs

4A. Direct Costs	23
4B. Administrative Costs	24
LOI Costs.....	25
Bad Check Costs to the Navy Exchange	27
4C. Wage Garnishment Costs	29
Bankruptcy Costs	31
NMCRS Assistance.....	32
Re-enlistment and Augmentation Costs	33

5. Impact of the Personal Financial Management Program	
5A. Introduction.....	34
5B. History	34
5C. Current Programming Efforts	34
5D. PFMP Implementation at USS L.Y. SPEAR	35
6. Recommendations	
6A. Mandatory Training	37
6B. Command Level Involvement	37
6C. Command Financial Specialist Tracking	38
6D. Family Member Involvement.....	39
6E. Recruitment and Screening Process.....	39
6F. Retention and Readiness.....	40
Military Salary-Reduction Savings Program	40
After-Tax Military Salary-Reduction Pension Program	40
6G. A Life Cycle Curriculum Model	41
6H. Curriculum Documents.....	43
The Training Manual.....	43
Standard Operating Procedures.....	44
Additional Curriculum Materials	45
6I. Training.....	46
Financial Educators	46
Command Financial Specialists.....	47
Division Officers.....	47
Monitoring and Evaluation	49
Leadership and Oversight.....	49
6J. Suggested Training Modules.....	50
The Video Prototype	50
The Computer Simulation Program Prototype.....	51
7. Suggestions for Further Research	
7A. Development of a Management Information System	52
7B. Longitudinal Study to Evaluate PFMP	53
7C. Correlation of Various Quality-of-Life Issues	54
8. Bibliography	
8A. Military Literature.....	55
8B. Civilian Literature	57
9. Appendixes	
Appendix A: Memorandum of Understanding (MOU) between MFI and the Bureau of Navy Personnel, Office of Deployment Support	A-1
Appendix B: Military Composite Standard Pay and Reimbursement Rates, Fiscal Year 1996	B-1
Appendix C: Paper Flow of LOI for LANTFLTHEDSUPACT	C-1
Appendix D: Paper Flow of LOI for USS SHENANDOAH	D-1
Appendix E: Civilian Literature Report	E-1
Appendix F: Installation and User's Guide to the Computer Simulation Prototype	F-1

1. Introduction

1A. Overview

Millions of Americans have been trapped in spiraling circumstances of overspending, debt, and bankruptcy for the past decade. This problem has increased over the past several years at a tremendous pace. Credit card delinquencies at 3.5% of all payments due are at a 15-year high and approximately 1.2 million personal bankruptcies were expected to be filed in 1996 (Philadelphia Inquirer, 1997). Table 1A-1 exemplifies the pace at which bankruptcies have been filed in the United States for the past five years.

Table 1A-1
Number of Personal Bankruptcy Filings
in the United States

Year	Bankruptcies
1992	900,000
1993	800,000
1994	780,000
1995	880,000
1996	1,100,000

(Source: New York Times, August 25, 1996)

Since the manpower of the Navy is a composite of our national population, poor personal financial behaviors with resulting financial difficulties are also being exhibited by the service members within the Department of the Navy (DON). In fact, the service members in the Navy file bankruptcy at the rate of approximately 1% overall and as high as 13% in areas like San Diego and Jacksonville (Sachse, 1993). Financial difficulties experienced by service members significantly impact on the Navy both fiscally and functionally. This report identifies and quantifies some of these costs.

1B. Discussion

Various studies have shown that financial difficulties are a larger source of stress than any other dilemma. It has been documented that stress causes lower productivity and impairs performance. In fact, a Department of Defense (DoD) survey of health related behaviors among military personnel revealed that stress causes impaired occupational functioning such as increased absenteeism, lower productivity, and heightened interpersonal problems (DoD, 1995). Civilian research has indicated that these factors result in additional costs to the employer (Brown, 1993).

Leadership personnel in the DoD reported that difficulty in financial management is the primary problem leading to a decline in operational readiness among first term military personnel (Family Status and Initial Term of Service Study, 1993). Analysis revealed that 15% of men and 12.2% of women say financial difficulties are a cause of stress, while only 7.6% of men and 7.5% of women report housing to be a cause of stress. Also, the level of stress experienced by a spouse, as perceived by the service member, is higher when experiencing financial difficulties. Spouses experiencing financial difficulties during deployment had a negative change in their commitment to the service members' profession (Caliber Associates, 1993).

Navy Family Services Center (NFSC) studies revealed that counseling sessions were primarily concerned with money and credit management. The difficulties encountered could have been minimized or eliminated by timely additional financial counseling and information (Navy Family Services Center, 1995). Five of the top ten critical counseling needs at NFSCs are in the financial arena. In particular they relate to *budget counseling, tax assistance, money management, credit and savings, and insurance* (U.S. Navy-wide Community Needs Assessment, 1994). Typical counseling needs of service members also exist in financial arenas relating particularly to *unexpected expenses, financial practices in surrounding communities, easy credit, and high interest rates*. Lack of money management skills and lack of information in financial management are the fundamental reasons for seeking counseling assistance (Hayes, 1995).

Evidence suggests that financial difficulties during deployment were experienced by those who were not knowledgeable in financial management and, therefore, had not acted in areas such as *direct deposit for spouses and pre-authorization forms for loans and grants* (Caliber Associates, 1993). This evidence indicates a strong need for personal financial management training. A pilot study conducted by the NFSC Norfolk, also indicated that a well-implemented PFMP at the command level can reduce the scope of personal financial management difficulties being experienced by the service members.

The Navy, as an employer, realizes substantial costs caused by the stress associated with employees' poor financial management. A majority of employers, however, fail to take into account how this stress negatively impacts in the workplace. By not acknowledging or recognizing how personal financial problems affect workers, and by not dealing with the financial situations of their stressed workers, employers have not calculated a vital cost component.

Research indicates that the personal financial health of employees can be turned from a negative cost into a positive contributor for the employer. This also applies to the Navy. An additional benefit of sound financial health is improvement to the quality of life for service members and their families.

1C. Background of PFMP

Navy officials recognized the problem of personal financial management difficulties of service members and took steps to address it by instituting a Personal Financial Management education, training and counseling Program (PFMP) implemented under OPNAVINST 1740.5 in November 1990. The PFMP had three primary objectives: To provide

- initial PFMP education at all officer and enlisted accession points in basic subjects, with more advanced subjects available at other training sites such as "A" schools and leadership training sites;
- a review of, and additional training in, PFMP subjects at the command level; and
- training for Command Financial Specialists (CFSs) and a requirement that every Command provide trained CFSs, personal financial management training, and individual financial counseling.

Presently, some elements of the PFMP have been implemented more effectively than others, with the most productive results surfacing where there was active command support for both the program and the CFS.

Due to service members' continued financial problems, Navy officials decided to study the scope and impact of poor personal financial management practices, and resultant costs to the Command. Additionally, officials requested both a review of the current PFMP and identification of improved methods for training and delivery of services.

The Department of the Navy, Bureau of Naval Personnel, Personnel Readiness and Community Support (PERS-6), and the Military Family Institute (MFI) of Marywood University signed a Memorandum of Understanding (Appendix A) to collaboratively conduct a PFMP research project assessing the scope and impact of poor personal financial management by Navy service members. The objectives were to

- determine costs to the Navy of poor financial management practices by service members, and
- better understand the impact of these difficulties on the Navy and its service members.

Another objective of this project is to propose recommendations which will improve the PFMP in order to enhance the quality of life for Navy service members and their families.

A PFMP Research Planning Meeting held on March 22, 1996 named the following action plan:

- Identify and use existing databases and research from civilian, Navy, and DoD sources to assess the scope and impact of poor personal financial management practices.
- Obtain critical data from key personnel, unit leaders, and others regarding their understanding of the scope and impact of personal financial management difficulties.
- Provide design parameters of a longitudinal study to assess the effectiveness of the PFMP over time.
- Suggest refinements to the existing curricula and develop a prototype for creative delivery of the curriculum utilizing available Navy platforms.

1D. Tasking

The Military Family Institute, Marywood University, Scranton, PA, in cooperation with the Bureau of Naval Personnel, Office of Deployment Support, and Personal Financial Management Programs (PERS-662D6), was responsible for the outline and parameters (i.e., goals, tasks, and outcomes) for the Personal Financial Management Research Project and report. Project goals and related tasks were to

- identify and assess existing personal financial management data,
- design and implement a Pilot Survey and interviews with key personnel,
- design a Longitudinal Study to assess PFMP effectiveness over time, and
- provide recommendations for PFMP Education/Training curriculum design and development.

The principal team members

Dr. Raminder Luther, Marywood University, Project Director/Principal Investigator, coordinated the effort of team members, conducted the analysis to arrive at costs to the Navy, and integrated the civilian and military research findings into this report.

Mr. Peter Darby, (PERS-662D6) provided oversight for the Navy and acted as the Navy's contact person.

Dr. Michael Mirabito, Dr. Paulette Merchel, and Dr. Thomas Dempsey, Marywood University, developed a prototype software package to target

consumer awareness and educate the consumer through interactive situations when purchasing or leasing a vehicle.

Mr. Timothy Gilroy, MFI, Marywood University, served as a Research Associate and a point of contact for project personnel.

Dr. E. Thomas Garman and Dr. Irene E. Leech, Virginia Polytechnic Institute and State University, acted as project consultants. They conducted a civilian literature review and provided recommendations for a personal financial management life cycle educational model, curriculum development, and program evaluation.

Captain Larry Griffitt, USNR (Ret.) and Mrs. Virginia Hayes were project consultants and subject matter experts serving as advisors to project principals. They searched for and collected existing military data and research and provided initial evaluation of the material.

All team members were involved in review of research findings and the final project report.

1E. Report Organization

Section 1 provides the background of the need for this research and draws parallels between the experiences of the civilian population and the Department of the Navy.

Section 2 outlines the methodology used in collecting data within the military and civilian populations. It also includes an explanation of the methodology used in estimating various costs to the Navy.

Section 3 outlines the scope of the problem of poor personal financial management of service members, particularly among enlisted members.

Section 4 details the costs to the Navy that are associated with the various manifestations of poor personal financial management by the service members.

Section 5 discusses the impact of the current PFMP as measured by some of the existing studies.

Section 6 contains recommendations regarding the curriculum design and an introduction of the prototype personal financial management training material included with this study.

Section 7 introduces parameters for a proposed longitudinal study.

2. Methodology

2A. Navy Data Collection

A review of relevant literature, data bases, and information sources was conducted within the Department of the Navy. On-line computer searches via government "Bulletin Boards," and other Internet resources were also completed. Data collected was then integrated with information from civilian sources.

The following were contacted via telephone: Navy-Marine Corps Relief Society, Norfolk Financial Education Services Unit, American Red Cross, Federal Reserve Board, Defense Finance and Accounting Center, Family Service Center, National Foundation for Consumer Credit, NEXCOM, and Consumer Credit Counseling Services. Similarly, communication was initiated with the Department of Defense, internal Naval sources, and military-related associations.

2B. Civilian Literature and Data Collection

The civilian literature review began with an Internet search of over 12,500 journals, dissertations, newspapers, the Congressional Record, and books using a variety of key words (e.g., *finance, personal finance, credit, bankruptcy, substance abuse, productivity, accidents, and stress*) and phrases.

Manual searches of published books and proceedings also occurred. While several hundred sources were reviewed, approximately 200 were found to be potentially useful. The 60 sources that were found to actually be useful are cited in this report.

2C. Cost Estimation Process

Evidence from civilian literature indicates that employees who experience personal financial management difficulties impact negatively on their employers. The Department of the Navy incurs significant fiscal and functional costs including the processing of paperwork associated with service members' personal financial management problems. OPNAVINST 1740.5 (PFMP instruction) requires service members facing any type of documented financial management difficulty, such as Letters of Indebtedness (LOI), be mentored by

trained counselors available either as Command Financial Specialists at the Command or as financial counselors in Navy Family Services Centers. Each of these actions has fiscal implications for the Navy and the service member's Command. This section details the methodology followed to estimate the cost associated with each of these actions.

The cost estimation process involved a three-step process:

Step One: Command Financial Specialists and Financial Educators were asked to assist in identifying processes for information flow at the Command level as a result of financial mismanagement by service members. Revised time estimates for processing and information flow were then sent to Norfolk NFSC and critiqued at a CFS Forum for accuracy and reliability. In other meetings, members of the Norfolk NFSC education team, several area CFSs, and several financial specialists from Europe also critiqued the information flow and processing times.

To compare results from the critique with other sources, flow charts of the actual paperwork process at selected commands were reviewed. To keep the cost estimates as conservative as possible, the flow of information involving the least amount of time was chosen. The revised estimates of time and flow charts were used to determine the cost of each process to the Navy.

Step Two: Following the same process as outlined in Step One, an average rank of each service member involved in the information flow and counseling process was determined.

Step Three: The cost of each service member's time was estimated based on average rank. Estimations of per minute cost of each rank's time were made and an average cost for time in grade for that rank was used. These cost figures were taken from the "Military Composite Standard Pay and Reimbursement Rates" tables for 1996 ("Amount Billable to Non-DoD Entities"). The amount for each rank included:

- Basic Pay
- Retired Pay Accrual
- Basic Allowance for Quarters
- Incentive and Special Pay
- Permanent Change of Station
- Miscellaneous Expense
- Annual DoD Composite Rate
- Acceleration Factor

A factor of .00055, as suggested by the reimbursement tables, was used to calculate the per hour and per minute cost for each rank.

Pay per Year = Amount billable to Non-DoD Entities as provided by the "Military Composite Standard Pay and Reimbursement Rates" tables

Pay per Hour = Pay per Year / .00055

Pay per Minute = Pay per Hour / 60

A copy of the Military Composite Standard Pay and Reimbursement Rates tables for 1996 is represented in Appendix B.

3. Scope of Financial Difficulties

3A. Poor Management Indicators

The media regularly reports that approximately one-third of adults are worried about their ability to repay their bills. A recent national survey revealed that three out of four Americans face at least one significant financial difficulty (i.e., inability to save money, high costs of medical care, or communication from creditors and collection agencies).

Examples of financial behaviors that negatively impact both individual family life and one's employment situation include:

- Habitual overspending
- Overuse of available credit
- Regularly writing "bad checks"
- Typically having a low or non-existent emergency fund savings account
- Inability to pay bills (e.g., utilities, rent, child care, credit cards, installment debts)
- Receiving "overdue notices" from creditors
- Relying on a spouse's second income to pay living expenses and debts
- Denial of additional credit resulting from a poor credit history
- Obtaining cash advances

Other behavioral patterns include non-contribution to pension plans, gambling, insurance lapses, welfare applications, evictions, liens, utility cutoffs, repossessions, wage and tax refund garnishments, personal bankruptcy, and unethical and criminal behaviors.

3B. Interlinking and Cumulative Indicators

Factors such as failure of a personal relationship, poor financial behaviors, and substandard job performance are related. While a direct cause and effect may not be demonstrated, there is a great amount of evidence that suggests these factors are related, thus a substantial correlation exists. According to Brown (1979b), 84% of employees experiencing financial hardships required counseling for other problems; one third of employees counseled for alcohol abuse also had money problems; and, one employee in every 30 at some point became so desperate over a personal problem that he or she performed irresponsibly and, at times, contemplated suicide or homicide.

According to Tang & Hammontree (1992), stress costs businesses between \$100 and \$150 billion a year in lost employee productivity. Thirty percent of all adults reported high work stress; 11 million people reported health-endangering levels of work stress (Hickox, 1994).

Absenteeism is a major source of lower employee productivity resulting from stress (Bruner & Cooper, 1991; Chaudhury & Ng, 1992; Garrett, 1993; Hager, 1994; Mughal, Walsh, & Wilding, 1996; Tang & Hammontree, 1992). A survey of 301 IDS Financial Service employees found that "personal finance worries may affect the job performance of more than one-third of America's corporate workforce and may lead to unwanted turnover" (Harris, 1987). Additionally, Harris reported that 33% of individuals under age 35 said they "would have to change jobs to meet financial goals."

Many employees take time from work to deal with financial problems. Productive labor time is lost whenever workers telephone creditors, seek sources of additional credit, converse with co-workers about stresses, talk with supervisors about financial problems, and place gambling wagers while on the job. Employees also extend work breaks in order to deal with financial stresses and have been known to use sick leave in order to make court appearances and meet with others concerning financial problems.

Since 1973, the number of lost workday cases, or frequency per 100 full-time workers, has increased more than 12%. Unscheduled absenteeism costs companies \$688 per worker per year on average (Waddell, 1996). Chronic absenteeism has become the number one workplace problem (Perry, 1996) and last year unscheduled absenteeism rose for the fourth year in a row. A primary reason for these trends is stress in the workplace (Kottage, 1992).

It has been estimated that 70% or more of all job absenteeism is a direct result of stress-induced illness (Tang & Hammontree, 1992). These absences have a devastating impact on worker productivity and customer satisfaction (Perry, 1996). Costs include lowered morale among other employees who must shoulder extra work loads, lost revenue from sales not made, loss of customers who flee to competitors for better service, and a decline in business reputation.

Estimated absenteeism costs were between \$9 and \$13 billion a year in England (Watkins, 1994), while in Canada absenteeism resulted in 53.4 million hours of lost employee productivity (Chaudhury & Ng, 1992). In 1981, it was estimated that businesses lost between \$3 to \$5 billion annually from family violence-related absenteeism and \$100 billion in abuse-related medical costs (Deming, 1991).

Brown (1993) reported that 10% is a very conservative estimate of the number of employees in the workplace with financial difficulties. Brown's formula for calculating the cost of employee financial problems to an employer can be estimated as follows: take the 10% of the workforce currently experiencing financial problems and multiply that by a 10% average annual wage lost in employee productivity (RJR, 1991). For example, consider an employer of 1,000 employees each with an annual wage of \$30,000. If 100 workers experience financial problems to the extent that their productivity is reduced by 10%, it can be calculated that the employer loses \$300,000 in lost productivity ($\$30,000 \times .10 = \$3,000$ per financially troubled employee $\times$ 100 financially troubled employees). This \$300,000 annual productivity loss for an employer with 1,000 employees is a conservative estimate.

Direct costs of absenteeism in the United States are estimated to be between \$25 and \$35 billion a year in lost employee productivity, half of which is paid sick leave (Rogers & Herting, 1993; Tang & Hammontree, 1992). Dalton and Mesch (1991) reported that the total productivity lost in the United States each year to absenteeism is nearly \$40 billion. Others have estimated these costs to be over \$300 billion per year, which represent between 9% and 15% of total wage bills. Losses associated with job stress are estimated to be as large as \$150 billion per year (Karasek & Theorell, 1990).

Employers Benefit when they Deal with Employee Problems

A strategy based on the joint quest for worker well-being and employee productivity is at the heart of the entire Quality of Life movement (Karasek & Theorell, 1990). It pays for employers to be interested in the wellness of their employees. For every dollar spent on mental health and substance abuse treatment, \$11.54 is saved in social services costs (Hickox, 1994). Employer interest in the personal financial problems of employees is growing due to the increased need to improve productivity (Williams, Haldeman, & Cramer, 1996).

Employers are adding a comprehensive financial wellness component to the human resource services offered to employees. Employers find that there is a five-to-one return for every dollar spent on an employee assistance program, with a substantial savings on health care benefits (Goldberg, 1994). This return can also be measured by a decrease in accidents, fewer absences, lower health care costs, an increase in worker happiness, and improved retention of employees.

General Motors saves \$3,700 per year for each employee enrolled in its Employee Assistance Program (EAP), with total savings of \$37 million; Northrop saves \$20,000 per employee in job productivity per rehabilitated employee; New

York Transit saved \$1 million in paid sick leave in one year (Campbell & Graham, 1988). Employee assistance programs saved the U.S. Postal Service and the New York Telephone Company more than \$2 million and \$1.5 million, respectively (Garman, Porter, & McMillion, 1989). Once acquainted with financial education training at a worksite, 63% of participants are more inclined to pursue financial education on their own (Cash, 1996). In the future, employers are increasingly likely to help their employees deal with financial problems because it increases job productivity, reduces costs, and makes employees happier.

At Ameritech, for example, helping employees deal with financial issues falls under the umbrella of the Employee Assistance Program (EAP). By placing the financial counseling in EAPs, Ameritech is assured confidentiality while employees have the opportunity to maintain control. Ameritech's human resources-research manager says, "We've found that by giving employees the tools — without any strings attached — they can work out problems. It's a win-win situation for Ameritech and its employees" (Cambridge Human Resource Group, 1995).

Employer Offered Programming: Recommended Focus

Employers offering financial wellness services for employees should focus on three primary efforts:

- information and education in credit management, consumer education, and personal finance to improve decision making;
- counseling and referral for difficult situations; and,
- pre-retirement planning that increases worker participation and savings in defined-contribution pension plans.

Services offered can include remedial assistance for those experiencing a financial crisis, preventive information and education for those facing money challenges, and productive information for those considering financial opportunities.

Offering financial wellness services to all employees, especially those experiencing personal financial problems, helps workers to help themselves. People who are well informed and in control of their personal finances are more secure in their feelings about life, more self-confident, and happier in family and job relationships. Financial wellness programming means upgrading one's education as a personal finance consumer in the marketplace which will create a better employee in the workplace. The availability of effective financial

wellness services increases job productivity and reduces employer costs. Offering financial wellness services for employees is a win-win situation for both employers and employees.

3C. Military Indicators of Financial Difficulties

In order to gauge the extent of financial difficulties in the Navy, various personal financial mismanagement indicators were first identified from a review of civilian literature. A synopsis of that information is contained in Section 3A. Similar indicators, although limited in number, exist within the DoD and the Department of the Navy. The present study defined the scope of financial difficulties in terms of measurable indicators that could be obtained from existing data. It is noted that data specifically relating to personal financial mismanagement of service members are limited within the DoD. Obtaining this information should be a primary objective of a longitudinal study.

The 1995 DoD Survey of Health Related Behaviors Among Military Personnel found that 14.6% of the service members identified financial problems as one of the top five sources of stress (Bulls, 1996). According to this information, approximately 60,000 Navy service members would be in this group. This survey also documented that stress caused impaired occupational functioning, such as increased absenteeism, lower productivity, and increased interpersonal problems.

Generally, those who experience financial difficulties often do so as a result of poor planning and a lack of financial preparedness rather than not having adequate funds. Fifty-eight percent of married service members and 51% of dual military couples reported financial difficulties while deployed, while 53% of civilian spouses of military personnel also reported financial difficulties (Caliber Associates, 1993).

Table 3C-1 presents a profile of debtors on the east and west coasts within military and civilian populations. The debtors in the Navy are typically younger and have more dependents than their civilian counterparts. In San Diego, service members have higher monthly incomes and debt ratios, and have a greater number of credit cards than their civilian counterparts. In Norfolk, they have lower monthly incomes and debt ratios, and have fewer credit cards as compared to their civilian counterparts. When civilian and Navy populations are compared, the debt-to-income ratio for the Norfolk service members is lower than the San Diego ratio.

Table 3C-1
Debtor Profiles

Consumer Credit Counseling Services, Norfolk		
<u>Characteristics</u>	<u>Civilian</u>	<u>Navy</u>
Average Age	27	24
Average Number of Dependents	2	2.5
Average Number of Credit Cards	6	3
Average Net Income Per Month	\$ 1,392	\$ 1,295
Average Total Debt	\$ 10,226	\$ 7,776
Average Payment	\$ 270	\$ 220
Consumer Credit Counseling Services, San Diego		
<u>Characteristics</u>	<u>Civilian</u>	<u>Navy</u>
Average Age	34	31.3
Average Number of Dependents	1.3	2.2
Average Number of Credit Cards	2.9	3.7
Average Net Income Per Month	\$ 2,040	\$ 2,416
Average Total Debt	\$ 20,168	\$ 24,841
Average Payment	\$ 337	\$ 349

The scope of personal financial mismanagement experienced by Navy personnel can be directly measured by a number of factors. These include bill payment problems, the amount of bad checks written, the number of bankruptcies filed, the number of LOIs, wage garnishment orders received, number of re-enlistments and augmentations refused, and the amount of aid sought at the NMCRS. Various studies have collected data regarding these issues. They are addressed in the following subsections.

Letters of Indebtedness (LOIs)

An individual having difficulties in managing personal finances often purchases many goods and services on credit. If this debt is paid in a timely manner, problems do not arise. However, financial mismanagement often leads to situations where payments become past due. This scenario within the DoD often results in the generation of a Letter of Indebtedness (LOI).

More than 123,000 LOIs are generated in the Navy every year. This number is, in fact, a conservative estimate based only on the data received from those commands that have an effective PFMP. Research indicates that the actual number of LOIs per 1,000 service members varies widely in commands throughout the Navy. Where a PFMP was in place with command support, sufficient CFSs*, and Personal Financial Management training, an average of

**Experts agree that the minimum ratio of financial counselors to the population being served should be at least one counselor for every seventy-five members.*

25 LOIs were received per month per 1,000 service members. Data from commands that do not have an effective PFMP were not available. However, it is hypothesized that LOIs generated in those commands will be higher than 25 per 1,000 service members per month.

Data from Shore Intermediate Maintenance Activity (SIMA) Norfolk indicated that Command Financial Specialists handled approximately 303 LOIs per 1,000 service members per year. Navy Medical Center (NMC) Portsmouth reported an average of 314 LOIs per 1,000 service members in the command per year based on the information for the period May 1994 through June 1996. Data for the first six months of 1996 from the Balboa NMC, indicated that 251 LOIs per 1,000 service members were handled every year (Table 3C-2).

Table 3C-2
LOI Data

SIMA, Norfolk (January '96 - October '96)	
Command Size	2200
Total personnel receiving LOIs	422
Total LOIs received at command	472
LOIs received from AAFES	154
LOIs received from NEX	206
LOIs from commissaries	009
LOIs from outside creditors	103
NMC, Portsmouth (May '94 - June '96)	
Command Size	3010
Total LOIs during May-December 1994	700
Total LOIs during January-December 1995	855
Total LOIs during January-June 1996	450
NMC, Balboa (January '96 - June '96)	
Command Size	3600
Ranks E-1 - E-3	214
Ranks E-4 - E-9	226
Officers	11

Bankruptcies

Three studies indicate that Navy personnel declare bankruptcy at about the same rate as the civilian work force, despite the fact that service members have a steady flow of income. (Sachse, 1993). Approximately 13% of the civilian population and 13% of active duty Navy and Marine Corps personnel were reported to have filed for bankruptcy in San Diego county in 1989. Of the service members, 67% were at the E-5 and E-6 levels. Additionally, these

members filed for bankruptcy with lower debt ratios than their civilian counterparts. The average sailor who filed for bankruptcy in the San Diego and Jacksonville areas was an E-5 or E-6 with an annual income of approximately \$29,000.

The American Red Cross estimates that an average of 12.6% of the loans made to service members become delinquent. The Navy-Marine Corps Relief Society (NMCRS) indicated that 2,364 active duty members were on the Alert List due to a Chapter 7 or Chapter 13 bankruptcy. Defense Finance Accounting System (DFAS) reported that there was a 79% increase (from 731 to 1,308) in the number of bankruptcy cases in the first quarter of 1996 as compared to the first quarter of 1995.

Although the percentage of bankruptcy filings was found to be similar to the civilian population, differences between the groups are apparent. While a majority of civilian bankruptcies are filed for reasons such as loss of income, or interruption and/or termination of medical benefits, Navy service members who file tend to be younger, enjoy a steady income, and have access to health care.

Bad Checks

It is conservatively estimated that the Navy Exchange system receives approximately 92,000 bad checks annually, while commissaries receive 75,000. Norfolk NEXCEN authorities report a monthly average of 742 bad checks or 8,904 annually which represents approximately 75% of all bad checks received. The total number of bad checks processed through the Norfolk region averages 11,873 annually.

- In Fiscal Year 1994, the Army/Air Force Exchange reported that 408,000 checks totaling \$34,584,000 were returned for insufficient funds.
- Norfolk NEX alone receives approximately 8,900 bad checks every year.
- The regional Navy Exchange Center (NEXCEN) in San Diego reports a monthly average of \$348,174, and the Jacksonville regional NEXCEN reports an average of \$222,748 in bad checks. The average number of bad checks received at these two NEXCENs every year is about 89,000.

Table 3C-3
Bad Checks Received at NEXCENS

Data for number of bad checks received at NEXCEN San Diego		
<u>Year</u>	<u>Number</u>	<u>Amount</u>
1995	42,830	\$ 3,365,324
1994	51,774	\$ 4,336,112
1993	51,617	\$ 4,832,844
Average	48,740	\$ 4,111,426
Average amount per bad check ('93 - '95)		\$85/check
Data for bad checks received at NAS Jacksonville, Florida		
<u>Time Frame</u>	<u>Avg. Amount/Month returned checks</u>	
February 94 - January 95	\$ 207,180	
July 95 - June 96	\$ 238,316	
Average number of bad checks per month (7/95 - 6/96)		3,177
Average amount per bad check (7/95 - 6/96)		\$75/check
Data for bad checks received at NEX Naval Base, Norfolk		
<u>Time Frame</u>	<u>Amount</u>	
January 96 - September 96	\$ 580,048	
Average number of bad checks per month (1/96 - 9/96)		742
Average amount per bad check (1/96 - 9/96)		\$87/check

Monthly Financial Obligations

The 1994 Navy-wide Community Needs Assessment indicated that significant numbers of service members reported experiencing personal financial management difficulties. Forty-three percent of active duty personnel, 61% of active duty spouses, and 33% of special needs families experienced difficulties meeting their monthly obligations. Furthermore, a significant number of senior leadership members nearing retirement faced similar circumstances. Forty-five percent of senior leadership with two years remaining indicated experiencing difficulty meeting monthly financial responsibilities.

Wage Garnishments

In 1995, DFAS received 108,000 court-ordered garnishment cases. These garnishments included child support, alimony, commercial debt, former spouse application, and bankruptcy. It is estimated that at least 30,000 service members in the DON had their wages garnished in 1995.

Impact on Re-enlistments and Augmentations

Based on their performance evaluations, those service members who meet established standards are offered the option to reenlist. When qualified individuals choose not to do so, the Navy must recruit and train new personnel. In 1995, of the 64,790 service members who were eligible to reenlist, 24,290 refused the option. Table 3C-4 illustrates that on average, 11.2% of enlisted members refused re-enlistment and 5.86% of officers discontinued services due to financial reasons. Based on survey results from 1990 through 1996, the four financial factors which influenced service members' decisions were *basic pay*, *married versus single pay*, *special pays (bonuses)*, and *compensation for PCS moves*.

Table 3C-4
Members Refusing Re-enlistment and Augmentation

Quarter	Fiscal Year	Officers	Enlisted
4	90	6.33%	11.63%
4	91	5.65%	13.15%
4	92	5.61%	11.79%
4	93	6.65%	10.84%
4	94	5.88%	9.63%
4	95	5.39%	11.28%
3	96	5.55%	10.09%
Average		5.86%	11.20%

(Source: 1996 Exit Questionnaires BUPERS (PERS662))

Security Clearance Revocations

According to the Comptroller's Office of the Defense Investigative Service, approximately 60% of service members' security clearances revoked were due to poor financial behavior.

Table 3C-5
Security Clearances Revoked

Year	Total #	# for Financial Reasons	(%)
1991	1,020	650	63.72
1992	800	453	56.62
1993	600	382	63.66
1994	350	382	52.28
1995	300	187	62.33
Average			59.72

(Source: Comptroller's Office of the Defense Investigative Service)

NMCRS Assistance

The Navy-Marine Corps Relief Society is a private, non-profit organization founded in 1904. The mission of the Society is to provide, in partnership with the Navy and Marine Corps, emergency financial assistance in the form of interest-free loans and grants. Assistance is for emergency needs only, and includes rent, utilities, food, emergency travel in times of death or illness, funeral expenses, payment of medical bills left after CHAMPUS (Civilian Health and Medical Program of the Uniformed Services), dental care, recovery from disaster, assistance when pay records or allotment checks are lost or when funds are stolen, and, for some, emergency automobile repairs. Other services include budget counseling and consumer education, education loan administration, visiting nurses, food pantry and thrift shops, and a layette program.

The amount of assistance provided by NMCRS indicates that a large number of service members are experiencing difficulties in either planning or managing their finances. Previous data (Table 3C-6) indicate that on average, NMCRS handles more than 90,000 financial cases every year, delivers budget counseling sessions to more than 100,000 service members, and provides more than \$48 million in yearly financial assistance.

Table 3C-6
Financial Assistance Provided by NMCRS

	1993	1994	1995
Number of Cases Handled	102,600	88,491	82,531
Amount of Assistance Given	\$53 M	\$47 M	\$44 M
Personnel Attending Management Seminars	121,500	90,000	90,000
Counseling Sessions	63,277	72,885	54,775

Although NMCRS assistance has declined in recent years, the organization continues to provide direct aid to thousands who seek financial assistance each year. While the navy population has decreased during the period 1993-95, other factors such as an increased PFMP presence may be contributing to the decline in actual financial assistance cases processed through NMCRS.

NEXCARD Debts

The NEXCARD program began in 1993 and approximately \$664 million (13% of total NEX sales) were made using NEXCARD. Visa and MasterCard accounted for approximately 18% of total sales.

The NEXCARD user is expected to make payment on the account when the statement is received. If the payment is not received in 30 days, another statement is mailed. In 45 days, the first notice of outstanding balance is mailed, and after 75 days a second notice is served, a courtesy copy of which is also sent to the commanding officer. If the account is not paid in 105 days, a DD-139 (Pay Adjustment Authorization form) is issued.

Since inception, approximately 23,000 accounts with a value of \$20 million have not been collected. Of these accounts, approximately 8,000 are two months or more past due and more than 15,000 are six months or more late.

3D. Indirect Factors

Satisfaction/Dissatisfaction with Quality of Life

If employees are satisfied with their quality of life at their workplace, productivity tends to improve. Conversely, if employees are dissatisfied, lower productivity and reduced readiness result. In addition, dissatisfied employees tend to look for better opportunities.

The impact of quality-of-life (QoL) issues on productivity is well accepted in the Department of Defense. Surveys conducted indicate there is a high percentage of Navy personnel who are either somewhat or very dissatisfied with a number of financial QoL issues. Table 3D-1 lists areas that received high dissatisfaction scores for financial reasons.

Table 3D-1
Financial QoL Dissatisfaction Percentages

<u>Issues</u>	<u>Percentage</u>
Income for Essentials	33.2%
Income for Extras	55.0%
Income for Savings	62.8%
Income Compared to Cost of Living	63.5%
Overall Pay	53.8%
Standard of Living	63.0%

(Source: 1995 QoL Survey conducted by NPRDC, San Diego)

Other quality-of-life issues may stem from financial difficulties. These require further study and documentation. Concerns about living quarters, housing, child care, and partner's employment opportunities relate directly or indirectly to the financial situation of the service member and his or her family. Thus, personal financial management difficulties may very well be a significant contributing cause of dissatisfaction among service members.

Quality-of-life surveys conducted by NPRDC, San Diego, assessed the impact of those issues relating to service member's productivity. The three main indicators examined were *Lack of Operational Readiness*, *Concerns over Short Notice of Deployment*, and *Concerns over Lengthy Deployments*. Financial concerns were by far the most critical of factors affecting productivity. Service members were asked to rank their concerns on a scale of 1-5, with 1 being the least affected.

Table 3D-2
Effect of Financial Difficulties on Operational Readiness

Factors	Lack of Operational Readiness	Short Notice of Deployment Concerns	Long Deployment Concerns
Financial	2.09	2.42	2.17
Housing	1.97	1.88	1.68
Child Care	1.04	0.98	0.94
Health Care	1.96	1.59	1.58
Partner's Job	1.46	1.18	1.17
Neighborhood	1.77	1.44	1.40

(Source: 1995 QoL Survey conducted by NPRDC, San Diego)

Financial difficulty was perceived as the highest factor impacting operational readiness. As shown in Table 3D-2, Financial difficulties not only reduce the operational readiness but also result in more concern about short notice of deployment and length of deployment than do any other factors.

Lack of Operational Readiness

When service members are not confident of their financial situations, it causes stress and impacts their readiness. Financial concerns are cited as primary reasons leading to a decline in operational readiness among first term military personnel (Family Status and Initial Term of Service Study, 1994). In the 1994 Navy Personnel Research and Development Center (NPRDC) Quality of Life Survey, 28% of service members in the ranks of E-4 through E-9 said that financial concerns affected their operational readiness.

Short Notice of Deployment Concerns

The welfare of dependent family members becomes a concern to the service member when personal finances are not managed efficiently. The 1994 Quality of Life Survey found that 28% of service members in the E-4 through E-9 ranks admitted that financial concerns were major factors that caused anxiety over short notice of deployment.

Lengthy Deployment Concerns

Concern for the family's well being during deployment may also increase the service member's stress level when the deployment period is lengthy. Stress and the resulting impact on performance and readiness will lessen if the service member is satisfied with his or her financial position. According to the 1994 Quality of Life Survey, approximately 30% of service members in the E-4 through E-9 ranks said they are concerned about a long deployment due to financial reasons.

Increase in NMCRS Assistance

NMCRS reported a 50% increase in requests for financial assistance during Operation Desert Storm. This indicates that many service members had not financially planned for deployment. Financial difficulties during deployment were encountered by those who lacked knowledge or experience in areas such as *direct deposit for spouses* and *pre-authorization forms for loans and grants* (Caliber Associates, 1993).

4. Financial Mismanagement Costs

4A. Direct Costs

Functional impact is defined in terms of reduced operational readiness, lowered productivity, lapses in concentration, deployment concerns, early returns, refusal to reenlist, and discontinuation of service by officers.

This section estimates financial costs associated with the consequences of financial mismanagement such as *Letters of Indebtedness (LOIs)*, *bad checks*, *wage garnishments*, *bankruptcies*, *retention*, and *NMCRS assistance*. Paperwork processing requirements and associated administrative costs are further examined in Section 4B.

The annual direct cost to the Command from productive time lost in processing paperwork and counseling is conservatively estimated to be \$35 million. Another \$50 million is expended to recruit and train replacements for those who do not continue in service.

Table 4A-1 summarizes Command cost resulting from service members' financial problems. The columns detail the nature of the outcome of poor financial management, the total number of those outcomes in the Department of the Navy, the cost of individual lost productivity, the direct cost in dollars, and the same cost in man years, respectively. The costs are calculated utilizing an E-5 rank.

Table 4A-1
Annual Lost Productivity Costs

Consequence	Cases	Cost/Case	Direct Cost	Years Lost
LOIs	123,000	\$ 98.76	\$ 12,147,480	303.68
Bad Checks	174,000	\$ 91.88	\$ 15,987,120	399.68
Wage Garnishments	30,000	\$ 93.36	\$ 2,800,000	70.00
Bankruptcies	4,300	\$ 228.78	\$ 983,754	24.59
NMCRS Assistance	190,000	\$ 19.64	\$ 3,731,030	93.28
Total			\$ 35,649,384	891.23

4B. Administrative Costs

This section contains details of the costs associated with processing LOIs, bad checks, wage garnishments, and bankruptcy filings by service members.

Since minimal time is required to process paperwork, it is necessary to calculate the per minute cost of personnel at various ranks. Section 2C details the process used to estimate a per minute cost. Table 4B-1 illustrates the per minute cost for enlisted members and officers based on the "Military Composite Standard Pay and Reimbursement Rates" for Fiscal Year 1996.

These cost estimates are similar to any non-DoD entity using Navy personnel to complete projects. The annual salary for each rank includes:

- Basic Pay
- Retired Pay Accrual
- Basic Allowance for Quarters
- Incentives and Special Pays
- Permanent Change of Station Pay
- Miscellaneous Expense

Table 4B-1
Military Composite Standard Pay and Reimbursement Rates
(Rates Used by the U.S. Navy for Calculating Manpower Cost Charges for Outside Agencies)

Enlisted Rank	E-1	E-2	E-3	E-4	E-5	E-6	E-7	E-8	E-9
Pay per Year**	\$ 23,467	\$ 26,828	\$ 29,400	\$ 35,703	\$ 43,321	\$ 51,895	\$ 60,344	\$ 69,201	\$ 81,776
Hour*	12.91	14.76	16.17	19.64	23.83	28.54	33.19	38.06	44.98
Minute	0.22	0.25	0.27	0.33	0.40	0.48	0.55	0.63	0.75
Officer Rank	O-1	O-2	O-3	O-4	O-5	O-6	O-7		
Pay per Year**	\$ 49,328	\$ 61,678	\$ 78,914	\$ 92,337	\$ 109,824	\$ 130,138	\$ 142,318		
Hour*	27.13	33.92	43.40	50.79	60.40	71.58	78.27		
Minute	0.45	0.57	0.72	0.85	1.01	1.19	1.30		

Note. *This figure is calculated using a factor of .00055 for hourly pay as provided by the DON. This includes a 14% rate for leave and holiday pay.

** "Military Composite Standard Pay and Reimbursement Rates" table for 1996

It is Navy policy to provide financial counseling services. OPNAVINST 1740.5 requires counseling services when indications of financial difficulty are brought to the attention of the Command (e.g., LOIs, bad check notices, and wage garnishments). When intervention is necessary, a cost has been assigned to the productive time lost.

Data from commands, NFSCs, NMCRS, and CFSs indicate that counseling sessions vary in length depending upon the individual, nature, and complexity of the problem. Sessions are estimated to average approximately one hour resulting in lost productivity due to pre-/post-session planning, preparation, and commuting. An additional 20 minutes was assumed for travel time.

Tables 4B-2 through 4C-4 show average costs of processing and counseling resulting from LOIs, bad checks, wage garnishments, bankruptcies, and NMCRS assistance. Time used in these cost calculations may be one third of what was indicated by some CFSs. Total cost calculations are based on information confirming that in approximately 40% of commands, CFSs handle such situations.

LOI Costs

An estimated 123,000 LOIs are generated annually, and \$12 million is expended for processing and counseling services.

Contact from creditors often results when service members accumulate overwhelming debt. Frequently, the Command is advised of the situation and requested that the responsible party be held accountable. While the Navy does not act as a collection service, an LOI will be processed through the chain of command with the Division Officer or the Command Financial Education Specialist tasked with handling the situation.

Paperwork flow related to LOI processing varies from command to command. Examples of paperwork flow are attached as Appendixes C and D. Table 4B-2 illustrates time spent for paperwork routing.

Specific data on the number of commands using CFSs versus Division Officers are unavailable. Anecdotal data suggest that approximately 40% of commands rely on the CFS to process LOIs. Based on paperwork flow estimates, each LOI costs the Navy approximately \$43.12 ($0.6 \times 47.59 + 0.4 \times 36.42$) and another \$55.638 ($0.6 \times 57.79 + 0.4 \times 52.41$) in lost productivity.

LOI processing costs are reported in Table 4B-2. Since the CFS is trained to perform this task, processing time by the designated CFS (68 minutes), is less than the time required by the Division Officer (83 minutes). Discussions with CFSs identified an average time of 2-3 hours to process an LOI. Thus, actual costs may more than double those costs in the table.

At the same time, CFSs revealed that an average LOI counseling session typically involves one hour. Based on this information, cost calculations and lost productivity costs are presented in Tables 4B-3 and 4B-4, respectively.

Table 4B-2
Cost of Processing an LOI
(All times are in minutes)

Division Officer processes the LOI				
<u>Service Member</u>	<u>Rank</u>	<u>Action</u>	<u>Time</u>	<u>Cost</u>
Admin Person	E-2	Opens	4	\$ 0.98
Department Head	O-4	Reads And Directs	8	\$ 6.77
Division Officer	O-2	Initiates Case	10	\$ 5.65
Legal (If DIVO)	O-2	Assists D.O.	20	\$ 11.31
Division Officer	O-2	Handles Case	25	\$ 14.13
Department Head	O-4	Reads Report	8	\$ 6.77
Admin Person	E-2	Files	8	\$ 1.97
Total Processing Time			83	
Direct Cost				\$ 47.59

CFS processes the LOI				
<u>Service Member</u>	<u>Rank</u>	<u>Action</u>	<u>Time</u>	<u>Cost</u>
Admin Person	E-2	Opens	4	\$ 0.98
Department Head	O-4	Reads And Directs	8	\$ 6.77
Division Officer	O-2	Forwards To CFS	10	\$ 5.65
CFS	E-6	Handles LOI	30	\$ 14.27
Department Head	O-4	Reads Report	8	\$ 6.77
Admin Person	E-2	Files	8	\$ 1.97
Total Processing Time			68	
Direct Cost				\$ 36.42

Table 4B-3
Cost of Counseling per LOI
(All times are in minutes)

Division Officer counsels the Service Member			
<u>Service Member</u>	<u>Rank</u>	<u>Time Spent</u>	<u>Cost</u>
D.O. (Counselor)	O-2	60	\$ 33.92
Counselee	E-3 - E-4	80*	\$ 23.87
Direct Cost			\$ 57.79

CFS counsels the Service Member			
<u>Service Member</u>	<u>Rank</u>	<u>Time Spent</u>	<u>Cost</u>
CFS (Counselor)	E-6	60	\$ 28.54
Counselee	E-3 - E-4	80*	\$ 23.87
Direct Cost			\$ 52.41

Note. *These 80 minutes include the time to and from the counselor's office. Assume that the service member is typically an E-3 or E-4 and is not accompanied by his or her boss.

Average salary of E-3 and E-4 is used for calculation of this cost.

Table 4B-4
Cost of Lost Productivity per LOI

Division Officer handles the case	
Processing Cost	\$ 47.59
Counseling Cost	\$ 57.79
Direct Cost	\$ 105.38
CFS handles the case	
Processing Cost	\$ 36.42
Counseling Cost	\$ 52.41
Direct Cost	\$ 88.83

Note. Assume that CFSs handle LOIs in at least 40% of the commands; average cost of lost productivity per LOI = $(0.6 \times 105.38 + 0.4 \times 88.83) = \98.76 .

Bad Check Costs to the Navy Exchange

When a service member issues a bad check at the Navy Exchange and/or when the Navy is a creditor, a written notification is sent to the individual's command. The command administrative person opens the notice, routes it to the Department Head for review, and typically directs it to the Division Officer or the CFS for processing. Within the same period, a written notification may also be sent to the disbursing office. The Division Officer or CFS will meet with the service member to discuss the implications of issuing a bad check, and in accordance with OPNAVINST 1740.5, appropriate counseling will be made available to the service member. If the check does not clear in a specified time, the service members' pay may be docked (pay checkage).

A written notification from the Division Officer or CFS of the action(s) taken is returned to the Department Head, who reviews and forwards it to the Executive Officer (X.O.). The Executive Officer then reviews and passes the notice to the Commanding Officer (C.O.) where it is placed in the service member's file. Bad checks issued to private creditors may result in an LOI, which will go through a chain of command (Table 4B-2).

Although some variation exists at different commands, the procedure described for the flow of information and the time at each step is fairly typical (Table 4B-5). This conservative flow demonstrates that costs to the Navy resulting from each bad check issued are at least \$36.00 $(0.6 \times 36.33 + 0.4 \times 36.11)$ for paperwork processing, and \$55.64 $(0.6 \times 57.79 + 0.4 \times 52.41)$ in costs related to lost productivity. Table 4B-6 details the calculations for counseling sessions costs resulting from issuance of bad checks, and Table 4B-7 details the cost of lost productivity per bad check. Approximately 92,000 bad checks are received

at the Navy Exchanges and another 75,000 are received at the commissaries annually. As a result, the Command realizes an annual cost of nearly \$16 million, or 400 man years at an E-5 level.

Table 4B-5
Cost of Processing a Bad Check
(All times are in minutes)

Division Officer handles the case				
<u>Service Member</u>	<u>Rank</u>	<u>Action</u>	<u>Time</u>	<u>Cost</u>
Admin Person	E-2	Opens	4	\$ 0.98
Department Head	O-3	Reads and Directs	6	\$ 4.34
Division Officer	O-2	Initiates Case	8	\$ 4.52
Division Officer	O-2	Handles Case	10	\$ 5.65
Disbursing Office	O-2	Pays Checkage	10	\$ 5.65
Department Head	O-3	Reads Report	8	\$ 5.79
X.O.	O-5	Finalizes and Initials	5	\$ 5.03
C.O.	O-6	Initials	2	\$ 2.39
Admin Person	E-2	Files	8	\$ 1.97
Total Processing Time			61	
Direct Cost				\$36.33

CFS handles the case				
<u>Service Member</u>	<u>Rank</u>	<u>Action</u>	<u>Time</u>	<u>Cost</u>
Admin Person	E-2	Opens	4	\$ 0.98
Department Head	O-3	Reads and Directs	6	\$ 4.34
Division Officer	O-2	Forwards To CFS	5	\$ 2.83
CFS	E-6	Handles Case	15	\$ 7.14
Disbursing Office	O-2	Pays Checkage	10	\$ 5.65
Department Head	O-3	Reads Report	8	\$ 5.79
X.O.	O-5	Finalizes and Initials	5	\$ 5.03
C.O.	O-6	Initials	2	\$ 2.39
Admin Person	E-2	Files	8	\$ 1.97
Total Processing Time			63	
Direct Cost				\$36.11

Table 4B-6
Cost of Counseling per Bad Check
(All times are in minutes)

Division Officer handles the case			
<u>Service Member</u>	<u>Rank</u>	<u>Time Spent</u>	<u>Cost</u>
D.O. (Counselor)	O-2	60	\$ 33.92
Counselee	E-3 - E-4	80	\$ 23.87
Direct Cost			\$ 57.79

CFS handles the case			
<u>Service Member</u>	<u>Rank</u>	<u>Time Spent</u>	<u>Cost</u>
CFS (Counselor)	E-6	60	\$ 28.54
Counselee	E-3 - E-4	80	\$ 23.87
Direct Cost			\$ 52.41

Note. Assume that the service member is typically an E-3 or E-4 and is not accompanied by his or her boss.

Average salary of E-3 and E-4 is used for calculation of this cost

Table 4B-7
Cost of Lost Productivity
per Bad Check

Division Officer handles the case	
Processing Cost	\$ 36.33
Counseling Cost	\$ 57.79
Direct Cost	\$ 94.12
CFS handles the case	
Processing Cost	\$ 36.11
Counseling Cost	\$ 52.41
Direct Cost	\$ 88.53

Note. Assume that CFSs handle bad checks in approximately 40% of the commands; average cost of lost productivity per bad check = $(0.6 \times 94.12 + 0.4 \times 88.53) = \91.88 .

4C. Wage Garnishment Costs

A creditor may request that the Navy garnish wages to satisfy outstanding debt when balances are past due. Paperwork flow related to processing wage garnishments is similar to that of bad checks. A request for wage garnishment from the creditor is sent by Defense Finance and Accounting Service (DFAS) to the Commanding Officer where typically it is then routed to the Department Head, the Division Officer, and finally the CFS. After addressing the issue, notification is sent to the Executive Officer as well as the Commanding Officer. In most situations, time spent by the Division Officer or the CFS will not be as consuming as in the case of an LOI or a bad check since processing mostly occurs at the disbursing office. The service member is required, however, to attend a counseling session. Tables 4C-1 and 4C-2 respectively illustrate the flow of information for processing of wage garnishments and counseling sessions. Table 4C-3 details the total cost of lost productivity per wage garnishment.

Based on collected data, estimates indicate each wage garnishment costs the Navy approximately \$37.72 ($0.6 \times 39.06 + 0.4 \times 35.70$) to process, and another \$55.64 ($0.6 \times 57.79 + 0.4 \times 52.41$) in lost productivity costs associated with counseling sessions. In 1995, there were approximately 30,000 wage garnishment orders against Navy service members (Section 3C). Annually, this generates a cost estimate of \$2,827,200, or 70.68 man years at an E-5 level.

Table 4C-1
Cost of Processing a Wage Garnishment
(All times are in minutes)

Division Officer handles the case				
<u>Service Member</u>	<u>Rank</u>	<u>Action</u>	<u>Time</u>	<u>Cost</u>
Admin Person	E-2	Opens	4	\$ 0.98
X.O.	O-5	Reads and Directs	6	\$ 6.04
Department Head	O-3	Reads and Directs	5	\$ 3.62
Division Officer	O-2	Initiates Case	6	\$ 3.39
Division Officer	O-2	Handles Case	10	\$ 5.65
Disbursing Office	O-2	Pays Checkage	10	\$ 5.65
Department Head	O-3	Reads Report	6	\$ 4.34
X.O.	O-5	Finalizes and Initials	5	\$ 5.03
C.O.	O-6	Initials	2	\$ 2.39
Admin Person	E-2	Files	8	\$ 1.97
Total Processing Time			62	
Direct Cost				\$39.06

CFS handles the case				
<u>Service Member</u>	<u>Rank</u>	<u>Action</u>	<u>Time</u>	<u>Cost</u>
Admin Person	E-2	Opens	4	\$ 0.98
X.O.	O-5	Reads and Directs	6	\$ 6.04
Department Head	O-3	Reads and Directs	5	\$ 3.62
Division Officer	O-2	Forwards to CFS	5	\$ 2.83
CFS	E-6	Handles Case	6	\$ 2.85
Disbursing Office	O-2	Pays Checkage	10	\$ 5.65
Department Head	O-3	Directs Report	6	\$ 4.34
X.O.	O-5	Finalizes and Initials	5	\$ 5.03
C.O.	O-6	Initials	2	\$ 2.39
Admin Person	E-2	Files	8	\$ 1.97
Total Processing Time			57	
Direct Cost				\$35.70

Table 4C-2
Cost of Counseling Per Wage Garnishment
(All times are in minutes)

Division Officer handles the case			
<u>Service Member</u>	<u>Rank</u>	<u>Time Spent</u>	<u>Cost</u>
D.O. (Counselor)	O-2	60	\$ 33.92
Counselee	E-3 - E-4	80	\$ 23.87
Direct Cost			\$ 57.79

CFS handles the case			
<u>Service Member</u>	<u>Rank</u>	<u>Time Spent</u>	<u>Cost</u>
CFS (Counselor)	E-6	60	\$ 28.54
Counselee	E-3 - E-4	80	\$ 23.87
Direct Cost			\$ 52.41

Note. Assume that the service member is typically an E-3 or E-4 and is not accompanied by his or her boss.

Average salary of E-3 and E-4 is used for calculation of this cost.

Table 4C-3
Cost of Lost Productivity
per Wage Garnishment

Division Officer handles the case	
Processing Cost	\$ 39.07
Counseling Cost	\$ 57.79
Direct Cost	\$ 96.86
CFS handles the case	
Processing Cost	\$ 35.70
Counseling Cost	\$ 52.41
Direct Cost	\$ 88.12

Note. Assume that CFSs handle wage garnishment in approximately 40% of the commands; average cost of lost productivity per wage garnishment = $(0.6 \times 96.86 + 0.4 \times 88.12) = \93.36 .

Bankruptcy Costs

Bankruptcy is often the last option for an individual facing financial difficulties. Generally in the civilian work force, those who file bankruptcy do so as a result of unemployment or in response to an emergency situation. Since Navy personnel enjoy steady employment and can rely on regular pay periods, it is anticipated that the number of service members filing bankruptcy would be insignificant. This assumption, however, is not supported by bankruptcy studies conducted within the Department of Defense. Service members file bankruptcy at levels similar to the civilian population (Section 3C).

More than 1% of civilian households filed for personal bankruptcy during 1996; therefore, since service members file at similar rates, it is estimated that 4,300 bankruptcies were filed in 1996. This results in a cost to the Navy of at least \$983,754 or 24.6 man years at E-5 level in lost productivity.

Bankruptcy must be filed with the U.S. Bankruptcy Courts and does not necessarily involve offices of the Department of the Navy unless the Command is a creditor. Legal services are available to service members through the Navy Legal Services Office (NLSO).

Filing for bankruptcy is a decision that most individuals carefully consider since it directly impacts on both credit history and future credit availability. In most cases, individuals considering bankruptcy consult with friends, family members, creditors, attorneys, and often the NLSO. In fact, it is estimated that of those who use NLSO services, approximately 50% return for a second visit. Based on discussions with individuals who have filed personal bankruptcy, it is estimated that an individual often experiences a period of self-evaluation

lasting anywhere from a month to one year. During this time, discussions take place with creditors and collection agencies representing one full day of lost productivity to the Navy. Further productivity losses occur when discussions involving co-workers take place during the work day.

Table 4C-4
Cost of Lost Productivity per Bankruptcy

	Rank	Time Spent	Cost
Information Search	E-5 - E-6	450	\$ 196.38
Paralegal	E-5	20	\$ 6.35
NLSO Time	O-3	45	\$ 26.04
Direct Cost			\$ 228.78

In Table 4C-4, the information search time includes talking with peers, friends and family, attorney consultations, attending court hearings, and processing paperwork. Approximately 80% of service members filing for bankruptcy seek advice from either a paralegal or the NLSO. The majority of service members filing for bankruptcy are either at E-5 or an E-6 rank.

NMCRS Assistance

Since Navy-Marine Corps Relief Society (NMCRS) is not funded by the Department of the Navy, any amount of time spent by the NMCRS personnel in assisting service members facing financial difficulties is not considered in the cost calculations. Although service provider time at the NMCRS is paid for by a third party, the individual seeking assistance does so during work hours since NMCRS is open only during regular working hours. Thus, in cost calculations for this activity, the service members' productive time lost due to seeking aid and counseling at NMCRS centers was considered.

Individual cases for financial assistance at the NMCRS average approximately one hour of the NMCRS staff's time. The total number of members seeking assistance from NMCRS is reported in Section 3C, however, the data on rank breakdown of these service members is not available. Since other studies reveal that the majority of members facing financial problems are in ranks E-3 through E-5, the average salary of an E-4 was taken for cost calculations of productive time lost by the thousands who seek NMCRS assistance.

Data on the amount of time spent by service members at the NMCRS is not available. However, anecdotal evidence suggests it involves approximately one hour of the service member's time. Budget counselors at NMCRS indicate counseling sessions generally last one hour. Approximately 90,000 service members seek financial assistance at the NMCRS, and another 100,000 attend

budget counseling sessions. The Command realizes an approximate \$4 million loss (\$19.637/hr. avg. rate for an E-4 x 190,000 hrs.) or 104.50 man years in productivity while members seek NMCRS assistance.

Re-enlistment and Augmentation Costs

When service members do not experience job satisfaction, the option not to reenlist or continue service exists. Resultant costs must be absorbed to recruit and train new personnel.

The House Appropriations Committee, Subcommittee on Military Construction Hearing on Quality of Life, indicated on February 29, 1996, that the cost to the Navy to recruit a new service member is \$6,323. This cost-per-recruit was calculated by the Office of the Assistant Secretary of Defense and reflects the Navy's total number of enlisted accessions divided by the total enlisted cost including military and civilian personnel compensation, enlistment bonuses, college funds (kickers), advertising, communications, and recruiting support. Medical costs are not included in this calculation. According to the same committee, training costs average an additional \$16,027. Thus, it costs about \$22,350 to recruit and train a new service member.

An exit questionnaire administered to service members who refused re-enlistment, indicated that approximately 11.2% of enlisted members based their decisions on financial concerns (Table 3C-4). Data from the past three years indicated that, on average, approximately 20,000 members refused re-enlistment every year. It costs the Navy \$50 million (\$22,350 x 2,240) every year to recruit and train replacements for those who leave due to financial concerns.

5. Impact of the Personal Financial Management Program

5A. Introduction

The ability of the U.S. Navy to accomplish its mission is directly related to the effectiveness of the men and women tasked to perform at peak efficiency. It is with vital interest that the Navy assists its members to reduce extraneous stress that impacts on efficiency. Since financial difficulties are a major source of stress, the Personal Financial Management Program was initiated to assist members in achieving sound financial status.

5B. History

The Navy Personal Financial Management Program (PFMP) was established on November 6, 1990 in response to the increasing financial difficulties faced by Navy members and their families. These dilemmas were due to a lack of knowledge in basic money management, as well as the ease of obtaining and abusing credit combined with poor budgeting practices. Problems were exacerbated by market hype, unscrupulous business practices, and an instant gratification mind set. Apparent financial problems were further evidenced in a lack of financial preparedness for deployments, lower re-enlistment and augmentation rates, and increased numbers seeking assistance from Navy Family Services Centers and the Navy-Marine Corps Relief Society.

To address these difficulties, senior Navy leadership established the comprehensive Navy-wide Personal Financial Management education, training, and counseling Program (PFMP). The goal as defined in OPNAVINST 1740.5 is to provide all Navy members and their families with a PFMP emphasizing personal financial responsibility and accountability. Basic principles and practices of sound financial management as well as appropriate referral services, when applicable, would be provided.

5C. Current Programming Efforts

The Navy PFMP is structured around a core of Command Financial Specialists. Financial Educators located at NFSCs train and work with CFSs to build financial education programs within individual commands. The NFSC

Financial Educator provides training to the CFSs, individual service members and their families. The Financial Educators also offer counseling when a case is too complex for the CFSs. It is the Navy's intention to provide the CFSs with the tools necessary to run an effective command level program emphasizing financial education.

Several efforts and initiatives to provide for better delivery of personal financial management services are in development or are currently being utilized. They include

- utilization of teleconferencing training at Family Services Centers for PFMP Managers;
- video training for Command Financial Specialists;
- updating the CFS training manual and instructor's guide;
- development of an information network to include a PFM Newsletter, E-mail, and a fax system;
- development of a proactive educational environment which is available to the service member from admission to transition from the Navy; and,
- working with other branches of the service to develop a DoD/PFMP advisory board.

5D. PFMP Implementation at USS L.Y. SPEAR

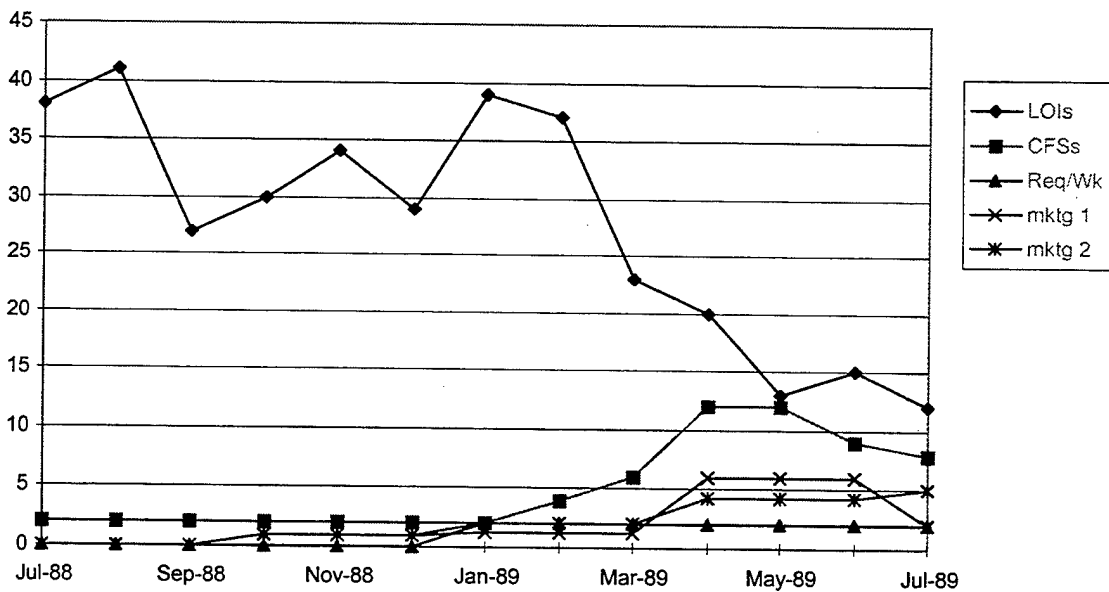
Sound financial training can substantially reduce a myriad of problems including bounced checks, reduced operational readiness, and perhaps prevent suicide arising from financial management difficulties. Table 5D-1 shows the impact CFS presence on the L.Y. SPEAR (a submarine tender at Norfolk) on reducing the number of LOIs generated from that Command over a period of one year. As the number of CFSs were increased from 2 to 12, LOIs received per month were reduced from 40 to 13. This decrease was accomplished due to simultaneous minimal marketing efforts such as videos (labeled *mktg 1*) and Plan of the Day (POD) notes (labeled *mktg 2*). Figure 1 graphically illustrates the impact of additional CFSs: as the number of CFSs increased and marketing efforts intensified, the number of LOIs at the Command were reduced. Since bounced checks, readiness reduction, suicide attempts, and LOIs result from the same primary cause (financial difficulties), it is expected that increased availability of a CFS may substantially decrease the extent of these problems.

Table 5D-1

	LOIs	CFSs	Req/Wk	mktg 1	mktg 2	Moving Average
Jul-88	38	2	0.05	0	0	
Aug-88	41	2	0.05	0	0	
Sep-88	27	2	0.05	0	0	35
Oct-88	30	2	0.05	1	1	33
Nov-88	34	2	0.05	1	1	30
Dec-88	29	2	0.05	1	1	31
Jan-89	39	2	2	1.3	2	34
Feb-89	37	4	2	1.3	2	35
Mar-89	23	6	2	1.3	2	33
Apr-89	20	12	2	6	4.3	27
May-89	13	12	2	6	4.3	19
Jun-89	15	9	2	6	4.3	16
Jul-89	12	8	2	2	5	13

Figure 1

Effect of Financial Training



- LOIs indicates the number of Letters of Indebtedness per month
- CFSs indicates the number of CFSs available to the Command
- Req/Wk indicates the number of requests per CFS per week
- mktg 1 indicates marketing effort in terms of number of financial videos shown per week
- mktg 2 indicates marketing effort in terms of the number of financial notes displayed on the POD

6. Recommendations

6A. *Mandatory Training*

Past research reports have suggested the need for the Personal Financial Management Program to focus primarily on prevention and to become proactive in delivery of services in order to meet service members' needs. In the Defense Science Board Task Force on Quality of Life Study (1995), Honorable John O. Marsh, Jr., ex-Secretary of the Army, Chairman, recommended that The Department of Defense implement an effective "proactive" personal financial management program within its Family Centers. Other research also indicates that the greatest problem experienced by Navy service members and their families is in the financial arena, and a need exists for sequential education in financial management.

These programs must be uniformly available during training and begin at the service members' first permanent duty station. Along with early education, support services need to be targeted toward prevention. Money management and consumer education training should be the focus of the Personal Financial Management Program.

Training should be designed and implemented at both enlisted and officer accession points with continuance at follow-on training sites. Fundamental subjects such as the Navy Pay System, leave and earning statements (LES), basic budgeting skills, and checkbook maintenance and management should be included. Initial training should be reinforced and expanded in command training evolutions and should include information and skill development in military pay and allowances, direct deposit and banking, basic budgeting and management skills, financial planning, credit management, consumer awareness, and insurance and legal issues of personal financial management with respect to the UCMJ and various enactments of law. The PFMP should also provide for a flow of information through NFSCs, Navy media, in leave and earning statements, handouts, and by other methods as they become available.

6B. *Command Level Involvement*

Command level involvement is essential for the Navy to present a standard and integrated approach to assisting members and their families. Informed and supportive supervisory personnel minimize the financial pitfalls their people encounter by assisting them through proactive personal financial management

education, training, and counseling. Resultant benefits to the Navy include increased morale, retention, readiness and capability, resulting in significant reductions in costs of manpower loss, training, lost duty time, and administration at the command level.

Research and anecdotal data have suggested that the most effective training programs are those held at the unit level which include support from leadership. Command level involvement should include funding the PFMP at a level consistent with service members' needs, as well as shifting CFS from a collateral to regular duty to promote a uniformly effective preventive education program. Personnel at the appropriate level should also work toward the establishment of a system to identify and track trained Command Financial Specialists. Delivery of services will further be enhanced with standardization of management reporting and quality assurance needs, establishment of a formal PFMP advisory council, effective and consistent media advertisement, ongoing curriculum standardization and revision, and, mandatory training.

6C. Command Financial Specialist Tracking

Financial Educators (FEs) are responsible for personal financial management education at the base level and may be Navy personnel or contract personnel, depending upon the specific base. In addition to training the trainers (CFSs), FEs provide education to commands and directly counsel personnel who lack access to a CFS, if the severity of the problem is to such an extent that a referral by a CFS is necessary. FEs also provide personal financial management education for other core programs such as *Return and Reunions*, and *orientation briefings for leadership*.

The CFS is charged with providing financial education at the command level which includes both individual work and group programs. CFSs must provide both first line assistance for those with financial problems as well as the required Personal Financial Management command training. This is a collateral duty and commands differ in the level of activity.

Currently, a standardized system does not exist to track trained CFSs as they move from command to command. As a result, their expertise is often underutilized because without tracking they are accountable to no one. Standardized advanced training cannot be offered to individuals who may need it due to substantial changes in regulations related to personal financial management (e.g., *garnishments*, *NEX cards*, *bankruptcy laws*) largely due to the failure to implement an efficient tracking system matching the service member to a qualified CFS.

A centralized system should be developed (either at Norfolk or within the Bureau of Navy Personnel or Chief of Naval Education and Training) to track CFSs while they are in the Armed Forces. Currently there is not a secondary NEC designation for CFSs. As a result, commands are unable to identify service members with the appropriate expertise to deal with the problems and challenges associated with personal financial mismanagement. Also, without a NEC, personnel are likely to feel that this role will not enhance their career and are thus unlikely to be willing to put as much effort into it as they might with other roles. CFSs should receive secondary NEC designations styled after Navy Career Counselor qualifications.

6D. Family Member Involvement

The U.S. Navy's Personal Financial Management Program should focus on three primary efforts: (1) information and education on various personal financial issues to improve decision making, (2) counseling and referral for difficult situations, and (3) pre-retirement planning services that increase worker participation and savings. Included in the services offered should be remedial assistance for those experiencing a financial crisis, preventive information and education for those facing money challenges, and productive information for those considering financial opportunities.

Personal financial management affects and is affected by every member of a family. Curriculum development and training in personal financial management should involve both service members and civilian family members.

Often, personnel do not take advantage of available opportunities because they are not aware of them or they are not aware of the influence that negative personal financial management behaviors have on their careers. An appropriate, effective, and enticing marketing plan for the Personal Financial Management Program should be developed and implemented for service members, their families, and senior leadership.

6E. Recruitment and Screening Process

Education should begin with appropriate financial screening during recruitment. The Navy needs to screen recruits and to identify those having significant financial problems. Credit checks, like those conducted by large employers in the private sector, should be conducted on potential recruits. This can be accomplished by using both well-established debt-to-income ratios

and accepted credit bureau scoring systems. The importance of maintaining good personal financial management practices needs to be understood by all recruits and recruiters. A personal financial management check-up, particularly debt-to-income ratios (less than 20%) and a thorough credit check should be used as a recruitment and deployment screening tool.

6F. Retention and Readiness

Military Salary-Reduction Savings Program

The perceived inability or disregard for establishment of a savings account remains a serious problem. Particularly at lower grade levels, service members rarely have substantive amounts of money in a savings account. Many live from paycheck to paycheck barely making financial ends meet. Financial trouble (e.g., excessive borrowing, poor buying decisions, gambling to make financial ends meet) occurs when a need exists and cannot be met.

The military should consider the establishment of a Military Salary-Reduction Savings Program to encourage regular savings by service members. This program would serve as a powerful incentive for savings and would assist service members in developing the important habit of contributing to a savings fund.

After-Tax Military Salary-Reduction Pension Program

Most service members leave the Navy before qualifying for the government's defined-benefit retirement plan. Similar experiences occur in the civilian sector, although many civilians today participate in before-tax defined-contribution retirement plans. In addition, corporations often offer an optional after-tax salary reduction retirement plan. This type of plan is beneficial for those approaching retirement who realize that they have too little set aside and need to catch up, and for those who want to contribute more to their retirement program but have already reached the maximum in a before-tax IRS qualified plan. Although the employee pays current-year income taxes on contributions to an after-tax pension plan, the investment earnings are tax-deferred.

The military should consider the establishment of an After-Tax Military Salary Reduction Pension Plan to encourage service members to save for retirement and to provide an additional inducement to retain the loyalty of service

members. Under similar civilian sector programs (sometimes called *corporate thrift programs*), employees may make contributions to a retirement plan up to a ceiling of 15% of annual income that accumulates tax-free.

6G. A Life Cycle Curriculum Model

The personal financial management curriculum should be strengthened both in scope and depth to enable Financial Educators and Command Financial Specialists to consistently offer the same core material at all commands. Rationale for all topics should be reviewed to determine the logic for including or excluding topics. Topics that have substantial personal financial management importance but are omitted at many bases include "Getting Married," "Getting Divorced," "Having a Child," "Purchasing a Home," "Understanding Exchange Rates," "Renting or Living Off Base," "Getting Out of Debt," "Preparing for the Cost of College," "The Financial Aspects of Marriage," "Budgeting for Baby," "Money Skills for Teenagers," "Retirement Planning," and "Planning for Separation/Transition/Retirement." With the large number of LOIs and continued rise in bankruptcy filings, creditors and subject experts feel many people fail to take their financial obligations seriously. A topic that lacks emphasis in the existing education is "Legal Obligations of Sales Transactions." A Navy-wide personal financial management education program that addresses concerns across the life cycle should be developed. A suggested topic outline for such a program follows.

Contact Point Recruitment

Topics to Cover

- Understanding of Financial Screening
- Personal financial responsibility in the military
- Calculating one's debt-to-income ratio
- Checking one's credit history
- Introduction to the PFMP and availability of CFSs

E-1 to E-3

- Basic Personal Financial Management
- Financial responsibility in the military
- Setting and achieving financial goals
- Utilizing a revolving savings plan to pay bills when due
- Making spending plans
- Record keeping
- Managing a checking account
- Avoiding consumer rip-offs
- Legal obligations of consumers
- Legal rights of consumers
- Shopping for checking and savings accounts
- Using credit cards wisely
- Buying a vehicle and other expensive goods

E-3 to E-6

Financial Education
Financial planning
Saving and investing
Preparing for financial emergencies
Managing credit and reducing debt
Planned use of credit
Identifying and using local resources
Letters of indebtedness and garnishments
Income taxes
Implementing an insurance program
Basic legal issues, including wills
Your consumer legal rights
Major life event transitions

- Marriage
- Divorce
- College
- Death
- Investing
- Deployment and moving
- Separation from service
- Consumer rip-offs
- Retirement planning
- New baby
- Remarriage
- Retirement
- Disability
- Home buying

Leadership
E-5 to E-9
O-1 to O-3

Advanced Financial Management
Investing to Achieve Goals
Tax planning
Risk management
Identifying and dealing with "at risk" people
with personal financial difficulties
Sources of help with personal financial problems
and challenges
Major life event transitions

- Marriage
- Divorce
- College
- Death
- Deployment and moving
- Separation from service
- Retirement planning
- Legal issues, including wills
- Legal rights of consumers
- Utilizing the PFMP
- New baby
- Remarriage
- Retirement
- Disability

6H. Curriculum Documents

The Training Manual

The document which currently outlines the content of the Navy financial management education program is the "Command Financial Specialist Training Manual (NAVPERS 15608 B)." It is the basic text used for training individuals selected as Command Financial Specialists. The Table of Contents outlines the course content as follows:

- The Necessity of Personal Financial Management Programs for Military Personnel
- Financial Counseling and Communication Skills
- Consumer Rip-Offs in the Marketplace
- Military Pay and Allowances
- Legal Issues of Personal Financial Management
- The Balancing Act—Maintaining Checking Accounts
- Developing Savings Plans
- Developing a Rehabilitative Financial Plan
- Understanding Credit—Use, Abuse, and Reports
- Processing Letters of Indebtedness
- There is Life After Debt—Debt Management Counseling
- Car Buying Strategies
- You Bet Your Life—Buying Life Insurance
- Developing Your Program at Your Command
- Pre-Deployment Programs
- Money and the Move
- Financial Planning for Separation and Retirement

Each section includes an introduction, a content outline, support materials, and suggested resources. A reference section notes additional support materials that may be obtained from sources outside the military.

All CFSs receive a copy of the *Command Financial Specialist Training Manual* at initial training, but do not receive updated copies when available. On some installations, CFSs borrow the Personal Finance Standard Operating Procedures guide and related materials when they teach the topics at their command. In many situations, however, it is not physically possible for CFSs to borrow the guide. As a result, the training manual obtained during the personal financial management command training remains the only curriculum document in their possession. It consists primarily of reprinted information from the Personal Finance Standard Operating Procedures guide, rather than detailed information on personal financial management and is primarily designed for training rather than for helping a CFS conduct a personal financial management program in a command.

The *Command Financial Specialist Training Manual* should be totally revised to reflect the substantive details of knowledge in personal financial management. If this were done, the CFSs and FEs would possess a single document containing useful information rather than something that mostly outlines the content of the field. Financial Educator curriculum development positions should be created under the core curriculum model manager to aid in the process.

The next revision of the *Command Financial Specialist Training Manual* should begin as soon as possible so it can be made available to personnel by early 1998. The publication should be of high quality, so that its use will be encouraged. The *Command Financial Specialist Training Manual* should be placed in electronic form so it could be readily updated. This electronic manual will result in a substantial decrease in printing costs, ease the process of updating the knowledge base, and provide access through electronic bulletin boards.

Standard Operating Procedures

Financial Educators at local bases create standard operating procedures guides for each educational session offered. In Norfolk, for example, there are approximately 16 designated standard operating procedures guides:

- Financial Education Indoctrination
- Military Pay and Allowances and Direct Deposit System
- Checking Account Management/ATM's
- Buyer Beware/Avoiding Fraud
- Personal and Family Budgeting: Developing Your Spending Plan
- Savings and Investing Basics
- Using Credit, Consumer Credit, Credit Cards, and Loans
- Legal Issues of Personal Financial Management
- Letters of Indebtedness and Garnishment
- Insurance: Life, Auto, Supplementary Health
- Car Buying Strategies (Leasing, Financing and Contracts)
- Pre-deployment Financial Management (Singles/Couples)
- Financial Leadership Seminar
- How to Survive the Holidays Financially
- How to Stretch Your Food Dollar
- Planning for Your Financial Future

These are updated regularly by the FEs and are the primary source for the specific information taught in each session. Since each base determines the topics and content of its own guides, there are substantial differences in personal financial management programs. Financial Educators should be designated as the subject matter experts in an effort to combine various

iterations of these guides into one set of documents. This effort might be best coordinated by personal financial management personnel in the Bureau of Navy Personnel. Key inputs could be obtained from the Personal Financial Management Advisory Board.

Model guides (for use by FEs and possibly separate guides for use by CFSs) should be developed to ensure consistency in format and quality.

Some standard operating procedures guides need a broader perspective (*car buying* should be *vehicle buying*), others need a sharper focus on the essentials of service members (*insurance* and *buyer beware*), and some need revision to better reflect various stages in the life cycle (*planning for your financial future*).

Additional Curriculum Materials

It is imperative that the personal financial management curricula be updated regularly due to constant changes in the marketplace. People are accustomed to high quality television which means that high quality educational materials are required to capture and keep the interest of service members; electronic technology should be utilized to its fullest capacity.

All Command Financial Specialists should be given a library of educational resources, including books, pamphlets, and multi-media programs, to keep them up-to-date on personal financial information and to assist them in programming efforts.

Command Financial Specialists should be supported with detailed standard operating procedures guides designed for use at the command level and top quality electronic teaching aids, including video and, as it becomes available, Digital Video Disk materials.

Computer based education stations should be readily available in all commands so that service members can participate in self-directed study, information retrieval, and guided tutorial instruction to improve their well being. The goal of such stations should be to instruct service members on how to become self-sufficient in personal financial management so that they will know *what* information they need and *how* to access it.

6l. Training

Financial Educators

OPNAVINST 1740.5 designates Navy Family Services Center Norfolk as the sole training site for Financial Educators (FEs). A Desk Guide, currently under development, may provide more consistency and basic program operation information for the FEs.

A newsletter is now available for all FEs on a quarterly basis. The newsletter should be continued and additional emphasis should be placed on providing updated personal financial management education. Some FEs have monthly opportunities for training through Video Tele-Conferences (VTC). Training is provided by FEs and outside experts, however, all bases do not have access to VTC.

Beyond these, there are few other substantive efforts to provide updated information on personal financial management to CFSs. Some CFSs are members of the Association for Financial Counseling and Planning Education and participate in its annual conferences as a training event, while others have obtained the Accredited Financial Counselor (AFC) certification designation by passing two stringent examinations. Regular professional training is required to maintain certification. All CFSs should be certified as Accredited Financial Counselors (AFC) through the Association for Financial Counseling and Planning Education (AFCPE).

Communication linkages should be designed and implemented to regularly update and inform Command Financial Specialists and Financial Educators regarding personal financial management.

Financial Educators, like CFSs, should seek and attain a certification in the content of personal financial management, through the Association for Financial Counseling and Planning Education (AFCPE). After obtaining certification, they should obtain the required continuing education to keep current (VTCs could provide part of this education). Further, the military should encourage the development of a non-military certification/designation in the content specific to CFSs, including procedures associated with letters of indebtedness, garnishments, and NEX cards.

Command Financial Specialists

Command Financial Specialists (CFSs) participate in a five-day training program provided by Financial Educators at designated Navy Family Services Centers or by a Mobile Training Team. Most FEs offer some type of periodic update education for CFSs.

Follow-on CFS training for command level program development, counseling, and educational skills should be established. In order to provide CFS training at CONUS and OCONUS sites where training on a Temporary Active Duty (TAD) basis at fixed sites is not cost effective or readily available, Mobile Training Teams should be established and funded.

Division Officers

Junior supervisory personnel currently have no opportunity to learn about personal financial management. As a result, other than learning through personal experiences, they generally lack understanding about the challenges and problems facing enlisted personnel in the area of personal financial management. Since commands are not sensitized to personal financial difficulties, it is difficult for them to take a proactive approach. Further, Division Officers are forced to learn about managing and resolving service members' financial difficulties while on the job; this is extremely time consuming. Junior supervisory personnel lack education, training, and counseling in personal financial management, particularly in how to utilize the role of the CFSs.

This is in conflict with OPNAVINST 1740.5 which states that, "In order to help individual service members avoid financial problems and handle financial concerns, Leading Chief Petty Officers, Division Officers, and the CFSs will counsel Navy members experiencing financial difficulties or seeking advice on personal financial management concerns." In addition, the requirement states that Division Officers will "be provided training on basic financial management concepts and skills."

A successful prototype one-day training program has been offered during 1995 and 1996 at several bases. The program's content covered:

Necessity of Personal Financial Management

- Background problems
- Indicators of difficulty
- The Personal Financial Management Program
- What the Command Financial Education Specialist can do

Personal Financial Management/Developing a Financial Plan

- LES and paycharts
- Budgets
- Debt-to-income ratios
- Debt management
- Pay studies
- What to expect from Disbursing and DFAS

Consumer Rip-offs

- Area rip-offs
- Ways to avoid problems
- Sources of help
- Sample financial contact

Legal Issues

- Contracts
- Consumer laws
- Non-support, divorce, child custody

Navy Marine Corps Relief Society

Processing Letters of Indebtedness and Garnishments

- Procedures for processing letters of indebtedness
- Responding to creditors
- Garnishment process
- Possible defenses

NEX

- Cards
- Collection methods and timing
- Hardship policy

Command Leadership Financial Resources Training

- Sample concerns and issues
- DoD and civilian resources

Wrap-up: The Personal Financial Management Program

- How to use the Command Financial Education Specialist
- What the Navy Family Services Center can do for You

In addition to the many positive remarks offered concerning the prototype training for Division Officers, both observers and participants noted that

"personal finance was a key leadership issue." A standard operating procedures guide for "Division Officer Financial Leadership Training" has been developed by the Navy Family Services Center Norfolk.

Division Officers should receive training in personal financial management leadership as part of the curriculum at their initial warfare specialty training schools. The training should enable them to identify problems of service members, to comprehend paperwork processing procedures, to recognize when to delegate personal financial crises, to understand related legal issues, to resolve problems, to isolate those situations requiring outside resources, and to effectively use Command Financial Specialists in these efforts. Such training may require more than a one-day program, but the core leadership program is in operation at Norfolk.

Monitoring and Evaluation

A monitoring and evaluation plan which tracks the impact of the program at all levels needs to be developed as an integral part of the programming efforts.

Participants in the Command Financial Specialist training program should regularly be given a comprehensive objective examination to measure their understanding of the material studied. This testing may necessitate development of parallel test forms to ensure reliability. Valid and reliable measures of comprehension in personal financial management, particularly based upon the information contained in the standard operating procedures guides should be obtained. A Personal Financial Management Program Questionnaire should be updated and standardized for all CFS training sites. Some self-reported questions on financial behaviors and attitudes should be included. This type of information can be used both to tailor teaching materials to genuine needs and to assess service member progress.

Leadership and Oversight

Offering personal financial management services to all service members, especially those experiencing personal financial problems, helps workers to help themselves. People who are well informed and in control of their personal finances are more secure in their feelings about life, more self-confident, and happier in family and job relationships. The availability of effective personal financial management programming services increases job productivity and reduces employer costs. Offering personal financial management programming services for employees is a win-win situation for both employers and employees.

Support and education for Navy personnel occurs through Navy Family Services Centers, Navy-Marine Corps Relief Society, The American Red Cross, Consumer Credit Counseling Services and legal groups.

The Navy should re-examine the fundamental role and scope of the Personal Financial Management Program with a view toward centralizing resources for better accountability, resourcing the PFMP Manager to allow for oversight, and developing the personal financial management education to include a broader scope.

6J. Suggested Training Modules

A Video Prototype and Computer Simulation Program Prototype have been designed to support the financial education aspect of the specific activity (Vehicle Buying Strategies), contained under number 5, Consumer Rip-offs and Frauds of the "Navy Top Ten PFMP" areas.

The two prototypes are constructed to stand alone and complement each other. The multimedia project concept addresses three situations.

- To provide multimedia support to the CFS 5-day training course at NFSC.
- To provide multimedia support to CFSs in developing and implementing financial training and counseling programs at their respective commands.
- To convey basic understanding of financial management problems through the use of individualized multimedia simulation programs.

The Video Prototype

"How to Buy that Vehicle and Not Get Ripped Off"

The video is formatted for readily available playback equipment (VCR).

The video program first demonstrates how an uninformed military person, without realizing it, can unnecessarily spend thousands of dollars when buying a new vehicle (car). Next, the video demonstrates how a prepared and well informed military person buys a new vehicle (same model car) and saves thousands of dollars. Finally, the two buyers meet and exchange information. The planned objectives of the video include

- encouraging potential vehicle buyers to seek assistance from their CFS;
- stimulating discussions by military personnel concerning specific types of consumer education;

- dramatizing consumer character types that the viewer can quickly identify with;
- presenting aspects of basic consumer information in a brief, interesting and accessible manner; and,
- encouraging the viewer to use the Computer Simulation Program to learn about and practice vehicle buying.

The Computer Simulation Program Prototype

"How to Buy that Vehicle and Not Get Ripped Off"

Due to the expense and time required to present a fully developed Computer Simulation Program (CSP), the prototype shows various structures and specific subject areas in outline form. The CSP is formatted for readily available hardware.

The CSP is constructed to be user friendly, familiar in layout, specifically designed for military personnel, and focused on one specific product (used trucks).

- The CSP begins by guiding the user through a number of options. The purpose is to identify the exact vehicle the service member wants as well as the amount of money he or she can afford to spend.
- The user proceeds to select an auto dealership, and then navigates through the processes, papers, and contracts required to get the keys to the vehicle.
- The planned objectives of the Computer Simulation Program are to
 - • provide a rich vicarious experience for the user on the factors involved in the vehicle buying process;
 - • familiarize the user with the steps and financial responsibilities involved in purchasing any vehicle;
 - • allow the user to control the process, and to repeat when necessary, most advantageous aspects of vehicle buying; and,
 - • encourage the user to learn about and practice buying a vehicle.

Both the video prototype and computer simulation package are on file in the Bureau of Navy Personnel, Office of Deployment Support.

7. Suggestions for Further Research

Despite an ongoing commitment by the Department of the Navy to address mounting financial pressures faced by many of its members, problems persist, and indications are that stressors may indeed worsen. With the continuation of force reductions and frequent deployments, operational readiness is paramount for successful mission completion. Service members who develop skills resulting from a consistent Personal Financial Management Program will provide the Navy with a return on investment relative to a decrease in personal stress and family dysfunction, as well as increased levels of job performance, morale, readiness, and retention. The challenge is to implement an effective PFMP that will assist members in reducing financial stress and provide ongoing training and development resulting in sound personal financial management practices.

7A. Development of a Management Information System

Personal financial management factors associated with poor job productivity are identified in this study. It is now possible for the military to collect personal financial management data to assess an individual service member's propensity to experience job stress to the extent that it reduces job productivity. Likewise, it is also possible for the military to collect personal financial management data from individual commands. However, no system presently exists to identify this data, collect it, and report the findings.

The Navy should consider the development of a management information system (MIS) for indicators of personal financial management difficulties as one effort to hold commands accountable for progress or the lack thereof, as is currently done with Physical Readiness Training (PRT), safety, and Combined Federal Campaign (CFC) drives. This data must be measurable, easy to collect, and genuinely indicative of difficulties in personal financial behavior. Indicators within the MIS could include letters of indebtedness, non-deployment, loss of security clearance, security screen failures, denied re-enlistments, early returns, loss of rate/rank, Navy/Marine Relief, referrals for financial counseling, garnishments, and bankruptcies. As an MIS system is implemented, it would be helpful to ascertain the *presenting problem* as well as the *underlying problem* where possible.

7B. Longitudinal Study to Evaluate PFMP

A longitudinal study will serve to further evaluate the current Personal Financial Management Program and identify strengths upon which to build. A longitudinal study will make comparisons between commands where effective programs are in place and others where consistency and regular delivery of services are lacking. Opportunities for constructive recommendations regarding present program offerings as well as future curriculum and development strategies will be presented as a result of such an evaluation.

The study would also collect primary data to identify areas where a need for improvement is indicated, as well as propose questions that will assist the Navy in future planning. Assessment of Personal Financial Management Program components will identify strengths and weaknesses of each and provide an incentive to expand on current program offerings.

Assessment will include:

- current marketing efforts and strategies
- curriculum scope and depth
- program delivery systems
- training materials
- operating procedures
- resource availability processes and time frames used for introduction of updated material

Expansion of current program offerings may incorporate initiatives such as:

- consistency of core training materials
- life cycle financial education and support
- MIS incentives for commands
- centralized tracking systems
- savings and retirement incentives
- non-military certification initiatives
- standardization of operating procedures
- application of recruitment and training tools to identify potential or existing financial management difficulties

Research is needed to identify how effective the Personal Financial Management Program is in dealing with "at risk" personnel.

Program effectiveness, impact, and return on investment should be specifically measured. Hard data on both negative and positive indicators in personal financial management, as well as anecdotal evidence should be included. This evaluation should be coordinated so that data is available from all commands in a form usable for Navy-wide impact analysis. It should be collected in a way

that is easy to implement at the command level and easy to summarize at intermediate and Navy-wide levels.

The Navy should conduct research to evaluate the relationship between the degree of competency in personal financial management and command readiness.

7C. Correlation of Various QoL Issues

This study has brought to light several existing research pieces which indicate that the impact of personal financial management difficulties on operational readiness is far greater than other quality-of-life issues such as housing, child care, employment opportunities, and health care. Further research is necessary to evaluate whether or not financial management difficulties are the root cause of the majority of problems that relate directly to quality-of-life. This research should serve to identify the relationships that exist among various quality-of-life issues. Once these relationships are established, the Navy will be better prepared to appropriately target funds toward those quality-of-life issues having the greatest need, thus contributing to a higher level of satisfaction for its service members.

8. Bibliography

8A. Military Literature

Alkov, R. A. & Borowsky, M. S. (1982). A questionnaire study of psychological background factors in U. S. Navy aircraft accidents. Aviation, Space, and Environmental Medicine, 860-1115.

American Red Cross. (1991-1996). Overview of station services to members of the Armed Forces.

Army personnel survey office, US Army Research Institute. (1996). 1995 survey of Army families III (Copy of executive summary and disks of executive summary and final summary).

Bell, D. B., Stevens, M. L. & Segal, M. (1996). How to support families during overseas deployments (Research Report 1687). Alexandria, VA. U. S. Army Research Institute for the Behavioral and Social Sciences.

Bell, D. Tietelbaum, J. & Schumm, W. (1996). Keeping the home fires burning: Family support issues.

Blankinship, D. A., Bullman, s. L., & Croan, G. M. (1990). Policy, program, and fiscal implications of military family research: Proceedings of the 1990 military research review, Contract Number: MDA903-89-M-8931, Fairfax, VA. Caliber Associates.

Brassington, D. (1994-1995). CFS monthly reports. NFSC Norfolk, VA.

Brassington, D. (1994). PFM Program Effectiveness. NFSC Norfolk, VA.

Bulls, I. (1996). OSD Family Policy Information Paper.

Caliber Associates, (1993). Study of the impact of operation desert shield/storm on Navy families, Volume I: Research on family separations, Contract Number: N00600-91-D-0364.

Caliber Associates, (1993). Study of the impact of operation desert shield/storm (ODS/S) on Navy families and effectiveness of family support programs in ameliorating impact, Executive summary, Volume II: Final report, Contract Number: N00600-91-D-0364.

Caliber Associates, (1994). U.S. Navy Community Needs Assessment, Volume 2: Detailed Summary of Needs.

Clark, B. (1995). Navy Personnel Costs.

Comparative study-R.S. Navy community needs assessment-1994 & Navy community needs assessment: Norfolk-1994 for financial education services. (1995).

Defense commissary agency. (1994-1995). Returned commissary patron checks.

Department of Defense. (1995). Department of Defense selected manpower statistics.

- DTIC. 91995-1996). Navy A/D manpower statistics.
- FCS Norfolk, VA. Financial education brief.
- NFSC Norfolk, VA. (1995). Counseling activities report for 1995 financial education unit.
- Gill, B. (1996). DARPA information.. Camp Pendelton, CA: Naval Hospital.
- Hamel, J. F. (1994). Mobile training teams: A cost analysis. Master's Thesis. Monterey, CA: Naval Postgraduate School.
- Hawk, K. (1996). Command financial screenings/referrals.
- Human Services Research and Design Laboratory, (1994). U.S. Navy Community Needs Assessment, Volume 2: Detailed Summary of Needs.
- Jacksonville Navy Exchange Center. (1995). Returned Checks.
- Kantor, J. (1996). Navy-wide personnel survey-1995 interim results and officer and enlisted statistical tables.
- Kantor, J. (1996). 1996 Navy-wide personnel survey.
- Markle. (1993-1996). CFS monthly reports, Trident training facility.
- Military Family Clearing House: OSD. (1994). Military family demographics: Profile of the military family.
- Military Family Newspaper. (1996).
- National Foundation for Consumer Credit. (1996). Directory of Member Services.
- Navy Family Services Centers. (1995). Financial Education.. Hampton Roads, VA: Department of Defense.
- Navy-Marine Corps Relief Society Information. (1994-1995).
- Navy Personnel. (1995). Fiscal Year 1995 & 1 & 2 Quarter FY 96 QUOLMIS report-PFM excerpts.
- Navy PFMP. (1995). Command Financial Specialist Training Manual.
- Navy Exchange Center. (1994-1996). Returned check trend analysis.
- Navy Time. (1997). 97 Military pay scales.
- NEX Norfolk. (1996). Naval Base Norfolk.
- Nicholson, C. B. (1990). Study of Navy and Marine corps personal bankruptcy cases in the south district of California.
- NPRDC. (1993). USMV 1993 QoL Questionnaire/selected results.
- NPRDC. (1994). 1994 Navy QoL Questionnaire/selected pages & analysis.
- NPRDC. (1995). 1995 Navy personnel survey.
- Office of the Assistant Secretary of Defense. (1993). Family Status and Initial Term of Service, Volume II Trends and Indicators.
- Office of the Assistant Secretary of Defense. (1993). Family Status and Initial Term of Service, Volume III Field Study.
- Office of the Assistant Secretary of Defense. (1993). Family Status and Initial Term of Service, Volume IV-Appendices.
- OASD. (1993). Family status and initial term of service; Vol. I-IV.

- Pers 00X/Pers2. (1996). Recruitment/training costs.
- Pulvino, C. & Waddell, F. (1996). Civil service geographic wage rates & PFM counseling stats.
- Research Triangle Institute. (1995). 1995 Department of Defense survey of health related behaviors among military personnel.
- Rogers, S. (1995). Navy Exchange Command: Bad check data (NEXCOM).
- Rovig. (1995). Exceptional family member program statistics.
- Rowe, M.. (1992). An analysis of personal financial management training in the U.S. Air Force and U.S. Navy.
- Rubino, P. (1995). The ability of the command financial specialist program to educate sailors. Norfolk, VA: Navy Family Services Center.
- Sachse, T. W. (1993). A statistical analysis of active duty bankruptcies at the Jacksonville, FL and San Diego, CA bankruptcy courts. Master's Thesis. Monterey, CA: Naval Postgraduate School.
- Sachse, T. W. Bankruptcy thesis data base.
- SAG Corporation. (1995). Navy billet cost factor.
- San Diego, CA Regional Navy Exchange Office/Jacksonville, FL. (1993-1995). San Diego bad check data & cost to process for SD and JAX.
- Schwerin. (1996). OPNAVINST 5300.8B Coordination and control of personnel surveys.
- Statistics from Sima Norfolk Financial Specialists. Norfolk, VA: Shore Intermediate Maintenance Activity.
- Tingen, C. (1996). Counseling Statistics/Financial Unit. Norfolk, VA: Navy Family Services Center.
- USS Enterprise. (1996). USS Enterprise CFS data.
- Wilcove, G. (1996). 1994 Navy QoL survey executive summary.
- Winn, R. (1995). Garnishment Data. Cleveland, OH: Defense finance and accounting service Cleveland center.
- Wright, J. (1996). Feedback from CFS Training, Port Hueneme, CA.

8B. Civilian Literature

- America's gambling fever (1996, January 15). U.S. News & World Report, 121, 53-61.
- Brown, R. C. (1979a). Employee assistance programs in industry. In D. C. Myhre (Editor), Financial Counseling: Assessing the State of the Art (pp.137-144). Blacksburg, VA: Financial Counseling Project Extension Division, Virginia Polytechnic Institute and State University.

Brown, R. C. (1979b). The need for employee financial counseling. In D. C. Myhre (Editor), Financial Counseling: Assessing the State of the Art (pp. 29-38). Blacksburg, VA: Financial Counseling Project Extension Division, Virginia Polytechnic Institute and State University.

Brown, R. C. (1993). Financial worries in the workplace. R.J. Tobacco Company, RJR Employee Counseling. Winston-Salem, unpublished manuscript.

Bruner, B. M., & Cooper, C. L. (1991). Corporate financial performance and occupational stress. Work & Stress, 5, 267-287.

Callery, Y. C. (1994, May/June). Chemical abuse rehabilitation for hospital employees: Examination of benefit usage when referred by an employee assistance professional. Today's O.R. Nurse, 16, 35-43.

Caldwell, B. (1991). Behavioral benefits. Employee Benefit Plan Review, 8, 10-12.

Campbell, D. & Graham, M. (1988). Drugs and alcohol in the workplace: A guide for managers. New York: Facts on File Publications.

Cambridge Human Resource Group (1995, July). Number 1 undressed workplace concern: Financial illiteracy tops new poll. Chicago: Author.

Cartwright, S., Cooper, C. L., & Barron, A. (1993). An investigation of the relationship between occupational stress and accidents amongst company car drivers. Journal of General Management, 19, 78-85.

Cash, J. G. (1996, August 20). Variables with suspected correlation to financial problems, health care costs, productivity, and quality of life. Unpublished manuscript.

Chafee, J. H. (1995, June 20). National Highway System Designation Act. Congressional Record, S8656-8678.

Chandhury, M., & Ng, I. (1992). Absenteeism predictors: Least squares, rank-regression, model-selection results. The Canadian Journal of Economics, 25, 615-635.

Chandler, C. & Morin, R. (1996, October 14). Prosperity's imbalance divides U. S. The Washington Post p. A-1+.

Credit card delinquencies rise (1996, September 18). The Roanoke Times, p. B-6.

Dalton, D. R., & Mesch, D. J. (1991). On the extent and reduction of avoidable absenteeism: An assessment of absence policy provisions. Journal of Applied Psychology, 76, 810-817.

Darby, P. (1996, March 22). Financial education. Unpublished manuscript.

Deming, J. (1991, July). Rescuing workers in violent families. HR Magazine, 36, 46-48.

Deery, S. J., Erwin, P. J., Iverson, R. D., & Ambrose, M. L. (1995). The determinants of absenteeism: Evidence from Australian blue-collar employees. The International Journal of Human Resource Management, 6(4), 825-848.

Forthofer, M. S., Marman, H. J., Cox, M., Stanley, S., & Kessler, R. C. (1996). Associations between marital distress and work loss in a national sample. Journal of Marriage and the Family, 58, 597-605.

Fulcher, G. T. (1991, August 5). The dark side of a trip to the track. Industry Week, 240, 13-16.

Fulkerson, J. (1995, August). Business reports: Markets: Charging through the friendly skies. American Demographics, 17, 19-20.

Garman, E. T. (1996). Ripoffs and Frauds (Revised ed.). Houston: Dame Publications.

Garman, E. T. (1989, November). Speech to the Association for Financial Counseling and Planning Education, Detroit, MI.

Garman, E. T., & Forgue, R. E. (1997). Personal Finance (5th ed.). Boston: Houghton Mifflin.

Garman, E. T., Porter, N. M., & McMillion, J. A. (1989). Financial counseling by a corporation with a large number of employees. Proceedings of the 18th Annual Southeastern Regional Family Economics/Home Management Conference, 76-84.

Garman, E. T., Leech, I. E., & Grable, J. E. (1996). The negative impact of employee poor personal financial behaviors on employers. Financial Counseling and Planning, 7, 157-168.

Garrett, E. M. (1993, December). Can this employee be saved? Small Business Reports, 18, 26-36.

Greenwald, J. (1996, July 8). Deadbeat and upbeat. Time, 148, 44.

Gilmore, G. (1994). Coping the reality of rightsizing. Risk Management, 41, 43-46.

Goldberg, C. (1994, Dec. 12). High price of substance abuse in the workplace. Business News, 50, 1-2.

Greninger, S. A., Kitt, K. A., Hampton, V. L., & Achacoso, J. A. (1996). Perceived usefulness of credit and insolvency measures among financial planners and educators. Consumer Interests Annual, 42, 237-238.

Hager, B. D. (1994, September). Stress takes its toll on productivity. San Antonio Business Journal, 8, 18.

Hansell, S. (1996, August 25). Personal bankruptcies surging as economy hums. The New York Times, pp. S-1, 38.

Harris, T. (1987, July). Helping employees manage their finances. Managing Today, 19, p. 6.

Hickox, K. (1994). Content and competitive. Airman, 38(1), 31-33.

Hill, R. (1949). Families under Stress. New York: Harper & Row.

Hill, R. (1958). Generic features of families under stress. Social Casework, 49, 139-150.

Holmes, T. H., & Rahe, R. H. (1967). Social readjustment rating scale. Journal of Psychosomatic Research, 12, 333.

Holmstrom, D. (1994, March 15). Food stamp use and abuse reaches all-time high in U. S. The Christian Science Monitor, pp. 1,4.

Husbands, R. (1992). Sexual harassment law in employment: An international perspective. International Labour Review, 131, 535-560.

Karasek, R., & Theorell, T. (1990). Healthy work: Stress, Productivity, and the Reconstruction of Working Life. New York: Basic Books, Inc., Publishers.

Kellar, B. & Nolf, N. (1984, March). Preliminary report: Troubleshooter training, a financial counseling course for military personnel. Unpublished manuscript.

Kirkcaldy, B., Cooper, C. L., & Ruffalo, P. (1995). Work stress and health in a sample of U. S. police. Psychological Reports, 76, 700-702.

Kottage, B. E. (1992). Stress in the workplace. Professional Safety, 37 (8), 24-26.

Leigh, J. P. (1991). Employee and job attributes as predictors of absenteeism in a national sample of workers: The importance of health and dangerous working conditions. Social Science & Medicine, 33, 127-137.

Lipman, I. A. (1995, January). Drug testing is vital in the workplace. USA Today, 123, 81-82.

Macadam, C. (1994, April). Stress related absenteeism-How to break the cycle. Transition, 4, 22-23.

McCubbin, H. I., & Patterson, J. M. (1983). The family stress process: The double ABCX model of adjustment and adaptation. Marriage and Family Review, 6, 7-37.

Minter, S. G. (1990). A helping hand for the troubled employee. Occupational Hazards, 52, 55-58.

Mughal, S., Walsh, J., & Wilding, J. (1996). Stress and work performance: The role of trait anxiety. Personality and Individual Differences, 20, 685-691.

Parker, L. (1994). The role of workplace support in facilitating self-sufficiency among single mothers on welfare. Family Relations, 43, 168-173.

Perry, P. M. (1996, June). Absenteeism is a big problem, but you can learn how to curb it. Industrial Distribution, 85, 78-84.

Rejda, G. E. (1984). Social Insurance and Economic Security (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.

RJR conducts cost study covering 20 years. (1991). EAPA Exchange, 2(1), 30-31.

Rogers, R. E., & Herting, S. R. (1993). Patterns of absenteeism among government employees. Public Personnel Management, 22, 215-229.

Scanlon, W. F. (1986). Alcoholism and Drug Abuse in the Workplace. New York: Praeger Publishers.

Scanlon, W. F. (1991). Alcoholism and Drug Abuse in the Workplace: Managing Care and Costs through Employee Assistance Programs (2nd ed.). Westport, Conn.: Praeger Publishers.

Schellhardt, T. D. (1996, October 2). Company memo to stressed-out employees: 'Deal with it.' The Wall Street Journal, pp. B-1+.

Siman, P. (1995, July 31). The explosive growth of gambling in the United States. Congressional Record, S10912-10916.

Singletary, M. (1996, September 18). A new breed of debtor shocks credit card issuers. Washington Post, pp. F1+.

Staroba, K. (1990). The substance abuse maze. Association Management, 42(11), 26-40.

Sporakowski, M. J. (1979). Financial problems as stress and crisis. In D. R. Harvey, D. C. Myhre, M. J. Sporakowski, & A. H. Webb (Eds.). Developing a Personal Approach to Financial Counseling (pp. 75-81). Blacksburg, VA: Virginia Polytechnic Institute and State University.

Stern, L. (1995, Feb. 13). Focus: On your money: Money watch: Credit card crunch. Newsweek, 125, 54.

Tang, T. L., & Hammontree, M. L. (1992). The effects of hardiness, police stress, and life stress on police officers' illness and absenteeism. Public Personnel Management, 21, 493-510.

Waddell, R. E. (1996, September 18). E-mail to E. Thomas Garman.

Watkins, I. (1994). The rising cost of absenteeism. Quarry Management and Products, 21(4), 37-38.

Williams, F. L., Haldeman, V., & Cramer, S. (1996). Financial concerns and productivity. Financial Counseling and Planning, 7, 147-156.

Williams, F. L. (1996). Financial Difficulty Measured as Monthly Deficit: An Empirical Analysis of Determinants. Manuscript submitted for publication.

Williams, F. L. (1982). Guidelines to Financial Counseling with Crisis Intervention and Consumer Economics Education. West Lafayette, Indiana: School of Consumer and Family Sciences, Purdue University.

Williams, F., Lown, J., Haldeman, V., Garman, E. T., Fletcher, C. N., & Cramer, S. (1990). Financial concerns of employees and their productivity. Proceedings of the Association for Financial Counseling and Planning Education, 45-68.

Yeh, B. Y., Lester, D., & Tauber, D. L. (1986). Subjective stress and productivity in real estate sales people. Psychological Reports, 58, 981-982.

9. Appendixes

Appendix A

Memorandum of Understanding (MOU) between MFI, Bureau of Navy Personnel, Office of Deployment Support

MEMORANDUM OF UNDERSTANDING

Marywood College
and
Department of the Navy
Bureau of Naval Personnel
Personal Readiness and Community Support

I. STATEMENT OF PURPOSE

This Memorandum of Understanding (MOU) establishes a collaborative working relationship between Marywood College and the Bureau of Naval Personnel, Personal Readiness and Community Support, for the purpose of conducting research and development activities which will enable the Bureau of Naval Personnel to better understand, serve and enhance the lives of Navy families. It pertains to any activities conducted under the provisions of the following references, any extensions to these references, and/or to any future research and development-related funding which may be provided to the Marywood College by the Bureau of Naval Personnel.

II. REFERENCES

- A. AFOSR Grant No. F49620-93-0586, 26 Sep 93.
- B. Letter from Rear Admiral L. R. Marsh, Assistant Chief of Naval Personnel, Personal Readiness and Community Support to Dr. Peter J. McNelis, Director, Military Family Institute, Marywood College, dated February 23, 1996.

III. SCOPE

This MOU describes how the Marywood College, Military Family Institute (MFI) and the Bureau of Naval Personnel, office for Deployment Support and Personal Financial Management Programs (DS&PFMP) have agreed to work together to define and execute Personal Financial Management Program research and development initiatives in accordance with the above-cited Statement of Purpose.

IV. OBJECTIVES

The goal of this MOU is to establish a mutually beneficial working relationship between the MFI and DS&PFMP. That relationship will help

- A. The MFI to accomplish its mission of conducting relevant military family research
- B. The DS&PFMP to obtain scientifically sound information useful to its Personal Financial Management Program mission

V. UNDERSTANDINGS AND AGREEMENTS

The following understandings and agreements apply to any research and/or development projects conducted by the MFI, in collaboration with DS&PFMP, under the provisions of this agreement:

- A. The MFI will ensure that their research and development efforts meet the highest levels of scientific, professional, and ethical standards by providing:
 - 1. technically and professionally qualified personnel
 - 2. facilities and equipment, as required/appropriate
 - 3. adequate funding to meet research costs as stated in Annex I. (Note: the MFI funding base may require supplementation by DON, or other DOD components, in order to accomplish additional or follow-on tasks)
 - 4. project management
 - 5. independent scientific review
- B. The Office for DS&PFMP will facilitate the R & D enterprise by :
 - 1. serving as the Point-of-Contact for the MFI, and project advocate between DS&PFMP and the remainder of the DON.
 - 2. facilitating access, and participating in the representation, to the appropriate military research review and approval boards, agencies or offices, as needed.
 - 3. providing physical space and logistical/administrative support to any R & D personnel assigned/attached to the DS&PFMP for project coordination and technical support.
 - 4. enabling access to research populations and military/government agencies
 - 5. participating in major command and installation briefings regarding project scope, benefits and support requirements.
- C. By mutual agreement, Annex I defines the work to be accomplished by the parties, including start and finish dates, and is hereby incorporated. All further work to be defined as the result of applying Annex I will be relevant to the missions of the MFI and the DS&PFMP, will be formally agreed upon by their appropriate representatives, and will be incorporated in this MOU by means of an Annex, signed and dated by the parties, which specifically refers to this subparagraph V.C.. Any such Annex will be an amendment to this MOU pursuant to paragraph VI below.
- D. Research results/reports and development products are:
 - 1. forwarded in their entirety to the DS&PFMP at the conclusion of each project, and may be utilized, as appropriate, by that office.
 - 2. the responsibility of the MFI and may not necessarily reflect the views or opinions of the DS&PFMP and /or the DON.
 - 3. generally available to the researchers for publication in scholarly journals and presentations at meetings, unless the use has been specifically excluded, and agreed to, by the MFI and DS&PFMP
 - 4. required to strictly observe applicable confidentiality and national security regulations, if any, prior to publication
 - 5. required to make reference to the fact that the work was conducted under the auspices of both the MFI and the DS&PFMP

VI. AMENDMENTS

This Memorandum of Understanding may be amended or modified at any time by mutual consent of the two parties. Any amendment or modification shall be accomplished by a written Annex to this agreement, signed and dated by the parties.

VII. EFFECTIVE/TERMINATION DATES

- A. This MOU is effective upon the date of final signature.
- B. This MOU is rescinded upon either party giving written notice to the other party.
- C. Should notice of recision be given, both parties are obligated to fulfill their currently active research and/or support commitments.
- D. This MOU shall expire 30 September 1998 unless renewed by mutual agreement.
- E. Any annexes to this MOU shall be terminated concurrently with the termination of the MOU.

SIGNED:


Sister Mary Reap, I.H.M.
President
Marywood College

Date: 5-2-96


L. R. Marsh
Rear Admiral, U.S. Navy
Assistant Chief of Naval Personnel

Date: 15 MAY 1996

1 Encl.: Annex I (Results and Recommendations, PFMP Research Planning Meeting, 22 March 1996)

Appendix B

Military Composite Standard Pay And Reimbursement Rates, Department of The Navy for Fiscal Year 1996

REVISED MILITARY COMPOSITE STANDARD PAY AND REIMBURSEMENT RATES
DEPARTMENT OF THE NAVY FOR FISCAL YEAR 1996

GRADE	BASIC PAY (1)	RETIRED PAY ACCRUAL (2)	BASIC ALLOWANCE FOR QUARTERS (3)	INCENTIVE AND SPECIAL PAY (4)	PERMANENT CHANGE OF STATION (5)	MISCEL- LANEOUS EXPENSE (6)	ANNUAL DoD COMPOSITE RATE (7)	ACCELERATION FACTOR (8)	AMOUNT BILLABLE TO NON-DoD ENTITIES (9)
O-10	\$113,020	37,184	\$0	\$2,465	\$2,758	\$16,825	\$172,252	\$10,335	\$182,587
O-9	103,642	34,098	658	3,229	2,758	14,137	158,522	9,511	168,033
O-8	93,880	30,886	7,610	2,803	2,758	13,080	151,017	9,061	160,078
O-7	82,870	27,264	6,811	2,740	2,758	11,819	134,262	8,056	142,318
O-6	69,354	22,817	10,918	6,071	2,758	10,854	122,772	7,366	130,138
O-5	55,387	18,222	11,455	6,151	2,758	9,635	103,608	6,216	109,824
O-4	45,203	14,872	9,507	6,406	2,758	8,364	87,110	5,227	92,337
O-3	37,280	12,265	7,845	6,313	2,758	7,986	74,447	4,467	78,914
O-2	30,130	9,913	6,388	2,339	2,758	6,659	58,187	3,491	61,678
O-1	22,820	7,506	5,871	1,738	2,758	5,841	46,536	2,792	49,328
WO-5							\$0		
WO-4	44,733	14,717	9,073	3,095	2,758	8,418	82,794	4,968	87,762
WO-3	36,787	12,103	8,329	2,284	2,758	7,184	69,445	4,167	73,612
WO-2	31,085	10,227	5,137	3,736	2,758	6,721	59,664	3,580	63,244
WO-1	23,185	7,627	9,513	0	2,758	5,622	48,703	2,922	51,625
CADETS	\$6,696	\$0	\$0	\$135	\$117	\$2,309	\$9,257	\$1,666	\$10,923
E-9	\$37,499	\$12,366	\$8,444	\$2,095	\$1,160	\$7,768	\$69,302	\$12,474	\$81,776
E-8	30,582	10,060	7,725	2,007	1,160	7,111	58,645	10,556	69,201
E-7	25,928	8,528	6,691	2,049	1,160	6,783	51,139	9,205	60,344
E-6	22,023	7,245	5,612	1,733	1,160	6,206	43,979	7,916	51,895
E-5	18,011	5,923	4,545	1,302	1,160	5,772	36,713	6,608	43,321
E-4	14,868	4,687	2,911	950	1,160	5,481	30,257	5,446	35,703
E-3	12,628	4,143	1,687	125	1,160	5,172	24,915	4,485	29,400
E-2	11,715	3,829	891	121	1,160	5,020	22,736	4,092	26,828
E-1	10,142	3,299	455	104	1,160	4,727	19,887	3,580	23,467

Notes: (1) Column 9 includes factors for Other Personnel Support Costs only (6% for Officers and 18% for Enlisted Personnel).

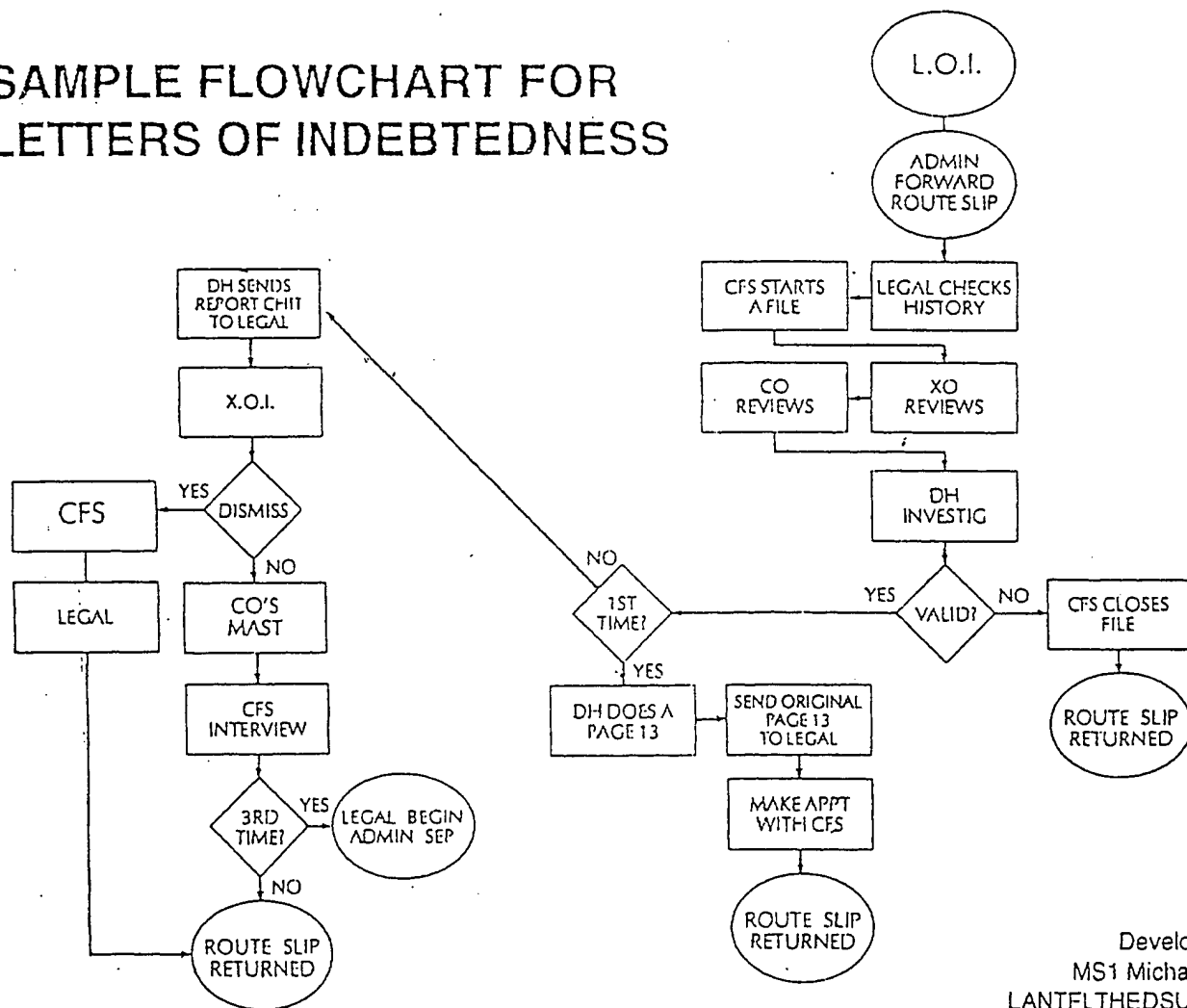
(2) To compute a Daily Rate that includes 14% for Leave and Holiday Pay, a factor of .00439 may be applied to Column 9. For an Hourly Rate, .00055 may be used.

Revised Tab K-3

Appendix C

Paper Flow of LOI for LANTFLTHEDSUPPACT

SAMPLE FLOWCHART FOR LETTERS OF INDEBTEDNESS



Developed by:
MS1 Michael Clark
LANTFLTHEDSUPPACT

Appendix D

Paper Flow of LOI for USS SHENANDOAH

Appendix D - Sample paper flow for L.O.I. processing (U.S.S. Shenandoah)

(COMMAND) INSTRUCTION 1740.1

SUBJ: GUIDANCE ON THE POLICIES AND PROCEDURES APPLICABLE TO
PROCESSING OF COMPLAINTS OF INDEBTEDNESS AND FAILURE TO
PROVIDE SUPPORT FOR DEPENDENTS

Ref: (a) MILPERSMAN 6210120
(b) MILPERSMAN 6210140

Encl: (1) Division Officer's Action Memorandum
(2) Processing Letters of Indebtedness

1. Purpose: To promulgate policies and procedures applicable to processing of
complaints of indebtedness and failure to provide support for dependents.

2. Discussion

a. References (a) and (b) provide detailed guidance on Department of the Navy policy regarding indebtedness and nonsupport of dependents. Reference (a) states, in part, "All members shall provide adequate and continuous support for their dependents and comply fully with the provisions of separation agreements and valid court orders. Any failure to do so which brings discredit upon the naval service may be cause for administrative or disciplinary action... and may ultimately lead to separation from the naval service." Reference (b) states, inter alia, "Members of the naval service are expected to pay their just financial obligations in proper and timely manner...failure to pay just debts or repeatedly incurring debts beyond the members ability to pay...may become grounds for disciplinary action or administrative discharge."

b. Complaints of indebtedness and failure to provide for support of dependents are a source of continuing concern to the Commanding Officer, and processing these complaints places an extra administrative burden on everyone concerned. Furthermore, such complaints reflect adversely not only on the individuals concerned, but also on the command, the naval service, and in cases involving foreign nationals, the United States. Complaints must therefore be handled effectively, expeditiously, and courteously.

c. It the policy of this command to provide adequate counseling to personnel with regard to moral, legal, and financial responsibilities, to encourage all personnel to conduct their affairs in such a manner as to reflect credit upon themselves, the ship, and the naval service. Administrative or disciplinary proceedings will be initiated against those personnel who demonstrate a pattern of dishonorable failure to pay just debts or provide adequate dependents support.

(3) In all cases, the Division Officer shall ensure that the member submits a written statement acknowledging the indebtedness or support requirement and indicating their intentions for resolution of the matter, or indicate reasons why they feel the obligation is unjust. This statement should be submitted as an enclosure to the Division Officer's endorsement.

(4) In all cases, the individual concerned will be advised that they should communicate with the complainant to indicate their position or intentions to resolve the matter. Caution should be exercised in this regard due to the fact that any statements made by the service member may be used in the event civilian litigation occurs. Attach copies of any correspondence between the individual and the complainant to the Division Officer's endorsement.

(5) After counseling the service member and obtaining a statement of their intentions, the Division Officer will complete the first endorsement to enclosure (1) and forward the file to the CFS, via the cognizant Department Head. In this regard, route slip action items due date set by Admin must be strictly adhered to. If delays are encountered processing the complaint, the Division Officer will advise the CFS and indicate what actions are being taken to expedite processing and obtain an extension to the action due date.

c. Cases Involving the Navy-marine Corps Relief Society:

When complaints or inquiries concerning command personnel are received from the Navy-Marine Corps Relief Society, they shall be processed in accordance with the aforementioned procedures. Special attention is directed to reference (b) when processing inquiries from the Navy-marine Corps Relief Society. None of the procedures set forth in this instruction shall be construed to circumvent the requirements set forth by reference (b).

d. Follow-up Action: The Command Financial Specialist shall be alert to detect and identify aggravated cases of indebtedness or non-support and submit recommendations as to appropriate action in such cases to the Commanding Officer via the chain of command.

FIRST ENDORSEMENT

From: _____ Division Officer
To: Command Financial Specialist
Via: Department Head

Encl.: (2) Copy of subject member's reply to letter of indebtedness

1. Subject member has been advised of the Navy's policy concerning indebtedness and has made the following response: (Initial appropriate response)

_____ Member acknowledges the validity of the debt in question as claimed by the creditor(s) and proposes the following plan to resolve the debt:

_____ Member acknowledges the indebtedness, however, disputes the balance in question for the following reason(s):

_____ Member denies any indebtedness to creditor(s). Explain:

2. Subject member has prepared a written statement to the creditor(s). Enclosure (2), original copy, was mailed on _____ (date).
3. Division Officer comments, if any:

Division Officer

Source: (U.S.S. Shenandoah)

Appendix E

Civilian Literature Report

The Negative Impact Of Employee Poor Personal Financial Behaviors On Employers

E. Thomas Garman,¹ Virginia Tech

Irene E. Leech,² Virginia Tech

John E. Grable,³ Virginia Tech

This article demonstrates that there are substantial costs to employers caused by the stresses associated with poor personal financial behaviors of employees. Approximately 15% of workers in the United States are currently experiencing stress from poor financial behaviors to the extent that it negatively impacts their productivity. The proportion of workers experiencing financial problems that negatively impact productivity for a single employer could range as high as 40 to 50% depending upon certain factors. The costs of reduced employee productivity because of poor personal financial behaviors are substantial. The full extent of the costs to employers is unknown.

KEY WORDS: *absenteeism, employee assistance program, employee productivity, personal financial behavior, stress, substance abuse*

Seventeen years ago Brown (1979a; 1979b) reported that the personal financial problems of workers negatively affect their employers. As a pastoral counselor for a large company providing well above national average pay and benefits, Brown observed that the money problems of employees were frequently costly for the employer. Because of the poor financial behaviors of employees, some compensatory measures employers are forced to pay include "insurance premiums, hospital bills, production down-time, materials that needed redoing, and the training of an inexperienced replacement" (1979b, p.32). Brown's research revealed that the number of employees experiencing financial difficulties was approximately 10%.

Household spending, credit use, and stress have changed enormously in recent decades. Anecdotal evidence and media reports today suggest that a much higher proportion of people are experiencing stress about financial matters. A national survey revealed that 3 out

of 4 Americans faced at least one significant financial problem recently, such as being unable to save for future needs, delaying medical care, or having problems with a collection agency (Chandler & Morin, 1996). Consumer credit card delinquencies are at an historic high (Credit card delinquencies rise, 1996; Singletary, 1996) and frequent news reports indicate that personal bankruptcies are expected to reach all-time highs in 1996—over 1.1 million (Greenwald, 1996; Hansell, 1996).

According to a survey conducted among corporate human resource executives, the financial illiteracy of workers "is considered the most critical unaddressed workplace issue" (Cambridge Human Resource Group, 1995, p.1). Thirty-two percent of the executives ranked the "toll on productivity caused by personal financial problems as the most pressing overlooked workplace issue" (p.1).

Employers today are taking the issue of employee stress

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This research was conducted by the Virginia Tech faculty as subcontractors for the Personal Financial Management Project under the auspices of a jointly administered project co-directed by the Military Family Institute (MFI) at Marywood College, Scranton, PA 18509 and the Bureau of Naval Personnel, Office of Deployment Support and Personal Financial Management Programs (DS&PFMP). The Executive Director of the MFI is Dr. Peter McNelis, and the PFMP effort is coordinated by Dr. Raminder Luther. The DS&PFMP Project Manager is Peter J. Darby.

seriously as indicated by the facts that approximately 25% of workers feel stressed at work every day and about 40% of employers offer on-the-job assistance for handling stress (Schellhardt, 1996). However, employers do not know how job stress and money problems are related. Also unknown is the employer's cost of their employees' personal financial problems. This study was undertaken to review the literature to gain updated information and insights about the frequency and severity of personal financial mistakes and careless behaviors of employees that may lead to serious problems negatively affecting an employer.

Methodology

The literature review began with an Internet search of over 12,500 journals, dissertations and books using a variety of key words and phrases. This was followed with a similar computer search of additional thousands of journals, newspapers, and the *Congressional Record* using Infotrak. The computer searches used such key terms as "finance," "personal finance," "credit," "bankruptcy," "substance abuse," "productivity," "accidents," and "stress."

Three manual searches of published books and proceedings also occurred: one of various library reference indexes which led to a number of journals, and a second of the personal libraries of the researchers, which included a number of unpublished conference proceedings. A number of telephone calls were made to selected researchers in order to find some of the more-difficult-to-locate publications. While several hundred sources were reviewed, only about 200 were found to be potentially useful, and from that only about 60 were found to actually be useful.

Personal Financial Mistakes and Careless Behaviors

People travel the pathways of life experiencing a number of normal events that cause stress, such as moving from one home to another, hospitalization for an injury or illness, marriage, death of family members, and occasional loss of income while between jobs. Many of these events which occur normally negatively impact one's personal and family finances. These events, while common, also cause stress in people's lives.⁴ The media often reports that at any point in time about one-third of American adults are concerned about their ability to pay the next month's bills. Table 1 provides examples of personal financial mistakes and careless behaviors of employees that may lead to serious problems that negatively impact one's employer.

Table 1
Personal Financial Mistakes and Careless Behaviors

1. Occasionally spending too much money
2. Occasionally overusing credit
3. Occasionally reaching the maximum limit on a credit card
4. Occasionally running out of money
5. Occasionally writing a check with insufficient funds
6. Occasionally having a low or non-existent emergency fund
7. Occasionally being unable to pay due bills (e.g., utilities, rent, child care, credit cards)
8. Occasionally being unable to repay installment debts
9. Occasionally receiving "overdue notices" from creditors
10. Occasionally paying late some due bills and installment debts
11. Occasionally relying on a second income to pay living expenses and debts
12. Occasionally being denied additional credit, perhaps because of a lack of a sufficient positive credit history
13. Occasionally borrowing, perhaps by obtaining a cash advance from a line of credit on a credit card or advance pay from an employer, to pay for living expenses and/or other debts
14. Occasionally obtaining a debt-consolidation loan
15. Occasionally having liabilities in excess of assets
16. Occasionally not contributing to a pension plan
17. Occasionally losing money to ripoffs and frauds
18. Occasionally losing money by gambling or buying lottery tickets
19. Allowing an insurance policy to lapse (e.g., vehicle, renter's/homeowner's, medical, life)
20. Occasionally making a request for welfare (e.g., cash grants, food stamps, subsidized housing)
21. Occasionally feeling emotionally stressed about money matters
22. Occasionally worrying about the security of one's job

Factors listed in Table 1 do not necessarily lead to poor financial behaviors. In fact, most people go through life periodically experiencing many of these personal financial mistakes and careless behaviors. In reality, these are some of the normal and quite typical financial practices, experiences, and concerns of living in a modern society. However, when an excessive number of these personal financial mistakes and careless behaviors or factors occur or accumulate in combination with other events and catalysts, they collectively can result in poor financial behaviors.

Genuine Indicators of Poor Financial Behavior

Poor financial behaviors are personal and family money management practices that have consequential, detrimental and negative impacts on one's life at home and/or work. Writing a check with insufficient funds in the account may be classified as a personal financial mistake or careless behavior, however, when it occurs along with similar mistakes this is poor financial behavior. For example, a single episode, such as gambling away one's entire paycheck, could eliminate

any possibility of paying one's monthly rent or making a vehicle loan payment in a timely manner. In addition, there are a number of other actions, such as garnishment of wages, that are always indicators of poor financial behavior.

Table 2 provides examples of poor financial behaviors that negatively impact one's family life (e.g., relationships with relatives and friends) and/or one's employment (e.g., job performance). Note that the first 22 factors are the same as those listed in Table 1 as examples of personal financial mistakes and careless behaviors; however, here they occur in excess, as is true of the remaining 14 behaviors.

Table 2
Poor Financial Behaviors

1. Regularly spending too much money^a
2. Regularly overusing credit^a
3. Regularly reaching the maximum limit on a credit card
4. Regularly running out of money
5. Regularly writing "bad checks" (e.g., ones with insufficient funds in the account which results in additional bank/vendor charges and perhaps other penalties)
6. Typically having a low or non-existent emergency fund savings account
7. Regularly being unable to pay due bills (e.g., utilities, rent, child care, credit cards)^a
8. Regularly being unable to repay installment debts
9. Habitually receiving "overdue notices" from creditors
10. Regularly paying late some due bills and installment debts
11. Regularly relying on a second income to pay living expenses and debts
12. Being denied additional credit because of a poor credit history
13. Regularly borrowing, perhaps by obtaining a cash advance from a line of credit on a credit card or advance pay from an employer, to pay for living expenses and/or other debts
14. Regularly obtaining debt-consolidation loans
15. Typically having liabilities in excess of assets
16. Typically not contributing to a pension plan
17. Regularly losing money to ripoffs and frauds^a
18. Regularly losing money by gambling or buying lottery tickets and/or gambling in an attempt to "fix" one's financial situation^a
19. Regularly allowing insurance to lapse (e.g., vehicle, renter's/homeowner's, medical, life)
20. Regularly making a request for welfare (e.g., cash grants, food stamps, subsidized housing)^a
21. Regularly feeling emotionally stressed about money matters
22. Regularly worrying about the security of one's job
23. Regularly receiving communications from collection agencies^a
24. Being sued for financial reasons
25. Having property securing a debt repossessed
26. Having utility service cut off
27. Being evicted from rental housing or having one's home foreclosed
28. Having a lien placed on one's personal or real property
29. Having one's tax refund intercepted by a government agency or court order

Negative Impact of Poor Personal Financial Behaviors On Employers

30. Having one's wages garnished
31. Filing for personal bankruptcy
32. Being referred by an employer for credit and budget counseling because of poor job performance associated with poor financial behavior
33. Exhibiting unethical and/or criminal behavior (e.g., employee theft, embezzlement, check fraud, income tax evasion, expense account fraud, filing deceptive loan statements)
34. Being disciplined or fired by one's employer for poor financial behavior
35. Being imprisoned for financial reasons

Poor Personal Financial Behaviors that Negatively Impact Employers

There are many substantive areas of costs associated with poor financial behaviors. Poor financial behaviors negatively impact both families and employers. A person's poor financial behaviors impact on family life and lead to losses of transportation, housing, ability to obtain credit for needed goods and services, arguments with relatives, heavy emotional stress, spouse/child abuse, and divorce. Poor financial behaviors result in extremely high costs that are incurred by employers, including:

1. Absenteeism^a
2. Tardiness
3. Fighting with co-workers and supervisors
4. Sabotaging the work of co-workers
5. Job stress
6. Reduced employee productivity^a
7. Lowered employee morale
8. Loss of customers who seek better service
9. Loss of revenue from sales not made
10. Accidents and increased risk taking^a
11. Disability and worker compensation claims
12. Substance abuse
13. Suicide and murder^a
14. Increased use of available health care resources by the employee and relatives^m
15. Thefts from employers
16. Loss of security clearance
17. Nondeployment of employee to an overseas operation
18. Lack of employee focus on the strategic goals of the employer
19. Greater use of employee assistance program services, including those for spouse and child abuse
20. Employer time to deal with poor financial behaviors of employees^a
21. Loss of trained personnel (both for workday losses due to temporary suspension from duties as well as for termination of employment).

Poor Financial Behaviors and Stress are Interlinked and Cumulative

It is apparent that the factors contributing to poor financial behavior are interlinking and cumulative. Holmes' list of 43 stress producing items, cited in Holmes and Rahe (1967), which is used to predict medical problems, clearly illustrates the cumulative effect. As stress increases the Holmes score increases, along with the likelihood of the occurrence of major health problems.

This relationship is also true regarding various personal financial mistakes and careless behaviors. As the number and intensity of personal financial mistakes and careless behaviors escalate, the likelihood of serious negative consequences, both at home and/or work, increases. The widely accepted Hill ABCX family crisis model (Hill, 1949; Hill, 1958), particularly as redefined by McCubbin and Patterson (1983), shows that family maladaptation is characterized by family instability and deterioration of health that has both short- and long-term consequences.

It is crucial for individuals, families, and employers to understand that most people go through their lives effectively "handling" all the stressors of modern life, occasionally exhibiting poor financial behaviors. Most families struggle with change; adapt, and utilize creative techniques to manage the demands of life. This is the graphic circular flow of living where things attain a sort of balance, graphically illustrated as "within the circle," as shown in Figure 1. Here individuals and families experience a variety of financial difficulties as well as health problems, relationship stresses, and problems at work, but they continue living all the while generally keeping life in balance.

Sometimes one or more of these factors becomes severe enough to create an imbalance. Serious marital problems, difficulties with a co-worker, harassment from creditors, and unexpected medical expenses are some of the things that can throw one's life out of balance, perhaps to an oblong, egg-shaped sphere, as shown in Figure 2. These occasions may be the most advantageous time for successful intervention—before the problem(s) get totally out of control. Years ago, Brown (1979b) found that financial problems comprise about one-fourth of employee counseling cases, and this proportion may be higher today.

Figure 1
Within the Circle

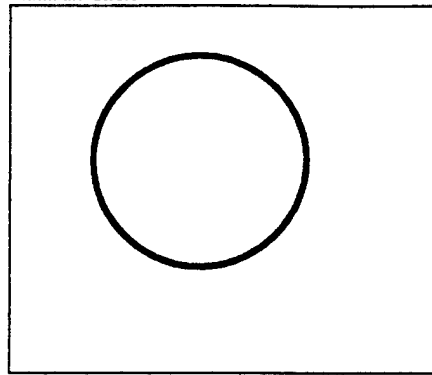
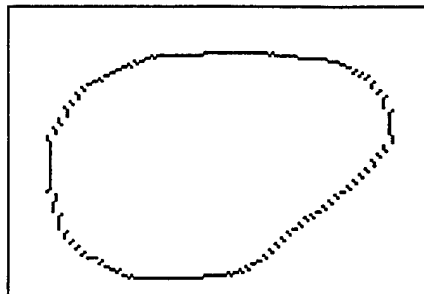


Figure 2



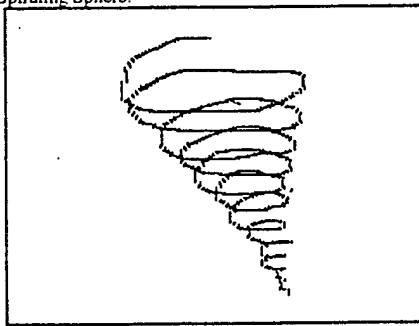
Out of Balance

When "financial problems arise, it is in the workplace that they are likely to surface first" (Kellar & Nolf, 1984, p. 1). Among five risk stressors in life (relationships, work, health, crime/violence, and personal finance), personal finance was rated by workers in one study as the number one source of stress; concerns about personal finance are five times those regarding health (Cash, 1996). Among one homogeneous population, 4 of the top 10 identified needs were financial (Darby, 1996). Such stress suggests that many people are experiencing a substantive degree of economic insecurity, "where there is considerable worry, fear, anxiety, and psychological discomfort" (Rejda, 1984, p. 3).

Negative Impact of Poor Personal Financial Behaviors On Employers

When employees' various life events and factors get out of control, including personal, financial and work, the high degree of economic insecurity can be graphically represented as a spiraling sphere shape, as shown in Figure 3. Here people experience failure in family life, personal finances, and/or employment as their lives seem to spin out of control. Events such as eviction, divorce, wage garnishment, or loss of employment may occur.

Figure 3
Spiraling Sphere.



Factors such as failure of a personal relationship, poor financial behaviors, and substandard job performance, are related. While research may have not yet demonstrated a statistical relationship of linearity between variables, there certainly exists a substantive correlation. Thus, while a direct cause and effect may not be demonstrated, there is a great amount of evidence that strongly suggests these factors are related. Brown (1979b) found that 84% of employees with financial problems also needed counseling for other problems. Further, one-third of employees counseled for problem drinking also had money problems.

Brown's more recent research (RJR, 1991) shows that problems of employees include family problems, financial problems, substance abuse problems, legal problems, worker compensation claims, and accident and sickness disability claims. In an early study, Brown (1979b) found "that 1 in every 30 employees at some point becomes so desperate over a personal problem or because of mental illness or intoxication that the employee contemplates suicide, or homicide, or functions as a hazard on the job" (p. 32).

Sporakowski (1979) observes that sex and money are the two most frequently presented problems in a marriage counselor's office, and "that they frequently result from a combination of ignorance or lack of information; differing attitudes, values and expectations; sensitive feelings; difficulties in interpersonal communication; and factors external to the individuals or relationships that result in a feeling of helplessness or lack of control" (p. 75).

Some examples illustrate the combined and cumulative aspect of poor financial behaviors that result in an out-of-control spiraling of life for individuals and families:

- * When an employee is involved in an on-the-job accident, fact finding may reveal that other factors are involved, such as pending legal action due to financial problems and/or substance abuse;
- * When an employee steals from an employer, analysis may reveal that other factors are involved, such as overuse of credit, caused by uninsured health costs and gambling to attempt to "fix" the financial crisis;
- * When an employee's work productivity drops off sharply, analysis may reveal that other factors are involved, such as emotional stress from financial problems caused by marital instability and substance abuse;
- * When an employee commits spousal abuse, counseling may reveal that other factors are involved, such as serious debt problems and emotional stress; and
- * When an employee's wages are garnished, investigation may reveal poor financial management practices and marital problems.

Poor Personal Financial Behaviors Are Often Manifested as Stress Which Reduces Employee Productivity

Stress has been documented as resulting in lower employee productivity. According to Tang and Hammontree (1992), stress costs businesses between \$100 and \$150 billion a year in lost employee productivity. Thirty percent of all adults report high work stress; 11 million people report health-endangering levels of work stress (Hickox, 1994).

A key question is, "Which variables are related to stress?" Literature on the question is actually quite clear. According to Kirkcaldy, Cooper, and Ruffalo (1995), a combination of mental and physical factors influence work stress. These variables include alcohol, drugs,

gambling, absenteeism, family relations, hazardous working conditions, threat of injury on the job, personal health (Leigh, 1991), and poor financial management. Interestingly, many of these variables not only cause stress but result in stress as well.

A major source of lower employee productivity resulting from stress is absenteeism (Bruner & Cooper, 1991; Chaudhury & Ng, 1992; Garrett, 1993; Hager, 1994; Mughal, Walsh & Wilding, 1996; Tang & Hammontree, 1992). Employee stress about personal financial matters, as demonstrated above, is a reality in the workplace. A survey of 301 employees of IDS Financial Services found that "personal finance worries may indeed affect the job performance of more than one-third of America's corporate workforce and may lead to unwanted turnover" (Harris, 1987, p. 6). Thirty-eight percent said "money worries sometimes hamper job performance," and 33% under age 35 said they "would have to change jobs to meet financial goals" (p. 6).

Many employees take time off work to deal with their financial problems. For example, workers take time away from productive labor to telephone creditors, seek sources of additional credit, converse with co-workers about stresses, talk with supervisors about financial problems, and place gambling wagers. They also take occasional extended work breaks, supposedly to use the toilet or to eat a meal, but instead spend the time dealing with financial stresses. Employees sometimes even call in sick to their employers so they can make court appearances, talk with attorneys, and meet with others concerning financial problems.

Since 1973 the number of lost workday cases, or frequency per 100 full-time workers, has increased more than 12% (Waddell, 1996). Unscheduled absenteeism cost companies \$688 per worker per year on average, and last year unscheduled absenteeism rose for the fourth time in a row (Waddell, 1996). A primary reason for these trends is stress in the workplace (Kottage, 1992). Chronic absenteeism has become the number one workplace problem according to some experts (Perry, 1996).

It has been estimated that 70% or more of all job absenteeism is a direct result of stress-induced illness (Tang & Hammontree, 1992). These absences have a direct and devastating impact on worker productivity and customer satisfaction, according to Perry (1996). Costs include lowered morale among other employees who must shoulder extra work loads, lost revenue from sales

not made, loss of customers who flee to competitors for better service, and decline in business reputation.

External responsibilities were the third most important determinant on absenteeism in a study of Australian blue-collar employees conducted by Deery, Erwin, Iverson and Ambrose (1995). Personal financial difficulties are an example of external responsibilities.

The costs of absenteeism are staggering, and it is not surprising that high costs are universal. According to Rogers and Herting (1993), sick leave among employees has increased from an average of 64.9 hours per employee in 1975 to 73.9 hours in 1981. Results of recent surveys indicate that only 35% of respondents use sick leave when they are "really" sick (Rogers and Herting).

Absenteeism costs have been estimated to be between \$9 and \$13 billion a year in England (Watkins, 1994), and in Canada absenteeism results in 53.4 million hours of lost employee productivity (Chaudhury & Ng, 1992). Fifteen years ago, in 1981 it was estimated that business lost between \$3 to \$5 billion annually from family violence-related absenteeism and \$100 billion in abuse-related medical costs (Deming, 1991).

Direct costs of absenteeism in the U.S. are estimated to be between \$25 and \$35 billion a year in lost employee productivity, half of which is paid sick leave (Rogers & Herting, 1993; Tang & Hammontree, 1992). Dalton and Mesch (1991) report that the total productivity lost in the United States each year to absenteeism is nearly \$40 billion. Others have estimated these costs to be over \$300 billion per year, which represent between 9 and 15% of total wage bills (see Karasek & Theorell, 1990). Losses associated with job stress are currently estimated to be as large as \$150 billion per year (Karasek & Theorell, 1990).

Stress, Substance Abuse, and Employee Productivity

The relationship between stress, substance abuse, and lost employee productivity is especially alarming. Stress, including that caused by financial problems, leads some people to abuse alcohol and drugs. Ten million persons are addicted to alcohol and 3 million persons are addicted to drugs. Of these, approximately 7 million are employed (Callery, 1994). In other words, 12 to 15% of all workers are experiencing some sort of personal problem, and at least one half of these problems involve chemical abuse (Callery, 1994). According to Callery there is a consistent relationship between chemical abuse and poor

employee performance, including lowered production, decreased efficiency, tardiness, as well as increased use of employer fringe benefits such as sick time, disability, and workers' compensation. Substance abuse causes absenteeism, accidents, health care costs, loss of trained personnel, employee theft, and lost job productivity (Minter, 1990).

Employers pay dearly for drug abuse problems in the workplace. Drug abuse seriously erodes an employer's financial standing and reduces a company's ability to compete, costing businesses \$60 billion each year (Lipman, 1995). Further, recreational drug users are 2.2 times more likely to request early dismissal or time off; 2.5 times more likely to have absences of eight days or more per year; 3.6-times more likely to be injured on the job; and five times more likely to file a workers' compensation claim (Lipman, 1995). Recreational drug users are 7 times more likely to have wage garnishments and they are one-third less productive on the job (Lipman, 1995). Fifty-nine percent of financial costs associated with alcoholism and drug abuse result from losses in the work world (Goldberg, 1994). The annual cost to society of substance abuse and mental illness is more than \$190 billion (Minter, 1990). Drug and alcohol abuse cost the American economy at least \$177 billion a year, including \$99 billion in lost employee productivity (Staroba, 1990).

According to Scanlon (1986), employee alcoholism and drug abuse are estimated to cost American business at least \$26 billion total; (\$16 billion and \$10 billion respectively), with \$16 billion of this total cost directly related to lost employee productivity, absenteeism, medical expenses, disability claims, and corporate theft. Furthermore, more recent data show that drinking problems cost employers \$2,500 per employee per year in productivity losses, absenteeism, and disability benefit claims, amounting to \$15 to \$20 billion a year (Scanlon, 1991). All of these costs are ultimately passed on to consumers in the form of higher prices and/or higher taxes.

Per capita expenses to both private and public organizations are equally alarming (Scanlon, 1986). Costs to all organizations works out to \$4,200 per worker per year in 1986 dollars. Inflated to 1996 dollars, the figure is \$5,600 per worker. Drinking, exclusive of drug abuse, costs employers \$2,500 per worker per year in lost employee productivity, absenteeism, and disability benefit claims. The total costs of corporate alcoholism

are estimated to be between \$15 and \$25 billion each year.

Stress, Poor Financial Management, and Employee Productivity

Stress-related variables tend to impact each other. According to Williams (1982), financial problems result from unexpected changes which necessitate reevaluation of the use of resources. It is not surprising that many of the "situations" outlined by Williams are also stress-related variables. For example, situations which may create severe financial problems include: changes in family income, changes in employment status, unscrupulous or fraudulent schemes, adverse job politics, loss of ability to fulfill home responsibilities, need to support parent or other persons, premature death of spouse, birth of child, illness or disability, accidents, divorce, major unexpected bills, lawsuits, and changes in consumer prices.

According to Williams (1982), specific situations that cause financial stress include: underestimating expenses because of inexperience or poor records, overestimating income, lack of family communications, being overwhelmed with bills and expenses to the point of being afraid, inability to say "no", lack of planning, buying products and services on credit, poor money handling skills, credit overextension, using money for emotional reasons, not having a cash reserve for emergencies, and not controlling expenses such as gambling, alcohol, tobacco, and drugs.

Stress inducing variables eventually have an impact on a family's financial well-being, which in turn, influences individual response to stressful situations. For example, an individual who faces increasing levels of stress will, according to the literature, be more likely to miss work on a regular basis. This action tends to increase feelings of guilt, resentment, and loss of hope. Many such individuals turn to alcohol, gambling, tobacco, or drugs to dampen the effects of stress in their lives. Factors contributing to stress are cumulative and interlinking. Consequently, when employees exceed their coping threshold for stress, it is likely that workers' compensation claims—both legitimate and fraudulent—will increase (Gilmore, 1994).

Unfortunately, these activities force reallocation of financial resources towards the maintenance of unhealthy habits. In turn, poor financial management leads to increasing levels of stress, which tend to support other

types of behavior, further reducing employee productivity. In other words, the relationship between stress, stress-related variables, poor financial management, and overall reduced employee productivity is not linear; it is, in fact, a spiralling sphere which ultimately leads to physical, financial, and employment failure.

Employers Pay the Costs for Reduced Employee Productivity

Mental illness and substance abuse cost the nation an estimated \$273 billion annually in treatment expenses, lost and reduced employee productivity, law enforcement efforts, and other related costs. Mental illness costs the country \$129.3 billion; alcohol abuse \$85.8 billion; abuse of other drugs, \$58.3 billion. Employers assume a large portion of the costs attributed to mental illness and substance abuse in the form of treatment benefits and prevention programs, lost work days, and reduced employee productivity (Caldwell, 1991).

For example, it is estimated that 25% of the chemical-dependent employee's earnings can be applied to the cost of lost employee productivity and poor job performance (Scanlon, 1991). Six to ten percent of a workforce abuses alcohol and other drugs to the extent that work is disrupted. Employees who are problem drinkers cost their employer approximately one-fourth of their average annual salary per year (Brown, 1979b).

Brown (1993) reports that 10% is a very conservative estimate of the number of employees in the workplace with financial difficulties. Brown's formula for calculating the cost of employee financial problems to an employer can be conservatively estimated as follows: take the 10% of the workforce which is currently experiencing financial problems and multiply that by a 10% average annual wage loss in employee productivity; that equals the cost of an employer doing nothing (RJR, 1991). For example, consider an employer of 1,000 employees with an average wage of \$30,000 who has 100 workers experiencing financial problems to the extent that their productivity is reduced by 10%. That calculates to \$300,000 in annual lost productivity (\$30,000 [annual employee wage] X .10) = \$3,000 per financially troubled employee X 100 [current number of financially troubled employees]). This \$300,000 annual productivity loss for an employer with 1,000 employees is a conservative estimate.

Others also report that a proportion of workers have difficulties with their personal finances to the extent that

it negatively impacts their productivity. Kellar (personal communication with E. Thomas Garman, March 22, 1987) estimated that at any point in time at least 10% of U.S. Navy personnel were experiencing financial problems. Garman (1989) made a similar estimate of at least 10%. A higher estimate was made by Cash (1996) who found that 28% of workers report that personal finances have negatively impacted their productivity in the past year.

The estimates from the 1980s about the proportion of workers experiencing significant financial problems must be raised for the current times for a number of reasons. Both the number of credit cards in circulation and the use of credit cards for marketplace transactions have risen enormously since the 1980s. Further, credit card delinquencies are currently at an all-time high. Also, personal bankruptcies are projected to reach an historical high this year. Finally, as the proportion of individual and family income required to pay interest and repay debt increases, the margin of net income available for other needs and wants, including any expenditures that might stress one's budget, becomes smaller. In short, the greater use of consumer credit the less margin there is for spending errors; thus, substantially more people today are experiencing financial problems than a decade or two ago.

Therefore, it can be conservatively concluded that approximately 15% of workers in the U.S. are currently experiencing stress from personal financial mistakes and careless behaviors as well as from poor financial behaviors to the extent that productivity is negatively impacted. Depending upon such factors as employee income levels, ranges of age and stage in the life cycle, and the costs of living, the proportion of workers experiencing financial problems that negatively impact productivity for a single employer could range as high as 40 to 50%.

Furthermore, and very importantly, the productivity of workers who are experiencing stress about personal financial matters may drop by a factor or more than 10% (the percentage used in Brown's [1979b] seminal calculation). If the decline in worker productivity is actually 20%, for example, the amount of lost productivity to an employer is much greater! Consider again the above employer of 1,000 employees with an average wage of \$30,000 who has 100 workers experiencing financial problems to the extent that their productivity is reduced. This time, however, the productivity loss is estimated to be 20%. That calculates

to \$600,000 in annual lost productivity (\$30,000 [annual employee wage] X .20) = \$6,000 per financially troubled employee] X 100 [current number of financially troubled employees]). This \$600,000 annual productivity loss for an employer with 1,000 employees is likely a more realistic estimate of the types of costs that are incurred by employers. An employee who misses four days of work in one month, for example, causes a 20% loss in productivity, and this does not include any related costs for temporary labor, workers' compensation, employee medical care, and increased insurance premiums.

Employers Benefit When They Deal With Employee Problems

A strategy based on the joint search for worker well-being and employee productivity is at the heart of the entire quality-of-life movement (Karasek & Theorell, 1990). It pays for employers to be interested in the wellness of their employees. For every dollar spent on mental health and substance abuse treatment, \$11.54 is saved in social services costs (Hickox, 1994).

Employers find that there is a five-to-one return for every dollar spent on an employee assistance program, with a substantial savings on health care benefits (Goldberg, 1994). General Motors saves \$3,700 per year for each employee enrolled in its EAP, with total savings of \$37 million; Northrop saves \$20,000 per employee in job productivity per rehabilitated employee; New York Transit saved \$1 million in paid sick leave in one year (Campbell & Graham, 1988). Employee assistance programs saved the U.S. Postal Service more than \$2 million; the New York Telephone Company employee assistance program saved \$1.5 million (Garman, Porter & McMillion, 1989).

A recent literature review (Williams, Lown, Haldeman, Garman, Fletcher & Cramer, 1990) concludes that there is justification for continued efforts to provide valid and reliable evidence of the impact of financial concerns on employee productivity and on the cost-benefit of employers offering financial counseling and planning to employees in an industry setting. Employers who believe in primary prevention find it smart (when dealing with drugs and alcohol in the workplace) to make help available to all employees experiencing problems impacting job performance (Campbell & Graham, 1988). One of the new wellness trends is financial health programs (Cash, 1996).

Once acquainted with financial education training at a

worksite, 63% of participants are more inclined to pursue financial education on their own (Cash, 1996). In the future, employers are increasingly likely to help their employees deal with financial problems for very good reasons—it increases job productivity, reduces costs, and makes employees happier.

At Ameritech, for example, "helping employees deal with financial issues falls under the umbrella of the Employee Assistance Program (EAP)" (Cambridge Human Resource Group, 1995, p.4). By placing the financial counseling in EAP, Ameritech is assured of confidentiality and it gives employees the chance to maintain control. Ameritech's human resources-research manager says, "We've found that by giving employees the tools—without any strings attached—they can work out any problems. It's a win-win situation for Ameritech and its employees" (p. 5).

Research Needed

This literature review confirms that there are substantive costs associated with the stresses associated with poor financial behaviors. These impact the individuals involved, their families, and their employers. The full extent of the costs to employers is unknown. The costs, especially the genuine costs of reduced employee productivity, need to be quantified so that the real costs to employers of the poor personal financial behaviors of employees can be known and cost off-setting measures can be considered.

Research is needed to carefully determine if people who are writing checks with insufficient funds, having their wages garnished, and experiencing marital difficulties are likely to be the very same people who are performing poorly on the job. Trends over time need to be identified and tracked so that employers can recognize the needs and the impact of assistance provided.

Research also is needed to further identify the specific problems and the resulting negative behaviors of employees. This should be done to better understand the extent of interrelationships, to determine the associated costs to employers, and to develop methods to identify, weigh, and scale poor financial behaviors and the related stress factors. Findings should be predictive so that cost-effective prevention efforts might be undertaken to reduce the negative costs of the poor financial behaviors of employees on employers. In addition to identifying the costs, research needs to be conducted to ascertain the return on investment to employers who establish

employee assistance program in personal financial management.

Practitioners and researchers should work together to conduct this research. Together they should design studies which will allow practitioners, and others in business, to easily collect needed data in the course of their supervisory responsibilities. Because employee problems are interrelated and tend to spiral in crisis, well designed research studies will be required.

Endnotes

- a. There are other stressful events that also may result in negatively affecting one's employer which are not necessarily under the control of the individual or family, such as having an exceptional child, or other family member, who requires substantial financial expenditures. Such factors are not examined in this literature review.
- b. Consumers are spending \$1.03 for every \$1 they earn (Stern, 1995); consumers between ages 18 and 25 spend \$1.17 for every \$1 they earn (Garman & Forgue, in press); poor money management is identified as the main problem by 45% of clients going to a consumer credit counseling agency (Williams, 1996); a study by Visa shows that 29% of the people declaring bankruptcy last year report that overspending was the major cause for them filing bankruptcy (Singletary, 1996).
- c. Two-thirds of adults have at least one Visa or MasterCard (Fulkerson, 1995); the average American has 8 to 10 credit cards, and the outstanding credit card balance for most people is over \$1,700 (Stern, 1995).
- d. Credit card delinquencies of more than 30 days are currently 3.66%, the highest in history (Credit card delinquencies rise, 1996; Singletary, 1996).
- e. Every other telemarketing call to your home is from a crook trying to steal your money (Garman, 1996).
- f. State lotteries exist in 36 states and casino gambling is legal in more than 20 states (Fulcher, 1991); there are 8 to 9 million individuals pathologically addicted to gambling (Fulcher, 1991); following the introduction of legalized gambling, the numbers of problem gamblers tripled, from 1.7% to 5.4% (America's gambling fever, 1996); problem gamblers cost society \$13,200 to \$30,000 per gambler (Simon, 1995); problem gamblers cost between \$13,200 and \$35,000 for government services (America's gambling fever, 1996); problem gamblers will write bad checks and reach the point of bankruptcy . . . often turning to illegal activities (Simon, 1995); 85% of compulsive gamblers admit to stealing from their employers, given the opportunity (Fulcher, 1991); 40% of pathological gamblers lose their jobs, 23% become alcoholics, and 63% contemplate suicide (Simon, 1995); problems caused by gambling reported by members of Gamblers Anonymous include divorce or separation (26%), quit or lost a job (34%), stolen from work to pay gambling debts (44%), bankruptcy (21%), gambling-related arrests (18%), contemplated suicide (66%), and attempted suicide (16%) (America's gambling fever, 1996).
- g. Twenty-seven million Americans use food stamps (Holmstrom, 1994); workplace support was the most significant factor affecting the degree to which mothers reduced their reliance on welfare as a source of household income over a 3-year period (Parker, 1994).
- h. Greninger, Kitt, Hampton and Achacoso (1996) determined this to be the best single indicator of financial insolvency.
- i. Increased personal financial pressures can lead to absenteeism (Macadam, 1994).
- j. The higher a salesperson's stress the lower their job productivity (Yeh, Lester & Tauber, 1986).
- k. Automobile accidents cause \$137 billion every year in medical expenses, lost employee productivity, and property damage, and this represents \$50 billion in annual costs to employers (Chafee, 1995); accidents involving employer-owned cars cause disruption to business (Cartwright, Cooper & Barron, 1993).
- l. A recent example is the infamous Susan Smith, who drove her automobile into a South Carolina lake drowning her two children, reporting that she was greatly stressed about financial matters; Smith also stated that she was separated from her husband and had just broken up with her lover.
- m. These occur for both mental health disorders as well as for physical problems (Cash, 1996).
- n. Time is lost by both the worker and the supervisor (Kellar & Nolf, 1984).
- o. Victims of sexual harassment, another form of stress, can experience severe anguish, tension, and depression which lead to absenteeism, staff turnover, and low employee productivity (Husbands, 1992).

References

- America's gambling fever (1996, January 15). *U.S. News & World Report*, 121, 53-61.
- Brown, R. C. (1979a). Employee assistance programs in industry. In D. C. Myhre (Editor), *Financial counseling: Assessing the state of the art* (pp. 137-144). Blacksburg, VA: Financial Counseling Project Extension Division, Virginia Polytechnic Institute and State University.
- Brown, R. C. (1979b). The need for employee financial counseling. In D. C. Myhre (Editor), *Financial counseling: Assessing the state of the art* (pp. 29-38). Blacksburg, VA: Financial Counseling Project Extension Division, Virginia Polytechnic Institute and State University.
- Brown, R. C. (1993). *Financial worries in the workplace. R.J. Tobacco Company, RJR Employee Counseling*. Winston-Salem, unpublished manuscript.
- Bruner, B. M. & Cooper, C. L. (1991). Corporate financial performance and occupational stress. *Work & Stress*, 5, 267-287.
- Callery, Y. C. (1994, May/June). Chemical abuse rehabilitation for hospital employees: Examination of benefit usage when referred by an employee assistance professional. *Today's O.R. Nurse*, 16, 35-43.
- Caldwell, B. (1991). Behavioral benefits. *Employee Benefit Plan Review*, 8, 10-12.
- Campbell, D. & Graham, M. (1988). *Drugs and alcohol in the workplace: A guide for managers*. New York: Facts on File Publications.
- Cambridge Human Resource Group (1995, July). *Number 1 unaddressed workplace concern: Financial illiteracy tops new poll*. Chicago: Author.
- Cartwright, S., Cooper, C. L. & Barron, A. (1993). An investigation of the relationship between occupational stress and accidents amongst company car drivers. *Journal of General Management*, 19, 78-85.
- Cash, J. G. (1996, August 20). *Variables with suspected correlation to financial problems, health care costs, productivity, and quality of life*. Unpublished manuscript.
- Chafee, J. H. (1995, June 20). National Highway System

- Designation Act. *Congressional Record*, S8656-8678.
- Chaudhury, M. & Ng, I. (1992). Absenteeism predictors: Least squares, rank-regression, and model-selection results. *The Canadian Journal of Economics*, 25, 615-635.
- Chandler, C. & Morin, R. (1996, October 14). Prosperity's imbalance divides U.S. *The Washington Post*, p. A-1+.
- Credit card delinquencies rise (1996, September 18). *The Roanoke Times*, p. B-6.
- Dalton, D.R. & Mesch, D.J. (1991). On the extent and reduction of avoidable absenteeism: An assessment of absence policy provisions. *Journal of Applied Psychology*, 76, 810-817.
- Darby, P. (1996, March 22). *Financial education*. Unpublished manuscript.
- Deming, J. (1991, July). Rescuing workers in violent families. *HR Magazine*, 36, 46-48.
- Deery, S.J., Erwin, P.J., Iverson, R. D. & Ambrose, M. L. (1995). The determinants of absenteeism: Evidence from Australian blue-collar employees. *The International Journal of Human Resource Management*, 6 (4), 825-848.
- Fulcher, G. T. (1991, August 5). The dark side of a trip to the track. *Industry Week*, 240, 13-16.
- Fulkerson, J. (1995, August). Business' reports: Markets: Charging through the friendly skies. *American Demographics*, 17, 19-20.
- Garman, E. T. (1996). *Ripoffs and frauds* (Revised ed.). Houston: Dame Publications.
- Garman, E. T. (1989, November). Speech to the Association for Financial Counseling and Planning Education, Detroit, MI.
- Garman, E. T. & Fargue, R. E. (1997). *Personal finance* (5th ed.). Boston: Houghton Mifflin.
- Garman E. T., Porter, N. M. & McMillion, J. A. (1989). Financial counseling by a corporation with a large number of employees. *Proceedings of the 18th Annual Southeastern Regional Family Economics/Home Management Conference*, 76-84.
- Garrett, E. M. (1993, December). Can this employee be saved? *Small Business Reports*, 18, 26-36.
- Greenwald, J. (1996, July 8). Deadbeat and upbeat. *Time*, 148, 44.
- Gilmore, G. (1994). Coping with the reality of rightsizing. *Risk Management*, 41, 43-46.
- Goldberg, C. (1994, Dec. 12). High price of substance abuse in the workplace. *Business News*, 50, 1-2.
- Greninger, S.A., Kitt, K. A., Hampton, V.L. & Achacoso, J. A. (1996). Perceived usefulness of credit and insolvency measures among financial planners and educators. *Consumer Interests Annual*, 42, 237-238.
- Hager, B. D. (1994, September). Stress takes its toll on productivity. *San Antonio Business Journal*, 8, 18.
- Hansell, S. (1996, August 25). Personal bankruptcies surging as economy hums. *The New York Times*, pp. S-1, 38.
- Harris, T. (1987, July). Helping employees manage their finances. *Managing Today*, 19, p. 6.
- Hickox, K. (1994). Content and competitive. *Airman*, 38 (1), 31-33.
- Hill, R. (1949). *Families Under Stress*. New York: Harper & Row.
- Hill, R. (1958). Generic Features of families under stress. *Social Casework*, 49, 139-150.
- Holmes, T. H. & Rahe, R. H. (1967). Social readjustment rating scale. *Journal of psychosomatic research*, 12, 333.
- Holmstrom, D. (1994, March 15). Food stamp use—and abuse—reaches all-time high in U.S. *The Christian Science Monitor*, pp. 1, 4.
- Husbands, R. (1992). Sexual harassment law in employment: An international perspective. *International Labour Review*, 131, 535-560.
- Karasek, R. & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. New York: Basic Books, Inc., Publishers.
- Kellar, B. & Nolf, N. (1984, March). *Preliminary report: Troubleshooter training, a financial counseling course for military personnel*. Unpublished manuscript.
- Kirkcaldy, B., Cooper, C. L. & Ruffalo, P. (1995). Work stress and health in a sample of U.S. police. *Psychological Reports*, 76, 700-702.
- Kottage, B. E. (1992). Stress in the workplace. *Professional Safety*, 37 (8), 24-26.
- Leigh, J. P. (1991). Employee and job attributes as predictors of absenteeism in a national sample of workers: The importance of health and dangerous working conditions. *Social Science & Medicine*, 33, 127-137.
- Lipman, I. A. (1995, January). Drug testing is vital in the workplace. *USA Today*, 123, 81-82.
- Macadam, C. (1994, April). Stress related absenteeism-How to break the cycle. *Transition*, 4, 22-23.
- McCubbin, H. I. & Patterson, J. M. (1983). The family stress process: The double ABCX model of adjustment and adaptation. *Marriage and Family Review*, 6, 7-37.
- Minter, S. G. (1990). A helping hand for the troubled employee. *Occupational Hazards*, 52, 55-58.
- Mughal, S., Walsh, J. & Wilding, J. (1996). Stress and work performance: The role of trait anxiety. *Personality and Individual Differences*, 20, 685-691.
- Parker, L. (1994). The role of workplace support in facilitating self-sufficiency among single mothers on welfare. *Family Relations*, 43, 168-173.
- Perry, P. M. (1996, June). Absenteeism is a big problem, but you can learn how to curb it. *Industrial Distribution*, 85, 78-84.
- Rejda, G. E. (1984). *Social insurance and economic security* (2nd ed.). Englewood Cliffs, NJ: Prentice-Hall, Inc.
- RJR conducts cost study covering 20 years. (1991). *EAPA Exchange*, 2 (1), 30-31.
- Rogers, R. E. & Herting, S. R. (1993). Patterns of absenteeism among government employees. *Public Personnel Management*, 22, 215-229.
- Scanlon, W. F. (1986). *Alcoholism and drug abuse in the workplace*. New York: Praeger Publishers.
- Scanlon, W. F. (1991). *Alcoholism and drug abuse in the workplace: managing care and costs through employee assistance programs* (2nd ed.). Westport, Conn: Praeger.
- Schellhardt, T. D. (1996, October 2, 1996). Company memo to stressed-out employees: 'Deal with it.' *The Wall Street Journal*, p. B-1+.

- Simon, P. (1995, July 31). The explosive growth of gambling in the United States. *Congressional Record*, S10912-10916.
- Singletary, M. (1996, September 18). A new breed of debtor shocks credit card issuers. *Washington Post*, p. F1+.
- Staroba, K. (1990). The substance abuse maze. *Association Management*, 42 (11), 26-40.
- Sporakowski, M. J. (1979). Financial problems as stress and crisis. In D. R. Harvey, D. C. Myhre, M. J. Sporakowski & A. H. Webb (Eds.) *Developing a personal approach to financial counseling* (pp. 75-81). Blacksburg, VA: Virginia Polytechnic Institute and State University.
- Stern, L. (1995, Feb. 13). Focus: On your money: Money watch: Credit card crunch. *Newsweek*, 125, 54.
- Tang, T. L. & Hammontree, M. L. (1992). The effects of hardiness, police stress, and life stress on police officers' illness and absenteeism. *Public Personnel Management*, 21, 493-510.
- Yeh, B. Y., Lester, D. & Tauber, D. L. (1986). Subjective stress and productivity in real estate sales people. *Psychological Reports*, 58, 981-982.
- Waddell, F. E. (1996, September 18). Email to E. Thomas Garman.
- Watkins, I. (1994). The rising cost of absenteeism. *Quarry Management and Products*, 21 (4), 37-38.
- Williams, F. L. (1996). *Financial difficulty measured as monthly deficit: an empirical analysis of determinants*. Manuscript submitted for publication.
- Williams, F. L. (1982). *Guidelines to financial counseling with crisis intervention and consumer economics education*. West Lafayette, Indiana: School of Consumer and Family Sciences, Purdue University.
- Williams, F., Lown, J., Haldeman, V., Garman, E. T., Fletcher, C. N. & Cramer, S. (1990). Financial concerns of employees and their productivity. *Proceedings of the Association for Financial Counseling and Planning Education*, 45-68.

Appendix F

Installation and User's Guide to the Computer Simulation Prototype

Appendix F

MILITARY FAMILY INSTITUTE PERSONAL FINANCIAL MANAGEMENT PROGRAM

INTRODUCTION

The multimedia presentation you're about to use is a prototype for an actual production version (APV). As such, this presentation is designed to convey the type of information that would be included in the APV.

The APV would also sport enhancements not included in this prototype for financial and technical reasons. The latter is particularly salient. The prototype was designed to operate on a base multimedia-ready IBM/Windows PC. It doesn't require a motion video card, a CD-ROM, or other special accessories.

The APV, though, could incorporate video. Instead of viewing a still image, as you will in the prototype, video scenes could be used. The video quality could vary, depending upon the PC. But a site would have to be equipped with a suitable PC to take advantage of these enhancements.

APV Technical Considerations

The APV will be designed with specific instructional criteria. Besides serving as the APV's guiding principles, they'll have an impact on the selected media. As stated above, video may be used.

However, as also indicated, the adoption of specific media is tied to the technical sophistication of the PC. Consequently, before the APV is designed, basic technical requirements should be hammered out.

Does a base, for example, have a PC that can run the APV, that is, meet its technical requirements? Depending upon the number of projected users, how many PCs have to be purchased? Is it possible, as an option, to create a two-tiered project--with the second tier operating on less sophisticated machines?

The Prototype

The computer element of the proposal consists of 3 disks organized in 2 sets:

- I. Disk 1: Personal Financial Management Program (labeled as PFMP)
- II. Disk 1 and 2: Tutorial (labeled as TUTOR1 and TUTOR2)

Both sets form an interactive multimedia presentation. In this proposal, production/logistic demands dictate the use of two sets of disks. As indicated in the instructions, you install and use both sets as individual programs.

Please Note: Both sets will be fully integrated in the APV. You would activate the tutorial by simply selecting an on-screen button in the Personal Financial Management Program.

Prototype Overview

I. Personal Financial management Program: This module is the control center for the multimedia presentation. It's comprised of a series of electronic pages that are linked together.

You gain access to the other pages by activating on-screen buttons. For example, one button serves as a link to Vehicle Price Information.

To retrieve this new information, you simply move the cursor to the appropriate on-screen button. Press the Left mouse button, the link is activated, and the new page appears. (Detailed instructions are listed on later pages in this proposal. They are also "electronically" available as you use the program.)

The program opens with a short animation. You then activate a link, as indicated by on-screen instructions, and view the Main page. A number of financial management modules, as represented by different buttons, appear.

For the prototype, only the Vehicle link is active. If you select another category, you will receive an "Under Construction" prompt. All modules will be functional in the APV.

By activating the Vehicle link, you are brought to an Info page. At this point, you are presented with a series of options: you then follow the links to find the information you want.

Finally, in the APV, when you activate the Tutorial link, a vehicle-buying tutorial will be activated. As stated, though, for the prototype, the Tutorial is included as a separate program.

II. Tutorial: This module is a vehicle buying tutorial. It takes the user on a vehicle buying tour.

Unlike the Personal Financial Management Program, sections of the Tutorial are self-running. Specific pages will automatically change, based upon a built-in timer.

Other pages, though, are interactive and require user input. **These pages will have an on-screen, white button with black text.** As the Tutorial progresses, activate this link by moving the cursor to the button. Next, press the Left mouse button. (If a page doesn't have a white button, it will automatically change.)

In the APV, all the choices will be active. Thus, instead of only one active button (one choice), the user will have a range of choices.

Finally, the Tutorial ends with the selection of a vehicle and price/payment options. In the APV, a discussion will follow presenting an analysis of the user's selections (e.g., did you select a monthly payment you can afford?).

Prototype Hardware/Software Requirements

The prototype is optimized for the following system:

- IBM PC (or clone)
- Windows 3.1
- 640X480 screen; should use a Windows accelerator video card
- 256 colors
- capability to play WAV/FLC files (adds to the presentation; not required)

INSTALLATION INSTRUCTIONS

I. Personal Financial Management Program

Installs like any other Windows program.

Installation Procedure

1. Turn on the PC.
2. Place the PFMP disk in the floppy drive.
3. Start Windows 3.1.
4. Set the screen for 640X480: 256 colors.
5. Start File Manager.
6. Move the cursor to the Drive A icon, and press the Left mouse button. Drive A's files will appear.
7. Locate the setup.exe file.
8. Move the cursor to setup.exe. Press the Left mouse button 2 times.
9. You will then be prompted to select a target drive and directory. The program files are installed on this drive and directory. Follow the on-screen prompts.
10. The program will be installed.

Operation

1. A PFMP directory will appear in Windows' Program Manager window.
2. Move the cursor to the directory. Press the Left mouse button 2 times.
3. Move the cursor to the PFMP icon. Press the Left mouse button 2 times.
4. The program will start. Follow the on-screen prompt to move to the next screen.

For specific instructions, see the instruction sheets at the end of this proposal.

II. Tutorial (labeled as TUTOR1 and TUTOR2)

You must create two directories to use the program.

Creating the directories

1. Turn on the PC.
2. You are going to create 2 directories.
3. If you are not already there, go to the C:>prompt.
4. Type
 md mfitut (Press Enter)
 md mfitmp (Press Enter)

You have created the mfitut and mfitmp directories. The mfitut directory will hold the program files. The mfitmp directory will store the temporary files the program creates.

Copying the Files

1. Place the TUTOR1 disk in the floppy drive.
2. Type
 copy a:*.* c:\mfitut (Press Enter); If your floppy is drive b, substitute b for a.

When the file is copied, remove the disk.

3. Place the TUTOR2 disk in the drive.
4. Type
 copy a:*.* c:\mfitut (Press Enter); If your floppy is drive b, substitute b for a.

Using Windows

1. When the files are copied, start Windows 3.1.
2. Set the screen for 640X480: 256 colors.
3. Start File Manager.
4. Move the cursor to the Drive C icon, and press the Left mouse button. Drive C's directories will appear.
5. Locate the mfitut directory.
6. Move the cursor to the mfitut directory, and press the Left mouse button. The directory's files will appear in the File Manager's screen.
7. Locate the mfi.exe file.
8. Move the cursor to the mfi.exe file and press the Left mouse button 2 times. This will start the program.
9. Depending upon your system, you may be prompted to specify a target drive and directory where the program's temporary files will be stored. (Windows creates temporary files during its operation.)

10. Locate the mfitmp directory.

--To select the drive, move the cursor to the down arrow button icon located at the bottom of the on-screen prompt. Press the Left mouse button. Move the cursor to Drive C. Press the Left mouse button.

-- To select the directory, locate mfitmp. Move the cursor to mfitmp. Press the Left mouse button 2 times. Press the OK button.

11. The program will load and will automatically start. This may take a minute or two.

Using the Program at a Later Date

1. If you play the program at a later date, follow steps 1-9. When the program starts, you may receive a prompt that states

this file already exists. Replace existing file? Move the cursor to the Yes button (located on the on-screen prompt). Press the Left mouse button.

2. The program will start.

Program Operation

1. The program will run automatically.

2. As stated, the pages will automatically change. But when you see an on-screen white button, please activate it to continue. (Move the cursor to the button. Press the Left mouse button.)

3. When the program ends, you can replay it. If you want to quit, the program will automatically end after a short time period.

Personal Financial Management Program Instructions

Introduction

If you know how to use the Web, you know how to use this program.

You'll see a series of buttons on the screen and highlighted words (text).

The buttons and text are linked to other information. For example, the **EXIT** button ends the program. If you select this, you'll return to Windows.

When you're using the program, you can view the Help File by activating the Help link. Locate the on-screen Help button. Move the cursor to it, and press the Left mouse button.

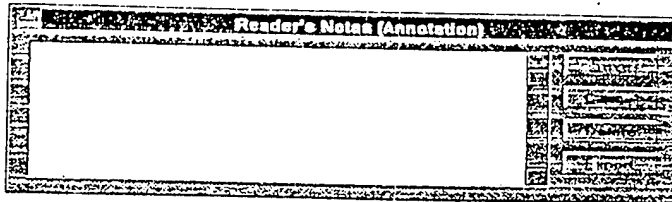
To scroll the screen of information, press the **Pg Up** and **Pg Dn** buttons on your keyboard. (You can also use the Up or Down arrows on the bar on the right of the screen.)

PLEASE NOTE: If the text ever appears jumbled, press either the **Pg Up** or **Pg Dn** buttons.

Links

To activate a link, move the on-screen cursor to a button or highlighted word. Next, press the Left mouse button. This will activate the link. New information will appear on the screen.

NOTES



When you select the Notes button, this screen appears. You can type in a note or other information you may want to recall at a later date. Move the cursor to the white, blank space, and start typing. When you're finished, press the Save button (move the cursor to it; press the Left mouse button.)

The Note will automatically be attached to this page. When you return to the page and activate the Notes link, the note will reappear.

POP-UP WINDOWS

At times, a small pop-up window will appear. In one case, it may give you an Under Construction prompt (if that module isn't completed). To close this window, press the Right mouse button.

PROGRAM SECTIONS

The program has several active sections that you can view. The key ones are:

Main: The Main section for the program. It lists all the available financial modules. Only the Vehicle button (link) is active in the prototype.

Info: When you activate the Vehicle link, you are brought to the Info page. You can also reach this page by activating the Info link (located on most of the pages as described above). Each financial module would have its own complementary Info page. For the prototype, only the Info page for the Vehicle link is active.

The Info page has a series of selections (buttons):

Vehicle Browser: By following this link, you will retrieve information about vehicle buying.

Vehicle Prices: This page provides vehicle price information. A short descriptive statement for each vehicle is also included. Operational instructions are listed at the end of this section.

Games: Not active in the prototype. In the APV, it will provide vehicle buying hints through a series of games.

Tutorial: For the prototype, the Tutorial is accessed via the second, separate program (as described). In the APV, it would be tied to this link.

Buying Information: Basic vehicle buying information.

Vehicle Prices Operational Instructions

This page provides you with vehicle price/description information. Two of the buttons are for cars less than/greater than \$15,000.

To view this information, move the cursor to the button of your choice. Press the Left mouse button, and the information for the first car (stored in the database) will appear. To view additional cars/information, move the cursor to the PREV or NEXT button. Press the Left mouse button to retrieve the new information. This process can be repeated.

You can also search for a car by activating the Vehicle Name button. Move the cursor to the button, and press the Left mouse button. At the on-screen prompt, type in a car's name and press the OK button (move the cursor to the button, and press the Left mouse button). The information will appear. To experiment with this capability, type in Supra or Accord.

NOTES:

1. Only a limited number of cars are included in the prototype's database
2. The motorcycle and Truck links will be active in the APV.
3. The Internet link will be live in the APV. This will provide users with the latest information.

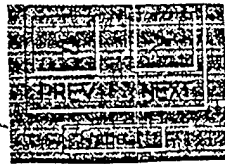
However, for areas where a link isn't available (e.g., at sea), the vehicle database can be easily and quickly updated. The information is stored in a standard database file.

To return to the previous page, press the Right mouse button.

If you've gone through (navigated through) multiple pages, you can continue pressing the Right mouse to navigate back through the previous pages.

NAVIGATIONAL AIDS

Some pages have special navigational aids that can also take you to the next and previous pages.



You'll see these navigational aids at different times. For example, to navigate to the next page, move the cursor to the **NEXT** button. Then, press the Left mouse button to activate the link. To return to the previous page, you have two options. Press the Right mouse button. **OR** move the cursor to the **PREV** button. Then, press the Left mouse button.

So, the Left mouse button activates the links. Move the cursor to a button or word and press it. The new information will appear. You can navigate to the previous page by pressing the Right mouse button or the **PREV** button (if there's one on the screen).

Most pages are equipped with 6 navigational buttons, located on the right side of the screen. They have the following functions.

Help: Takes you to the Help page.

Notes: Takes you to a Notes window. You can write/retrieve electronic notes. This feature is described below.

Info: Takes you to the Info page. This lists the major modules for a topic. For example, if you want to find vehicle prices or use the tutorial, go to the Info screen.

MAIN: Takes you to the program's opening screen. You can select one of the many financial topics. In the prototype, though, only the Vehicle link is active.

HOME: Some modules may have multiple pages of information. For example, if you're on page 8 and want to go back to page 1, select the **HOME** button.

EXIT: Exits the program. If you want to leave a bookmark (when prompted), when you restart the program, it'll return you to the last page you were on before you exited.

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Washington, DC 20503.

1. AGENCY USE ONLY (Leave Blank)		2. REPORT DATE August 1997	3. REPORT TYPE AND DATES COVERED Final April 1996 - January 1997
4. TITLE AND SUBTITLE Scope and Impact of Personal Financial Management Difficulties of Service Members on the Department of the Navy.		5. FUNDING NUMBERS F49620-93-1-0586 AFOSR CFDA #12.800	
6. AUTHOR(S) Raminder K. Luther, E. Thomas Garman, Irene E. Leech, Larry Griffitt, Timothy Gilroy			
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Military Family Institute Marywood University 2300 Adams Avenue Scranton, PA 18509-1598		8. PERFORMING ORGANIZATION REPORT NUMBER Military Family Institute (MFI) Technical Report 97-1	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) AFOSR/NL 110 Duncan Avenue, Suite B115 Bolling AFB, DC 20332-0001		10. SPONSORING/MONITORING AGENCY REPORT NUMBER AFOSR/NL Project Task #7755/00	
11. SUPPLEMENTARY NOTES Contracting officer: Ms. Marilyn J. McKee			
12a. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited.		12b. DISTRIBUTION CODE	
13. ABSTRACT (Maximum 200 words): The Personal Financial Management Program Research Study was completed by the Military Family Institute of Marywood University. The purpose of this study was to conduct a review of existing research findings that define the scope and impact on the United States Navy of poor personal financial management by service members. Objectives included enabling the Navy to determine the fiscal and functional costs of poor personal financial management practices and to develop a better understanding of its impact in order to enhance the quality of life for military families. This report draws from existing military and civilian studies. Data was collected from published reports, military database searches, quality-of-life surveys, and statistics provided by departments within the Navy and service providers. Recommendations for improvements to the current Personal Financial Management Program (PFMP) are included in the report as well as a discussion outlining the benefits of conducting a longitudinal study to ascertain baseline data and to assist the Navy in future planning.			
14. SUBJECT TERMS Retention - Training - Cost Estimations - Readiness Financial Management - Personal Financial Management Programs		15. NUMBER OF PAGES 99 16. PRICE CODE	
17. SECURITY CLASSIFICATION OF REPORT Unclassified	18. SECURITY CLASSIFICATION OF THIS PAGE Unclassified	19. SECURITY CLASSIFICATION OF ABSTRACT Unclassified	20. LIMITATION OF ABSTRACT Unlimited