COLLECTION SECURITY IN NATAL LIBRARIES

by

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DECLARATION

I, Theodoris Erens Serfontein, the undersigned, declare, that the work, Collection security in Natal libraries is my own work and that all sources used have been indicated and acknowledged by means of complete references.

T.E. SERFONTEIN

PREFACE

The writer would like to thank the following people for their assistance with this research project.

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My parents, Brandt and Sophie Serfontein, for their loyal support and encouragement. If it were not for their love and

sacrifice it would not have been possible for me to undertake this research.

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LIST OF ABBREVIATIONS

ABAA	Antiquarian Booksellers' Association of America
BAMBAM	Bookline Alert Missing Books and Manuscripts
DDC	Dewey Decimal Classification
DML	Durban Municipal Library
ESS	Electronic security system(s)
HSRC	Human Sciences Research Council
ISAP	Index to South African Periodicals
ISBN	International Standard Book Number
LISA	Library and information science abstracts
TBVC	Transkei, Bophuthatswana, Venda and Ciskei
UDC	Universal Decimal Classification
UDW	University of Durban-Westville
UND	University of Natal, Durban Campus
UNISA	University of South Africa
UNIZUL	University of Zululand
USA	United States of America

SUMMARY

Collection security in Natal libraries

by

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The purpose of this study was to determine if there was a collection security problem in South African libraries, with specific reference to Natal, to determine the extent of the problem, to find out why these problems exist, and to see if the countermeasures applied by the Natal libraries were effective.

Data collection was done by means of a literature study, three empirical surveys, and a sample stocktaking exercise at the four libraries included in this project, to determine their loss rate.

The results show that theft/loss and mutilation of library materials are problems of considerable magnitude, locally and internationally. (In 1991 it was estimated that in the United Kingdom library materials to the value of ± £100 million were lost). The stocktake completed at three of the four Natal libraries included in this study (The University of Natal, Durban's was incomplete) revealed that the combined, average loss rate was 15.5% (with a monetary value of R1,648,710.00) which was above the accepted norm of 2%-10%. The Durban Municipal Library had the lowest rate (6%) followed by the University of Durban-Westville (11%), and the University of Zululand (23%). The two university libraries, where it was possible to complete the sample stocktake (i.e. the University

of Durban-Westville and the University of Zululand), used the 3M electronic security system and the Durban Municipal Library the Checkpoint system.

The main reasons for theft varied from, not having enough funds, and being selfish, to the book was not available in the bookshop and the user thought s/he would not get caught.

The reasons for mutilation varied from, the user was not aware of the cost of replacing mutilated material, being selfish and to prevent others from getting the same information. It was also found that the photocopy services needed to be upgraded to prevent frustrated users from stealing or mutilating library materials. 64.1% of the 343 respondents who participated in the survey conducted at the four libraries included in this study were inconvenienced by mutilation.

The reasons for theft and mutilation by users in the Natal libraries coincided with those of the international world as found in the literature survey.

Security or countermeasures are not effective and must be improved, i.e. the librarians must change their attitude towards library crimes, facilitate user access, implement a regular stocktaking programme, educate the library users, and publicise acts of theft and mutilation.

OPSOMMING

Sekuriteit van versamelings in Natalse biblioteke

deur

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STUDIELEIER: Prof W M Vermeulen
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Die doel van hierdie studie was om vas te stel of daar in Suid-Afrikaanse biblioteke, veral in Natalse biblioteke, 'n probleem ten opsigte van die sekuriteit van versamelings is, die omvang van die probleem, hoekom so 'n probleem bestaan, en of die teenmaatreëls, wat deur die Natalse biblioteke toegepas word, effektief is.

Data-insameling is gedoen deur middel van 'n literatuurstudie, drie empiriese opnames en 'n monster voorraadopname by al vier die biblioteke, wat in hierdie projek ingesluit is, om die omvang van hulle verliese te bepaal.

Die resultate toon dat diefstal (of verlies) en vernielsug, probleme is van groot omvang, plaaslik en internasionaal (Daar is beraam dat in die Verenigde Koninkryk die verlies van biblioteekmateriaal in 1991 ± £100 miljoen beloop het). Die voorraadopname wat by drie van die vier biblioteke wat in hierdie navorsing voltooi is (die Universiteit van Natal, Durban s'n kon nie voltooi word nie) het getoon dat die gesamentlike, gemiddelde verlies 15.5 % is ('n monetêre waarde van R1,648,710). Dit is bokant die aanvaarde norm van 2%-10%. Durban se Openbare Biblioteek het die laagste persentasie verlies getoon (6%) gevolg deur die Universiteit van Durban-Westville (11%) en die Universiteit van Zoeloeland met 23%. Die twee universiteitsbiblioteke, waar die voorraadopname voltooi kon word, (d.w.s. die Universiteit van Durban-Westville en die

Universiteit van Zoeloeland) gebruik die 3M elektroniese sekuriteitstelsel en die Durbanse Openbare Biblioteek die Checkpoint stelsel.

Die belangrikste redes vir diefstal het gewissel van: nie genoeg fondse nie, selfsugtigheid, tot die boek was nie in die boekwinkels beskikbaar nie en die gebruiker het gedink dat hy/sy nie gevang sou word nie.

Die redes vir mutilasie het gewissel van: die gebruiker was nie bewus van die koste vir die vervanging van vernielde materiaal nie, selfsugtigheid, en wou verhoed dat ander gebruikers dieselfde inligting bekom. Daar is ook gevind dat die fotokopie-dienste verbeter moes word om te verhoed dat gefrustreerde gebruikers biblioteekmateriaal steel of beskadig. 64.1% van die 343 respondente wat aan die opname van hierdie studie deelgeneem het, is deur vernielsug verontrief.

Die redes vir diefstal en mutilasie deur gebruikers in Natalse biblioteke het ooreengestem met dié van die internasionale wêreld soos bepaal in die literatuurstudie.

Daar is bevind dat sekuriteit of teenmaatreëls nie doeltreffend is nie en dat daarop verbeter moet word, byvoorbeeld bibliotekarisse moet hulle houding teenoor biblioteekmisdade verander, toegang tot materiaal vir gebruikers vergemaklik, biblioteekgebruikers opvoed, en dade van diefstal en mutilasie openbaar maak.

CHAPTER 1

INTRODUCTION

"Theft and mutilation of books are reprehensible activities that have prevailed for longer than we care to remember."

Almagro (1985: 49)

1. BACKGROUND

Library security and/or collection security is a problem that has existed since the inception of libraries. The earliest instances of this problem date as far back as the ancient Egyptian and Greek civilizations. Almagro relates a number of instances. In 539 B.C. the Persian conquerors removed papyri scrolls from the library of Ramses II of Egypt. Later, ca. 41 B.C., the Romans plundered the Pergamon Library in Greece when "Antony gave its contents to Cleopatra as a token of his passion". During the Middle Ages the use of chains to ensure collection security became popular and the phrase "Ligatum cum catena" became synonymous with libraries and books. Pope Nicholas V (1447-1455) issued a papal bull excommunicating everyone who had not returned books belonging to the church (Almagro 1985 : 49).

The problem of collection security did not disappear with the Middle Ages. It still exists today and is in fact an international problem of considerable magnitude. This is clearly illustrated when one consults the indices "Library and information science abstracts" (hereafter LISA) and "Library literature". Various aspects of library security are covered in the literature of Africa, the two Americas, Australasia, China, Europe, Great Britain, India, Japan and the USSR. At this stage most of the research on library security seems to emanate from the United States and Great Britain.

The problem of library security also exists in South Africa.

- In 1988 theft of Africana material from the State Archives in Cape Town received wide coverage in the press (Raath, 1990: 22, 23).

- Discussions with librarians from other university libraries, i.e. University of Natal (Durban) and Potchefstroom University for CHE, revealed that they all had collection security problems.

- In April 1992 during a discussion with Dr. P. Minnaar, University Librarian of the University of Zululand, it was revealed that the UNISA Library, Durban branch, had caught a person trying to steal a book. They intended to prosecute.

- The university library of the University of Zululand, also appears to have a security problem. The many missing and mutilated volumes of library material, as well as magnetic tattle tapes found lying in the library in the mornings confirm this perception.

1.1. MOTIVATION FOR THE STUDY AND PROBLEM STATEMENT

1.1.1. Lost and mutilated library materials

Requests to search for books which should be on the shelves, but are not, are received regularly at the library of the University of Zululand. A further cause for concern is the many articles referred to by lecturers and thus in high demand by students, that are simply torn, or cut out of journals and reference materials.

From December 1988 to January 1991 (a period of 24 months)

102 magnetic tattle tapes were found lying in the 900 section (Dewey classification) of the library's collection. 33 of these were found in cubicles. In the Law collection on the same floor, 29 tattle tapes were found in the same period. This meant a total of at least 131 volumes which were mutilated or stolen in sections totalling about one tenth of the library's collection. To the researcher this indicated a serious problem that justified further investigation.

1.1.2. Literature searches

Recent literature searches in "LISA" and "Library literature" show that library security, or collection security, is regarded as an ever increasing problem. The writings of Shaughnessy (1984: 1), Gandert (1982: 9), Bahr (1981: 1), and Lincoln & Lincoln (1987: 1-17) confirm this viewpoint. All the above-mentioned sources indicate that collection security has become a dilemma for libraries all over the world. Because collection security is a problem of such magnitude it is important to investigate the situation also in South Africa.

1.1.3. Collection security in Natal libraries

Although the problem of book theft/loss and mutilation does not receive much attention in library literature in South Africa the indications are, as stated above, that the problem is also present locally. The mere fact that most of the larger libraries in Natal have had electronic security systems installed, strengthens the assumption that collection security is also a problem in Natal libraries.

1.1.4. Research in South Africa

To my knowledge no major research has been conducted or published on this issue in South Africa. This conclusion is

based on literature searches in the following indices and data bases:

- HSRC (Institute for research development)
- Index to South African Periodicals (hereafter ISAP)
- Library Literature
- LISA
- SABINET
- UNISA bibliographical services

1.1.5. Rationalization

South African librarians are frequently deliberating about rationalization in order to make optimum use of available funds. It is therefore important to ascertain whether significant losses of library materials occur, and if so, what the financial implications are.

Due to the weak exchange rate of the Rand against foreign currencies the cost of library materials is high. During a telephone conversation with Veronica Listig of Mast Bookshop in Durban (March 1995), the following average prices for academic books were pinpointed.

- Books from South Africa ± R180.00
- Books from United Kingdom ± R220.00
- Books from United States ± R230.00

This meant an average book price of ± R210.00. If the 131 missing volumes mentioned above were to be replaced, the loss would be 131 x R210 = R27,510.00. In 1994 the University of Zululand Library accessioned 12,535 volumes. Bahr (1981: 2-3) mentions an average loss rate of library material between 2% and 15%. If an assumed loss rate of 2% was taken for the above-mentioned accessioned volumes, the loss would be 251

volumes (2% of 12,535 = 251) or 251 x R210 = R52,710.00. The loss is even greater if related costs such as the cost of processing, re-ordering and searching, is also taken into account. The question arises whether the library establishment in South Africa realises what the cost of book theft/loss and mutilation actually amounts to.

1.2. HYPOTHESIS

Although major libraries in Natal are aware that books are being stolen and mutilated (university libraries in Natal and the Durban Municipal Library all have electronic security systems), they do not realize the extent of the problem and are therefore not facing up to the situation.

1.3. AIMS

The aims of the study are:

1.3.1. To determine whether there is a collection security problem in major South African libraries, especially university libraries.

1.3.2. To establish the extent of the problem.

1.3.3. To establish what countermeasures are being applied at present at libraries in Natal and how effective they are.

1.3.4. To find out why this problem exists.

1.3.5. To suggest solutions to improve the current situation.

1.4. DELIMITATION OF THE STUDY

For geographical and financial reasons the study will be confined to three university libraries in Natal, viz. University of Durban-Westville, University of Natal (Durban campus), University of Zululand, and one municipal library, viz., the Central Lending Library of the Durban Municipal library.

These institutions are considered sufficiently varied in character to allow for meaningful conclusions in the South African context.

- The University of Zululand represents a slightly isolated and relatively young university in a rural setting (Durban, the nearest city with university libraries is ± 165 km away, and the nearest town, Empangeni, is ± 20 km away) with a majority of black students.

- The University of Natal (Durban) represents the older and more traditional type of university in South Africa with a traditionally white oriented student body.

- The University of Durban-Westville is also in an urban setting, but relatively recently established with a student body traditionally representing Indian students.

- The Durban Municipal Library, although not a university library, caters for the public of Durban, i.e. for users from all walks of life, and with regard to size the Central Lending Library can be compared to the libraries of the above universities.

- All four of the above mentioned libraries use the same computerised library system, viz. the URICA system.

- The three university libraries use magnetic tattle tape electronic security systems, and the Durban Municipal Library a radio frequency electronic security system. It would be useful to compare the two systems with regard to reliability, and performance.

1.5. METHODOLOGY

1.5.1. Literature study

A comprehensive literature study will be conducted on collection security pertaining to book theft/loss, mutilation and security systems. The literature study will include stocktaking methods geared to measure book theft/loss and mutilation.

1.5.2. Electronic security systems for libraries in Southern Africa

(1) To establish what electronic security systems for libraries are available in Southern Africa a survey will be conducted. A questionnaire will be used to survey all the university libraries in Southern Africa known to the researcher, as well as public libraries from the main urban areas, national libraries, and some of the larger special libraries such as Human Sciences Research Council and Council for Scientific and Industrial Research.

(2) Following the above survey, interviews will be conducted with representatives from the main suppliers of electronic security systems. A questionnaire will be used as an interview schedule and will be sent in advance so that the respondents can be prepared for the questions in the interview.

(3) Two questionnaires will be prepared to serve as interview

schedules with the librarians of the four libraries selected for this study, to establish what countermeasures they applied against book loss and mutilation.

1.5.3. Stocktaking

A preliminary literature study showed that there are different methods of stocktaking, i.e. from a full inventory to inventories of selected subject areas, including manual as well as computerised systems. To establish which method will be most suitable and practical for this study, interviews will be conducted with the respective university librarians using an interview schedule. The feedback from these interviews will be used to determine the most suitable stocktaking procedure for the investigation.

A sample stocktaking will be conducted at the libraries concerned. The sampling method will depend on the ability of the computerised library systems of the libraries to produce shelflists of their stock.

1.5.4. Investigation of delinquent behaviour

One of the aims of this study is to establish the reasons why users steal and mutilate library material. To achieve this, a questionnaire will be prepared to be used for a survey at the four libraries included in this study.

The population studied will be confined to the users of each library. Due to the numbers involved sampling will be required. A sampling method which is feasible, i.e. will not need expensive manpower and which will receive the support of the four librarians concerned will be used.

A random (probability) sample is always preferred. However, after weighing factors such as the timing of the survey (i.e.

peak time of use by patrons), time available to receive respondents' replies, lay-out of the libraries, approachability of the users, and after discussions with the librarians, it was decided that an accidental (non-probabilty) sampling method will be used.

At the three university libraries the collections are housed on different levels of the buildings with each level housing certain sections of the Dewey Classification System. The users are normally stationary in the areas where the subjects of their interests are located. The researcher will start at the bottom level and distribute a questionnaire to every tenth user on each floor. After collecting the completed questionnaires, the researcher will move on to the next level. This cycle will be repeated until all the questionnaires are distributed.

At the Durban Municipal Library the books are housed on one level only, and the users are not stationary as in the case of the three university libraries. They tend to come in, do what they need to, and leave. In this case the researcher will distribute a questionnaire to every tenth user as they enter the library.

Library staff members will be excluded from the study because including them would require a separate investigation, and the literature seems to indicate that staff are a minor source of loss (Burrows & Cooper, 1992: 17-18).

1.6. DEFINITION OF TERMS

1.6.1. Collection security

For the purpose of this research, collection security will mean the security of libraries' contents such as books, journals, and audiovisual materials.

1.6.2. Library materials

For the purpose of this study this term will include all library materials such as books, journals, and all audiovisual materials.

1.6.3. Library security

In the context of this study library security will include all aspects of library security, i.e. the security of the library's collection, safety of staff and patrons, patron behaviour, building safety, disasters such as fire, flooding, and pest control.

1.6.4. Mutilation

For the purpose of this study the researcher would prefer a definition which includes torn and missing pages as well as defacement such as underlining with pen and pencil, marginal notes, ink marks or other marks or folds. Watstein's definition (1983: 12) is acceptable as it includes all these aspects, viz.: "Mutilation (of library material) occurs when an item has parts removed from it or is altered so as to make it imperfect".

1.6.5. Natal

Since April 1994 the Natal province is known as Kwazulu Natal. The research project was registered before that date.

1.6.6. Southern Africa

This includes South Africa with all its provinces, Homelands, and TBVC states prior to the new dispensation of 1994 as well as the neighbouring states of Botswana, Lesotho, Namibia and Swaziland.

1.6.7. Theft of library material

"A theft may be defined as carrying out of a library a book (library material) without prior permission of the librarian" (Prasad: 1968; 16).

1.6.8. University of Natal (UND)

UND has two campuses, i.e. one in Durban and one in Pietermaritzburg. For the purpose of this study, unless otherwise mentioned, the Durban campus will be referred to as University of Natal or UND.

1.6.9. Durban Municipal Library (DML)

DML has several branches, i.e. the Don Africana library, Reference library, Music library, Children's library, Central lending library and various other suburban branches. For the purpose of this study DML will mean Central lending library.

1.6.10. University of Durban-Westville (UDW)

The University of Durban-Westville will be referred to as UDW.

1.6.11. University of Zululand (UNIZUL)

The University of Zululand will be referred to as UNIZUL.

1.7. RESEARCH PROGRAMME

Chapter 1 contains the introduction to the study outlining the motivation for the study, the hypothesis, the aims, and the methodology.

An overview of library and collection security problems

described in the literature will be provided in Chapter 2. The magnitude of the collection security problem, different aspects of theft and mutilation, countermeasures, and reasons for library theft and mutilation will be discussed.

In Chapter 3 the researcher will look at library security systems applied at Natal libraries. This will include electronic and non-electronic systems as well as the reasons for acquiring electronic security systems. A survey will also be conducted to establish what electronic security systems are used by other libraries in Southern Africa.

In Chapter 4 a sample stocktake will be conducted at each of the four libraries selected for this study. The purpose of the stocktake will be to determine the magnitude of book losses to see if there is a collection security problem.

Chapter 5 will examine the reasons of library users for stealing and mutilating library materials. Aspects which will receive attention are:

- perceptions of the magnitude of the theft and mutilation problem
- users' perceptions of the security services
- reasons for stealing and mutilating library material
- and the photocopy services provided.

Chapter 6 will focus on conclusions and recommendations. The most important findings of the literature surveyed and the empirical surveys conducted will be summarised. As a result of these findings certain conclusions will be reached on whether there is a collection security problem, and if the librarians selected for this survey are facing up to the problems of collection security in their libraries. Recommendations and some suggestions for further research will also be made as a result of these findings.

CHAPTER 2

2. OVERVIEW OF LIBRARY/COLLECTION SECURITY PROBLEMS

2.1. INTRODUCTION

Before 1960 literature on library security was relatively limited but since the 1960's reports on collection security were published more frequently (cf. Bahr, 1981: 1; Brand, 1984: v; Shaughnessy, 1984: 1). Since the 1960's and especially 1970's there was in fact a marked increase in literature regarding the security of library collections. Shaughnessy's summary of articles on library security indexed in "Library literature", 1959-1979 reflects this trend (1984: 1). From 1950-1959, 27 articles were published; from 1960-1969, 131 articles and from 1970-1979, 336 articles.

Before the 1960's literature dealing with topics on the protection of the library and its resources was primarily concerned with fire and water disasters in libraries (Morris, 1986: v). Although still a major threat, modern technology has made such advances with regard to the detection and extinction of fire and the restoration of wet books that other aspects are now receiving more attention. Morris mentions thieves, problem patrons and environmental aspects of book storage. However, technological innovations or, as Morris puts it "... the science of protection of libraries from adversities ..." (1986: v) have made big strides in helping librarians to prevent disasters.

2.2. THE COLLECTION SECURITY PROBLEM

The contents list of the bibliography by Sable (1984) clearly indicates the scope of the library or collection security problem. The topics in this list vary from earthquakes, fire, insurance, mutilation, law and legal aspects, theft and

loss, to electronic detection and security systems. "LISA" and "Library literature" include, inter alia, aspects such as acidification, climate, and natural disasters.

The available literature seems to indicate that, with regard to library security, one should distinguish between two major, but related aspects, which are both in one way or another, related to the preservation of library material, and the maintaining of professional services to library users in as user friendly an environment as possible. These are:

- hazards and natural disasters
- crime related aspects

2.2.1. Hazards and natural disasters

Hazards and natural disasters include aspects such as acidification, climate, dust, earthquakes, fire, floods, fungi (such as mildew and mould), humidity, pesticides, pests and vermin, pollution and riots. These aspects are treated extensively in the literature. In South Africa alone three related symposia were held during 1987 and 1988, and the proceedings subsequently published. (South African Library, 1987; Organisation for the preservation of documentary material, 1989; Du Plooy, 1988).

2.2.2. Crime related aspects

Elliott (1984: xii) makes the following significant statement: "People who do not use libraries tend to think of them as safe, quiet sanctuaries. People who do use libraries know better. Chances are good that they have witnessed some incident involving drunk, disorderly, or disturbed persons in the library. And library staff know best of all just how unquiet and unsafe libraries can be".

Shuman (1984: xiv) elaborates on this theme: "People yell vulgarities and threats at them. Some jump and wave their arms, concluding an invisible orchestra. Others talk to themselves. We get people who are infested with vermin, who smell so bad that it makes us sick to our stomach, and who chase our legitimate patrons out of the room. One night a man at one of the machines had a gun ... One man threatened to strangle me, I never did find out why."

2.2.2.1. Types of crime

The above two quotes illustrate that library security is a complex problem. Indeed most of the crimes one can think of have also been committed in libraries, for example, arson (EVERETT community library ..., 1988: 24-25; Lincoln & Lincoln, 1987: 28); assault (Lincoln & Lincoln, 1987: 40-41); burglary (Lincoln, 1984a: 27-78); indecent exposure (Shuman, 1984: 76-79); fraud (Lincoln & Lincoln, 1987: 35); forgery (Huntsberry, 1989: 69-74); murder (Lincoln, 1984a: 61); rape (Mast, 1983: 31); theft (Lincoln, 1984a: 76; Hanff, 1984b: 284-287; Bircher, 1990: 219-221); vandalism (Sager, 1981: 345-349; Sleep, 1982: 39-42; Lincoln, 1989: 37-61); and violence (VIOLENCE in the work place, 1991: 426).

Lincoln & Lincoln (1987: 27-28) compiled a list of 24 types of crime that have been committed in libraries in Great Britain. In listing these crimes he says "... we were not as concerned with actual legal categories as we were with behavioural categories that described the type of offence". Different kinds of vandalism is described, for example, intentional damage to books, equipment, the building, etc. In most legal systems these crimes would be categorised under one type of crime (i.e. criminal damage or malicious and reckless conduct). These 24 categories are divided into four general categories of theft, vandalism, problem patron behaviour and assault. The 24 categories mentioned are:

	Book theft
	Reference theft
	A V theft
Theft}	Equipment theft
	Fraudulent bill
	Counterfeit money
	Personal theft
	Other theft
	Forced entry
	Book damage
	Vandalism outside
	Vandalism inside
Vandalism}	Equipment damage
	Damage staff car
	Damage patron car
	Arson
	Drug use
	Drug sales
Problem patron}	Harassed patron
behaviour}	Harassed staff
	Obscene calls
	Indecent exposure
Assault}	Assault on patrons
	Assault on staff

For the purpose of this study the researcher will concentrate on theft or loss, and mutilation of library materials. In the researcher's opinion mutilation of library material can be regarded as book damage which falls under vandalism in the Lincolns' list.

2.3. THEFT

2.3.1. Problems

One of the problems of theft in university and other libraries is that librarians seem apprehensive to report it. Gandert (1982: 66) says, "It is, of course, easier and less embarrassing to report a book as missing rather than as stolen". Bahr (1989: 77) sounds pleased when he says, "at last libraries are grabbing headlines on a regular basis; both journalists and their readers find library theft accounts fascinating".

Brawner & Nelson (1984: 41) say about theft, "... libraries have long operated under the 'honor system' and have only recently begun to realize that all too frequently, they have the 'honor' while others have the 'system'". They also point to the fact that libraries do not report thefts and other crimes to avoid publicity, and because they fear that the news would attract more crime. This is also confirmed in an article which appeared in APLA bulletin (CRIME prevention and security, 1984: 4) and one by Hanff (1984a: 289). Jackson (1990: 359) also makes this point when she says, "Many librarians are very unwilling to admit that their users or their colleagues may be criminals. Certainly it goes against the traditional view of the librarians as the purveyors of information to any individual requesting it. ... The American experience is different. There librarians readily admit their loss rates, survey their security often and discuss their problems openly".

Non-reporting is a problem because it helps rather than discourages theft as is emphasised by Witten (Quoted in Flagg, 1983: 648) when he mentions "that if all libraries had a policy of immediate, full disclosure of thefts the market for stolen books would be virtually eliminated".

2.3.2. Estimates

Another aspect which aggravates the theft problem is that the true situation regarding missing books is only estimated. Jackson (1991a: 380) illustrates this point when she writes, "We still do not know enough about the extent of theft in libraries. Statistics are very often estimated losses; some members of the public do not even see 'keeping their books' as a crime". Jackson (1991a: 382) estimates the loss rate at £60 million in the United Kingdom if an absolute minimum loss rate of 2% was given at a replacement cost of £20 per volume, with a national stock of 150 million books. In another report by Jackson (1991b: 394) this is given as £100 million. Lincoln & Lincoln (1987: 97), from a survey done in 1984, show in a table comparative rates of crimes (per 100 libraries) for library theft in the United States, Canada and Great Britain:

United States	1,616
Canada	1,641
Great Britain	3,498

(The American and Canadian figures are based on representative samples of all public libraries, while the figure for Britain is based on a sample of central and district public libraries. The annual number of thefts for the U.S.A. was 16.2 or a rate of 1,616.)

Estimates of books missing from the shelves are not sufficient, because there are different reasons for missing books, such as, mis-shelving of books, catalogue or computer error, books on librarians' desks, books in storage areas, or books designated for binding but not indicated as such in the records.

2.3.3. Types of theft

Lincoln & Lincoln (1987: 27-28), in their 24 categories of

library crime list 9 different kinds of library theft, viz.

- Book theft
- Reference theft
- A V theft
- Equipment theft
- Fraudulent bill
- Counterfeit money
- Personal theft
- Other theft
- Forced entry

These categories illustrate the various types of theft that can take place in libraries. For the purpose of this study book theft, reference theft, and A V theft will be combined under theft of library materials. As this study is limited to the research of security of library collections (library materials), theft of other materials will not be discussed.

2.3.4. Theft of library material

Four different methods of stealing library materials will be described viz.,

- Direct theft
- Overdues
- "Lost items"
- Professional theft

2.3.4.1. Direct theft

Direct theft refers to the various means of stealing library material directly from the library, i.e. the removal of library material out of the library without authorisation by the librarian, thereby depriving fellow library users of their right to information. Ways of doing this include: befriending a

person at the circulation desk (i.e. student workers, especially after hours when there is perhaps inadequate supervision by professional staff), intimidation, hiding items in one's clothing or amongst books already authorised, or, circumventing or bypassing the electronic and/or manual security systems used by the library concerned.

In 1991 a member of the lecturing staff of the UNIZUL informed the university librarian that students in his class boasted about the ease with which they could remove books from the library in spite of the electronic security system. One of the ways of doing this was by removing the tattle tapes from the books. Another method was to pass the library material around the exit gates, especially when no one was looking, and in so doing bypassing the electronic alarm system. A further method was by illegally using someone else's library number to borrow books on the other person's name without him/her knowing about it. Another method reported to the researcher (and observed by him) to deprive fellow users of their right to use library material is by passing library material through windows which have been left or forced open.

Direct theft is identified as a major problem in libraries by Jackson (1990: 359 & 1991a: 380-382) and Lincoln & Lincoln (1987: 33-37) and is mainly responsible for the loss of library materials. As far back as 1968 Prasad wrote: "Analysis of the results of selected library inventories showed that the losses of books through theft and mysterious disappearance range from 0.6% to 30% of the annual circulation rate" (Prasad, 1968: 16). In the literature there are many references to book theft in libraries. In some cases there are examples of a single person being caught with literally car loads of library material in his possession (Myers and Krittenbrinck, 1987: 25-26).

Intimidation is used by users at the UNIZUL Library. Student workers admitted they were scared to confront library users

misusing their privileges, for fear of reprisals. On occasion even the security guards were scared of confronting library users trying to remove material illegally. One of the deputy librarians at the UND revealed in a conversation that she suspected intimidation at one of their branch libraries (Thompson, 1993).

2.3.4.2. Overdue books

Harrod (1971: 472) describes Overdue as a "colloquialism for an overdue book and also for an overdue notice". As can be seen the term overdue(s) implies books as well as notices. The researcher will use the term overdue(s) as meaning overdue library material and not overdue notices. Harrod describes an Overdue book as "a library book which has been retained longer for home reading than the period allowed". As non-book materials like video tapes, audio tapes, records, compact discs, etc. are also loaned the words Overdue material and library material are preferred. Nelms & Taylor (1989: 13) and Mitchell (1983: 2030) both use overdue material or library material.

Overdues are a familiar problem in most libraries (including academic libraries). Many different approaches have been tried by libraries to help retrieve overdue materials. These measures include the so-called "get-tough" policies of issuing warrants of arrest (Nelms & Taylor, 1989: 13) to retrieving overdues through collection agencies (Mitchell, 1983: 2030) and others such as "Forgiveness week" (Milner, 1984: 627). The overdue problem is regarded in a serious light and has on occasion led to court action resulting in imprisonment of the guilty party (Kniffel, 1989: 1035).

Burgin & Hansel (1984: 1-17) conducted surveys on overdues in 1981 and 1983. They found that most of the counter-measures did not improve the return rate of overdues. It was also found that

most of the materials lost because they were overdue, were eventually recovered after a period of one year. After the second survey in 1983, Burgin & Hansel (1984: 16) commented "... it appears once again that many of the activities in which we engage in an attempt to reduce overdues simply do not work". The only activities found to be workable were:

- restricting patrons with overdue materials
- automating circulation
- using a collection agency
- sending the first notice within 15 days of the due date

In fact their advice is " don't engage in activities that do not have a significant impact on the overdues rates" (Burgin & Hansel, 1984: 15). These findings were tested in 1984 by the Sheppard Memorial Library in Greenville, North Carolina (Nelms & Taylor, 1989: 17), and affirmed.

2.3.4.3. "Lost" items

"Lost" items refer to the method whereby a user borrows library material and for some reason decides to deprive other users from using it, but in an "honest" way. The user reports the item as lost and offers to pay for the loss. Normally these materials are difficult to come by (i.e. out of print, or not available in the local book shops) and the user knows or hopes that the library will not charge him/her the replacement value. Conversations with the senior librarian at the Umlazi Branch of the University of Zululand have revealed that some of the students have tried to do this. The librarian caught on to this method and was able to thwart some of these attempts by insisting that the user searched again for the "lost" material(s). This resulted in the return of the library material concerned to the library.

To a certain extent this method can also be regarded as a case of overdue material since the material is not returned on or before the due date. A colleague at the UNIZUL Library told of her experience in a previous library where a user on a few occasions offered to pay for the loss of prints which she had borrowed from the library. The user knew that the library would only charge her the original cost. However, when it happened a third time, the user was asked to pay current replacement as well as processing costs. The "lost" print was soon found and returned to the library.

Library materials are sometimes hidden in different places in the library. Examples of these acts are the deliberate mis-shelving of books or, hiding them behind cabinets or map stands, in cubicles and on top of shelves where they are out of sight. The researcher even found books hidden in the ceiling of one of the seminar rooms of the library. Strictly speaking this type of behaviour is not theft but these acts cause the books to be lost, which in turn causes fellow users to be deprived of information. Personal observation showed that it was normally the material in high demand that tended to go missing. Theft has the element of depriving somebody of a right (ownership), in the case of a library it deprives a person of his/her right of access to information. In the light of this viewpoint the above acts are also regarded as theft.

2.3.4.4. Professional thieves

The literature survey has revealed that there are basically two types of thieves of library material. There is the thief who basically steals to acquire the material because of the information needed, or because he simply wants to own the material (Myers & Krittenbrinck, 1987: 25-26). On the other hand, we have the professional thief who steals for monetary gain and often specializes in stealing rare materials. Famous

cases are those of Shinn (Bahr, 1989: 78), Blumberg/McGue (Huntsberry, 1989: 69-74) and Mount (Galvin, 1990: 442-450). Their modus operandus is usually that of forged identities and/or gaining the trust of the unsuspecting library staff. Once they have worked themselves into a position of trust they would gain access to valuable library material and walk out with it.

In the case of McGue it seems he did not even bother about gaining trust. On several occasions he was found in areas restricted to the public. In the last instance, twice in the same library. When arrested he was found in possession of burglary tools, which explained how he got access to restricted areas. In response to the light sentence that Blumberg received (6 months probationary period and a $1000.00 fine) Huntsberry (1989: 74) remarks: "Blumberg has little incentive to change careers. The monetary reward is unlimited and the cost of his last mistake was but a minor inconvenience". Huntsberry is, in these words, highlighting a common problem experienced by libraries, i.e. punishment meted out by the courts does not serve as a deterrent because it is too light. Mount received a stiffer sentence of eight years in prison (Galvin, 1990: 443).

A further problem of theft (more so by professional thieves) is that no matter how vigilant library security is, a way will be found to beat the system. Galvin (1990: 450) says "... the archival security is good, needs to be better, but is never going to be perfect". The other factor to be considered is that libraries are not always aware that theft has taken place. A number of libraries became aware of the fact only after the culprit was caught in another part of the country for another theft. This is illustrated in the above-mentioned cases, where libraries only became aware of their missing material after the police had informed them of the recovery of their library material from the guilty parties.

2.4. MUTILATION

2.4.1. Definition

The Concise Oxford Dictionary (1964: 797) describes mutilation as "render (book, etc.) imperfect by excision etc." Msuya (1991: 109) describes it as "the destructive action of cutting and removing pages of a book, a journal or any other document". Lincoln (1989: 37-61) seems to prefer the term vandalism and gives various viewpoints and descriptions without offering a definition. This is because there are various types of vandalism which makes it difficult to give a neat, all embracing definition. The various types described are:

- Acquisitive vandalism: the common feature here is to acquire money or property with the accompanying destruction that occurs being a by-product of this goal.
- Tactical vandalism: this is where destruction is a considered technique designed to help reach a goal beyond the acquisition of money or property, i.e. vandalism designed to draw attention to an ideological cause.
- Vindictive vandalism: the use of property destruction as a form of revenge.
- Malicious vandalism: this form of destruction is most vicious and includes pouring acid on car roofs, slashing of car tyres, throwing stones at drivers of cars and clogging toilets and sinks in library buildings resulting in flooding.

Lincoln (1989: 50-60) mentions six different types of vandalism in libraries, viz.:

Intentional book damage
Vandalism outside the building
Vandalism inside the building
Vandalism to cars
Vandalism to equipment
Arson

It is not always clear what is meant by the word mutilation. This is confirmed by Birney & Williams (1985: 43) when they say, "One obvious deficiency in the research had been a lack of agreement on what is meant by 'mutilation'". Birney & Williams then give various definitions by different researchers and even mentions two researchers namely Martin and Souter who offer no definitions. Most librarians seem content to say, "We know it when we see it" (Birney & Williams, 1985: 44; Lincoln, 1989: 37).

For the purpose of this study the researcher would prefer a definition which includes torn and missing pages as well as defacement such as underlining with pen or pencil, marginal notes, ink marks or other marks or folds. Watstein's definition (1983: 12) is preferred as it includes all these aspects, viz.:

> "Mutilation occurs when an item has parts removed from it or is altered so as to make it imperfect".

2.4.2. Magnitude

Alongside theft of library material stands mutilation of library material. Librarians have known as long as there have been libraries that certain patrons can be counted on to abuse the privileges and the collections. Already in 1935 Munn (1935: 591) talks of the problem of mutilation as "the most aggravating of all". Munn also sees the threat of mutilation (due to the schools' project method of teaching) as "... one which threatens the very existence of our book collections" (Munn, 1935: 591).

In modern times cases of mutilation have been reported from Scotland to England, and from the U.S.A. to the USSR. Lincoln (1989: 49) says, " A national study of 18 different types of crime in public libraries in the U.S.A. found that vandalism was widespread". Lincoln (1989: 50) provides the following figures which were obtained through national studies in Canada, Great Britain, and the USA. The figures were supplied as incidents per 100 libraries and represent annual rates of incidents of mutilation as found in the above mentioned national studies. In the U.S.A. there were 526 incidents per 100 libraries, in Canada 655 and in Great Britain 996 per 100 libraries. It must be stressed that these figures are of reported incidents and not of pages torn out or number of volumes mutilated. Lincoln (1984a: 36) agrees with Munn when he says, "One of the most troublesome and costly problems faced by many libraries is mutilation of materials".

Msuya (1991: 110) mentions an average of 12.5 mutilated pages per journal at the Dar es Salaam University Library. He says, "Mutilation has caused a major loss in this library not only in terms of costs incurred in the purchase of similar articles to replace the mutilated ones, but also in terms of the inconvenience which faithful readers suffer".

2.4.3. Methods to determine extent of mutilation

Although mutilation is of universal concern, not much literature, especially research literature on mutilation of library material is available. Birney & Williams (1985: 41-42) say, "Most of the literature that does exist is purely descriptive". They also observed that from 1972-1983 the literature only produced ten articles and two papers that "met some of the requirements of research, such as formulation and testing of hypothesis and predictions based on test results".

In South Africa one only hears of incidents of mutilation. Conversations with colleagues from various university libraries (Rand Afrikaans University, Potchefstroom University, University of Natal, Durban, University of Durban-Westville, University of Zululand) confirmed that mutilation was a cause for concern in their libraries. However, none was able to say how big the problem was and, to the researcher's knowledge, no in-depth research on mutilation per sé has been done in South Africa.

On the other hand, there is as yet no easy and fast way to determine the extent of mutilation of library materials. The only way is to physically check the material concerned, either by random sample or by type of material such as reference material, or journals. Although it would be ideal, it is impossible to check every item for mutilation. Another method is to keep a record of library material that has been reported as mutilated by library patrons. In other words the library is dependent on the user for its information and just keeps a record of the incidents.

Collver (1990: 347-365) describes another unique method. It started off as a "Rip-off File" in the Library of the State University of New York, Stony Brook. The file contains replacement copies of journal articles that have been cut or torn from the bound volumes in the stacks. Collver says this service proved to be useful and earned the gratitude of many library patrons.

The interesting part of this service is that as a by-product the Rip-off Project accumulated unique data on journal mutilation and subsequent demand for the missing articles. Over a 13-year period (1975-1987) the rip-off service showed that 9.2% of the current journals of the library were mutilated. It was also possible to predict that by 1989 ten percent of the journals would be mutilated. This service also showed which

journals were most likely to be mutilated, and enabled the library to formulate a policy to purchase microform backfiles of those titles.

2.5. COUNTERMEASURES

It has been established that the phenomenon of theft and mutilation of library collections receives world wide attention. The question now is what countermeasures are taken in the library world to fight this problem.

Basically there are three types of security measures that are implemented by libraries, viz. non-electronic systems (such as security guards, identification tags, patrolling the library), electronic systems, and a combination of these two.

2.5.1. Non-electronic security systems

Libraries have been combating the theft and mutilation problem even before the implementation of electronic security systems in libraries. One only has to think of the chained books of the Middle Ages and the closed access policy in libraries where stacks are out of bounds for the users. Many employed exit guards, turnstiles and special patrols. Other methods were used such as buying duplicates, placing moratoriums on fines, and taking legal action. These methods are still used today and sometimes in conjunction with electronic systems. (The UNIZUL Library employs security personnel as well as an electronic security system). Unfortunately very few studies have been conducted to determine their effectiveness. Libraries usually assume that checking of bags, clothing, etc. is an effective psychological deterrent (Bahr, 1981: 97).

Manual systems also include instituting measures such as guards, patrols, legal measures, restricted access, circulation

systems, registration, duplicates and amnesty, building design, and security consciousness (Bahr, 1981: 97-105).

2.5.1.1. Guards

Surveys conducted in the U.S.A. in the 1960's and 1970's indicated that 30%-50% of academic libraries used guarded turnstiles. Guards at turnstiles are also called door checkers and according to Smith (1985: 7) they serve the same purpose as an electronic system "which is to monitor people who exit from the library to make sure that library materials in their possession are checked out". On the other hand, security guards are seen as "another set of eyes and ears for management when management is not around" (Schindler, 1978: 2).

2.5.1.2. Door Checkers

In his study Smith (1985: 7-13) came to the conclusion that although door checkers were effective to some extent their effectiveness could not be compared with that of electronic security systems. The study was performed at Westminster College Library and compared the effectiveness of student checkers and adult checkers.

Student checkers did provide a psychological deterrent, but the improvement effected was minimal because the job was boring and it was difficult to maintain motivation. The other reason is that the student checkers' efforts are compromised in that library material is concealed in the clothing of the library users. Student checkers reduced the loss rate by a marginal 15% (Smith, 1985: 10). If one compared this to the minimum range of effectiveness of 60% allowed for electronic systems, the effectiveness of student checkers still has a long way to go.

Adult checkers appear to be better at preventing theft of library materials than student checkers. This is because they bring more maturity, greater commitment and motivation to the job, and follow established rules more closely than students, and therefore need less supervision. Adult checkers are also more reliable than student checkers in adhering to scheduled hours. The effectiveness of adult checkers in reducing losses is 45% (Smith, 1985: 11). Although better than the students' 15% it is still considerably less than the minimum figure of 60% for electronic security systems.

Smith also points out that the low success rate of 15%-45% in reducing the loss rate does not justify the cost of employing door checkers. He illustrates that the salaries of student and adult checkers would surpass the cost of installing an electronic system within one to four years.

2.5.1.3. Security guards

The use of security guards differs from turnstile guards or door checkers, in that security guards are not necessarily stationary at one point but can perform various other duties. Properly utilised their role is that of prevention and detection as opposed to reaction, which is normally a police function. A properly functioning security guard should prevent incidents from happening either directly or by his presence.

A typical function of a security guard is that of patrolling. This is done to protect staff and patrons against delinquent patrons. Throughout his work "River Bend revisited" Shuman (1984) refers to the use of security personnel for this function. Security guards do not only deal with the unauthorised removal of library materials. Their concern should go further, viz. the safety of staff, patrons, equipment, furniture and

collections as well as compliance of patrons with library regulations (Bahr, 1981: 99). The security service should complement rather than be a substitute for book theft detection systems. Schindler (1978: 3) identifies fifteen functions which security guards can be expected to provide:

1. Access control
2. Control of removal of items
3. Fire watch
4. Crowd control
5. Information and assistance
6. Inspection of safety fire fighting equipment
7. Control of fire
8. Observation of employee evacuation activity
9. Patrol of premises
10. Parking lot control
11. Lock up
12. Setting and testing alarm systems
13. Building evacuation during emergencies such as bomb threats
14. Observation
15. Reports covering observations in all phases of operations.

2.5.1.4. Legal measures

Unlike the situation in South Africa legal measures have been taken in countries like the United States to assist libraries in dealing with the theft and mutilation problem. Most of the state laws provide a legal definition of library theft and a legal basis for dealing with thieves. These laws recognise that taking, mutilating or failing to return library property is an act of theft (Bahr, 1981: 99-101). These laws have been applied to states such as Virginia, Mississippi, Iowa and Wisconsin and have led to successful arrests and convictions (including gaol sentences and fines) for thefts and overdues. These laws

also identify theft as wilful concealment and exempt staff from criminal liability if they detain a patron or make an arrest.

Measures taken by university authorities vary from reporting students to the Dean, warning delinquent outside borrowers that they will be prosecuted if they return to the campus, giving offenders a two-year disciplinary probation or having them dismissed and their academic records destroyed; or simply handing offenders over to police for prosecution. At UNIZUL the librarian can only report offenders to the University's Disciplinary Committee for action (Minnaar, 1992).

2.5.1.5. Internal measures

Internal measures include functions such as instituting restricted areas like rare book collections, or having a closed access policy. A further measure is taking material known to be in high demand and having a high theft risk, from the open shelves and keeping them locked in glass cupboards (Bahr, 1981: 102). This measure is also practised by the researcher in the UNIZUL Library.

Registration is also a widely used practice with varying degrees of enforcement. Some university libraries require all patrons to have IDs and restrict use of the library only to those with library cards. This forces students to validate their IDs. Through personal experience the researcher knows that patrons at the UNIZUL Library are not allowed to take material out on loan without producing their library ID cards. Visitors are issued with visitor's cards which they are expected to wear.

2.5.2. Electronic systems

There have been various electronic systems on the international market like Checkpoint systems; Gaylord; Knogo,

LPS International: Stop-loss; Sensormatic; Sentronic (Book-Mark); and 3M:1850, 1350, 1250 (Bahr, 1981: 31). Through the 1970's some of these systems were phased out until in the 1980's only three vendors were actively marketing systems to libraries: Checkpoint, Knogo and 3M (Bahr, 1984: 30). Checkpoint and 3M are American products while Knogo is a European system. In a further study Bahr (1991: 19) reports that Gaylord was considering re-entering the market.

The electronic security systems use one of two technologies: radio frequency or electromagnetism. With all systems, procedures and modes of operation are similar. A target (also known as detector, marker, sensor, strip, tag or tattle-tape) is placed in the library material to be protected. System hardware (two screens, columns or posts) detects the presence of the targets placed in the library material as they are carried between the screens, unless the targets have been desensitized, or the item is passed around screens before a patron exits. The latter is called a bypass mode of operation and the former a full-circulating mode of operation. All systems operate on either of the modes and vendors supply targets that can be either turned on or off, or targets that cannot. Permanently sensitized targets are used in bypass systems, saving desensitizing costs. Bypass systems function well in public libraries but, in academic libraries, where patrons frequent the library more than once a day, the full-circulating mode is more practical.

Targets vary in shape and size. The very first targets measured 6" x 9". However demands for smaller targets and advances in technology have produced smaller and differently shaped targets. Radio frequency targets contain tiny circuits and are rectangular or square in shape. Targets are placed where the cards or tabs would be useful. Electromagnetic targets are

thin rectangular strips and are placed in spines or between pages of a book and sensitized or desensitized by units designed for this purpose.

2.5.3. Effectiveness of security systems

The effectiveness of security guards is difficult to assess, because as mentioned earlier, not much research has been conducted in this field. The effectiveness of guards is questioned by Bahr (1981: 97-99), Smith (1985: 7-13) and Schindler (1978: 1). Where security guards are used instead of electronic security systems both Bahr (1981: 98) and Smith (1985: 12) maintain that the guard system can be effective, but that the reduction in loss rate is not sufficient to justify the cost. Smith mentions figures of 15% and 45%. In other words, the guard system used on its own, is not cost effective. Guards must be used to enhance rather than to replace electronic systems. Electronic systems cannot apprehend or reason with offenders; they can merely give out warning signals, or lock gates at the exit to prevent offenders from leaving the library.

The effectiveness of electronic security systems seems to be far superior to manual systems where humans are employed to do the work. In most cases the reduction in loss rate has increased by 60% to 95% (Hanson, 1989: 63; Bahr, 1981: 5; Camp, 1985b: 123). However, it is also important to bear in mind that electronic systems can only be as effective as the human factor will allow them to be, i.e. if staff allow the system to be by-passed its effectiveness will be jeopardised.

Electronic systems have their side-effects. False alarms occur in all the systems mentioned (Bahr, 1981: 87-96), but these do not seem to be of great significance. Care must also be taken when issuing video and audio tapes not to put them through the sensitizer/desensitizer because they may be damaged.

2.6. REASONS WHY LIBRARY USERS COMMIT LIBRARY CRIMES

To find reasons for theft and mutilation (or vandalism) can be a study on its own as there are various aspects which must be considered such as psychological factors, social factors, environmental factors and situational factors. Although this aspect is important it is beyond the scope of this study to conduct an in-depth investigation along the same lines as those of Lincoln (1984a) and Lincoln & Lincoln (1987). It is sufficient to mention the reasons as found in the literature, more specifically as pertaining to academic and municipal libraries.

2.6.1. Theft

The mere fact that book theft does exist is in itself a mystery. This is illustrated by Griffith (1978: 226) when he asks: "Why anyone would run the risk of being caught stealing something they could probably borrow [or photocopy] will never clearly be understood by a psychiatrist, let alone a librarian".

Zimmerman (1961: 3437) has the following to say: "The problem of book thefts and the mutilation of books is a chronic library affliction. It is common to all types of libraries, principally school and college, and is of major proportions in those with open stacks".

Zimmerman (1961: 3437) divides book thieves into two categories, viz. those who forget to charge books out and those "who knowingly leave without charging their books". Zimmerman mentions reasons for book theft as:

- A desire to add to personal collections, to build up small holdings in the users' fields of interest, and

- the "desire to use material at their own convenience, and

- to escape the need for renewal and the payment of fines".

- Lack of multiple copies is another reason. Souter (1976: 102) argues that a "reader will be less unwilling to return a book which is wanted by another reader when he knows that he will definitely be able to gain possession of it again in a short time". However, Roberts (1968: 269) disagrees as a survey revealed that copies with a high rate of duplicates actually had the highest losses. A pilot stocktaking conducted by the researcher in 1992 at the UNIZUL Library supported this. One work of which ten copies should be in the library only had two copies left that could be accounted for.

- Selfishness is also a reason that comes to the fore. By selfishness is meant that the patron deprives his fellow colleagues of information so that he can outperform them. In other words, they do not consider the needs of others. Unfortunately, this type of student is normally the better one (Weiss, 1981: 345; Souter, 1976: 96-100; Hendrick & Murfin, 1974: 408; Murfin & Hendrick, 1975: 12; Antwi, 1989: 367).

- Academic pressure results in competition for library resources, especially where library material is in high demand. Lecturers exacerbate these pressures by recommending to a large group of students a book which is either on loan to the lecturer or not even held by the library (Mast, 1983: 43).

2.6.2. Mutilation

Various researches have been conducted on mutilation such as

those by Gouke & Murfin (1980: 1795-1799), Murfin & Hendrick (1975: 8-12), Souter (1976: 7-13), and Weiss (1981: 8-12). Motives for mutilation vary from revenge to shortcomings in the library service.

- As in the case of book theft selfishness also applies to mutilation of library material, especially with journals and for the same reasons as mentioned for theft (Murfin & Hendrick, 1975: 9; Souter, 1976: 107; Mast, 1983: 40).

- Academic pressure is also a motivation for mutilation (Mast, 1983: 43).

- Library hours have been blamed. Patrons have torn pages out of library material because the library was closing and they had not yet finished with the sources they were working with. They were not given enough warning that the library was closing (Murfin & Hendrick, 1975: 9).

- Anger and frustration have led to students mutilating library material. The students would be upset by some incident with university authorities and then vent their anger against the library (Hendrick & Murfin, 1974: 409).

- Inadequate photocopying facilities seem a contributing factor. Offenders who wanted to copy items but found that the photocopying facilities were inadequate, and who did not want to wait, simply tore out what they wanted (Murfin & Hendrick, 1975: 12).

- Fear of being caught was absent. It appeared to offenders that libraries did not do anything to catch culprits and therefore they had no fear of the

consequences of their actions. It was easy to cut out pages without being caught (Murfin & Hendrick, 1975: 12; Lincoln, 1984a: 37).

- Finding items with ripped out pages seems to be another reason for mutilating library material: the item is already damaged, and if I don't take what I want now, someone else will.

- Access to library material is also a factor which leads to mutilation of library material. When it comes to closing time and the material has to be left in the library the temptation to mutilate becomes very strong.

2.6.3. Methods used to ascertain reasons for library crimes

Literature on methods used to ascertain reasons for theft and mutilation of library materials is not as plentiful as on theft and mutilation. Lincoln (1984a: 35-37) gives an overview of findings of other research projects like those of Souter, Weiss, Murfin & Hendrick, Munn,and Gouke & Murfin. The methods used were questionnaires and/or interviews.

Souter (1976: 96-110) visited 6 university libraries where he interviewed the librarians concerned. The interviews were structured around a set of questions between the library member/s considered most knowledgeable in the area of delinquency, and himself. In four of the six cases he was able to record the proceedings on tape. In the interests of confidentiality no speaker was named in the body of the study, and whether male or female, all were referred to in the masculine gender. This study only gave the views of the librarians and did not include those of the students as well.

Weiss (1981: 341-347) used questionnaires to obtain information. These questionnaires were directed at students. An attempt was made to identify the personal characteristics of students who mutilated and/or stole library books. Weiss used faculty members to distribute 100 questionnaires to their undergraduate students. In addition questionnaires were distributed to students in front of the student union building of which 101 were completed and returned. The questionnaire used in this study was designed to divide student library users into two groups: those that admitted to stealing and mutilating books and those who had never done so.

Hendrick & Murfin (1974: 402-411) conducted a similar study in 1973 but limited their research to psychology students at the Kent State University. They also used a questionnaire. The project was explained to the subjects. Oral and written instructions encouraged frank and honest answers. The questionnaire contained several sections. The first pertained to background data such as sex, age, academic year, academic experience, library familiarity and use and attitudes toward mutilation. Two sections contained explicit rating items with responses obtained on a five-point numerical scale with scale end-points labelled as either "completely true" and "completely false", or "completely agree" and "completely disagree".

The last section presented several library options for prevention and asked subjects to check one of three alternatives with respect to tearing out articles. One item asked subjects to sign their name and record their telephone if they were willing to be interviewed about the library. Three students indicated their willingness and were interviewed. Anonymity was guaranteed. Detailed questions were asked on:

- events preceding ripping out
- circumstances

- attitudes toward ripped out volumes
- photocopy machines
- penalties and getting caught
- replacement problems and concern for others

In 1988 another study was conducted by Pedersen (1990: 120-128) at the Emporia State University which had an enrolment of 5,134 students. It was also decided that best results would be achieved with an anonymous questionnaire (similar to those of Murfin & Hendrick and Weiss). The sample in this study differed from the previous studies mentioned above. An attempt was made to choose a sample that was more representative of the entire student population. Courses were randomly selected from each subject division making up the entire university structure. The questionnaires were administered to the students during class time, with the permission of the instructor. This method helped to ensure a high survey return. Sixteen classes were visited during a two-week period and the questionnaire was administered to 235 students. Data analysis was based on the results from those respondents. The sample represented ± 5% of the student population of the university; 122 (54%) were female and 104 male (46%).

In 1991 another study was done at the Kent State University by a psychologist and two librarians (Lilly, Schloman & Hu, 1991: 43-69). A questionnaire was sent to a random sample of students to determine the extent of their experience in mutilating periodicals and their attitudes toward mutilation and other aspects of the library. The questionnaire consisted of 38 questions and a space for written comments. Two questions pertaining to their major subjects and academic performance required a written response. All the other questions were Likert-type scales so that respondents could simply mark the appropriate response alternative. Questionnaires were mailed to a random sample of 1000 out of a total student population of

20,000. A total of 232 (23.2%) questionnaires were returned.

2.6.4. Recommended solutions

The above and other researches revealed problem areas that needed to be acted on to prevent or minimise the collection security problem.

Edwards (1986: 453-456) makes several suggestions which include the following:

Improve photocopying services. Photocopiers should be conveniently located, inexpensive, reliable, easy to use and adequate in number. This should help decrease the likelihood of theft and mutilation.

Facilitate patron access. Patrons would be less likely to steal or mutilate items if they can access the materials without difficulty. A student working against deadline pressures may be tempted to purloin materials for his/her own use especially if the materials are not available elsewhere and library hours are limited or curricular needs are ignored.

Provide needed services. Regular reference service, open stacks, adequate guides and many other services that facilitate the use of the library help patrons develop a positive attitude towards the library. A library responsive to the needs of patrons may help create an atmosphere in which theft or mutilation may be less likely to result from a frustrated patron.

Educate patrons. Users who are aware of the costs and impact of theft and mutilation may be less likely to become offenders. Exhibits of mutilated materials can also produce positive results, and advising of academic penalties will also discourage the tempted ones.

Security manual. Library staff need to know what to do if a person is illegally removing materials from the library. A security manual should indicate the procedures for handling emergencies or unusual situations and staff should have a copy of the manual in their work area.

Loss deterrents such as a consistent circulation policy, adequate staff training, clear property markings on materials and limited key dispersal should be implemented.

The above suggestions are also included in recommendations by other librarians, with a few additions. Sleep (1982: 42) also suggests sufficient patrolling of the stacks. Antwi (1989: 368-372) adds a few more like vetting of library staff, amnesty week, faculty involvement, sanctions against offenders, supervision of staff and users to ensure that security measures are implemented.

Msuya (1991: 115) also suggests that students' book allowance should be channelled through the bookshop. The students would then be compelled to buy textbooks helping to reduce the dependency on the library for the textbooks.

Lincoln (1984a: 151) covers most of these suggestions and adds inspection of parcels, cases, etc. and the prompt repair of mutilated materials to prevent the stimulation of similar behaviour by other readers. Pedersen (1990: 128) further recommends that staff watch out for students having trouble using the library and its materials and who are looking for help, reducing the frustration level that may lead to acts of vandalism and theft or other crimes.

Weiss (1981: 346) mentions a very important measure and that is to break the cycle of book theft and abuse. Because the library does not apprehend the offender a cycle of repeated

theft is started, and the offender becomes unafraid of the consequences of his/her actions. If students believed that they would be caught, and library-rule breaking was taken seriously, the problem would decrease significantly. Weiss also says, "If the problem of library-book abuse is to be taken more seriously and even eliminated, the question of why student offenders are not caught has to be addressed seriously".

2.6.5. Legal implications

A problem that is highlighted in the literature is that laws do not specifically apply to library crime. In the U.S.A. some of the states have recognised this problem and introduced laws to help fight library crime. These laws "recognise that taking, mutilating or failing to return library material is stealing" (Bahr, 1981: 99-100). Some even go further by "defining theft as wilful concealment and permitting staff to legally detain patrons when there is probable cause" (Bahr, 1981: 100). Other measures mentioned by Bahr (1981: 99) is the employment of truant officers or delinquent book collectors whose duty it is to reclaim overdue books. Baltimore County Public Library and the Lawson McGhee Library (Knoxville, TN) have appointed such officers in 1974 and 1976 respectively.

2.7. SUMMARY

In this chapter the researcher concentrated on the problem of collection security and especially on the crime related aspects thereof. Collection security goes much further than theft and mutilation. Hazards and natural disasters are also very important factors of collection security. Even crime related aspects of collection security cover such a wide area that it would be impossible to cover all the aspects in a study of this nature. In other words, although this study concentrates on book theft/loss and mutilation, it does not cover the entire problem in-depth.

In discussing theft of library materials one of the conclusions reached was that librarians tended to be too subtle or timid in their approach to recognise theft and mutilation of library materials for what they are, and therefore failed to solve the problem. Librarians must take positive action by surveying and discussing their problems openly.

Although book loss is a problem, it is not always possible to determine the true situation, as the figures supplied are quite often estimated. It seems as though more and more libraries are using the practice of stocktaking or inventories to determine their losses. Most of the larger university libraries have in the past moved away from the practice of stocktaking as they regarded this practice as too costly and time consuming to justify. With the computerisation of libraries and various inventory techniques that can be utilised it is now possible for librarians to become more aware of the true situation regarding their library stock/collection.

Library theft in its various forms (direct and indirect theft and overdues) was discussed and to a certain extent solutions offered. Library material is subject to theft and mutilation. Librarians must accept this as a fact and then take action to combat this evil. Certain preventative security measures were highlighted such as electronic security systems (ESS), the use of guards, or a combination of both. The success rate of security systems was discussed and the conclusion that ESS's were most efficient and cost effective was reached, with the proviso that an ESS can only be as good as the human factor allows it to be. It is also noted that no security system is completely effective.

An important factor in collection security is to determine why patrons commit the crimes of theft and mutilation. This is done by means of questionnaires and interviews or both. In the

literature overview various reasons as to why these crimes were committed were identified. The most effective instrument to obtain this information is the questionnaire, coupled with a reliable sampling method. If interviews are possible one has an even more reliable method to get better answers.

Solutions as described in the literature were discussed along with the legal implications. In South Africa there are no specific library laws that deal with library crime. Library crimes are dealt with under common law. In the United States some states have recognised the problem of library crime and introduced laws that specifically apply to library crime. It would perhaps be a wise step if other countries followed suit, as such laws would help to minimise library crime, and would facilitate the viewpoint of Weiss (1981: 346) that the cycle of book theft and abuse must be stopped, and that the question why offenders are not caught and dealt with, should be addressed.

This chapter has covered a wide range of aspects pertaining to collection security with the emphasis on book loss/theft and mutilation. Most of the information refers to the international scene with a few references to the situation in South Africa. It will be useful to determine what the situation in South Africa is, and to what extent security measures are implemented, and what the legal implications are. Furthermore, it is also important to establish what security measures and systems are used in South Africa, and from the researcher's point of view, particularly in the major libraries in Natal.

CHAPTER 3

3. SECURITY SYSTEMS APPLIED AT NATAL LIBRARIES

3.1. INTRODUCTION

In the previous chapter various electronic security systems such as 3M, Knogo, Checkpoint and others used in libraries in other countries were mentioned, and it is now time to look at the systems used in South Africa. It appears that due to economic circumstances (i.e. international sanctions against the Republic of South Africa), only a few systems were available in South Africa and as sanctions became more stringent, only one system seems to have withstood the pressures. This meant that the major share of the market was captured by the company marketing that system.

3.2. LIBRARY ELECTRONIC SYSTEMS AVAILABLE IN SOUTHERN AFRICA

3.2.1. Method of obtaining information

Information regarding library electronic systems in South Africa is very limited. No literature on the subject was available. The researcher knew through personal knowledge that most of the major university libraries and a number of the larger public libraries in South Africa used ESS's. The logical step to obtain the necessary information was to do a survey by means of a questionnaire which was distributed in Southern Africa.

3.2.2. Delimitation of libraries receiving questionnaires

To determine what ESS's were used in Southern African libraries, a questionnaire was sent to 59 libraries in Southern Africa (See Appendix A). The 59 libraries were broadly categorised as follows:

- University libraries (26)
- Technikon libraries (11)
- Public libraries (12)
- Provincial library services (4)
- National libraries (3)
- Special libraries (3)

As this study is mainly concerned with university libraries, all university libraries in South Africa, the TBVC states as well as those of Botswana, Lesotho, Namibia and Swaziland were included in the survey. University libraries were therefore the largest group of libraries included in the survey.

To broaden the base of libraries to be included in the survey, questionnaires were also sent to the following libraries:

- A public library in towns or cities which also have a university library;

- Public libraries in the larger urban areas which do not have a university library (i.e. East London and Kimberley).

- All Technikon libraries, known to the researcher, situated in a town or city with a university library were included in the survey.

The World of learning 1992 was used as a guide to select Technikon and public libraries.

- The four provincial library services, three national libraries (State Library, the South African Library, South African Library for the Blind) and three special libraries (Human Sciences Research Council, Council for Scientific and Industrial Research and the Agricultural Central Library). These libraries were also included because of their national importance and esteem.

In the researcher's opinion these libraries were representative of the larger libraries in Southern Africa. 50 libraries responded to this questionnaire giving a response rate of 84.75%.

3.2.3. Results of the questionnaire (Appendix A)

34 of the 50 libraries (68%) indicated that they used electronic security systems. Of these 34 libraries, 31 indicated that they used the 3M system, 6 Checkpoint, 2 Saverlabel, and one library (HSRC) indicated that it used an ESS, but did not know which system. 4 libraries used more than one ESS, of which 2 libraries used 3M and Checkpoint, and 2 used Checkpoint and Saverlabel.

Only one other ESS was mentioned, i.e. Gaylord used at the University of South Africa (UNISA). However, an enquiry at UNISA revealed that they used the 3M system only.

3.2.3.1. 3M Electronic systems

Of the 31 libraries which used 3M, 13 did not know which model they used, 3 stated they used various models, 6 used model 1325, and 5 model 1355, 2 model 1360, one model 1365, one model 1370 and 2 model 1850-2. Two university libraries indicated they used more than one model and specified which models they used.

- The University of Witwatersrand used 3 models, i.e. 1325, 1850-2 and 1370.

- The University of Zululand used 2 models, i.e. 1805-2 and 1350.

3.2.3.2. Checkpoint systems

Checkpoint was used by 8 libraries. Two libraries specified

which models they used. One used Mark 2 and the other Mark 3. The other 6 libraries did not indicate which models they used.

3.2.3.3. Saverlabel

None of the two libraries which indicated they used Saverlabel mentioned which models were used. Both libraries indicated that the Saverlabel product was not the only ESS used, but was used along with other ESS's. Both libraries used Saverlabel with Checkpoint. During an interview, the librarian at DML said their organisation had great difficulty obtaining tags for their Checkpoint systems (Checkpoint withdrew their business from South Africa, due to sanctions applied by the United States government), resulting in the purchase of a second ESS, i.e. Saverlabel.

3.2.3.4. Combination of above systems

Four libraries used more than one electronic security system. Two libraries used both 3M as well as Checkpoint and another two used Checkpoint and Saverlabel.

3.2.3.5. Comparisons

As far as the researcher could ascertain there were 8 different ESS's available on the international market, i.e.: Checkpoint, Gaylord, Knogo, LPS International: Stop-Loss, Saverlabel, Sensormatic, Sentronic (Book Mark), and 3M. This survey shows that only 3 ESS's for libraries are used in Southern Africa. These 3 are:

- Checkpoint
- Saverlabel
- 3M

Of the 50 libraries which responded, 34 libraries indicated they used an ESS, which is 68% of the respondents. The results show that of the 34 libraries, 91.2% (31 out of 34) used the 3M

system, 23.53% (8 out of 34) used Checkpoint and 5.88% (2 out of 34) used Saverlabel. Judging by these figures 3M stands out as the most used ESS in South African libraries.

It is worth noting that almost half of the libraries, (43% of the libraries using 3M and 75% of libraries using Checkpoint) which indicated that they used an ESS, did not know which model they used. Considering the cost of an ESS (approximately R40,000 in 1992) it is rather surprising that librarians should be so ignorant, or indifferent, with regard to their systems.

3.3. LIBRARY ELECTRONIC SECURITY SYSTEMS IN SOUTHERN AFRICA

3.3.1. Main suppliers in South Africa

From the above survey it was established that the three main systems available to libraries in Southern Africa were Checkpoint, Saverlabel and 3M. Let us now take a closer look at these three systems.

Through literature searches (Bahr, 1981 and 1984) and interviews with the suppliers the information below was obtained. A questionnaire intended as an interview document was sent to companies distributing the above-mentioned ESS's (see Appendices B, C, and D). Checkpoint and Saverlabel responded positively by granting interviews and readily supplying information without any restrictions.

The interviews were wide ranging, and the results are offered as an overview, i.e. not all questions are reflected individually in the analysis.

Unfortunately 3M South Africa did not wish to grant an interview and was very restrictive with regard to the information they supplied. (They completed the questionnaire but restricted the information which could be made available in a

publication). Therefore most of the information regarding 3M was obtained from the literature or supplied by libraries using 3M systems.

3.3.2. 3M Tattle Tape Library Security Systems (Appendix D)

3.3.2.1. How does it work? (Q.6)

Either bypass or full-circulating systems are available. They operate on an electro-magnetic principle. A low-frequency electrical signal is triggered when a thin metallic strip (target or tattle tape) is stimulated by an alternating electro-magnetic field. If a patron attempts to pass through the sensing unit with materials that have not been checked out properly, an alarm sounds and the gate locks.

The 3M Model 1365 consists of two detection panels that are mounted with a ramp-style baseplate and an accompanying floor mat. It is also available without a baseplate and lattices mounted directly to the floor. The alarm, photocell-activated patron counter and the status indicator are located in the base of the detection panels. The system can be supplied with or without locking gates.

3.3.2.2. What will it protect? (Q.9)

3M detection systems protect books, unbound periodicals, records, record jackets, cassettes, paintings, films, pictures, prints, certain artefacts, manuscripts, and so on. With the older models magnetic tapes must be passed around the sensing units, as they cannot be put in the sensitizers/desensitizers. 3M is now marketing a desensitizer and sensitizer especially made for magnetic media like video and audio tapes, eliminating the need for passing them around the sensing units. With the latest models (1365) magnetic tapes are also protected without fear of damage by sensitizers/desensitizers.

3.3.2.3. How is it installed? (Q.10)

3M provides a technician to properly install and adjust the system. Since systems are mounted on aluminium plates, no floor drilling is necessary to anchor sensing screens. If wooden or glass panels are required to channel traffic, these must be installed by the library.

3.3.2.4. What are its special features? (Q.11)

Once concealed in library material, the magnetic strips or tattle-tapes are difficult to find and remove, making it difficult to circumvent the 3M system. There are two types of strips: one with adhesive on one side for marking compact discs, magnetic media and the spines of hard cover books, and one with adhesive on both sides for marking between pages of paperbacks and periodicals.

The 3M system has special sensitizing and desensitizing units which will not damage the magnetic properties of audio or video tapes. This system also has no effects on hearing aids, pacemakers or other sensitive electronic devices.

3M is so confident of its product that (in the U.S.A.) they offer a three point guarantee:

- If a library is not satisfied - for any reason - with the 3M system within a year of installation, 3M will remove it and refund the purchase price.
- If a library doesn't reduce its losses by at least 50% in the first year 3M will pay the difference - at $25.00 per book.
- The 3M Tattle-Tape Detection strips are guaranteed to be free from defects for the lifetime of the library material. (3M Tattle-Tape, 1991: 2)

3.3.3. Checkpoint (Appendix E)

3.3.3.1. How does it work? (Q.6)

Checkpoint targets are always active, which is different from other systems. Therefore library staff must either pass books around the sensing screens from behind the circulating desk or deactivate books by placing a specially treated date due card, called a Checkcard, over the Checklabel. If dated due cards are not used, a small tab, called a Checktab, can be used to cover a Checklabel or Teeny Beeper.

The tags and Checkcards shield the Checklabel and do not deactivate it. In all other full-circulating systems, targets are deactivated. This means Checkpoint requires fewer equipment components than other systems.

Checkpoint has two basic equipment components: sensing screens and an operator's control unit. The system also has gates or turnstiles and an additional portable remote release is available. This release unlocks gates and turnstiles from as far as 75 feet away from the actual system. However, this entails purchasing an additional control unit.

System software includes Checklabels and Teeny Beepers. If they are part of a bypass system they can be placed virtually anywhere in a book or they can be printed and used as bookplates. In a full-circulating system the labels must be affixed under or inside a bookpocket, or on the back cover, i.e. in a place where they can be shielded by a Checkcard.

3.3.3.2. What will it protect? (Q.9)

Checklabels can be applied to books, unbound periodicals, phonodiscs, phonodisc jackets, cassettes, cartridges, paintings,

prints and reels of film if the hub is large enough. When affixed to unbound periodicals the Checklabel can be placed on the front cover with a printed noncirculating sign, or it can be affixed to a subscription form inside the journal. If the latter technique is used the Checklabel can be saved and re-used. Checklabels cannot be used on cassette cases; Teeny Beepers can.

3.3.3.3. How is it installed? (Q.10)

Installation entails anchoring the sensing screens, gates or turnstiles, and guide rails. The customer must supply the necessary power outlets near the location of the sensing screens. Checkpoint employees supervise the process, make the final electrical connection and place the system in operation.

3.3.3.4. What are the system's special features? (Q. 11)

Checkpoint is tailor-made for circulating systems using date due cards and/or book pockets.

Emitting no radiation, the Checkpoint system has no effect on pacemaker wearers, nor does radiation from CRTs (cathode-ray tubes) interfere with its operation.

User reports indicate that Checkpoint has the fewest false alarms and the least downtime (Bahr, 1981: 40).

Checkpoint uses one target for both bypass and full circulating systems, therefore conversion from one to the other is easy.

3.3.4. SAVERLABEL (Appendix F)

3.3.4.1. How does it work? (Q.6)

The targets (tags) of Saverlabel are magnetically-encoded measuring a mere 75mm X 10mm. The tags are paper thin and affixed to library material with a high-performance adhesive. Saverlabel offers a choice of either a pass-around (by-pass) or, deactivation (full circulating) system and works on an electro-magnetic system of a low frequency (550 H). Saverlabel also makes use of scanner screens, triggering off an alarm when issuing of library material has not been authorised.

3.3.4.2. What will it protect? (Q.9)

Saverlabel is designed to protect individual Checkout aisles or single doors and, will protect books, microfiche, computers, telephones, computer discs, audio and video tapes and journals.

3.3.4.3. How is it installed? (Q.10)

Saverlabel will provide a technician to properly install and adjust the system. Building alterations like floor drilling will be required. If the environment is unsuitable (i.e. power cables, and other electronic systems that can cause disturbances), it might require the library to do the necessary alterations.

The library must supply a dedicated power line as well as a power plug within three metres of the system.

At the time of installation a training programme in the use of the system is given to library staff members. An operating manual will be supplied on request.

3.3.4.4. What are its special features? (Q.11)

i) The system works well with the tagging of metal-based products (i.e. one can stick the labels/tags onto metal products such as computers and protect them).

ii) The tags themselves are a feature. Because of the size and thinness of the tags, they can be placed anywhere in the book and detection will almost be impossible. The tags are safe to use with audio and visual tapes.

iii) The system has no effect on hearing aids and heart pacemakers.

iv) The hardware takes up less space than other systems - only 900 mm is needed between the screens.

v) Saverlabel can cover a very large area - up to 1,8m.

vi) The price of the Saverlabel system is worth mentioning. The biggest model costs ±R25,000 as opposed to ±R68,000 for other systems.

Figure 3.1

Comparison of the three ESS's

FEATURES	3M	CHECKPOINT	SAVERLABEL
HOW DOES IT WORK?	Electro-magnetic. Low frequency. Metal Tattletape Favours full circulating but bypass also available.	Radio frequency. Low frequency. Checklabels. Favours bypass but full circulating also available.	Electro-magnetic. Low Frequency. Metal Tattletape Favours bypass but full circulating also available.
COST	For full system = R64,000	For full system = R32,000	Models vary from R11,500-R25,800
INSTALLATION	Technicians install system. Library must provide a dedicated electrical line.	Technicians install system.	Technicians install systems. Library must supply a dedicated power line.
WHAT WILL IT PROTECT?	Books, unbound periodicals, record jackets, records, cassettes, paintings, films, prints, pictures.	Books, unbound periodicals, phonodiscs, phonodisc jackets, cassettes, cartridges, paintings, prints, films.	Checkout aisles or single doors, books, unbound periodicals, microfiche, computers, telephones, computer discs, audio - and video tapes.
GUARANTEE	Information restricted.	3 months full guarantee. Includes parts, labour, travel expenses, but not malicious damage.	3 months full guarantee, including all parts and labour free of charge is provided.
TARGETS	Uses magnetic metal strips with adhesive either on one side or both sides. Strips are activated or deactivated by a sensitizer/desen- sitizer. They are difficult to detect.	Uses Checklabels which are always active. They are concealed by a book plate or book pocket. Deactivated by placing a Checkcard over the Checklabel.	Uses segmented, magnetically encoded metal strips with adhesive on either one or both sides. Strips are difficult to detect. They are activated or deactivated by a sensitizer/desens itizer.

3.4. ELECTRONIC SECURITY SYSTEMS (ESS) USED BY NATAL UNIVERSITY LIBRARIES AND DURBAN MUNICIPAL LIBRARY

The researcher established beforehand through personal visits, personal knowledge, and conversations with the chief librarians of the four libraries, selected for this study, that the three university libraries used the 3M Tattle Tape Library Security System. The Durban Municipal Library uses Checkpoint and Saverlabel.

3.5. REASONS FOR USING ELECTRONIC SECURITY SYSTEMS

The researcher now wished to establish why these four institutions had decided to use electronic security systems, and why they had chosen a particular system. The researcher first asked why the libraries concerned changed to electronic security systems to establish their motives for this step. The libraries were then asked why they purchased a particular ESS. In other words, did the systems which they purchased fulfil their requirements?

A copy of the interview schedule was first sent to the librarian concerned, followed by the interview.

3.5.1. Results of the interview on why the libraries switched to electronic security systems (Appendix B)

The first interview (Appendix B) tried to establish the reasons why the libraries chose to opt for electronic security systems.

3.5.2. Security systems applied before the installation of an ESS (Q.1)

All four libraries answered "no". However, three of the

libraries qualified their answers.

UNIZUL used a turnstile to control the traffic and a mirror to help detect whether users were hiding material which they could sneak out of the library. These measures do not apply any more.

The UND had security measures in their short loan section only. The area was arranged in such a way that most of the seating area was visible to the librarian, who could then keep an eye on things. Furthermore, all tables with partitions were removed or altered so that there were no more tables with partitions. This was to prevent mutilation of library material by users hiding behind the partitions. All windows were sealed to prevent library material being thrown out of the windows. The sealing of windows was such a success that this idea was carried over into the new library building which has no windows that can open. These measures still apply today.

The UDW only used turnstiles. DML did not have any security measures.

3.5.3. What type of system was used? (Q.2)

This question was an extension of the first question if the answer to the first one was "yes". The libraries had to say what system they were using prior to the installation of an ESS. They were given five options to choose from, i.e.:

- Door checkers (students)
- Door checkers (professional)
- Security guards (library staff)
- Security guards (Professional staff)
- Patrol guards
- Other.

As all four libraries answered "no" to question 1, question 2 became "not applicable".

3.5.4. Questions relating to the security sytems used prior to the installation of an ESS

Questions 3-7 were questions related to question 1 if the answer to question 1 was "yes". These questions probed such matters as:

- which of the old systems was the most effective?
- was a combination of any of the ones mentioned in question 2 used?
- which combination was used?
- was the previous system replaced by an ESS?
- why was the previous system discarded?

As all four libraries answered "no" to question 1, questions 3-7 also became "not applicable" and were not answered.

3.5.5. Is the previous system used in conjunction with the ESS in your library? (Q.8)

All four libraries, including the three university libraries who qualified their answers to question 1, answered "no" to this question. (The three university libraries had some security measures like turnstiles and mirrors, but did not use them when the ESS was installed).

3.5.6. Were other systems, not mentioned in question two considered in lieu of an ESS? (Q.10)

None of the four libraries considered any other systems not mentioned in question 2 in lieu of an ESS. This can be interpreted in two ways. Either they did not know of any other

system or they had already opted for an ESS. The former seems to be more likely, as all four librarians indicated during the course of the interviews that they were not aware of any other system.

3.5.7. Which system mentioned in question 2 was the most cost effective? (Q.11)

None of the systems mentioned in question 2 was used by any of the four libraries so this question was also "not applicable".

3.5.8. Was the cost of the previous system a factor in your decision towards acquiring an ESS? (Q.12-Q.13)

None of the four libraries indicated that the cost of the previous system was a factor in their decision towards acquiring an ESS. This was because they did not have a previous system. In the researcher's opinion the mere fact that the four libraries did not have a system previously, could also have been costly, as all four indicated, during the course of the interviews, that they were aware of book losses in their libraries.

The librarian at UND noted that in their old library sealing the library's windows was an effective security measure.

3.5.9. Comparison of cost effectiveness between the old systems and the ESS (Q.14)

The universities of Zululand, Natal, and Durban-Westville and the Durban Municipal Library did not make use of door checkers, patrols, or security guards. All four libraries also indicated that prior to the implementation of an ESS, they did not have any security systems which covered the whole library, therefore no cost comparisons could be made between their old systems and the new ESS.

However, the university librarian of UND did indicate that the ESS was cost effective because:

- The ESS is based at the entrance of the library, the users know it is there, and this projects the psychological message that the whole library is covered by the system. The visibility makes it more cost effective.

- The librarian at UDW was of the opinion that having an ESS was better than not having a system at all, because the ESS served as a deterrent to would-be offenders.

3.5.10. Was an inventory held to determine the magnitude of missing stock before considering an ESS? (Q.15)

The universities of Natal, and Zululand libraries indicated that no inventories were held to determine whether their stock losses justified the installation of an ESS. The UND Library had never conducted an inventory, except in the short loans section.

The UNIZUL Library held an inventory in 1976 to determine the damage caused by a recent fire. No inventory was held specifically for considering the purchase of an ESS.

Although UDW conducted inventories regularly (according to the deputy librarian, an inventory was held annually at one stage), none was specifically held to judge whether to acquire an ESS.

3.5.11. If no inventory was conducted how was the loss rate determined? (Q.16)

UND used the short loans inventories as an indication of the magnitude of the library's loss rate (2%). They also relied on reports from users of missing material. No indication was given

as to how these reports were monitored.

UNIZUL accepted the 1976 inventory's loss rate of 3% as an indication of their losses.

UDW felt that previous inventories had given results which indicated its losses since 1961. In 1961 the loss rate was 19%, in 1962 34%, 1963 31.3%, in 1965 it was 28.4%, in 1975 19.1%, and in 1985 a loss of 3.3% was measured. According to the deputy librarian this meant that since 1961 up to 1985 UDW had accumulated losses of about 40% of their stock. Therefore UDW had tangible evidence of their book losses before considering an ESS.

DML simply said, "We knew we were losing books but could not quantify it".

3.5.12. What was the loss rate of your library (%)? (Q.17)

Only UDW could provide figures of their loss rate (as indicated above). The other three were either aware of losses or assumed a figure based on a partial inventory or used the figure of an old inventory held years before.

3.5.13. Acceptance of loss rate (Q.18)

UND's loss rate at the short loans was 2% and was accepted as a figure they could live with. However, in the researcher's opinion this did not reflect a true picture of the library's loss rate. Although the short loans represented a cross section of the main collection, it is kept in a reserved area with tighter control than in the rest of the library. Except for overnight loans, the use of books in the short loans is restricted to a specific area and limited loan time (two hours), in other words a closed access policy is implemented.

The main collection, on the other hand, is not restricted and has an open access policy. Therefore, security wise, the two sections could not really be compared.

UNIZUL's 1976 inventory showed a loss rate of 3%. The University librarian at UNIZUL could only presume that the 3% loss rate was not acceptable. (He was not a staff member at that time).

For UDW the 1985 loss rate of 3.3% was accepted as a figure that could be lived with.

Although loss rate at DML was unknown, they knew they were losing books. This situation was not acceptable to them.

3.5.14. How did the loss rate influence your decision towards acquiring an ESS? (Q.19)

UND said that because there was a loss rate and because of the inconvenience to users caused by missing books, it was felt that security should be tightened.

UNIZUL said that because there was a loss rate, as established in the 1976 inventory, it was felt that an ESS had to be installed.

DML said, "Our losses were the main reason for the installation of an ESS".

UDW was also not satisfied with its losses and had read in the literature that the 3M electronic security system could reduce a library's loss rate by 85%. This helped in deciding to acquire an ESS.

3.5.15. What percentage loss would you consider acceptable? 2% 3% 5% 8% 10% 15% higher? (Q. 20)

The preferences of the different libraries were:

DML 2%
UDW 3%
UND 2%
UNIZUL 3-5%

Loss rates which librarians are prepared to live with vary. Bahr (1981: 23-24) mentions figures which imply that loss rates acceptable to librarians fluctuate between 2% and 10%. This means that the four libraries' criteria for an acceptable loss rate fall within the accepted norms.

3.5.16. What criteria were used to establish the necessity for an ESS? (Q.21)

Figure 3.2

Criteria for the necessity of an ESS

CRITERIA	INSTITUTIONS			
	DML	UDW	UND	UNIZUL
1) Cost of old system	–	–	√	–
2) Prevention of book loss	√	√	√	√
3) Loss rate too high	√	√	√	√
4) Avoiding human error	–	–	√	–
5) Better control of traffic flow	√	√	–	–
6) Type of material accommodated by an ESS	√	–	√	–
7) Reliability of system	√	√	√	√
8) Technical backup services	√	√	√	√
9) Other	–	–	√	–

Of the eight criteria mentioned in Figure 3.2, all four libraries considered, "prevention of book loss, loss rate too high, reliability of system, and technical backup services" as important criteria to establish the necessity for an ESS.

However, the other criteria: cost of the old system, avoiding human error (1 library), type of material accommodated, and better control of traffic flow (2 libraries) did not receive much attention. These may be considered important factors, for example, how can one justify an ESS if one does not know if the cost is an improvement on the old situation? The researcher gained the impression that a thorough investigation towards acquiring an ESS was lacking.

3.5.17. Which other Electronic Security Systems were available on the market at the time you purchased your security system? (Q.22)

Due to sanctions against South Africa, except for one system (3M), electronic security systems were not freely available locally. A choice of eight systems known to the author at that time were given as options to indicate their awareness of other systems.

These eight were: Checkpoint, Gaylord, Knogo, International: Stop-Loss, Sensormatic, Sentronic (Book-Mark), 3M, and Saverlabel. Further choices of "other" and "own system" were also given.

UDW and UNIZUL did not know of any other system than 3M, whereas UND was also aware of the Checkpoint system. DML was aware of a total of five ESS's, viz. Checkpoint, Knogo, Sensormatic, 3M and Saverlabel which seemed to indicate that DML was more concerned about acquiring the best system. This view is supported by an open ended response regarding 3M, which DML tested and found unsatisfactory, because books could be removed from the library without being detected.

3.5.18. Was theft a factor in deciding on an ESS? (Q.23-Q.25)

All four libraries reacted positively to this question during the interview which indicates that the libraries were worried about the theft problem, and that an electronic security system was a tool to combat it. However, they all reacted differently when asked in what way theft was a factor in deciding on an ESS.

DML just knew they were losing books and UDW felt that something had to be done about it and that an ESS was a good deterrent to would-be offenders. UND said that missing material was an inconvenience, and that it took too long to replace missing items. The librarian at UNIZUL could not comment as an ESS was acquired before his time. All he did know was that they lost a lot of books through windows which could be forced open.

No attempt was made by any of the four libraries to ascertain why users stole library material.

This creates the impression that although the libraries are aware of the theft problem, they do not seem to know how to cope with it. They seem to put all their faith in the ESS. The libraries do not seem to realise that, although the ESS is a powerful instrument in combating the theft problem, it is just that. It does not address the root causes of library theft.

3.5.19. Was mutilation of library material a factor in deciding on an ESS? (Q.26)

DML and UND both said that mutilation was a factor in deciding on an ESS, whereas UDW and UNIZUL both said it was not a factor.

None of the four libraries attempted to ascertain why users mutilated library materials. Here also it seems as if the libraries' hopes are entirely vested in an ESS to solve mutilation problems.

3.6. REASONS FOR PURCHASING A PARTICULAR ELECTRONIC SECURITY SYSTEM (Appendix C)

The second interview was held in order to discover why a library chose to acquire a particular electronic security system. All the interviews were conducted in 1993. Any changes that occurred after that date will therefore not be reflected in this study.

All three university libraries used various models of the 3M system. DML used two other systems, viz. the Checkpoint and Saverlabel systems. DML has been using Checkpoint for 9 years and Saverlabel for 8 years. All three university libraries have been using their ESS for more than 15 years, i.e., UDW for 18, UND for 20 and UNIZUL for 16 years.

3.6.1. Features of an ESS which could have a bearing on deciding whether to purchase a system

Figure 3.3

Features of an ESS	INSTITUTIONS			
Features	DML	UDW	UND	UNIZUL
1. Were health factors considered	√	–	–	–
2. Damage to library material	√	–	√	√
3. False alarms limited?	√	–	√	√
4. Detectability of targets	–	√	√	√
5. Price: Very important	–	–	–	–
Important		√	√	√
Not important	√			
Undecided	–	–	–	–
6. After sales service good?				
Yes	* √	√	√	√
No	* √	–	–	–
7. Maintenance cost of ESS:				
High	–	–	√	–
Average	–	√	–	√
Affordable	√	–	–	–
8. Running cost of ESS justified?				
Yes	√	√	# ?	√
No	–	–	# –	–
9. Efficiency maintenance service				
Good	–	√	–	√
Satisfactory	–	–	√	–
Poor	√	–	–	–
10 Was ESS the only system				
Yes	–	√	√	√
No	√	–	–	–
11 Were tattle tapes reliable?				
Yes	√	√	√	√
12 Compatible with circulation?				
Yes	–	√	√	√
No	√	–	–	–
13 Increased Mutilation				
Yes	–	–	√	√
No	√	√	–	–
14 Types of material	–	–	√	√
15 User friendliness				
Yes	√	–	√	–
No	–	√	–	√

(* DML has two ESS's: # UND was uncertain)

Figure 3.3. summarises the responses of the four libraries. Questions 1-15 deal with specific aspects of electronic security systems which, in the researcher's opinion, could influence one's decision to acquire an ESS.

3.6.2. Additional comments

3.6.2.1. Were health safety factors (such as interference with hearing aids and heart pacemakers) considered? (Q.2)

The three university librarians appeared surprised at this question as they had not realised (slight as it may be) that the electronic fields could have an effect on items such as hearing aids and pacemakers. They had not considered this aspect. On the other hand the librarian from DML was aware of this and this factor was taken into consideration in their deliberations regarding an ESS.

3.6.2.2. Possible damage by an ESS to library material such as magnetic tapes (including video and audio tapes) (Q.3)

The fact that an ESS can damage library material was not an important factor with UDW and they did not consider it. The other three libraries regarded it as important.

3.6.2.3. False alarms (Q.4)

Except for UDW all the other libraries were satisfied that the ESS they were interested in did not have a problem with false alarms. UDW was not satisfied with this aspect.

Although UND was satisfied they qualified their answer. Initially false alarms were not a problem, but with more PC's and other electronic equipment being used in the library, more

false alarms occurred which had to be sorted out.

3.6.2.4. Detectability of targets (Q.5)

The detectability of targets was a factor with three of the libraries. DML said "no". Two qualified their answers. DML only considered the size of the targets, without it being a deciding factor. UDW qualified their "yes". At the time they acquired their ESS it was the only one available on the market which did not give them a choice as far as targets were concerned.

3.6.2.5. Other features

None of the libraries regarded the price and installation costs as very important. The three university libraries regarded it as important with DML not being too worried about the price. From these answers it would seem that the libraries had a relatively free hand in choosing a suitable ESS.

All four libraries were satisfied with the after sales service of their suppliers, which seemed an important consideration. However, DML had to qualify their answer as they had more than one supplier to deal with (DML has more than one system). They were only satisfied with one of the suppliers as far as after sales service was concerned.

UND regarded the maintenance cost of their ESS as high and even said it was a rip-off. Their maintenance was costing them R2000.00 p.m. The librarian was worried that the libraries were caught in a system of spiralling costs from which there was no escape.

UDW and UNIZUL said it was reasonable or average. DML was in a favourable position - the municipality's maintenance department maintained their Checkpoint system and with the Saverlabel system cost was no major factor.

Asked whether the cost of maintaining their library's ESS was justified, DML, UDW and UNIZUL thought it was.

However, UND was uncertain about this aspect. UND felt that if the maintenance costs could be halved then it would really be justified. They feel libraries are stuck with a system of high costs.

Rating the efficiency of the maintenance service provided by the supplier varied amongst the libraries. UDW and UNIZUL gave their suppliers a good rating.

UND was not very happy with the service. Although the maintenance company responded quickly to calls UND experienced too many recalls to rectify the same problem.

DML was not satisfied at all and gave a "poor" rating. Checkpoint at that stage had, due to sanctions, left South Africa and the library had great difficulty in obtaining necessary items like tattle tapes.

All four libraries were satisfied that the targets for their ESS's were up to standard.

The librarian at UND however, said the tags were expensive and commented that the discount price of 2% that was offered to the library was not enough when one considered that the company usually received orders in excess of 40,000 targets per order.

Compatibility of the ESS with the circulation system of the library was not considered an aspect of major importance to DML as they were still operating a manual system. However, it was still regarded as important as they were planning to computerise their library.

For the three university libraries, with their computerised library systems it was naturally a consideration of major importance.

Targets of the ESS's could encourage mutilation of library materials by users who wished to remove the targets in order to bypass the system. DML and UDW had not taken this aspect into account when they were considering the acquisition of an ESS. UND said they had a suspicion that it could happen but did not take it seriously. UNIZUL was also aware of the problem.

DML and UND did not consider the aspect that an ESS could protect other library material than books.

UNIZUL and UND were aware of this facility. UND however, said they did not apply the facility as it cost too much.

Whether the level of user friendliness of the ESS influenced their decision to purchase a particular system produced a mixed reaction. DML and UND regarded this as an important factor, as opposed to UDW and UNIZUL who did not take it into consideration. UNIZUL said because it was the only system available at that stage user friendliness was not considered.

DML said it was important to have a reliable system like Checkpoint. It was easy to handle and very rarely had breakdowns. Another important factor mentioned by DML was that the targets of the magnetic tattle tapes, used for the electro-magnetic ESS's caused damage to rare books in the Don Africana collection. These magnetic tattle tapes caused acidity problems thereby damaging the books.

UND said initially when the ESS was installed there were no problems and very few false alarms. The service was also good. However, with more and more electronic systems being used in the library, more problems with false alarms and malfunctions came

to the fore. The so called electronic "noise" factor becomes a problem. An ESS must be user friendly and when installed these problems must be circumvented.

3.7. FUTURE CHOICE OF AN ESS (Q.16)

When asked if they would buy the same ESS again if they had a choice DML said they were very satisfied with the Checkpoint system and would prefer to stay with that system.

The other three libraries used the 3M system and the response from them was a mixed reaction. UDW would prefer to buy another system if a better one became available. UND would also buy another system but felt at that stage it would be nearly impossible to do so. UNIZUL would stay with their system because they had no real knowledge of other systems.

3.8. EXPECTATIONS WITH REGARD TO REDUCTION IN LOSS/THEFT RATE

All four libraries expected a significant reduction in the loss/theft rate of their library materials but when asked what percentage reduction they expected the answers were varied.

DML did not really say what they expected the reduction to be but mentioned that a loss of 2000 books per annum dropped to 500 which was a significant reduction in their losses.

UDW expected a reduction in loss of between 50% and 80%, whilst UND and UNIZUL said that they did not know what reduction in their loss rate they could expect.

DML and UNIZUL both said that they did not receive an indication from the distributing company of what percentage reduction in the loss/theft rate of library material could be

expected. However, UDW and UND said the company did indicate a percentage reduction and that it was 80%.

UDW and UND said that the distributing company did not include the expected theft/loss rate in the guarantee agreement. This aspect was rather surprising to the researcher because the three university libraries used 3M systems. 3M did, under certain conditions, offer such a guarantee (3M Tattle-Tape, 1991: 2). However, telephonic enquiries to 3M intimated that because libraries in South Africa tended not to do inventories prior to the purchase of an ESS, and one thereafter, this guarantee was not applied in South Africa.

DML and UNIZUL did not respond to this question as they answered "no" to the previous question.

UDW said they did not achieve the expected loss/theft rate whilst UND did not know as no inventories were held to verify any reduction in losses.

3.9. SUMMARY

Electronic security systems are used by most libraries in Southern Africa (68% of those surveyed). This chapter tried to establish what ESS's were available on the market and how they compared with each other. Furthermore this chapter tried to ascertain why the four libraries of this study switched to an ESS, and why they chose their particular ESS's. This information was obtained by means of questionnaires and interviews.

A sample survey by means of a questionnaire (Appendix A) was conducted with libraries in Southern Africa to determine what ESS's were available in this area. The results of this survey showed that at that stage there were only three ESS's used by libraries in Southern Africa, viz. the 3M, Checkpoint and

Saverlabel systems.

The researcher then compared the different features of the three ESS's mentioned. The main difference is the principle on which they work. Saverlabel and 3M work on an electromagnetic low frequency principle using metal tattletapes (targets). Checkpoint works on a radio frequency also using a low frequency and uses Checklabels as opposed to metal strips.

The researcher interviewed the heads of the four libraries to ascertain why they decided to acquire an ESS. From the results it was clear that they were aware of losses in their libraries but did not really know the extent of the losses. Only UDW was in a position to know what its losses were.

None of the libraries had, prior to acquiring an ESS, a system to combat theft and mutilation of library materials. Their main reasons for acquiring an ESS were: to prevent book loss, because their loss rate was too high (although most of them could not say how high it was), the reliability of the system and the backup services of the supplier. All four libraries said that theft of library materials was a factor in deciding on an ESS.

As none of the libraries had tried to ascertain the reasons for theft by patrons, it appears as if the libraries just accepted the fact that books were stolen, and that an ESS was the answer to the problem.

The question as to why the libraries had chosen a specific ESS was addressed by a second interview (Appendix C). The main reasons for choosing their ESS's were that they should be compatible with their circulation system, that the targets should be reliable and that the after sales service should be good. The three university libraries also regarded the non-detectability of the targets as an important factor. They

also said that at the time they acquired an ESS there was only one ESS available on the market, so they did not have much of a choice. It is also interesting to note that only one of the three university libraries would purchase the same ESS again if they had a choice.

Due to the four libraries not taking certain steps before acquiring an ESS, the researcher is left with the impression that the libraries had learnt of ESS's and had decided an ESS would be the answer to their security problems. They had not conducted inventories to determine the extent of their losses before installation, nor thereafter to check if the ESS did reduce the loss rate.

Furthermore, none of the libraries, according to the interviews, had existing security systems at the time of acquiring an ESS. None of them had investigated alternatives to electronic systems like security guards, patrolling of the library, door checkers or, using a combination of both electronic and non-electronic systems. After all, any security system is only as good as the people using it allow it to be.

CHAPTER 4

4. MEASURING BOOK THEFT/LOSS AT NATAL LIBRARIES

4.1. INTRODUCTION

In the previous chapter the researcher looked at the different security systems that were available on the market and what systems were used by the libraries, especially by the four Natal libraries included in this study. The security measures applied by the libraries were investigated and the legal aspects were looked at.

This chapter will take a look at the stock situation in each of the four libraries to determine what the magnitude of the book loss/theft is and if it is a problem. The only way to determine book loss is by means of stocktaking. This exercise was conducted at four of the major libraries in Natal, viz. Durban Municipal Library (Central Lending Library), University of Durban-Westville, University of Natal (Durban Campus) and University of Zululand.

4.2. CHOICE OF STOCKTAKING METHOD

Not much is written on library stocktaking. This is supported by authors like Bluh (1969: 367), Bolte (1975: 15) and Von Schon (1977: 147) who all complained about the same problem. There are various methods of stocktaking that can be used in libraries.

Stocktaking in libraries is different from the stocktaking procedures in the business world. In the commercial world (private sector) stock is sold for profit. So, for the private sector, the main purpose of stocktaking is to see what profits are made or losses suffered. Libraries are non-profit, service orientated organisations which do not trade their stock but

have, inter alia, preservation and lending functions so that their stocks can be used by their patrons.

Bahr (1981: 7-29) describes various methods of stocktaking which can be used to satisfy different needs. These vary from a full stocktaking exercise to a volume count (book census) and various means of sample stocktaking.

4.3. INVENTORY

4.3.1. Definition

Although the terms 'inventory' and 'stocktaking' could mean the same, for the sake of clarity and purposes of this study, 'inventory' will be construed as meaning a full stocktaking exercise as explained in the next paragraph and is preferred to the term 'full stocktaking' where applicable.

Bahr (1981: 9) defines an inventory as: "... a systematic stock-taking that seeks to locate every volume that a library's records show it owns".

4.3.2. Advantages

The inventory method gives the best results because every piece of library material is accounted for. This method will not only tell how many but also which copies are missing. It is also the only stocktaking method that will supply the authors and titles of all volumes that are missing.

A further advantage is that this method also shows errors in cataloguing, classification, wrong accession numbers, misshelving of books, etc.

4.3.3. Disadvantages

It is a very thorough method but can be time consuming and labour intensive. More than likely extra staff will have to be employed to enable the inventory to be completed in the time available. This can push up the costs of the exercise. The other disadvantage is that it must either be done during a quiet period (i.e. recess periods) or the library must be completely closed, which will inconvenience the patrons.

The cost involved is the reason why the practice of conducting a regular, periodic inventory in large or medium-sized libraries practised in the 1930's is not common practice any more. The libraries claim that the "... cost of a complete inventory of a large or medium-sized library is high" (Bahr, 1981: 9). This, according to Bahr, is true of the university libraries "... who have abandoned the practice of conducting a regular and systematic inventory of their collections". This corroborates the experience of the researcher when he undertook stocktaking at the four Natal libraries included in the investigation. It was found that the three university libraries conducted very few stocktakings and one of the university libraries could not say when last one was conducted. The opposite is true of the fourth library, a municipal library, which took stock regularly.

The assumption that losses are low and that it is therefore not necessary to have full knowledge of the missing book situation, and that the cost of inventories is thus not justified, is not always true. Bahr (1981: 10) points out that as far back as 1927 public libraries were recording losses of between 10% and 48%. Griffith (1978: 224) is very critical of this assumption when he says, "Book losses in your library aren't as bad as you think. More than likely, they are much worse".

4.4. BOOK CENSUS

4.4.1. Definition

This method is also known as gross inventory or volume count. This is similar to a stocktaking in the commercial world whereby the volumes are simply counted and compared to the number of stock the library's record shows it should have. Bahr (1981: 7) gives an accurate description of this method and defines it as: "... a count of the number of volumes either on the library shelves or otherwise accountable for (in processing, binding, circulation or mending etc.)".

For this method to be successful the library must have accurate records or shelflists of the library's holdings. The volumes are simply counted and then subtracted from the actual number of volumes recorded on official records.

4.4.2. Advantages

Firstly, it is a reliable and accurate method of determining book loss. Bahr (1981: 7) illustrates this when he cites the case of Levittown Public Library which compared the reliability of the book census to that of the inventory. This library used both methods and showed the loss rate given by the inventory as 3.4% and that of the book census as 3.6%. There was hardly any difference.

Secondly, it is relatively quick. In 1917 St. Louis Public Library, with a stock of 500,000 volumes, calculated its book-loss rate in less than five hours with the book census method (Bahr, 1981: 7).

Thirdly, the book census provides an accurate volume count, which may differ from the library's record of holdings (shelflist).

4.4.3. Disadvantages

To use this method effectively it must be done while the library is closed, or very inactive as far as patrons are concerned because it could inconvenience patrons.

Another drawback is that this method, as mentioned earlier, will only indicate the number of volumes missing and not the specific authors and titles.

If neither of these disadvantages is a problem then the book census is a viable method for calculating book loss.

4.5. FREQUENCY OF STOCKTAKINGS

4.5.1. Book census

It is recommended that a book census should take place every five years although some authorities recommend every second year (Bahr, 1981: 8).

4.5.2. Inventory

For an inventory it seems to be more difficult to recommend a frequency. Bahr (1981: 17) mentions a frequency of every ten years. He seems to suggest that the frequency can also depend on the volume of loss the library sustains.

This in turn should be determined through sample checks. Whenever a sample indicates an intolerable loss then an inventory or partial inventory should be conducted. A partial inventory is the same as an inventory but only of certain identified areas of the stock. It deals directly with the problem loss area and is much cheaper than an inventory.

4.6. METHODOLOGY

4.6.1. Sampling method

For the purposes of this study it was impossible to undertake an inventory of the four libraries mentioned above. Limited resources, i.e. manpower, finances and time available to complete this study did not allow an inventory. The best solution was to conduct a sample inventory in the libraries concerned. The researcher had to use a stocktaking method that was practical to execute, reliable and one that represented a fair picture of the stock situation.

4.6.1.1. Book census as sampling method

Just as the inventory can be used as a sampling method (partial inventory) so the book census method can also be used as a sampling method. It is a reliable method, and it is practical (the physical counting of volumes on the shelves is quick). By using it as a sampling method more volumes can be covered to represent a larger sample of the stock, giving a fair picture of the stock situation. These factors all contributed towards the researcher's decision to accept the book census as a method to conduct a sample inventory. The other factor that weighed in favour of the book census was that the researcher was not interested to know which books were missing but only how many were missing. The book census could serve this purpose.

4.6.2. Pilot study

4.6.2.1. Introduction

To acquaint himself with problems that might arise when the book census was conducted at the four libraries, the researcher conducted a pilot book census. This was a very useful and

practical exercise which provided an opportunity to develop a uniform method of building a shelflist to be printed by computer as all four libraries used the same computer programme, i.e. URICA.

4.6.2.2. Printed shelflists

On the printing side the URICA system has 9 levels of cataloguing options to choose from. From level 1 (author title) to level 9, the fullest option, and a SAMARC level for amendments etc. Level 3 is the shortest option with the details most needed for this exercise. It supplies the necessary information like accession numbers, and gives an indication of the status of the copies, i.e. whether they are on loan, at binders, in restricted areas, etc. This level of printing was used to create a shelflist for each library where the book census was conducted.

The URICA system has a stocktaking module but none of the libraries subscribed to this module. It was therefore necessary to build a shelflist for each library and this was done through a print-out of the books for that part of the collection earmarked for the book census.

4.6.3. Arrangements with individual libraries

4.6.3.1. Stocktaking method

The support of the executive heads of the libraries concerned was crucial, therefore they were all interviewed to explain what was required and how the stocktaking was to be conducted. The book census was accepted as the method that would cause the least interference with the libraries' day to day routine. It was also agreed that each library would provide a print-out of the sections required to assist in building a shelflist for

comparing the numbers of the volume count done for the book census.

4.6.3.2. Part of the collection to be used for stocktaking

All four libraries used the Dewey Decimal Classification (DDC) system. Although a few suggestions were made by the librarians it was left largely to the researcher to decide which parts of the collections were to be used and how many. On inspection of the libraries' stock it became clear that the collections in different parts of the libraries did not quite correspond with each other as far as numbers were concerned. UNIZUL had a small collection in the 001 class (computers) whereas UND had quite a large collection. On the other hand UND had a small collection in the 200 class (religion) whereas UNIZUL and UDW had a larger collection in these fields. The same applied to a few other class numbers. Because of this it would have been very difficult to decide on the number or percentage of books to be counted if a comparison of the stocks of the libraries were to be made.

The researcher decided to maintain a balance between those parts of the collection which were well used and those not so well used. This was done bearing in mind that books tended to be more vulnerable to theft/mutilation practices in well used collections. So this approach would test the theory that well used sections of collections were more prone to theft/mutilation than less used sections.

4.6.3.3. Choice of sections for sampling

The librarian at UND indicated that the following Dewey numbers were well used and were large collections: 001's, 540's, and 658 and he had the suspicion that the computer books (001) were prone to theft. These three numbers were then included in

the sample book census as the 540 and 658 numbers also represented large collections at the other libraries concerned. The researcher's pilot study, done in the range 960-960.99, was conducted at UNIZUL. This study gave a high figure (34%) of missing books and he was interested to see if the other libraries had the same problem in the same area.

The Dewey classification system has ten main classes (000-900). The book census needed little administration, labour wise, so it was decided that it would be feasible to select one number from each class and use it in the sample book census. The researcher did not strive to count a certain percentage of the total stock but rather opted for a count of one section of each classification number, to count all the volumes in that section and to compare the results of the different libraries.

After discussions with all four of the librarians concerned the following numbers were selected:

001	Computer science
150-159	Psychology
260-269	Religion, missiology
370	Education
410-419	Language
540-549	Chemistry
658	Management
790-799	Sport
800-809	Literature
960-969	African history

4.6.3.4. Type of material and collections

Libraries normally have special collections like the reference, Africana (rare books) and periodical and basement (lesser used books, etc.) and short loans collections.

Furthermore, there are different types of library material such as video and audio tapes, records, compact discs, etc., which are also housed in separate collections. Some of these collections are either restricted or housed in other buildings which could complicate access when the volume count was done. With this in mind the researcher decided to do a book census only of monographs in the open collection, eliminating all other collections from the book census. These restricted items and special collections could also be identified on the printout and be easily eliminated.

A decision was also required with regard to volumes that were not on the shelves because of their status, for example volumes that were either at the binders, or still "in process", or indicated as missing or "withdrawn as damaged". After careful consideration it was decided it would not be feasible to search for these volumes, and they were therefore eliminated from the book census.

4.6.3.5. Method used for book census

4.6.3.5.1. Steps

Date: A date was pre-arranged with the library concerned. With the university libraries a time when the libraries were quiet was chosen. In all three it was done during a holiday recess when the students were not on campus. This meant little interference with patrons' interests, and it also enabled the libraries to have their shelves in order to facilitate the counting process. This arrangement also gave the computer sections of each library enough time to sort and print the records which would be used as shelflists.

Counting procedure: On the pre-arranged date the researcher with four helpers started counting the volumes on the shelves. The following modus operandi was used:

One person started counting and marked every hundredth volume by turning it on its spine in its normal shelving position. This was done for the following reasons:

- If a person thought that s/he miscounted or got interfered with and became muddled with the counting at a certain point, it would not be necessary for the person to start the counting procedure all over again.
- A second person was used to check the first person's counting. By using the marked volume it was easy to rectify the leader's mistakes.
- This method also facilitated the counting when the end of the selected section was reached. Counting every 100th volume sticking out made it much easier to check the total number of volumes counted.

Books not on the shelves: All books lying on tables, trolleys, etc. were also checked for inclusion in the stocktaking. Returned books lying in the circulation desk area and which had not yet been returned to the shelves were also checked for inclusion.

4.6.3.6. Shelflists

As the book census used a sample of the whole collection, and as the computerised system used by the libraries did not have stocktaking modules which could accommodate a sample stocktaking, shelflists had to be created. This was based on the computer printouts obtained from the libraries.

These printouts all indicated, either at the call number or, at the accession number in which collection the volumes were housed. The researcher then went through these printouts and eliminated all the volumes that were not to be included in the book census. These volumes included those that were in special

collections, branches or still in process, etc.

Books that were on loan were identified in the printout. If these books were part of the open shelf collection (i.e. books that were normally allowed to be borrowed), they were included in the book census.

This process of elimination enabled the researcher to build a shelflist from which to compare the volumes counted. The total of the volumes counted was compared to the total of the books on the shelflist. The difference was then calculated as the loss rate in percentage points.

In two of the four libraries there was an added complication as they had not yet transferred all their books from the old manual catalogue to the new computerised system. This meant that the old shelflist also had to be utilised and included in the book census.

4.7. RESULTS OF THE BOOK CENSUS

The above procedure was followed in all four libraries. In three of the four libraries the book census was successful and results could be given for the whole exercise. However, the book census at UND was not successful as a true shelflist could not be built from the old manual catalogue.

4.7.1. Book census at UND

The problem here was that the UND library did not have one manual shelflist but two, with the second part being a classified catalogue. All the records with ISBNs had been removed from the shelflist catalogue and put into the classified catalogue. This meant that two sets of catalogue cards had to be worked through to try and establish a shelflist for the old

system. A further complication was that in the classified catalogue branch libraries' cards were interfiled. If a person was not familiar with the library setup it became very difficult to sort out which volumes belonged where. To an outsider it was not always clear whether the cards represented a branch library or not.

A further problem encountered at UND library was the printing of a shelflist from the computerised database. A book census was held but due to technical reasons the printout could not be produced at the time. There was a long delay and the printout no longer represented a true picture of the book situation as at the time of the book census. It was decided to abandon this census and do another one.

However, both attempts were unsuccessful as on both occasions in certain of the selected classification numbers there were more books on the shelves than could be found on the shelflists. This meant that there were books on the shelves that were not accounted for in the library's records. This made it impossible to accept the results. The exercise was then abandoned.

Another reason for this decision was that the library housed two collections. The library originally used the Universal Decimal Classification (UDC) system. It is currently in the process of converting its books from the UDC system to the DDC system. All the books from the UDC system that had not yet been converted to the new DDC system would not be in the computerised printout. The UDC collection was kept separate from the DDC collection and could quite easily be excluded from the book census. Only the DDC books were considered for the book census.

4.7.2. Book census at DML

Table 4.1

Results of book census held at DML											
Class.	001	150	260	370	410	540	658	790	800	960	Total
Man.Cat	0	0	0	0	0	0	0	0	0	0	0
+P/Out	217	822	189	133	33	79	1078	3383	522	864	7320
Sub.Tot	217	822	189	133	33	79	1078	3383	522	864	7320
-Loans	95	408	49	24	5	20	386	474	106	96	1663
Sub.Tot	122	414	140	109	28	59	692	2909	416	768	5657
-Count	95	355	130	84	24	50	575	2848	367	722	5250
Missing	27	59	10	25	4	9	117	61	49	46	407
% Loss	12%	7%	5%	19%	12%	11%	11%	2%	9%	5%	6%

(Percentages are given in rounded figures)

For Table 4.1 it must be noted that the last column of the last row is not an average of percentages of loss. Fractions cannot be added together by first adding the numerators and then the denominators and then taking the ratio of the two, e.g. 1/3 + 1/4 $\neq$ 2/7.

The percentages of missing books were calculated as follows: The number of books missing in Table 4.1 represents the number of books missing from the total number of books that should be on the shelf as per the shelflist, i.e. 407/7320 x 100/1 = 5.56 = 6%.

Overall the loss for DML looks acceptable with a percentage loss of 6% (5.56%). This falls within the range of acceptability of a loss rate of between 2% and 10%. However, a closer look shows that about 50% of the different sections have a loss rate of more than 10%. The other half is below the 10% mark and even goes as low as 2% in the 790's. The highest loss rate is in the 370's (Education) at 19% with linguistics (410) and computer science (001) at 12% and chemistry (540) and management (658) at 11%.

The danger area appears in the 370's with nearly 19% of the stock missing and DML should, according to Bahr (1981: 23), seriously consider conducting an inventory of the 370's section. The DML should decide what loss rate is acceptable and stage an inventory if necessary. For this exercise out of a total of 5657 books 407 were missing. The replacement cost for these missing books is : 407 volumes x R210.00 = R85,470.00. (The cost of R210.00 per volume is derived from figures as explained in Par. 1.1.5).

4.7.3. Book census at UDW

Table 4.2

Results of book census held at UDW

Class.	001	150	260	370	410	540	658	790	800	960	Total
Man.Cat	0	0	0	0	0	0	0	0	0	0	0
+P/Out	242	3606	1030	2491	895	2115	7616	762	1951	1172	21880
Sub.Tot	242	3606	1030	2491	895	2115	7616	762	1951	1172	21880
-Loans	7	303	49	236	123	153	504	54	220	34	1683
Sub.Tot	235	3303	981	2255	772	1962	7112	708	1731	1138	20197
-Count	215	3005	919	1746	695	1928	6474	611	1582	567	17742
Missing	20	298	62	509	77	34	638	97	149	571	2455
% Loss	8%	8%	6%	20%	9%	2%	8%	13%	8%	49%	11%

(Percentages are given in rounded figures)

The 11% loss is above the accepted loss rate of 2%-10%. Only three of the ten areas exceed 10%, but are well above the accepted loss rate. They vary from 13% (790's) to 20% (370's) and a very high 49% (960's). The African history section (960) seems to be a serious problem with nearly 50% of the stock missing.

UDW had 2455 books missing out of a total of 20197 volumes of this sample. To replace these volumes would cost UDW 2455 x R210.00 = R515,550.00 (The cost of R210.00 per volume is derived from figures as explained in Par. 1.1.5).

4.7.4. Book census at UNIZUL

Table 4.3

Results of book census held at UNIZUL											
Class.	001	150	260	370	410	540	658	790	800	960	Total
Man.Cat	0	715	599	0	15	52	37	0	229	334	1981
+P/Out	432	3692	644	3384	875	2493	2942	1115	1843	2118	19538
Sub.Tot	432	4407	1243	3384	890	2545	2979	1115	2072	2452	21519
-Loans	19	41	15	121	22	46	72	34	33	33	436
Sub.Tot	413	4366	1228	3263	868	2499	2907	1081	2039	2419	21083
-Count	362	3093	1216	2495	733	2145	2285	797	1345	1623	16094
Missing	51	1273	12	768	135	354	622	284	694	796	4989
% Loss	12%	29%	1%	23%	15%	14%	21%	26%	34%	33%	23%

(Percentages are given in rounded figures)

The overall loss rate for UNIZUL is 23%. Compared to the 2%-10% acceptable rate, the 23% indicates that a serious problem exists. The area with the lowest rate is the 260 field with a loss of only 1%. (This low figure can be attributed to the fact that at the time of this book census, the 260 field which housed the missiology books, hardly featured in the Theology faculty's curriculum. As the patrons had no, or very little interest in this part of the collection it was rarely used). All the other areas have losses of more than 10% and vary between 12% and 34%. Areas with the biggest losses are those in the 800 and 900 classes with losses of 34% and 33% respectively. Four of the classes are in the 20% range (21% - 29%) whilst 3 classes are in the 10% range (12% - 15%).

According to the 1995 figures as supplied by Mast Bookshop (Par. 1.1.5) the average price of a book was R210.00. The replacement costs for missing books for UNIZUL is 4989 volumes x R210.00 = R1,047,690.00.

Table 4.4

Total percentage of missing/stolen books				
Institution	DML	UDW	UNIZUL	Total
Volumes on shelflist	7320	21880	21,519	50719
- Loans	1663	1683	436	3782
Sub Total	5657	20197	21083	46937
- Volumes counted	5250	17742	16094	39086
Total vols. missing	407	2455	4989	7851
% missing.	5.5%	11.22%	23.18%	15.5%

(Percentages are given in rounded figures)

Of the three libraries for which a book census was conducted successfully, DML has the best results with an average loss of 5.5%. This is followed by UDW with 11.22%, and UNIZUL with 23.18%. The overall replacement cost for the missing books, for all three institutions is:

7851 volumes x R210.00 = R1,648,710.00.

Table 4.5

Comparative figures of missing books											
Class. no	001	150	260	370	410	540	658	790	800	960	Totals
DML	12%	7%	5%	19%	12%	11%	11%	2%	9%	5%	5.50%
UDW	8%	8%	6%	20%	9%	2%	8%	13%	8%	49%	11.22%
UNIZUL	12%	29%	1%	23%	15%	14%	21%	26%	34%	33%	23.18%

(The above percentage figures are a summary of Tables 4.1-4.3)

The assumption that books in well used collections are more prone to theft than the lesser used areas is not necessarily true at DML. According to the loan figures of DML in Table 4.1 the 150 class (Psychology) has a loan rate of nearly 50%, but the loss rate is only 7%, compared to the highest loss rate of 19% in the 370 class with a loan rate of 18% and the second highest loss rate of 12% in the 001 class which has a loan

rate of 44%.

At the two university libraries the loan figures of Tables 4.2 and 4.3 do not give a true picture of the loans as the book census was conducted during a recess period of the universities. This meant that most of the students were not on campus and would have returned their library books before they left. The researcher can therefore not use the loans figures as in the case with DML to test the above-mentioned assumption.

4.8. SUMMARY

The main purpose of this chapter was to determine what the losses of the four libraries included in this study were and to see if these losses exceeded accepted norms.

Various methods of stocktaking were outlined, giving both the advantages and disadvantages of each method. The researcher had to use a stocktaking method that was easy to implement, reliable and one that represented a fair picture of the stock situation. The book census method was decided upon (as explained in Par. 4.6.1. and Par. 4.6.1.1.).

It was not feasible to undertake an inventory at the four libraries therefore the researcher had to use a sampling method and conduct a book census to achieve his purpose. None of the libraries subscribed to the URICA stocktaking module and the researcher had to build a shelflist for each library from a computer printout. This meant that it was not possible to do a book census of a certain percentage of the libraries' stock. Instead the researcher had to do a count of one section of each classification number, with the same classification number being used for all four libraries. The results of the different libraries could then be compared.

Due to the fact that a proper shelflist could not be built for UND (as was explained in Par. 4.7.1) the stocktaking exercise at UND was abandoned.

The results show that UNIZUL has a serious problem of missing/stolen books on hand with an average percentage loss of 23%, whilst UDW's 11% loss also indicates a problem, especially in the 960 and 370 classes.

Although Bahr mentions figures of between 2%-10% as the margins for an acceptable loss rate, in the opinion of the researcher 2% should be the better figure to strive for. Even a 2% loss, as shown in Par. 1.1.5, could mean a loss of R52,710.00 of a year's acquisitions in one library.

This means that even the 6% loss rate at DML, although much lower than the other two libraries' loss rates, indicates that there is still room for improvement.

A stocktake at UND was not possible, because of the difficulty in building a shelflist. This could cause a problem in the future. This weakness, coupled with the fact that no stocktaking has been conducted at UND, could cause serious problems in court if the library has to prove ownership of library material, in a case of theft. In South African legal terms it is known as Actio rei vindicatio and in America as Replevin. (It means recovery by a person of goods claimed to be his on his promise to test the matter in court and give the goods up again if defeated). To prove ownership the library would have to produce legal records, such as shelflists, acquisition registers and cataloguing records.

Furthermore insurance claims, due to theft can also be a problem. A delegate at the LISDESA conference January 1995, told the researcher that they had a recent burglary at one of their

branches. Due to the fact that the library had conducted an inventory shortly before the burglary, she could prove conclusively how many books were stolen. If no inventory had been conducted the insurance company would not have paid out the library's claim.

The combined loss rate of the three libraries is 15% which, is well above the norm (R1,648,710.00 replacement cost). All three libraries should improve anti-theft measures and take a serious look at their security systems. DML has the lowest loss rate of the three libraries surveyed which is significant because DML does not use 3M. DML tested 3M and found it unreliable.

One of the measures that the libraries can apply is to look at the reasons why library users commit acts of theft and mutilation. There are various reasons why users commit these crimes and these will be looked at in Chapter 5.

CHAPTER 5

5. LIBRARY USERS' REASONS FOR BOOK THEFT AND MUTILATION

5.1. INTRODUCTION

In the previous chapter the aim was to establish the magnitude of loss in the four libraries of this study. In this chapter the findings of a survey to determine the reasons for these losses will be presented. As explained in Chapter 1 a questionnaire was used for data collection. The researcher made use of non-probability, accidental sampling, in the sense that questionnaires were distributed to every 10th library user who happened to be in the library. (This is explained in detail under Par. 5.3.1.4 and Par. 5.3.1.5).

With this method it is not possible to evaluate if the cases were representative of the population studied. Although a random sample could have been more accurate it would have been too costly an exercise in time and money with the limited resources available to the researcher. On the other hand, the accidental sampling was more practical, easier to administer and it reached those users who used the library, and who were likely to have some knowledge of the problem of theft and mutilation of library materials.

5.2. SAMPLE SIZE

The researcher asked the librarians at the different institutions for information regarding the populations of their respective institutions. The following information was received:

- The City Librarian, DML reported 10,000 users per week.
- The Deputy Librarian, UDW reported ± 10,000 students.
- The Deputy Librarian, UND reported ± 7,500 students.
- The University Librarian, UNIZUL reported ± 5, 000 students.

The City Librarian at DML could not give a figure for the membership of the main lending library in the city, which was the library targeted for this questionnaire. However, the library was patronised by at least 10,000 members per week and this figure was then taken as a workable one to formulate a sample size. (The overall membership figure was in the region of 350,000).

The researcher then based the sample size on a figure of 10,000:

DML has 10,000 users per week
UDW library has 10,000 students
UND library has 7,500 students (3/4 of 10,000)
UNIZUL library has 5,000 students (1/2 of 10,000)

A total of 100 questionnaires for every 10,000 users/students per library, with a minimum of 75 questionnaires per library was decided upon to ensure that the sample size would not be too small to work with. UNIZUL therefore, also required 75 questionnaires (and not 50). The sample size was then adopted as shown in Table 5.1.

5.2.1. Clarification of sample size

Table 5.1

Sample size		
Institution	Users	Questionnaires
UDW	10, 000 students	101
UND	7, 500 students	75
UNIZUL	5, 000 students	75
DML	10, 000 users p.w.	105
Total		356

The figure of 101 for UDW needs clarification. The questionnaires were distributed at the different institutions on

different days of the week. UDW was done on the Monday, whilst DML was done on the Wednesday. On this day at the Municipal library, a user approached the researcher explaining that she was a student from UDW. This student then asked the researcher to be allowed to complete the questionnaire for UDW. The researcher complied, raising the figure of 100 for UDW to 101.

At DML there were five extra copies of the questionnaire left over. The researcher was of the opinion that the extra five would not make a significant difference in the result and therefore included these five extra questionnaires in the survey.

5.3. COLLECTION OF DATA

5.3.1. Methodology

5.3.1.1. Pilot study

Before the final questionnaire was distributed, the researcher conducted a pilot study to test the questionnaire.

Where: At the four institutions named above, amongst the users and the library staff to test the reaction of both constituencies of the library.

Why: This was to test the questionnaire and to see what improvements could be made and what possible unforeseen problems would arise. It was also done to gain experience in the practicalities of distributing and collecting the questionnaires.

Another problem to be tested was to see if respondents would be prepared to answer the questions which asked if they stole and mutilated library material. In an interview with the Head of the Department of Criminal Justice, University of Zululand, the

concern was expressed that there might be resistance amongst respondents to answer this type of question, especially amongst the non-white respondents. The researcher was therefore not optimistic about respondents admitting to theft or mutilation in such a small survey. However, this proved to be an incorrect perception as there were in fact respondents who answered "yes".

How many: The sample was limited to ten questionnaires for each of the four institutions, of which 5 were to be completed by users and 5 by the library staff. This was done so that reaction of both users and staff could be tested.

Results: All forty questionnaires were returned giving a 100% response rate. This exercise showed that distributing the questionnaires personally amongst respondents would ensure a high response rate. This method of distribution was then applied in the actual survey. The statistical data was then fed into the SAS-programme (a computerised statistical programme).

However, with all its wonderful abilities the researcher found that to use such a programme, also limits one in certain aspects, for example, with regard to questions which required more than one answer. The programme would only accept one answer which meant that only the first answer was taken into account, leaving all the other answers unaccounted for. The Likert style would have solved this problem. However, this option was not taken as it would have made the questionnaire exceptionally long and unwieldy, which meant that the respondents would have been reluctant to complete the questionnaire - something the researcher wished to avoid.

5.3.1.2. Distribution

From the experience gained in the pilot study it was decided that the researcher should visit the three libraries in Durban

and personally distribute and collect the questionnaires. The researcher was unknown to the users in the Durban libraries, and it was assumed that the users would be less apprehensive about completing the questionnaires than if the exercise was conducted by staff members whom they recognised.

When the pilot study was conducted at the UNIZUL Library the researcher got the impression that some of the users were reluctant to answer some of the questions. They had to be reassured categorically that the information given would be treated as strictly confidential and anonymous as no names appeared on the questionnaire. Because the researcher was a staff member it seemed advisable to use another person to distribute and collect the questionnaires at this library.

5.3.1.3. Distribution at the University libraries

All three university libraries have multi-storey buildings and house their collections in different levels of the buildings. The Dewey Decimal Classification System is used in all four of the libraries with the UND Library partly also using the Universal Decimal Classification System. The different levels house different subject fields so the questionnaires were distributed evenly amongst the subject areas represented in the library. The users tended to be in the areas where the materials on their subject interests were shelved, and they also tended to be stationary as most of them were seated at desks, doing their work.

The researcher distributed 10 questionnaires per level and to every tenth user on each level. The distribution was started at the bottom level, moving up one level after each 10 questionnaires had been distributed, completed and returned. In case the user could not wait for the researcher to collect, arrangements were made to leave the completed questionnaires at

the circulation desk. This whole process was repeated until all the questionnaires were distributed and collected.

For the researcher this was the best possible method to ensure as high a response rate as possible, as well as a fair distribution in all subject areas. In other words, it achieved a more balanced distribution.

5.3.1.4. Distribution at the DML

At DML a different method was used as the collection in the main library was housed on one level only. The users were also not stationary as was the case at the university libraries. They tended to come in, get their reading material from the shelves, and then leave. This meant a continuous change in the user population of the library. To ensure as high a return rate as possible, ten questionnaires were distributed at the same time, one to every tenth user. The rest of the arrangements were the same as those applied at the three university libraries.

5.3.1.5. Response rate

Table 5.2

Response Rate			
Institution	Distributed	Response	%
DML	105	103	98
UDW	101	101	100
UND	75	75	100
UNIZUL	75	66	88
TOTAL	356	345	97

Table 5.2 shows that the overall rate of return was 96.9%, giving a rounded figure of 97%. One return from UDW had to be cancelled as there were blank pages in the questionnaire as a result of a printing error. This was discovered too late to rectify. Two of the questionnaires distributed at the DML were

completed by UDW students and these questionnaires were completed as if they were from UDW and not from DML. They were transferred to UDW. Another DML questionnaire had to be cancelled as it was inadequately completed by the respondent. The total for DML is therefore 103 and that of UDW 103. (Table 5.3 explains the final analysis of returns).

Table 5.3

Distribution and response rate					
Institution	Distributed	Non-Returns	Cancelled	Total	%
DML	103	2	1	100	97
UDW	103	-	1	102	99
UND	75	-	-	75	100
UNIZUL	75	9	-	66	88
TOTAL	356	11	2	343	96

5.4. ANALYSIS OF DATA

5.4.1. Aims of the questionnaire

The aims of the questionnaire were:

i. To determine if there was a theft and/or mutilation problem in the libraries covered by this survey;
ii. To establish why users would steal and/or mutilate library material;
iii. To establish what type of user would steal or mutilate library material;
iv. To compare the level of theft at the different institutions;
v. To see if the security precautions were adequate.

From the SAS analysis of the data the following picture emerged.

5.4.2. Is there a Theft/Mutilation problem in the libraries covered by this survey? (Appendix G)

This problem is addressed by questions covering the following aspects:

- quality of security measures such as searching/questioning of users by the security staff.
- inconvenience caused to users by missing, stolen or mutilated library materials.
- users' perceptions as to the magnitude of the problem of missing or mutilated library materials.

The responses to individual questions are in some cases presented as part of a more general aspect to avoid tedious repetition of results.

5.4.2.1. Quality of security measures

5.4.2.1.1. How do you rate the security precautions/service in the library? (Q.11)

Table 5.4

How do you rate security precautions?		
Scale	Response	%
Not applicable	4	1.2
Very poor	23	6.7
Poor	53	15.5
Undecided	73	21.3
Good	146	42.6
Very good	44	12.8
Totals	343	100.0

In the rating of security precautions 22.2% of the respondents gave a rating of very poor and poor; 21.3% were undecided and 55.4% gave a rating of good and very good. Although security precautions were given a positive rating of 55%, the 22% negative rating sounded a warning that all was not well. This

perception is enhanced by the response to the qualifying questions which follow in Tables 5.5 and 5.6.

5.4.2.1.2. Have you ever been searched or questioned by the security staff in the library? (Q.14)

Table 5.5

Searched/questioned by security staff								
Scale	DML response	%	UDW response	%	UND response	%	UNIZUL response	%
Never	92		95		6 5		58	
1-2	6		7		8		7	
3-4	0	8	0	6.86	0	13.33	1	12.53
5-6	1		0		1		0	
More	1		0		1		0	
Totals	100		102		75		66	

Only 33 or, 9.6% of the 343 respondents indicated they were questioned or searched by the security staff. Response from the four institutions vary from 6.86% for UDW to 13.33% at UND. This low figure poses the question whether the security staff are effective in the execution of their duties.

In the case of DML they are used at the entrance where all incoming baggage (briefcases, handbags, etc.) is electronically checked. UDW uses security staff at the exit, with UND using security staff only during examination times when library usage is at its peak. UNIZUL uses them at the parcel counter and the entrance/exit gates. This low figure of 9.6% counters the high rating for security precautions in Table 5.4. This could be because the rating in Table 5.4 does not exclude the ESS's used in all four the libraries.

5.4.2.2. How would you rate the chances of a person being caught with a book that was not checked out of the library? (Q.24)

Table 5.6

Chance of users being caught stealing			
Scale	Users	%	
Never	31	9.0	
Slight chance	83	24.2	= 48%
Not so good	51	14.9	
Undecided	85	24.8	
Good	57	16.6	= 27%
Very good	36	10.5	
Totals	343	100.00	

48% thought that the chances of being caught were not good, 25% were undecided and 27% rated the chances of being caught good or very good. The majority of respondents thought that it would be easy to steal books from the library.

Responses from the individual institutions corroborate what is reflected in Table 5.6. Respondents from all four institutions rated (in varying degrees) the chances of not being caught as high (DML 47%, UDW 50%, UND 46.67% and UNIZUL 46.97%).

5.4.2.3. Is it easy to get past the library's security with stolen books? (Q.22)

Table 5.7

Is it easy to get past library security?					
Scale	UDW %	UND %	UND %	UNIZUL %	Total%
Yes	2.04	4.08	4.96	4.08	15.16
No	6.71	16.03	6.71	11.08	40.53
Undecided	20.41	9.62	10.20	4.08	44.31
Total	29.16	29.73	21.87	19.24	100.00

Question 22 enquired whether it was easy to get past the library security. In retrospect the researcher realised

that, though this question was aimed at the security staff it did not mention the word "staff". This meant that the electronic security systems of the libraries concerned may also have been included in the respondents' perception of security, when the question was answered. Just over 15% said it was easy to get past the library security, with 41% saying no and 44% being undecided. If the undecided ones are not considered the picture changes somewhat. It then means that those who said "yes it was easy" represented a total of 27% and those who said "no", 73%.

5.4.2.4. Have you ever been inconvenienced because a book you wanted from the library was stolen or missing? (Q.15)

Table 5.8

Inconvenienced by theft/missing books		
Times inconvenienced	Frequency	%
Never	174	50.7
1-2	84	24.5
3-4	29	8.5
5-6	12	3.5
more	44	12.8
Total	343	100.0

A large percentage (49.3%) of the users had actually been inconvenienced as a result of missing or stolen books. If one takes into account that an acceptable loss rate of 2% is implied by Bahr (1981: 24), then this figure of 49.3% poses a serious problem. Of the 49.3% users who said they were inconvenienced, 24.5% were inconvenienced 1-2 times; 8.5% between 3-4 times, 3.5% between 5-6 times, and 12.8% were inconvenienced more than 6 times, which puts the matter of inconvenience in an even more serious light.

Question 17 tested the perception of the respondents as

to what proportion of the library's users were stealing books. 51.7% indicated that they thought users were stealing books. 16.4% of the respondents considered the rate of stealing high or very high.

5.4.2.5. Have you ever been inconvenienced by library books and magazines that have been mutilated (torn or cut out pages and pictures, ink marks, etc.)? (Q.16)

Table 5.9

Users inconvenienced by mutilated material			
	Frequency	Percentage	% Respondents Inconvenienced
Never	123	35.9	
1-2	113	32.9	32.9
3-4	33	9.6	9.6
5-6	17	5.0	5.0
More	57	16.6	16.6
Total	343	100	64.1

For obvious reasons the researcher was not able to do a physical check at each of the four libraries to see how many volumes were mutilated. However, the above question does serve as a means to measure the magnitude of the problem. Approximately 64% of the respondents had been inconvenienced as a result of mutilation. As in the case of missing books the number of times this happened added to the seriousness of the situation.

In question 18 the respondents had to give their perceptions of what the rate of mutilation was. A total of 62.4% indicated in various degrees that users mutilated library material. It is interesting to note that there were 10% fewer "undecided" respondents than was the case with theft, and that the "high" rating was the highest of the ratings in mutilation (23%), and in theft "very low" was the highest. In other words the perception is that the mutilation rate is high and it occurs more frequently than theft.

From the above information it is clear that the users of the libraries seem to be acutely aware of the security problem, and that they take a serious view of theft and mutilation.

5.4.3. Why would users steal library material? (Q.23)

In the literature some of the main reasons for theft were outlined by Watstein (1983: 11-33) and in interviews by Murfin and Hendrick (1975: 8-12). Most of these reasons were incorporated in the questionnaire, and others which the researcher thought were important or could shed light on the reasons for theft were added. Fifteen possible reasons were given. The respondents had to select one or more of these reasons.

As was mentioned earlier the SAS-Programme did not have an option that would list which reason was selected most frequently and which least. Only the first reason chosen by the respondent could be captured. The other opinions indicated by the respondent had to be ignored.

This was unacceptable to the researcher so another file was opened on the SAS-Programme listing all the reasons for theft and mutilation. Therefore there are two different sets of results which will be given and discussed, i.e. one which lists the first chosen reason only and another which lists all the reasons.

5.4.3.1. Reasons for theft giving first options only

Why do you think would a person remove a book from the library without checking it out? Is it because of ONE OR MORE of the following reasons?

The following fifteen choices to this question were presented to the respondents:

1. Did not consider the needs of others.
2. Did not think about the act but stole casually and thoughtlessly.
3. To prevent fellow students/users from getting the same information so he/she could get a higher mark than they.
4. He/she had no funds to buy his/her own copy.
5. To add it to his/her own collection.
6. Needed the illustrations in the books and magazines but could not photocopy them.
7. Could not take out any more books as his/her loan quota was full.
8. Unable to check out a book because the computerised check-out system was not working.
9. To prevent the book from being put on the Reserve Shelf (Short Loans) section.
10. Thought he/she would not get caught.
11. Stole books as an expression of hostility towards the library and/or authorities.
12. Just to see if he/she could beat the system.
13. The book was not available in the local book shops so he/she could not buy a personal copy.
14. It was a prescribed book he/she needed.
15. For financial gain.

The first-option-only response gave the following results: 53.4% said the users stole because they did not consider the needs of others, whilst 13.4% said they did not have any funds. 9.9% said theft took place to prevent others from getting the same information, and 8.5% said that the culprits stole casually. The fifth most popular reason was that the thief wanted to add the library material to his/her own collection (2.9%). All the other reasons varied between 0.3% and 2.6% and, according to this method they did not seem important.

However, the picture changed somewhat when the second option was executed. To accommodate the SAS-Programme each of the 15 above-mentioned reasons were made dependent variables, with the independent variable, Institution.

Table 5.10

Reasons why users think books are stolen			
No.	Reasons	Response	%
1.	Did not consider others' needs	187	54.5
2.	Had no funds to buy own book	167	48.7
3.	It was a prescribed book	126	36.7
4.	Needed the illustrations	122	35.6
5.	Thought user wouldn't get caught	106	30.9
6.	Book not available in bookshops	104	30.3
7.	Prevent others getting the same information	103	30.0
8.	Could not take out more books	85	24.8
9.	Just to beat the system	82	23.9
10.	Stole casually & thoughtlessly	70	20.4
11.	To add book to own collection	68	19.8
12.	For financial gain	55	16.0
13.	An expression of hostility towards library or authorities	44	12.8
14.	Issue system out of order	39	11.4
15.	To prevent the book from being put on the Reserve shelf (Short Loans)	34	9.9

(Figures for Table 5.10 are given in order of most frequent to least frequent)

The results, as shown in Table 5.10, are now clearer and more representative than was the case with the first-option-only results discussed above.

The following tables in this chapter briefly analyse the results of the questions asked and discussions with regard to theft and mutilation as processed by the SAS programme.

5.4.3.2. Did not consider the needs of other users (Q.23.1)

Table 5.11

Did not consider the needs of other users				
Institution	Respondents	Response		%
		Yes	No	
DML	100	48	52	48.00
UDW	102	62	40	60.78
UND	75	36	39	48.00
UNIZUL	66	41	25	62.12
Totals	343	187	156	54.52

The "Did not consider the needs of others" is a general reason which could account for its popularity. On the other hand, it could also be said that respondents were pointing to an attitude problem which existed among users and which should be addressed.

People should be more considerate of others' needs. In a tertiary institution this problem could be solved by paying specific attention to it during the orientation period for new users. The assistance of heads of departments could also be sought in the following ways: zero marks, better cooperation between lecturers and librarians re availability of books, harsher punishment for library crimes, etc.

5.4.3.3. No funds available to buy his/her own books (Q.23.4)

The second most important reason for stealing library books, according to the opinion of the respondents is the lack of funds. This points to a problem that is out of the hands of libraries. Books are expensive in South Africa. As most books are imported, book prices are influenced by the value of the Rand against foreign currencies. In February 1995 the Rand/Dollar value (information supplied by First National Bank, Empangeni) was $1.00 = R3.6150 and the Rand/Pound value was £1.00 = R5.7720.

In 1991 the accessions librarian at UNIZUL informed the researcher that the average price of books, based on information supplied by Logans Bookshop (now Mast Bookshop) was ± R100.00 per book. In 1995 this price is now reaching an average of R210.00 per book. This is more than 100% increase over a period of 4 years.

5.4.3.4. Stole a book from the library because it was a prescribed book he/she needed (Q.23.14)

Table 5.12

It was a prescribed book				
Institution	Respondents	Response		%
		Yes	No	
DML	100	27	73	27.00
UDW	102	47	47	46.08
UND	75	39	36	52.00
UNIZUL	66	13	53	19.70
Totals	343	126	217	36.73

The selfishness of users is highlighted by the percentage of users taking prescribed books when they should be buying their own copy.

About 37% of all the respondents thought that users would steal books that were prescribed by lecturers. This meant that users had to buy their own copies as they would continuously be using these books throughout their studies. This reason ties up with the previous one where users say they do not have funds to buy the books.

It is significant that UDW (46%) and UND (52%) the two oldest and biggest university libraries of this survey, featured "Prescribed Books" as an important reason for theft. On the other hand DML rates it at 27% and UNIZUL at 19.7%.

The libraries should look at this aspect very seriously and

formulate definite policies to combat this type of misbehaviour. From personal experience the researcher knows that theft of prescribed books is a problem. In a few cases prescribed books had to be replaced more than once and in two particular cases 10 times. These books are now kept under lock and key. The libraries should decide either not to buy prescribed books or withdraw those already in stock from circulation or, if they are purchased for the library, use should be strictly controlled. It must be remembered that these books should be bought by the students, so restriction of access should not be a problem.

5.4.3.5. Needed the illustrations in the books and magazines but could not photocopy them (Q.23.6)

Illustrations in this case are taken in a very broad sense to include not only pictures but also tables, charts, diagrams, maps, etc. Just over a third of the respondents (35.57%) perceived that if users needed the illustrations they would steal the book. Photocopy facilities could help but, in the researcher's view not on its own. It should be accompanied by an educational and training programme to make the user aware that it is not necessary to steal a book to obtain illustrations.

5.4.3.6. Users stole because they thought they would not get caught (Q.23.10)

Nearly 31% of the respondents indicated that they regarded the above as one of the reasons why users stole library material. The results of this question correspond with the earlier figures for the question "How do you rate the chances of being caught" where 48.11% said they did not think the chances of a person being caught were great. This is another case where the respondents by implication indicated that the security aspects of the libraries were not up to scratch.

5.4.3.7. Users stole library books because the books they needed to purchase were not available in the bookshops (Q.23.13)

Just over 30% of the respondents indicated that they thought the above statement was correct and there was no significant difference in the response of users from the different libraries.

This implies that if bookshops, especially the university bookshops, do not receive their book orders on time, the risk of frustrated customers stealing from the library becomes greater.

A question which cannot be answered by this study, is who is to be blamed for the shortage of books in the bookshops, especially on-campus bookshops. Did the bookseller not order enough copies or, did the lecturer not inform the bookseller in good time what to get and how many copies?

5.4.3.8. Stole material to prevent others from getting the same information (Q.23.3)

Table 5.13

To prevent fellow users from getting the same information				
Institution	Respondents	Response		%
		Yes	No	
DML	100	15	85	15.00
UDW	102	47	55	46.08
UND	75	17	58	22.67
UNIZUL	66	24	42	36.36
Totals	343	103	240	30.03

30% of the respondents gave this aspect as a reason for theft. There is a significant difference in the responses for the respondents of the four libraries. This reason does not feature very strongly in the public library (DML) where 15% gave it as a reason, as opposed to 46.08% at UDW, 22.67% at UND and 36.36% at UNIZUL. This could be because students have to buy books for

their studies which is not the case with public library users. Also, the students are in competition with one another, and many public library users are not pressurised by assignments.

It is also interesting to note the difference in attitude between the male and female respondents. 25% of the male respondents gave this reason for theft as a choice whilst the female respondents regarded it as a more serious reason with 34.64%.

5.4.3.9. Could not take out any more books as his/her loan quota was full (Q.23.7)

Nearly a quarter of the respondents (24.78%) favoured this reason as one that would cause users to steal books. It is standard practice for libraries to place restrictions on the number of books that can be borrowed per person.

In the case of the university libraries the position is as follows: Undergraduates - 6 per person for two weeks: Post-graduates - 10 per person for one month: Academic staff - 20 per person for 3 months. On the face of it, it seems to be a reasonable arrangement. However, with nearly 25% of users implying that this arrangement is not as reasonable as it seems, maybe libraries should take another look at this arrangement. It could be wise to be a bit more liberal on this issue.

In the researcher's opinion this is another area where a study can be conducted by library authorities. The policy of limited books per person should be looked at, so that if need be, the necessary adjustments can be made.

5.4.3.10. Just to beat the system (Q.23.12)

Table 5.14

To beat the system				
Institution	Respondents	Response		%
		Yes	No	
DML	100	21	79	21.00
UDW	102	28	74	27.45
UND	75	26	49	34.67
UNIZUL	66	7	59	10.61
TOTALS	343	82	261	23.91

Nearly 24% of all the respondents indicated that users would steal books just to see if he/she could beat the system. To combat this behaviour the staff at the circulation desk should be people of exceptional calibre, and capable of always being on the look out for such users. The staff in the circulation department should always be alert, attentive, diplomatic and always give the impression they are in control of the situation. If security staff are used, then good team work between the circulation and security staff should be the norm.

5.4.3.11. Remainder of the reasons

Reasons 10-15 as per Table 5.10 featured less prominently. About 20% of the respondents thought that users would just steal casually and thoughtlessly and nearly 20% thought that users would steal simply to add the book to his/her collection. Stealing books for financial gain only received a rating of 16.03%.

Although Murfin and Hendrick's interviewees (Murfin & Hendrick, 1975: 8-12) said that they stole or mutilated library material as an expression of hostility towards the institution's authorities, this reason did not really feature amongst the respondents of this survey and was only supported by 12.83%.

The fact that users were sometimes unable to borrow books

because the computerised circulation was not working, did not seem too much of a problem to the respondents (11.37% thought this could be a reason for theft). It could also mean that the computerised circulation systems of the four libraries did not have too much down-time to cause an inconvenience that would urge users to steal books.

Although students at UNIZUL told the researcher that they knew of fellow students who stole library books which they knew their lecturer would put on the reserve shelf (short loans), this reason did not feature strongly in the survey. Only 9.91% thought that it was a reason for theft.

5.4.4. Response from those admitting to theft

Table 5.15

Users admitting to theft of books			
Institution	RESPONDENTS	Response	%
DML	100	2	2.00
UDW	102	10	9.80
UND	75	6	8.00
UNIZUL	66	5	7.57
TOTALS	343	23	6.70

Altogether 23 respondents (6.7%) indicated that they stole books from their respective libraries. This varies from 2% at DML to nearly 10% at UDW. However, question 21 asked the respondents whether they returned books they had stolen, afterwards. From the response a number of respondents who did not admit to stealing, now indicated in their answers that they did steal by saying they "never" or "always" returned stolen books. It means that a further 19 respondents admitted to stealing library books. This brings the total to 42 which is 12.24% of the respondents.

Table 5.16

Did you return a stolen book afterwards?			
Institution	Response		%
	Yes	No	
DML	3	97	15.79
UDW	8	94	42.11
UND	3	72	15.79
UNIZUL	5	61	26.31
TOTALS	19	324	100.00

5.4.4.1. Reasons for stealing by those users admitting to theft

Table 5.17

Reasons given by those guilty of theft of library books			
No.	Reasons	Response	%
1	Had no funds to buy own book	25	58.14
2	Did not consider others' needs	22	51.16
3	It was a prescribed book	18	41.86
4	To prevent others getting the same information	12	27.91
		--	-- --
5	Book not available in bookshop	12	27.91
6	Needed the illustrations	10	23.26
7	Other reasons	9	20.93
8	Could not take out more books	8	18.60
9	To add book to own collection	7	16.28
10	Thought wouldn't get caught	7	16.28
11	Did not think about the act	5	11.63
12	To prevent the book from being put on the Reserve Shelf (Short loans)	5	11.63
		-	-- --
		-	-- --
13	Issue system out of order	4	9.30
14	Just to beat the system	4	9.30
15	An expression of hostility towards library or authorities	3	6.98
		-	- --
16	For financial gain	3	6.98

Most of the reasons mentioned in Table 5.10 are also mentioned in Table 5.17 with a difference with regard to the main reason. The main reason is now "No funds to buy his/her own book/s" at 58.14%, with "Did not consider others' needs" as the second most important reason at 51.16%. "It was a prescribed book" now also features strongly at 41.86% with "To prevent others from getting the same information" and "Books not available in bookshop" at 27.91%.

Comparing the reasons in Table 5.10 and Table 5.17 the conclusion can be reached that, for stealing, the user's perceptions of the main reasons and those of the 'thieves' are very similar. The only difference seems to be a slight shift in emphasis i.e., "Did not consider others' needs" moved into second place as opposed to first place in Table 5.10. It is interesting to note that "For financial gain" and "... hostility towards the library and authorities" feature near the bottom of the log in Table 5.17. In Murfin and Hendrick's interviews (1975: 8-12) the "hostility" aspect was accentuated as a reason by the interviewees. The bigger cases of library theft in the United States and Great Britain (Par. 2.3.4.4) gave the impression that the theft of library material was for financial gain. It seems that the "guilty ones" of this survey have not yet reached the same levels of sophistication as those in the United States and Great Britain.

"Other reasons" given by those who admitted to stealing were:

1. Selfishness
2. To impress girlfriend
3. Forgot to take out the book
4. Laziness or as an act of fun
5. "University costs is extremely high but they do not buy new material for the library thus one is trying to make the university buy books."
6. "To show how lax the security system is when compared to his cleverness / To prove himself to his friends and show he is also clever."

5.4.5. Reasons for mutilation

It was not possible to physically check library material for mutilation but a question, to test the issue of mutilation was included in the questionnaire:

5.4.5.1. "Why do you think would library users mutilate library material? Is it because of ONE OR MORE of the following reasons?" (Q.25)

A choice of ten answers was given from which the user had to select one or more answers as reasons for mutilation. These ten answers were:

1. Not enough photocopy machines available
2. The book/magazine was already mutilated
3. He/she did not want other users to get the same information
4. Mutilate books as an expression of hostility towards the library or other authority
5. Did not consider the needs of others
6. User wanted the illustration(s) for him- or herself
7. Was not aware of the cost of mutilation to the library
8. It would be easy for the library to replace the torn out or mutilated section(s)
9. None of the above
10. Other reasons

5.4.5.2. Reasons for mutilation chosen by the users

Table 5.18

Reasons why users think library material is mutilated			
No.	Reasons	Response	%
1.	Didn't consider others' needs	215	62.7
2.	Not enough photocopy machines	---	----
-	available	132	38.5
3.	Wanted the illustrations self	123	35.9
4.	Was not aware of the cost	106	30.9
5.	Prevent others from getting	---	----
-	the same information	99	28.9
6.	Material was already	68	19.8
-	mutilated	---	----
7.	Mutilate as a hostile act	53	15.5
8.	Easy to replace material	46	13.4
9.	Other reasons	43	12.5
10.	None of the above reasons	6	1.7

(The figures in Table 5.17 are given in order of frequency)

As in the case of theft (Table 5.10) the most popular reason for mutilating library material is "Did not consider the needs of others" (54.5%). Of the first five reasons chosen in Table 5.18 three of the reasons actually point to the selfish nature of the mutilators. They are no. 1 "Did not consider the needs of others", no. 3 "Wanted the illustrations self" and no. 5 "Prevent others from getting the same information". Again the negative nature of human beings comes to the fore, and until this negative aspect of the users is addressed, no matter how many facilities are brought in to satisfy the users' needs, mutilation of library material will probably continue at the high levels indicated in Table 5.9 (64%), no matter how much material is provided.

Reasons 1,3,5,7, as per Table 5.18 are the same as discussed under theft and will not be repeated here. The researcher will concentrate on the ones that are more relevant to the mutilation question (i.e. reasons 2,4,6,8,9, and 10) listed in Table 5.18.

5.4.5.3. How do you rate your library's photocopy service? (Q.10)

Before going into the details of the next reason for mutilation of library material it is necessary to look at how the users rated the photocopy services.

Table 5.19

How do you rate the photocopy service?		
Scale	Response	%
Very poor	36	10.5
Poor	88	25.7
Undecided	74	21.6
Good	122	35.6
Very good	23	6.7
Totals	343	100.0

Collated 36.2% say that the photocopy service is poor as

opposed to 42.3% who say that the photocopy service is good. Less than 50% of all the users are satisfied with the photocopy service which is not impressive.

5.4.5.4. Not enough photocopy machines available (Q.25.1)

Table 5.20

Not enough photocopy machines available				
Institution	Respondents	Response		% dissatisfied
		Yes	No	
DML	100	18	82	18.00
UDW	102	54	48	52.94
UND	75	31	44	41.33
UNIZUL	66	29	37	43.94
Total	343	132	211	Av.% 38.48

The second most important reason is that there are not enough photocopiers available. The user does not want to wait his/her turn so s/he simply removes the information that is needed from the book/periodical.

5.4.5.4.1. Ratio of users per photocopier

Table 5.21

Ratio of users per photocopier			
Institution	User population	Photocopiers	Ratio
DML	10 000	1	1:10000
UDW	10 000	19	1:526
UND	7 500	14	1:536
UNIZUL	5 000	6	1:833

The researcher asked the four libraries concerned, how many photocopy machines they had for the sole use of their users in their main libraries to establish the ratio of users per photocopy machine. As Table 5.21 shows, there is quite a discrepancy between the libraries. UND has one machine for every 536 users. UNIZUL has one for every 833 whilst UDW has one for every 526 and DML one for every 10,000.

Asked if this was deliberately planned or if they were aiming at a standard ratio the librarians' reaction was that they were not aware of any standard ratio for photocopier per users. The researcher telephoned the suppliers, AMK Technologies and Nashua, who also said they were not aware of any such ratio. The suppliers simply relied on the work capacity of the photocopiers to decide whether a bigger model should be recommended or not.

The ratio's given in Table 5.21 do seem to support the 38.48% respondents who say that there are not enough photocopiers available.

5.4.5.5. S/he mutilated the book/journal because it was already mutilated (Q.25.2)

Table 5.22

Material was already mutilated				
Institution	Respondents	Response		%
		Yes	No	
DML	100	20	80	20.00
UDW	102	18	84	17.65
UND	75	25	50	33.33
UNIZUL	66	5	61	7.58
TOTALS	343	68	275	Av.19.83

20% of all the respondents indicated that they thought users would mutilate material because it was already mutilated. This confirms Murfin and Hendrick's findings when they pointed out that mutilated material should be repaired or removed immediately on discovery of mutilation as mutilated material seemed to encourage more mutilation.

5.4.5.6. Mutilate books as an expression of hostility towards the library or other authority (Q.25.4)

Murfin and Hendrick (1975: 8) managed to interview persons who admitted to acts of mutilation and found the above as a reason mentioned by the interviewees. The users would, when s/he was

frustrated by so called "unreasonable" acts of the authorities, vent their anger towards the library and mutilate library material. This reason was also tested in the four Natal libraries used for this study. The respondents did give it as a reason but not as an important one as the 15.45% response in Table 5.18 suggests. Those who admitted to mutilation also gave it a low rating of 15.4%.

5.4.5.7. It would be easy for the library to replace the torn out or mutilated section(s) (Q.25.8)

Murfin and Hendrick (1975: 8-12) also found that users would mutilate library material because they thought it would be easy for the library to replace the mutilated material. This aspect did not receive much prominence amongst the respondents (13.41%) and not even amongst those who admitted to mutilating library materials. They ranked it last.

5.4.5.8. Other reasons

Most of the reasons given as "other" do actually fit into one or more of the reasons already mentioned. However, there are a few that need mentioning and will now be discussed:

Only two "other" reasons were given by those who had admitted to mutilation.

The first reason mentioned implies that the security staff are incompetent when s/he says: "The security personnel is so foolish and lazy to check out stolen books. What they do is to sit down and chat loudly". This seems to confirm the earlier findings that the image of the security staff is not very good.

The second reason mentioned implies two aspects, i.e. the selfish aspect of the user, and that there are not enough

photocopy machines as s/he complains that the queues are too long. This person says: "Needed the information but is too lazy and stubborn to join the queue at the photocopy machines and is also an indifferent person".

Some of the "Other" reasons given by respondents who did not admit to mutilation vary from financial constraints, stupidity, and selfishness to the book was already mutilated, and complaints about the conditions of the photocopy machines, for example (in the exact words of the respondents):

1. "If the book is already mutilated, why shouldn't I, because it is now worthless already". This confirms the findings of Murfin and Hendrick (1975: 8-12) that material which is already mutilated tends to encourage further mutilation.

2. "Money & that he/she does not want to see others using it = but most important financial constraints."

3. Another person does not think much of the character of mutilators as s/he simply states: "He/she is a stupid".

4. A further comment simply says it "Could be exciting"

5. "Because of fear that when he/she leaves the book on the shelf she will never find it. The scarcity of the book".

6. "Being selfish. Only thinks of herself."

7. "Most of the time the photocopy machines are not in good working condition. There should be an attendant at all times."

5.4.5.9. Reasons why respondents, who admitted to mutilating books, did it

Although 64.1% (cf. Table 5.9) of the respondents said they were inconvenienced by mutilation of library material only 13 of the 343 respondents (± 4%) admitted to mutilating library material.

Table 5.23

Reasons why mutilators mutilate library material			
No.	Reasons	Response	%
1.	Was not aware of the cost	8	61.5
2.	Didn't consider others, needs	6	46.2
3.	Wanted the illustrations self	4	30.8
4.	Not enough photocopiers available	4	30.8
5.	Prevent others from getting the same information	3	23.1
6.	Material was already mutilated	3	23.1
7.	Mutilate as a hostile act	2	15.4
8.	Easy to replace material	2	15.4
9.	Other reasons	2	15.4

(The figures in Table 5.23 are given in order of frequency)

Except for a change in the ranking, the first five reasons are the same as those mentioned in Table 5.18. The main reason is now "Was not aware of the cost of mutilation to the library" (61.5%).

All the reasons for mutilation have already been discussed earlier. However, for the researcher it is enlightening to find that those who admitted to mutilation considered the most important reason for mutilating that they "are not aware of the cost of mutilation to the library". This implies that if users are made aware of the cost of mutilation, it will help to combat the problem of mutilation.

In an interview with the Deputy Librarian at UDW it was revealed that they had a campaign against mutilation and had, inter alia, held displays on mutilation. This seemed to have a positive effect, but it was not a long term solution as the effect seemed to wear off after a while. Such campaigns should obviously be repeated regularly.

5.4.6. Methods used to mutilate library material (Q.26)

Further to the reasons for mutilation the researcher wanted to find out what methods were used to mutilate library material.

Table 5.24

Methods used to mutilate library material		
Method	Respondents	%
1. Tearing out	252	73.47
2. Using a ball-point	141	41.11
3. Cutting out	138	40.23
4. Other methods	44	12.83
5. Using string	20	5.83

Table 5.25

Methods, per Institution, used to mutilate library material				
Method	DML	UDW	UND	UNIZUL
Tearing out	68%	75.49%	82.67%	68.18%
Cutting out	34%	57.96%	36.67%	37.88%
Using string	5%	4.9%	4.00	10.61%
Using a ball-point	47%	35.29%	65.33%	13.64%

Through personal observation the researcher was aware of the following methods i.e.: Tearing of pages, cutting out portions with a sharp object such as a knife, razor or scissors, by using ball-point pens, etc. The researcher also learnt of the string method from a librarian at DML. A wet string was placed inside the book, against the spine side of the book, between the pages which were needed. The wet string softened the paper. This made

it easy to tear out the page without anybody noticing it, as there would be no accompanying tell-tale tearing sound, normally associated with the tearing of paper.

All the above methods were mentioned when the respondents were asked what method/s they thought were used to mutilate library material. The researcher also hoped that other methods would be discovered under the section "Other (Please specify)". 44 responded to the "Other" method of which some will be discussed later on.

Tearing out the page is the best known method among the respondents with the string method the least known. Under the string method it is interesting to note that it is best known in UNIZUL at 10.61% and then in DML with 5%.

The researcher also tried to ascertain why, in spite of photocopy facilities being available, users still tended to mutilate and steal library material. The respondents were also tested on this aspect by a question from which they could choose more than one answer. The results are given below.

5.4.7. Reasons why books in libraries are stolen and mutilated even though photocopy facilities are available (Appendix G, Q. 27)

The respondents had 10 options from which they could choose. These are listed in Table 5.26.

Table 5.26

Books stolen/mutilated in spite of photocopy facilities			
Reason	Response		%
	Yes	No	
1. Queues were too long	212	131	61.81
2. Machines were out of order	170	173	49.56
3. Did not feel like making copies	123	220	35.86
4. Too expensive to make photocopies	120	223	34.99
5. The library was closing - no time left	81	262	23.62
6. No small change available for coin/slot machines	81	262	23.62
7. No photocopy paper available	73	270	21.28
8. Unable to buy photocopy cards to operate machine	72	271	20.99
9. Process of buying cards too cumbersome	43	300	12.54
10. Other	40	303	11.66

(The above results are given in order of frequency)

5.4.7.1. The queues at the machines were too long (Q.27.3)

This aspect compliments the findings under 2.6.6 and 2.6.4 that there does not seem to be enough photocopy machines available for the users. Nearly 62% of the respondents indicated that the queues were too long and they would therefore steal or mutilate library material rather than wait their turn to photocopy. To solve this problem seems simple enough: provide more machines but, restrictions with regard to space and noise complicate the matter.

5.4.7.2. The machines were out of order (Q.27.4)

Nearly 50% of the respondents said that if the machines were out of order it would lead to users mutilating or stealing library material. This enhances the view of one of the respondents mentioned earlier when s/he complained about the bad condition of the photocopy machines and advised that there

should be an attendant at all times to sort out machine problems (5.4.5.8). The researcher has personally observed how upset users become when this happened, especially in the evenings when there is no staff who can assist with the machines.

Although the libraries concerned do have staff who attend to photocopy machine problems it does seem that there is not enough staff. UNIZUL has one full-time staff member, UDW has 2, UND 1. DML uses one of its library staff on an assist-when-needed basis to look after paper stoppages and ink supplies. The three university libraries remain open in the evenings which means there should also be staff available for attendance at these times. If only one staff member is available, it does become difficult to have someone in attendance in the evening or after hours. UDW uses its two staff members in shifts till 22h00 in the evenings.

In the light of the 50% of respondents who selected this option it is also important that, if there is a service contract with the suppliers of the photocopy machines, this service is supplied promptly and efficiently. Library and company management should ensure that this service is not lacking in any way. The supplier should be made aware of the importance to keep the photocopy service running efficiently in order to prevent theft and mutilation of library material.

5.4.7.3. Did not feel like making copies (Q.27.1)

Nearly 36% thought that users would steal or mutilate library material just because they simply did not feel like making photocopies. In other words the effort to photocopy was just too much trouble for them. It was easier to steal or mutilate the library material they needed rather than to go to the trouble of photocopying.

5.4.7.4. It was too expensive to make photocopies (Q.27.9)

Nearly 35% indicated that users would rather steal or mutilate library material than photocopy the items needed as it was too expensive to make the photocopies. This is rather surprising as the photocopy charges at the different libraries do not seem to be high. UND charges 20 cents per copy (on the coin operated machines), and UNIZUL 10 cents per copy for A4 size paper, whilst UDW charges 15 cents per copy for A4 size and 20 cents per copy for A3 size paper. DML charges 20 cents per copy for both A4 and A3 size papers. These charges compared to those of the private sector do not seem to be too expensive as the private sector charges 30 cents per A4 copy (Copycat, Empangeni).

5.4.7.5. There was not enough time left as the library was closing (Q.27.2)

Nearly 24% said this was reason enough to mutilate library material. At the time of the survey all the libraries concerned had extended hours of opening, except DML. The three university libraries stayed open till late. This varied from 22h30 at UNIZUL till 24h00 at UND.

One tends to come to the conclusion that no matter how long the library stays open users will still mutilate instead of photocopy. This reason just seems to serve as an excuse as the users could have come earlier or first thing the following day. The researcher's experience with the students has been that quite a number of them tend to leave everything to the last moment and then expect everything to fall in place. In this respect Murfin and Hendrick (1975: 12) comment: "... it was near closing time and both made feeble attempts to copy the article before deciding to tear it out." This was said after their interviews with students who admitted to mutilating library material and gave too little time available as a reason for mutilating.

5.4.7.6. No small change available for use on the coin/slot machine(s) (Q.27.6)

81 or 23.62% of the respondents gave this as a reason why users would steal or mutilate library material instead of photocopying it. The researcher has personally observed how angry users became when asking for small change, after hours, and none was available. The alternative for them is to use the card-operating machines, but then the cards are also not available after hours.

From an administrative point if view this is not an easy problem to solve. Libraries would have to employ staff just to handle this aspect. Auditing authorities will want to have controlling measures implemented to ensure proper management of the moneys involved, such as proper supervision, an enclosed and safe area to operate from. This is not always possible due to the availability of staff and space. However, it is a problem which should seriously be looked at to improve the situation. The library should always try to be one step ahead to prevent theft/loss and mutilation of library material.

5.4.7.7. There was no copying paper available (Q.27.5)

Just over 21% (73) of the respondents chose this as a reason for theft and mutilation of library material. This should not be a difficult problem to solve and it is important that enough paper should be available at all times. This is an administrative matter which could be solved easily. There should not be occasion for the user to complain about the shortage of paper.

5.4.7.8. Not able to buy photocopy cards for use on the card operated machines (Q.27.7)

This reason is nearly on a par with the previous reason at

± 21%. All three university libraries mainly use card operated machines as opposed to coin/slot machines (i.e. UDW only uses card operated machines, UNIZUL has one coin operated machine with the rest being card operated. The same situation applies at UND and DML. This means that most of the users have been exposed to the experience of buying cards. Again the researcher has witnessed how angry and upset users become when they want to buy cards after hours but cannot get any. Most of them storm away highly upset and capable of committing any foolish act such as stealing and mutilating, just to get what they want.

It is, in the light of the 21%, therefore important that the libraries should, where possible, enable users to purchase these cards when they are needed most. UDW has a system whereby the user can reload his/her card when it is empty. However, even here some users find ways and means to circumvent the system which forces stricter control to be applied involving unnecessary management time and money spent on the service. This in turn would make management reluctant to institute such services.

5.5. PUNISHMENT

With regard to punishment one would like to know: Is it too mild, or should it be harsher? A number of authors and librarians seem to think that the punishment meted out is far too light. The users were asked to say what they thought.

5.5.1. Punishment for stealing/mutilating library books is minimal so nobody is scared of the consequences of being caught (Appendix G, Q. 28)

Table 5.27

Punishment is too light		
Choice	Respondents	%
Yes	128	37.3
No	56	16.3
Uncertain	159	46.4
Total	343	100.0

The majority of the respondents (46%) were not very certain if punishment for those guilty of stealing or mutilating books was too light. This could be because they were not aware of what kind of punishment was received by the guilty parties and would therefore not commit themselves. Of those who were prepared to commit themselves 37% felt that the punishment was not harsh enough and therefore did not serve as a deterrent to combat these crimes. About 16% of the respondents did not agree and felt that the punishment did serve as a deterrent. From Table 5.27 it can be deducted that the majority of respondents who were prepared to commit themselves felt that punishment for library thieves and mutilators was not sufficiently severe to serve as a deterrent.

5.5.2. What punishment would you say should a person, who is guilty of stealing/mutilating library material, receive? (Appendix G, Q. 27)

Table 5.28

What punishment should a thief/mutilator receive?		
Punishment	Response	%
A fine	127	37.03
Expulsion from library	105	30.61
A fine and expulsion	77	22.45
Prosecution in court by law	58	16.91
Other	45	13.12
Expulsion from university	24	7.00
None of the above	6	1.7
No response	6	1.7

The respondents were given a number of punishment options from which they could choose more than one option. The majority of respondents (37.03%) felt that a fine would be enough punishment. A weakness of this option is however, that the size of the fine is not determined. If the fine was a small one it would contradict the findings of Table 5.28 where most of the respondents said that punishment was too light and did not discourage library crimes such as mutilation and theft. Because the respondents said that punishment was too light one could presume that they meant a substantial fine.

The next punishment preferred by the respondents was expulsion from the library (30.61%). Some comments made by respondents indicated that the expulsion should be for a substantial period.

A combination of a fine and expulsion, as opposed to expulsion only, was preferred by 22.45% of the respondents, indicating that harsher punishment was preferred.

Yet the next one in line, prosecution in court by law, which could, depending on the verdict, be even harsher, did not seem to attract many votes, viz. 16.91%. Expulsion from the university as a punishment drew even less interest as only 7% were in favour of this option. Although as indicated above, a combination of a fine and expulsion from the library (some even say from the university) was preferred.

5.5.2.1. "Other" suggested punishments

Some of these "other" choices boiled down to the same as those already mentioned, but with a qualification added such as: "expulsion from the library for a time period". Some suggested a period of months and one even said for ten years.

Fines

The fine option was mentioned nine times but with a qualification added such as:

- i) A fine plus a period of expulsion.
- ii) A fine and replacement of the item.
- iii) The fine should be very high in order to act as a deterrent (One suggested an amount equivalent to three times the cost of the book).
- iv) A fine and if one holds a bursary the bursary to be withdrawn.

The impression created here is that although a fine is mentioned in Table 5.28 the respondents do not think it good enough. They are saying that something must be added. In other words, a fine must be coupled to some other form of punishment as well to make it more effective.

Expulsion

Although expulsion is also mentioned in Table 5.28 it is not a duplication under "other" as each of them is qualified.

- i) Expulsion for months or even 10 years. This is to serve as a deterrent.
- ii) Strict security is needed to prevent the expelled person from using the library anyway.
- iii) A warning followed by expulsion if this person does not heed the warning.
- iv) The guilty person should pay for all books stolen or mutilated at that time and if s/he is unable to do so then s/he must be expelled.
- v) Banned from all public libraries.

Sixteen of the 45 respondents under "other" had something to say about expulsion and was the punishment preferred most by the respondents (±36% of the 45). The second item mentioned does not expand on the expulsion theme but does show some insight into the problem, i.e. it might not be so easy to enforce such a punishment on a person. Staff and security personnel might not always be in a position to identify such a person to enable them to enforce the embargo.

Exposure to the public

There are three suggestions here and all three deal with exposing the offender to the public. All three have the same purpose but differ in approach:

- i) Offenders' "picture(s) should be published in newspaper to show how disgusting they are".
- ii) The second one simply says "the person's name must be made public".
- iii) The third one is not as harsh as the previous two but could be just as effective in combating future crimes. This one says, "denounce the person loudly in front of other people present".

The researcher has personally observed how embarrassed patrons become when the alarm is set off when they go through the exit gates. The alarm exposes such a person to everybody present and it is embarrassing to such a person. Some persons are very apologetic, some become angry, and some merely hang their heads in shame. It is very rare that such a person allows him/herself to go through this embarrassment a second time. If this "small" exposure is such an embarrassment and deterrent, then exposure to the broader public as suggested above by the respondents should serve as a much better deterrent.

Replacement of stolen/mutilated library material

At least 6 of the 45 (13%) who made "other" suggestions, said the material should be replaced by the guilty party, as a form of punishment.

- i) Five of the six said that stolen items should be replaced at a "specified amount".
- ii) The sixth one combines the replacement aspect with the punishments listed in Table 5.28. This person simply says "Any punishment should include the replacement of the book".

Replacement of books was not mentioned in the list of punishments listed in Table 5.28 and is an aspect which was not considered. The researcher is of the opinion that this form of punishment should also be considered and supports the last one mentioned where replacement must be made part of any other punishment imposed. This would not only serve as a deterrent but also help the library in replacing lost/mutilated items. The researcher would like to include processing costs in the replacement of stolen/mutilated material. This should deter would-be thieves and mutilators even more.

Miscellaneous

Under this heading is grouped punishments that could not be brought together under a related heading, because they each stand out on their own. They are:

- i) The act should "be treated as shoplifting or as damage to the other persons property".
- ii) The next punishment is obviously suggested by a person who has been frustrated by theft and mutilation as s/he says that punishment should include "castration".

- iii) A further punishment mentioned is that all the punishments suggested in Table 5.28 be applied because as s/he puts it: "stealing is stealing".
- iv) "Every book of the offender must be taken because he/she has been exchanging the books with fellows at some other institutions."

The last two need further comment as they represent something more than is stated above.

The third option above sums up what has been said by a number of persons when they speak about the attitude of librarians toward theft of library materials. This attitude is that librarians tend to down play the issue and somehow do not want to see the acts of theft and mutilation for what they are, viz. crimes. So the persons words of "stealing is stealing" seems very appropriate.

The fourth option is something new to the researcher and adds a new dimension to the theft of library material. This points to a network of organised theft of library material not limited to the geographic environment of a specific library. This implies that there are users from different institutions who cooperate with each other in supplying library material from what is available in one library to users of another library where that material is not available. This also implies that this "service" is reciprocative.

5.6. SUMMARY

The main purpose of this chapter was to establish the reasons for theft and mutilation in libraries. These acts are somewhat baffling to librarians because as Griffith (1978 : 226) says, "Why anyone would run the risk of being caught stealing something they could probably borrow [or photocopy] will never clearly be understood by a psychiatrist, let alone a librarian".

To achieve this purpose a questionnaire was compiled for a survey that was conducted at the four libraries included in this survey. The aims of this questionnaire were to determine:

- if there was a theft and mutilation problem;
- why users stole or mutilated library material;
- the level of theft at the different libraries;
- if the security precautions at the libraries were adequate.

Accidental sampling was considered the most practical although it is a non-probability method. The survey was conducted in the libraries, the respondents were library users, and the researcher was satisfied that on the whole, honest answers were given to the questions (i.e. people who did not patronise the library would not have been in a position to mutilate or steal library material and admit to it). However, it is possible that some respondents might not have taken the questionnaire seriously, for example, at least one suggested castration for offenders which could be interpreted as a frivolous response. On the other hand it could also indicate extreme frustration.

The researcher personally distributed and collected the questionnaires at each library as explained in Par. 5.3.1.3 and Par. 5.3.1.4. Of the 356 questionnaires distributed 345 were returned of which two had to be cancelled, leaving a total of 343. This is a return rate of 96%.

The quality of the security precautions and service was measured. The respondents gave the security precautions a rating of 55.4% (Table 5.4) and, when asked what the chances of being caught stealing a book were, 48% (Table 5.6) said the chances were not good, which gave a negative overall security rating.

The fact that 49.3% and 64.1% said that they were inconvenienced by theft/missing books and mutilation

respectively, strengthens the perception that all is not well with the security measures of the libraries.

The respondents were asked to give their opinion on why library users stole library material and could choose from 15 options. All the options, in varying degrees, were chosen as reasons for theft. The five most prominent choices were:

The thieves did not consider others' needs.
The thieves did not have funds to buy their own books.
Users stole a book because it was a prescribed book.
They needed the illustrations.
The culprits thought they would not get caught.

Forty two of the respondents admitted to stealing library materials. They also chose, in varying degrees, all the reasons but, there was a change in emphasis. The most important reason now was a monetary one, i.e. shortage of funds to buy their own books.

Testing the reasons for mutilation was done on the same basis as theft but with ten options only. Thirteen of the respondents admitted to mutilation and their main reason was that they were not aware of the cost of mutilation to the library.

Reasons were also sought for theft and mutilation despite available photocopy services. The same process as in theft and mutilation was applied, also with 10 options. The main reason given was that the queues were too long. This implied that the libraries did not have enough photocopy machines to cope with the demands of the users.

The researcher conducted a further investigation and found that there was no standard ratio of users per photocopy machine. The ratio of users per photocopy machine found in the four libraries varied from 1:10,000; 1:833; 1:536 to 1:526. As there

does not seem to be a standard ratio of users per photocopy machine, it is difficult to comment on the above ratios. However, as the respondents (± 62%) said the queues were too long, it seems as if the existing ratio does not meet the demands of the users.

A number of authors said that punishment imposed on library criminals was not harsh enough and did not act as a deterrent. This aspect was also tested in the questionnaire, and it was also found that punishment for library crime is too light.

When asked what other punishment, not listed in the selection of punishment options the respondents could choose from, various other punishments were given. In most of the cases these "other" punishments were harsher than the options they could choose from, i.e. one of the options was a fine. Under "other" they would add something to the fine like "a fine plus expulsion" or "a fine and replacement of the item". These "other" punishments seem to enhance the findings of the previous paragraph that punishment is too light.

From the findings of the survey one can say that there are many reasons for theft and mutilation. To solve the problems will not be an easy task, as many aspects will have to be addressed such as:

- Non-caring and selfish attitudes of the users will have to be addressed.
- Attitudes of librarians towards library crime will have to change, i.e. they must see acts of theft and mutilation as crime.
- Security measures must be upgraded.
- Needs of the users should be looked at, i.e. better loan facilities, photocopy facilities.
- Efficient and professional services are to be maintained

at key points such as circulation desk.

Libraries cannot rely solely on ESS's to solve their problems.

Clifford Stoll's remark on security measures is relevant in this regard "... security is a human problem that cannot be solved by technical solutions alone" (Quoted in Rude, 1993: 17).

CHAPTER 6

6. CONCLUSIONS AND RECOMMENDATIONS

6.1. INTRODUCTION

This study looked at the question of library collection security in four major libraries in Natal. The purpose was to determine whether there was a security problem regarding theft and mutilation of library materials, and if so, how serious was the problem and what countermeasures were applied by the libraries. This study also attempted to determine the reasons why patrons steal or mutilate library material. An overview of the findings with regard to the above areas will be discussed and recommendations for the solution of problems highlighted by this study will be made.

6.1.1. Findings regarding problem areas

In Chapters 2-5 the researcher covered several aspects of collection security. A literature review was done, followed by a look at security systems available in South Africa, and then more specifically at those used in the four libraries in Natal. To determine if a loss problem exists stocktaking was conducted at the four libraries concerned. The researcher tried to establish why the four libraries turned to electronic security systems for libraries, as well as their reasons for choosing a particular ESS. To determine the loss rate of the libraries a sample stocktake was conducted at the four libraries. A survey was conducted at the four libraries of this study to determine the reasons for theft and mutilation by library users.

(1) The magnitude of the collection security problem

The literature overview in Chapter 2 highlighted certain

aspects, problems and solutions regarding collection security which were also useful for the empirical studies conducted in the later stages of the research project.

It was found that collection security was an international problem of considerable magnitude causing great concern and inconvenience to librarians and patrons alike. Shuman (1994: 4) mentions an annual loss of $50 million for the U.S.A., and Jackson (1991b: 394) a figure of £100 million.

Another aspect that was highlighted was that librarians (in America and Europe) were too subtle and timid in combating library crimes (Par. 2.3.1). They often preferred to regard the crimes as oversights on the part of the offenders instead of treating them as crimes. Due to this timidness and fear of publicizing library crimes which could have detrimental effects on the attitude of library authorities, donors, etc., library crimes such as theft and mutilation of library material were not reported by librarians. However, in the U.S.A. it was found that reporting of crimes actually had the opposite effect because it served as a deterrent.

(2) What countermeasures are applied in libraries

The literature highlighted several countermeasures to combat crime in libraries. Three main streams were identified, i.e. non-electronic systems, electronic systems and a combination of these two (Par. 2.5).

The non-electronic systems refer to measures such as the chaining of books (as was done in the Middle Ages), the use of guards, patrolling of the libraries, and maintaining good circulation policies and systems, turnstiles, restricted access, building designs, the creation of a security consciousness, and registration policies. It is also necessary to have a written security manual and policy, to guide staff in handling

situations where crimes are committed.

Other measures include the instituting of electronic security systems which set off alarms when library materials leave the library illegally. The use of an ESS can also be combined with measures such as the use of security guards, door checkers and parcel counters.

(3) Collection security

Although it is necessary and good to apply countermeasures and tighten security through various means like security guards, it was found that in spite of all the security precautions no security system is completely foolproof. There will always be someone who will try, and succeed, to circumvent the security system(s) (It was pointed out that even the security systems for the safety of the presidents of the United States have been circumvented, resulting in the deaths or wounding of some of the presidents). However, without these security precautions libraries will not be able to keep theft and mutilation of their stock to a minimum.

(4) Establishing the extent of book losses

Although librarians were aware that book theft and mutilation occurred, very few librarians, internationally and locally, could say how many books were stolen or mutilated (Par. 2.3.2). The librarians could only estimate or guess the extent of their losses. They were unable to give accurate figures because regular inventories are no longer undertaken.

(5) Mutilation

It was found that there was no easy way to establish the extent of mutilation of library materials. It will require a

major effort and involve considerable cost in time and labour to establish an accurate figure for what is mutilated. Librarians mostly rely on reports from patrons and sampling techniques to get an idea of the magnitude of the problem.

(6) Why library users commit the crimes of theft and mutilation

The literature survey in Chapter 2 shows that it is not enough to apply countermeasures only. It is also very important to establish why users commit crimes of theft and mutilation. The more these are understood the better the librarians can react to eliminate their reasons for mutilating and stealing.

6.1.2. Hypothesis

The hypothesis stated in Par. 1.2 was:

Although libraries are aware that books are stolen and mutilated (major libraries in Natal all have electronic security systems) they are not facing up to the problem.

The libraries included in this study were all aware of theft and mutilation problems and took steps to tighten security to reduce these problems. All four acquired electronic security systems quite some time ago, in spite of the cost involved. (The costs of three systems are compared in Fig. 3.1).

However, the results of the various interviews and questionnaires created the impression that the libraries, although applying countermeasures, did not seem to know the basic reasons for crimes committed in libraries. None of them tried to establish why library users committed the crimes of theft and mutilation. Without this knowledge proper countermeasures and security policies cannot be devised and

employed. At the time of acquiring an ESS only one of the libraries had an idea of how much stock was missing.

The libraries are relying heavily on the ESS's instead of also looking at the causes of library theft and mutilation. In Par. 3.5.18 it was found that the libraries did not address the root cause of theft and mutilation by dealing with the reasons for these crimes, and that the ESS, although an important instrument in combating library crime, was nothing more than just that. Most of the libraries failed to exploit important measures such as systematic inventory control, proper (written) policies and procedures regarding staff training in observation of suspicious behaviour, and reporting and apprehending of thieves. When asked whether they had written security policies, none of the libraries had any.

6.2. SUMMARY OF IMPORTANT FINDINGS

The literature survey identified a number of related aspects. Theft and mutilation of library materials are problems occurring, and increasing world wide. Loss of library materials due to theft and mutilation is normally more serious than libraries think it is.

More and more libraries have resorted to countermeasures such as upgrading their security measures. This was done through various means such as having restricted areas, placing restrictions on the use of certain types of material, patrolling of the libraries, using security guards, and using electronic security systems.

Collection security problems also exist in South Africa and the extent of the theft and mutilation problem is also more serious than the four libraries of this study expected. All four indicated an expected loss rate of between 2% and 5%. The 15.5%

losses shown in Table 4.4, and the 64% of respondents who have been inconvenienced by mutilation (Table 5.9) clearly illustrate this point.

The basic aims of this study were to determine:

- whether there was a security problem in the major libraries in Natal,
- what the magnitude of the losses was,
- what countermeasures these libraries applied, and
- why users steal/mutilate library material.

Empirical means were applied to achieve these aims. It was necessary to look at what countermeasures were applied at the libraries, how these measures worked, and how effective they were. A sample stocktake was undertaken in the four libraries to determine the magnitude of the libraries' losses. A questionnaire survey was conducted to determine why these losses occurred at the four institutions. The availability of ESS's in South Africa was investigated, and interviews were conducted with representatives of three of the main suppliers of ESS's to compare the operation of the various systems.

6.2.1. Electronic security systems used in South African libraries

In order to establish what electronic security systems were used in South African libraries and if the librarians were aware if other ESS's existed, a questionnaire was mailed to all university libraries in Southern Africa known to the researcher and to some of the larger public libraries and other special and national libraries as explained in Par. 3.2.2. The response rate was 84.75%.

This survey showed that at that stage there were three main

suppliers of ESS's in the country, viz. 3M, Checkpoint, and Saverlabel of which 3M was by far the most widely used (91%, followed by Checkpoint 24%, and Saverlabel 6%). At that stage the researcher knew of 8 different ESS's available on the International Market. With the exception of the Gaylord system, only the above three were known to the libraries included in this survey.

6.2.1.1.Countermeasures

Countermeasures against theft and mutilation applied by the four libraries did not go much further than the installation of ESS's and the use of security guards at the entrances and parcel kiosks. None of the libraries tried to establish why users steal and mutilate library material or to develop a written security policy. Only one library attempted to educate its users through displays. There was no sign of creating a security consciousness amongst staff and users.

The researcher compared the three electronic systems used by the four libraries of this study. The most important differences and similarities are summarised in Fig. 3.1. The main difference is that the 3M and Saverlabel systems both work on the electro-magnetic, low frequency principle and use metal tattletapes (targets). The Checkpoint system works on a low radio frequency. It uses Checklabels as opposed to metal tattletapes. Although all 3 systems can do both the bypass and full circulating system, they each favour a particular system. Checkpoint and Saverlabel favour a bypass system as opposed to 3M which favours a full circulating system.

The above ESS's are used by the four libraries as a countermeasure to combat theft of library material. Two interviews were conducted with the librarians of each library. One was to determine why the libraries switched to an ESS and

the second one why they decided on a particular ESS.

As none of the four libraries had any manual or non-electronic security system in use prior to acquiring an ESS, the main reasons for acquiring an ESS can be summarised as follows:

- All four libraries, although they did not attempt to establish a loss rate of their stock, prior to acquiring an ESS, were concerned that the loss rate was too high, and acquired an ESS to counter this loss. (Only UDW, because of its past practice of regular stocktaking, was in a position to know what its loss rate was).
- They also needed a reliable system which had good technical backup services (Fig. 3.2).

Preferences for acquiring a specific ESS varied amongst the libraries. It appeared that only DML was aware that there were other ESS's on the market, and could make a choice. The other 3 libraries said that as no other ESS was available they had to take what was available.

The most important reasons for acquiring a specific ESS were:

- the reliability of the tattletapes (targets),
- the quality of the after sales service of the distributor,
- false alarms must be limited to the minimum,
- targets should be difficult to detect,
- the price and running cost of maintaining the system,
- the system should be compatible with the circulation system.

6.2.2. Stock losses

In order to establish if collection security was a problem the

researcher had to determine what the losses, if any, of these libraries were (Chapter 4).

To do this the researcher had to choose a stocktaking method that was easy to implement, reliable, and represented a fair picture of the libraries' stock situation. It was impossible for the researcher to do an inventory therefore a sample stocktake had to be undertaken.

After an investigation of various stocktaking methods the book census method was selected as it complied with all the requirements the researcher expected of a stocktaking method. It was easy to administer, did not take much time, would cause the least disruption in the libraries concerned and did not require much labour. It was also an accurate method as Bahr (1981: 7) showed in comparing the difference in results of an inventory and a book census (.2%).

As the library computer systems of all four libraries did not lend itself to sample stocktaking, the researcher was not able to do a stocktake based on a certain percentage of the total stock. Instead the researcher had to select a portion out of each classification number of the Dewey Classification system.

Unfortunately, due to the fact that a workable shelflist for UND could not be compiled the researcher was forced to abandon the results for this library. The final stocktaking was therefore limited to the three remaining libraries, i.e., DML, UDW and UNIZUL.

The results of the book census showed that a loss problem did exist. The overall loss of the three libraries was 15.5% as opposed to the expected loss rate of 2%-10%. Out of a total of 39,086 volumes that were counted, 7,851 volumes were missing. The monetary value of this loss amounted to R1,648,710.00.

The losses of the individual libraries varied. The lowest loss rate was that of DML (5.5%), followed by UDW (11.22%) and UNIZUL (23.18%).

A weakness of this exercise was that no follow-up book census could be done after a year so that an annual loss rate could be found. Sometimes, especially in the case of overdue books, the books are returned or reappear after a long period of being missing which could affect the loss rate. However, if a book is misplaced, overdue or taken out on "extended loan", the book is still missing and therefore a loss to the users and the library.

6.2.3. Reasons why library users commit crimes of theft and mutilation of library material

Instituting countermeasures such as installing an ESS, or turnstiles, and employing security staff are all necessary. However, to really combat the crimes of mutilation and theft of library material, it is also important to know why these crimes are committed.

To determine these reasons the researcher conducted a questionnaire survey at the four Natal libraries. 356 questionnaires were distributed of which 345 were returned, giving a response rate of 97%.

The results of this survey were as follows:

6.2.3.1. Theft

The questionnaire results confirmed the stocktaking results reported in Chapter 4, that theft/missing books created problems. Nearly 50% of the respondents said they were inconvenienced by stolen/missing books.

The most important reasons for theft (Chapter 5), in the following order of frequency were:

1) The users did not have enough funds to buy their own books.
2) They were selfish and did not consider the needs of others.
3) The book was not available in the bookshop.
4) It was a prescribed book.
5) The users needed the illustrations in the book/s.
6) The users' loan quota was full and therefore could not take out any more books.
7) The users thought they would not get caught.

6.2.3.2. Mutilation

Mutilation of library material caused inconvenience to ± 64% of the respondents. Reasons for the mutilation of library materials also varied with the main reasons being (in the following order of frequency):

1) The users were not aware of the cost of replacing/repairing mutilated material.
2) They did not consider the needs of others.
3) They wanted the illustrations for themselves.
4) There were not enough photocopiers available.
5) The users wanted to prevent others from getting the same information.
6) The material was already mutilated.
7) The users mutilate material as an act of hostility towards the authorities.
8) The users thought it was easy to replace the material.

6.2.3.3. Theft and mutilation because of photocopy service

The survey found that although photocopy services were

supplied by the libraries, the service in itself was a cause for theft and mutilation.

It seems as though the management of the photocopy services should receive more attention, or a rethink. Some of the reasons selected as causes for theft and mutilation were of an administrative nature which could be solved by management decisions. Examples of these were:

- The queues were too long and the users did not want to wait.
- The machines were out of order so the users could not make copies of what they needed.
- There was no small change available for the coin/slot machines.
- There was no photocopy paper available.

6.2.3.4. Punishment is too lenient

The literature survey found that punishment for library crimes in America and Great Britain was too lenient and did not act as a deterrent. In this survey the majority of the respondents were uncertain whether punishment was too lenient. However, of those who were prepared to commit themselves, the majority felt that punishment for library crimes was too lenient.

When asked what punishment should be given to library criminals most of the respondents selected a fine as an adequate form of punishment with expulsion from the library as the next choice.

The respondents could give their own ideas of punishment for library criminals under the heading "other". These ideas also seemed to say that punishment was too lenient as most of the ideas were the same as the options given in Table 5.28 but, with

or apprehensive to report on criminal activities in libraries must change. Attitudes like, the book is on extended loan (when long overdue) or it was an oversight on the part of the users if they remove library material illegally, do not help to alleviate the problem. These attitudes rather aggravate the problem as they do not act as a deterrent to would-be offenders. It would only encourage them in their deeds as they know no steps will be taken against them.

It goes against the traditional view of librarians to admit that their users may be criminals. However, they should rather as Jackson (1990: 359) says do as the Americans. "There librarians readily admit their losses, survey their security often and discuss their problems openly". Librarians must see these acts for what they are, viz. criminal offences and treat them as such.

(2) The authorities, especially at universities, should change their attitudes towards library crimes. All too often, as was shown in the literature survey, if a library book is stolen the punishment is far lighter than in the case of a similar offence in another context. (Through personal knowledge the researcher knows of a case where a staff member was found guilty of stealing library material and only received a warning).

6.3.2. Improve photocopy services

(1) Wherever possible the forming of long queues should be avoided or minimised. Breakdowns must be attended to immediately to avoid frustration to users and thus counter the users' inclination to steal or mutilate. Paper and ink shortages must and can be avoided at all times when the library is open.

(2) The purchase of more photocopy machines must be considered seriously. This was one of the main reasons given by the users

for stealing or mutilating in spite of photocopy facilities being available. In short, the photocopy services must be made as user friendly as possible in order to facilitate the users' access to the services.

6.3.3. Facilitate user access

A student working against deadline pressures may be tempted to purloin materials for his/her own use especially if the materials are not available elsewhere and library hours are limited or curricular needs are ignored. To counter this users must be given all help required to access materials without difficulty. A regular reference service, adequate guides, availability of well trained, dedicated staff (they must be available at all times) to assist users with their library needs will help patrons develop a positive attitude towards the library. A library responsive to users' needs can help create an atmosphere in which theft or mutilation may be less likely than when users are frustrated.

6.3.4. Regular stocktaking programme

(1) The researcher strongly recommends that libraries again implement a programme of regular stocktaking. It is very significant that DML which is now conducting stocktaking has the lowest loss rate (5%) of the four libraries selected for this survey.

UDW, which until 1985 did annual stocktakings, has a loss rate of 11%. During the period in which they did regular stocktakings their losses diminished from 34% in the 1960's to only 3.3% in 1985.

UNIZUL, which last conducted a stocktaking in 1976, and then only because of a fire, has a loss rate of 23%. At UND,

completely without a stocktaking record, the researcher could not conduct one because a shelflist could not be constructed.

From the above information it seems that regular stocktaking does play a role in reducing the loss rate thereby enhancing collection security.

(2) The literature suggests that major inventories or stocktaking exercises take place at least every five to ten years, with sample or partial stocktaking more frequently.

6.3.5. Educate library users

(1) Users who are aware of the costs and impact of theft and mutilation may be less likely to become offenders. Exhibits of mutilated materials can produce positive results, and advising of penalties will also discourage the tempted ones.

(2) Users must also be taught that there are alternatives to acquiring information by means of theft and/or mutilation. Through personal experience the researcher has observed some offenders who were not aware that they could ask for extension of the loan period of their book/s.

(3) Users must not only be made aware of the services a library can provide but be taught how to use the library for his/her own benefit. Again, the researcher has personally observed how little some users know about the use of the library. This was especially the case with first year students who had no clue how to help themselves or handle books to get information. They become very frustrated and are then inclined to mutilate or steal. This impression was that these users did not grow up in an environment where they were taught how to use a library. Proper orientation must be provided to new users in library use once they join the library. Follow-up education,

adapted to the need of the users as they progress in their education should also be conducted.

(4) In the researcher's opinion library education should start from the earliest school years where users can become information literate. In these forming years the right attitude towards library use can be generated.

6.3.6. Creating security manuals and/or written security policies

(1) Security manuals or written security policies were not available in any of the four libraries included in this study. Library staff need to know what to do if a person is illegally removing materials from the library. Such a manual should indicate the procedures for handling emergencies or unusual situations and staff should have a copy of the manual in their work area. In this regard Zeidberg (1984: Flyer) observed, "Libraries most concerned about preventing theft and improving collection security find that policies, procedures, and electronic systems are most beneficial with an alert, informed and trained staff to implement them. And staff need good policies and instruction to be effective".

(2) The Association of Research Libraries in America has encouraged this method and published several examples of security manuals and policies, (Collection security in ARL libraries, 1984:1-93). These manuals include guidelines on:

- library collections
- library property
- personal property
- preventing thefts
- personal protection
- procedures with electronic security systems

- mutilation

6.3.7. Breaking the cycle of book theft and mutilation

Library authorities do not seem to apprehend offenders. Because of this, a cycle of repeated theft is started and the offenders become unafraid of the consequences of their actions. If users believed that they would be caught, and library rule breaking was taken seriously, the problem would decrease significantly. Offenders must be apprehended so that the cycle of book theft and mutilation can be broken.

6.3.8. Legal steps

(1) In South Africa there are no laws specifically dealing with library crimes. Crimes committed in libraries are normally dealt with via common law procedures, in other words, theft of library materials will be regarded as shoplifting. In America specific library laws have been passed which recognise deeds such as wilful concealment and overdue books as theft. In some cases mutilation of library material is also made punishable by law with a fine and/or imprisonment (Bahr, 1981: 99-100). The researcher would like to suggest that similar legislation in South Africa could help in combating library crimes, i.e. punishment that can act as deterrents, defining when an overdue book is regarded as stolen.

(2) Internal measures such as clear and well defined library rules to combat, inter alia, library crimes must be made known to library users. Circulation systems which are not easily circumvented, by staff and students alike, must be applied. Loss deterrents such as a consistent circulation policy, adequate staff training, clear property markings on materials must be implemented. Misuse of library membership cards can be minimised by requiring proper identification for registration and limited

books for circulation, until identification is verified. Especially at university libraries the use of the library by outsiders must be well monitored and controlled. Restricted areas must also be constantly monitored by well trained staff.

6.3.9. Publicise acts of theft and mutilation

(1) Offences of theft and mutilation of library materials must be made known, especially to librarians of other institutions so that they can take note and be prepared for similar cases in their libraries.

(2) The names of people found guilty of library crimes should be publicised in the news media and instances reported in library journals. Exposure of library criminals to the public was recommended by respondents of the survey in Chapter 5 when asked their views on punishment.

(3) Library criminals' names (and photographs where possible), and details of their acts and convictions should be circulated amongst librarians and second hand booksellers in South Africa. This is necessary because as Van Nort (1994: 33) says, "One of the most effective tools in recovering stolen items is publicising the theft".

(4) Following on from (3) the researcher would also recommend that a reporting agency to which theft reports can be sent for circulation amongst librarians and booksellers be created. In the U.S.A. two such agencies exist, viz: that of the Antiquarian Booksellers Association of America (ABAA) and the Bookline Alert/Missing Books and Manuscripts (BAMBAM). Perhaps an organisation like SABINET might be interested in doing something similar.

6.3.10. Mutilated materials

Once material has been mutilated it leads to further mutilation. Such mutilated material must therefore be repaired promptly or even removed from circulation if it is on the open shelves.

6.4. SUGGESTIONS FOR FURTHER RESEARCH

Not much research has been done on collection security in South Africa. This study could only cover a very small part of the whole spectrum of collection security problems. This means that there are still many fields regarding collection security in South Africa to be researched.

More research could be carried out to find out the reasons for theft and mutilation. This study dealt with these reasons but the psychological, social, environmental and situational factors were not dealt with.

Other crime related aspects such as delinquent patron behaviour and vandalism are aspects that are related to library security which are important fields which could still be researched.

An interesting research project would be to do a study as to why books needed by students are not available in bookshops when needed and how this problem can be solved.

Students claim that they do not have funds to buy their books. However, the perception is created by rumours and instances such as described by Msuya in Par. 2.6.4 that students do have the money to buy books, but rather spend it on other personal items. It would be an interesting research project to determine the correct facts in this regard.

A thorough investigation into the matter of loan restrictions is also another issue that can be investigated, especially in the light of increased academic pressure on students to do well.

Any security system is only as good as the human factor allows it to be. Staff attitude towards library and collection security is important and research in this regard will go a long way to create means to develop security consciousness amongst staff.

6.5. CONCLUSION

This research concentrated on collection security, more specifically, theft and mutilation of library materials, in major libraries in Natal to determine whether there is a collection security problem.

A collection security problem does exist. The librarians are aware of the problem, and seem to be taking steps to combat the loss and mutilation problem, i.e. all four libraries installed ESS's. However, after the surveys and interviews were conducted the conclusion can be reached that the librarians do not seem to realise the extent of the collection security problems (All four librarians expected a loss rate of about 3%). The combined loss rate of the three libraries where a sample stocktake (book census) was conducted is 15% with a monetary value of R1,648,710.000.

None of the libraries had attempted to establish the extent of their losses, prior to acquiring an ESS or thereafter, to establish if there was a reduction in the loss rate. No attempt was made to understand why theft and mutilation takes place and to institute effective countermeasures and seemed to rely very heavily on the ESS's to solve their problems. It seems they do not know enough about collection security to counter theft, loss and mutilation of library materials effectively.

APPENDIX A: ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES QUESTIONNAIRE FOR LIBRARIES

QUESTIONNAIRE/SURVEY

ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES

The purpose of this questionnaire/survey is to ascertain what Electronic Security Systems (henceforth ESS) for libraries are available in South Africa. For purposes of this survey ESS means those systems used primarily to prevent library material being removed from the library illegally.

When you have completed the questionnaire please return it to me in the self addressed envelope supplied herewith.

Preliminary data

Name and address of library: .....
.....
.....
.....

(Please mark the appropriate box with an X, i.e. if YES then mark block with an X)	YES	NO
	X	

1) Does your library use an ESS? YES NO

(If your answer is NO please go to question 3)

2) Which ESS does your library use? (i.e. Knogo, Checkpoint Mark IV, 3M Model 1325, etc.)

.....
.....

3) Do you know if any of the following ESS's are used in other Southern African libraries?

	YES	NO
Checkpoint		
Knogo		
Gaylord		
3M		
LPS International: Stop-Loss		
Sensormatic		
Sentronic (Book-Mark)		
Saverlabel		

4) If YES which ESS and in which library/ies?

.....
.....
.....

5) Are you aware of any other ESS's, not mentioned in 3 above, which are used in libraries in South Africa?

YES	NO

6) If YES please supply details:

Name and model of ESS: .....
.....
Name of distributor: .....
.....
Library where ESS is used: .....
.....
.....

Thank you for your cooperation.

APPENDIX B: INTERVIEW/DISCUSSION DOCUMENT RE SELECTION OF ESS

INTERVIEW/DISCUSSION DOCUMENT RE SELECTION OF ESS

Reasons for selecting electronic security systems (ESS)

Previous system

1. Did the library have a security system in operation prior to the installation of the ESS? ..... YES NO

2. What type of system was this?

   a) Door checkers (students) .....

   b) Door checkers (Professional) .....

   c) Security guards (library staff) .....

   d) Security guards (professional staff) .....

   e) Patrol guards .....

   f) Other .....

   g) If "Other" please provide details .....
   .....
   .....

3. Which one was the most effective? ..... a,b,c,d,e,f or g

4. Was any combination of a-f used? ..... YES NO
   (If NO go to no. 6)

5. Which combination was used? .....

6. Was the previous system replaced by an ESS? YES NO
   If NO proceed to (8)

7. Why was the previous security system discarded? Was it:

   a) Too cumbersome? .....

   b) Too costly? .....

   c) Ineffective? .....

   d) Insufficient in providing security? .....

   e) Other reasons? .....

   f) If "other" please specify
   .....
   .....
   .....
   .....

   g) Skip questions 8 & 9 and proceed to question no. 10.

8. If NO (for 6), is the previous system used in conjunction with the ESS in your library? ..... YES NO

9. If YES, in which way? ... Please describe
   .....
   .....
   .....

10. Were other systems, not mentioned in (2) considered in lieu of an ESS? YES NO

Cost of system/s

11. Which system mentioned in 2) was the most cost effective?
a b c d e f .....

12. Was the cost of the previous system a factor in your decision towards acquiring an ESS? ..... YES NO

13. How did the cost of this system influence your decision towards acquiring an ESS? .....
.....
.....
.....

14. In your opinion is an ESS more cost effective than your previous system? ..... YES NO

15. Was an inventory held to determine the magnitude of missing stock before considering an ESS? ..... YES NO

16. If no inventory was held, how was the loss rate of library material determined?.....
.....
.....

17. What was the loss rate of your library (%)? .....

Loss rate:

18. Was this loss rate acceptable? ..... YES NO

19. How did the loss rate influence your decision towards acquiring an ESS? .....
.....
.....
.....

20. What percentage loss would you consider acceptable?:
2% 3% 5% 8% 10% 15% higher? .....

Electronic Security Systems

21. What criteria were used to establish the necessity for an ESS?

a) Cost of old system ..... __

b) Prevention of book loss ..... __

c) Loss rate too high ..... __

d) Avoiding human error ..... __

e) Better control of traffic flow ..... __

f) Type of material which can be accommodated by an ESS ... __

g) Reliability of system ..... __

h) Technical backup services ..... __

i) Other ..... __

j) If other, please give details .....
.....
.....
.....
.....

22. Which other Electronic Security Systems were available on the market at the time you purchased your security system?:

- Checkpoint ..... ___
- Gaylord ..... ___
- Knogo ..... ___
- International: Stop-Loss ..... ___
- Sensormatic ..... ___
- Sentronic (Book-Mark) ..... ___
- 3M: ..... ___
- Saverlabel ..... ___
- Own system ..... ___
- Other ..... ___
- Unknown ..... ___

- If "Other" please specify .....
.....
.....
.....

23. Was theft a factor in deciding on an ESS? YES NO
.....

24. If YES (for 23) in what way? - Please give details.
.....
.....
.....
.....

25. Prior to implementing an ESS, was an attempt made to ascertain why users steal library material? ..... YES/NO

26. Was mutilation of library material a factor in deciding for an ESS? ..... YES/NO

27. Was an attempt made to ascertain why users mutilate library material prior to implementing an ESS? .... YES/NO

APPENDIX C: REASONS FOR PURCHASING A PARTICULAR ELECTRONIC SECURITY SYSTEM: QUESTIONNAIRE/DISCUSSION DOCUMENT FOR INTERVIEWS

The purpose of this interview is to ascertain the reasons why your library bought a specific Electronic Security System (ESS)

REASONS FOR PURCHASING A PARTICULAR ELECTRONIC SECURITY SYSTEM.

1. Preliminary

1.1 Name of Institution: _____

Address: _____

_____

_____

_____

1.2 Which Electronic Security System (ESS) does your library use?

Make: _____

Model: _____

1.3 For how long has this ESS been in use in your library?

Years: _____

(If less than a year): Months: _____

2. Safety

Were health safety factors (such as interference with hearing aids and heart pacemakers) taken into consideration?

_____

YES/NO

_____

3. Safety to magnetic tapes

It is known that an ESS can damage library material such as

magnetic tapes (including video and audio tapes). Was this factor taken into consideration when purchasing your particular ESS?

YES/NO

4. False alarms

Were you satisfied that false alarms would be limited to a minimum?

YES/NO

5. Detectability of targets

Was the detectability of targets (i.e. tattle-tapes) a factor in your decision toward acquiring your ESS?

YES/NO

6. Price

How important were the price and installation costs in your decision towards purchasing your library's ESS?
(Please mark the appropriate box with an X)

Very important

Important

Not important

Undecided

7. After sales service

Were you satisfied that the company/distributor of the ESS had a good track record in providing an after sales service?

YES/NO

8. Cost of the maintenance service contract

8.1 What is your opinion of the cost involved in the maintenance of the electronic system; is it high, average, affordable? .....
.....
.....
.....
.....

8.2 Is the cost of running and maintaining your library's ESS justified?

YES/NO

9. Efficiency

What is your opinion of the level of efficiency of the maintenance service provided by the supplier of the ESS?

GOOD
SATISFACTORY
POOR

10. Availability

At the time of purchase of your ESS was this the only system available for assessment?

_____

YES/NO

_____

11. Target (Tattle tape) reliability

Were you satisfied that the targets used for your ESS were reliable and not prone to malfunctioning?

_____

YES/NO

_____

12. Compatibility with circulation system

Was compatibility of the ESS with your circulation system a major consideration?

_____

YES/NO

_____

13. Increased mutilation

Were you aware that the targets (tattle-tapes, etc,) of ESSs could encourage the mutilation of library materials because users would try to remove the targets in order to bypass the system?

_____

YES/NO

_____

14. Types of material protected

Was the fact that your ESS could protect material other than books, from theft an aspect which was considered?

YES/NO

15. User friendliness

15.1 Did the level of user friendliness of the ESS influence the library's decision to purchase the particular system?

YES/NO

15.2 If YES please provide details .....
.....
.....
.....
.....
.....

16. Choice of ESS

If you had a choice would you buy the same ESS again?

YES/NO

17. Reduction of loss/theft rate

17.1 When purchasing your ESS, was a significant reduction in loss/theft rate of library material expected?

YES/NO/UNCERTAIN

17.2 What percentage in the reduction of the loss/theft rate was expected? _____

17.3 Did the distributing company indicate what percentage reduction in the loss/theft rate of library material could be expected after installation of the ESS?

_____

YES/NO

_____

17.4 If YES what was this percentage? _____

17.5 Was this percentage reduction in theft/loss rate mentioned by the distributing company contained in the guarantee agreement?

_____

YES/NO

_____

17.6 Was the expected reduction in loss/theft rate achieved?

_____

YES/NO/DON'T KNOW

_____

APPENDIX D: ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES IN SOUTH AFRICA: QUESTIONNAIRE/DISCUSSION DOCUMENT FOR 3M

The purpose of this Questionnaire is to serve as a discussion document in an interview situation. This questionnaire will be sent to the interviewee prior to the interview so as to facilitate the interview process. The researcher will make an appointment for an interview after the interviewee has had sufficient time to peruse the questionnaire.

3M

QUESTIONNAIRE

ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES IN SOUTH AFRICA

1) NAME OF LIBRARY SECURITY SYSTEM

.....

2) NAME OF COMPANY/DISTRIBUTOR

.....

3) ADDRESS:

.....
.....
.....
.....
.....
.....

Code:.....

4) PERIOD OF SERVICE

For how many years has this system been marketed in Southern Africa? .....

5) DISTRIBUTION

In how many libraries in Southern Africa is this system used?

A) Independent States:

Bophuthatswana ..... ___
Ciskei ..... ___
Transkei ..... ___
Venda ..... ___

B) Self-Governing States:

Gazankulu ..... ___
KaNgwane ..... ___
KwaNdebele ..... ___
KwaZulu ..... ___
Lebowa ..... ___
QwaQwa ..... ___

C) Neighbouring States:

Botswana ..... ___
Lesotho ..... ___
Namibia ..... ___
Swaziland ..... ___
Zimbabwe ..... ___

D) Republic of South Africa:

Cape Province ..... ___
Natal ..... ___
Orange Free State ..... ___
Transvaal ..... ___

6) HOW DOES IT WORK?

a) By-pass only ..... YES/NO
b) Full circulating only ..... YES/NO
c) Choice of either a) or b) ..... YES/NO
d) On which principle?
Electro-magnetic ..... YES/NO
Frequency ..... LOW/HIGH
Radio frequency ..... YES/NO
Frequency ..... LOW/HIGH

6.1) Description

i) Either bypass or full-circulating systems are available. They operate on an electro-magnetic principle. A low-frequency electrical signal is triggered when a thin metallic strip is stimulated by an alternating electromagnetic field. If a patron attempts to pass through the sensing unit with materials that have not been checked out properly, an alarm sounds and the gate locks.

ii) The 3M Model 1365 consists of two detection panels that are mounted with a ramp-style baseplate and an accompanying floor mat. It is also available without a baseplate and lattices mount directly to the floor. The alarm, photocell-activated patron counter and the status indicator are located in the base of the detection panels.

6.2) Comments:

Please comment on the accuracy of paragraphs i) and ii) and add on any important data that you know has been left out.

i) .....
.....

.....
.....

ii) .....
.....
.....
.....
.....

7) WHAT DOES IT COST?

7.1) Equipment:

Model	Unit cost	Annual maintenance
1250	R	R .....
1350	R	R .....
1850	R	R .....
1850-2	R	R .....
1360	R	R .....
1365	R	R .....
Installation fees		R .....

7.2) Sensitizer/Desensitizer R .....

7.3) Circulation accessories

Model	Unit cost
966 (Circulation Control Unit)	R .....
955 (Bookcheck)	R .....
951 (Book sensitizer)	R .....
950	R .....
930 (Book Desensitizer)	R .....
940	R .....
Installation fees	R .....

7.4) Magnetic media circulation accessories

Model	Unit cost
2001 Desensitizer	R .....
2011 Resensitizer	R .....
551 Computer shield	R .....
Gates Exit/Entrance swinging gates	R .....
810 Book holder	R .....
Installation fees	R .....

7.5) Targets (Tattle-Tapes etc.)

Quantity	Programmable	Permanently sensitized
(i.e. 2000-5000	R0.135	R0.110)

There is an all-inclusive six-month warranty. A service contract is available in a second and subsequent years for purchase and lease/purchase programmes at a cost of 7% of equipment purchase value.

8) AFTER SALES SERVICES

8.1) Is there a guarantee? ..... YES/NO

8.2) If YES please give full details:

.....

.....

8.3) Maintenance Service

8.3.1) Do you provide a maintenance service contract?

..... YES/NO

8.3.2) What does this maintenance service contract include?

.....
.....
.....
.....

8.3.3) How many qualified technicians are employed by the company distributing this system in Southern Africa?

.....
.....
.....

9) WHAT WILL IT PROTECT?

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.....

10) HOW IS IT INSTALLED?

10.1) Does company's technician install the system? ... YES/NO

10.2) Are any building alterations (i.e. floor drilling) required? ..... YES/NO

10.3) What electrical circuits must the library supply?

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.....

10.4) Please supply any further information re. installation

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11) WHAT ARE ITS SPECIAL FEATURES

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12) OTHER ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES

If you are aware of other electronic security systems for libraries please, if possible, provide name of company/distributor and contact address/telephone number.

Name of system: .....

Name of Company/Distributor: .....

Contact address:

.....
.....
.....

Tel. Number: .....

Code .....

APPENDIX E: ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES IN SOUTH AFRICA: QUESTIONNAIRE/DISCUSSION DOCUMENT FOR CHECKPOINT

The purpose of this Questionnaire is to serve as a discussion document in an interview situation. This questionnaire will be sent to the interviewee prior to the interview so as to facilitate the interview process. The researcher will make an appointment for an interview after the interviewee has had sufficient time to peruse the questionnaire.

CHECKPOINT

QUESTIONNAIRE

ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES IN SOUTH AFRICA

1) NAME OF LIBRARY SECURITY SYSTEM

.....

2) NAME OF COMPANY/DISTRIBUTOR

.....

3) ADDRESS OF COMPANY

.....
.....
.....
.....
.....
Code:.....

4) PERIOD OF SERVICE

For how many years has this system been marketed in Southern Africa? .....

5) DISTRIBUTION

In how many libraries in Southern Africa is this system used?

A) Independant States:

Bophuthatswana ..... ___
Ciskei ..... ___
Transkei ..... ___
Venda ..... ___

B) Self-Governing States:

Gazankulu ..... ___
KaNgwane ..... ___
KwaNdebele ..... ___
KwaZulu ..... ___
Lebowa ..... ___
QwaQwa ..... ___

C) Neighbouring States:

Botswana ..... ___
Lesotho ..... ___
Namibia ..... ___
Swaziland ..... ___
Zimbabwe ..... ___

D) Republic of South Africa:

Cape Province ..... ___
Natal ..... ___
Orange Free State ..... ___
Transvaal ..... ___

6) HOW DOES IT WORK?

Delete with an X that which is not applicable: (i.e. if answer is YES, delete NO).

a) By-pass only ..... YES/NO

b) Full circulating only ..... YES/NO

c) Choice of either a) or b) ..... YES/NO

d) On which principle?

Electro-magnetic ..... YES/NO

Frequency ..... LOW/HIGH

Radio frequency ..... YES/NO

Frequency ..... LOW/HIGH

6.1 Description:

i) Checkpoint targets are always active, which is different from other systems. Therefore library staff must either pass books around the sensing screens from behind the circulating desk or deactivate books by placing a specially treated date due card, called a Checkcard, over the Checklabel. If date due cards are not used, a small tab, called a Checktab, can be used to cover a Checklabel or Teeny Beeper.

ii) The tags and Checkcards shield the Checklabel and do not deactivate it. In all other full-circulating systems, targets are deactivated. This means Checkpoint requires fewer equipment components than other systems.

iii) Checkpoint has two basic equipment components: sensing screens and an operator's control unit. The system also has gates or turnstiles and an additional portable remote release is available. This release unlocks gates and turnstiles from as far as 75 feet away from the actual system. However, this entails purchasing an additional control unit.

iv) System software includes Checklabels and Teeny Beepers. If they are part of a bypass system they can be placed virtually anywhere in a book or they can be printed and used as bookplates. In a full-circulating system the labels must be affixed under a book pocket , inside a book pocket or on the back cover i.e. in a place where they can be shielded by a Checkcard.

6.2) Comments:

Please comment on the accuracy of paragraphs i), ii), iii) and iv) and add any important data that you feel has been left out.

i) .....
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.....
.....

ii) .....
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iii) .....
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iv) .....
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7) WHAT DOES IT COST?

7.1) Equipment

Model	Unit cost	Annual maintenance
Single aisle	R	R .....
Dual aisle	R	R .....
Gates		
Manual	R	R .....
Electric	R	R .....
Portable verifier		R .....
Installation		R .....

7.2) Targets

Brand (i.e.	Quantity 500-1999	Unit cost R0.30	Printing: Add R0.03)
Checklabels			
	.....	R	R ....
	.....	R	R ....
	.....	R	R ....
Teeny Beepers			
	.....	R	R ....
	.....	R	R ....
Die cutting for Cassette Tapes & Phonodiscs	1000-2999	R ..... (plus checklabel cost)	
	3000 +	R ..... (plus checklabel cost)	

Replica ..... R ..... R ....
Checklabels
(No circuit)

Replica Teeny
Beeper ..... R ..... R ....
Checklabels ..... R ..... R ....
(No circuit) ..... R ..... R ....

7.3) Installation fees

R .....

8) After Sales Services

8.1) Is there a guarantee? ..... YES/NO
Delete with an X that which is not applicable: (i.e. if answer is YES delete NO).

8.2) If YES please give full details:
.....
.....

8.3) Maintenance Service

8.3.1) Do you provide a maintenance service contract? . YES/NO

8.3.2) What does this maintenance service contract include?
.....
.....
.....
.....

8.3.3) How many qualified technicians are employed by the company distributing this system?
.....

9) WHAT WILL IT PROTECT?

.....
.....
.....

10) HOW IS IT INSTALLED?

Delete with an X that which is not applicable: (i.e. if answer is YES then cross out NO)

10.1) Does company's technician install the system? ... YES/NO

10.2) Are any building alterations (i.e. floor drilling) required? ..... YES/NO

10.3) What electrical circuits must the library supply?

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.....
.....

10.4) Please supply any further information re. installation

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.....

11) WHAT ARE ITS SPECIAL FEATURES

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12) OTHER ELECTRONIC LIBRARY SECURITY SYSTEMS

If you are aware of other electronic security systems for libraries please, if possible, provide name of system, company/distributor and contact address/telephone number.

Name of system: .....

Name of Company/Distributor:

.....

Contact address:

.....

.....

.....

Tel. Number: .....

Code .....

APPENDIX F: ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES IN SOUTH AFRICA: QUESTIONNAIRE/DISCUSSION DOCUMENT FOR SAVERLABEL

The purpose of this Questionnaire is to serve as a discussion document in an interview situation. This questionnaire will be sent to the interviewee prior to the interview so as to facilitate the interview process. The researcher will make an appointment for an interview after the interviewee has had sufficient time to peruse the questionnaire.

SAVERLABEL

QUESTIONNAIRE

ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES IN SOUTH AFRICA

1) NAME OF LIBRARY SECURITY SYSTEM

.....

2) NAME OF COMPANY/DISTRIBUTOR

.....

3) ADDRESS:

.....
.....
.....
.....
.....
.....

Code:.....

4) PERIOD OF SERVICE

For how many years has this ESS been marketed in Southern Africa? .....

5) DISTRIBUTION

In how many libraries in Southern Africa is this system used?

A) Independent States:

Bophuthatswana ..... ___
Ciskei ..... ___
Transkei ..... ___
Venda ..... ___

B) Self-Governing States:

Gazankulu ..... ___
KaNgwane ..... ___
KwaNdebele ..... ___
KwaZulu ..... ___
Lebowa ..... ___
QwaQwa ..... ___

C) Neighbouring States:

Botswana ..... ___
Lesotho ..... ___
Namibia ..... ___
Swaziland ..... ___
Zimbabwe ..... ___

D) Republic of South Africa:

Cape Province ..... ___
Natal ..... ___
Orange Free State ..... ___
Transvaal ..... ___

7) WHAT DOES IT COST?

7.1) Equipment

Model	Unit cost	Annual maintenance
	R.....	R.....
	R.....	R.....
	R.....	R.....
	R.....	R.....
	R.....	R.....
Installation fees		R.....

7.2) Sensitizer/Desensitizer

7.3) Circulation accessories

Model	Unit cost
Desk Top Pad	R.....
Wand	R.....
951 (Book sensitizer)	R.....
950	R.....
930 (Book Desensitizer)	R.....
940	R.....
Installation fees	R.....

7.4) Magnetic media circulation accessories

Model	Unit cost
Desensitizer	R.....
Resensitizer	R.....
Gates Exit/Entrance swinging gates	R.....
Installation fees	R.....

7.5) Targets (Tattle-Tapes etc.)

Quantity	Programmable	Permanently sensitizes
(i.e. 2000-5000 Barcodes	RO.135	RO.110)

8) AFTER SALES SERVICES

8.1) Is there a guarantee? ..... YES/NO

Delete with an X that which is not applicable: (i.e. if answer is YES delete NO).

8.2) If YES please give full details:

.....

.....

8.3) Maintenance Service

8.3.1) Do you provide a maintenance service contract? . YES/NO

8.3.2) What does this maintenance service contract include?

.....

.....

.....

.....

8.3.3) How many qualified technicians are employed by the company distributing this system?

.....

.....

.....

9) WHAT WILL IT PROTECT?

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10) HOW IS IT INSTALLED?

Delete with an X that which is wrong (i.e. if answer is YES then delete NO).

10.1) Does company's technician install the system? ... YES/NO

10.2) Are any building alterations (i.e. floor drilling) required? ..... YES/NO

10.3) What electrical circuits must the library supply?

.....
.....
.....
.....
.....

10.4) Please supply any further information re. installation:

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.....

11) WHAT ARE ITS SPECIAL FEATURES

.....

12) OTHER ELECTRONIC SECURITY SYSTEMS FOR LIBRARIES

If you are aware of other electronic security systems on the South African market, please could you supply details:

Name and model of system: .....
.....
Name of company/distributor: .....
.....
Address: .....
.....
.....
.....
Telephone number: ..... Code: .....

APPENDIX 6: COLLECTION SECURITY IN MAJOR LIBRARIES IN NATAL: QUESTIONNAIRE FOR LIBRARY USERS RE REASONS FOR THEFT AND MUTILATION

CONFIDENTIAL

Collection security in major libraries in Natal

Dear Respondent:

Thank you for your cooperation and willingness to fill in this questionnaire.

Please note the following:

- Your name and address must not appear on this questionnaire
- All information will be kept CONFIDENTIAL AND ANONYMOUS
- Please complete this questionnaire before you leave the library
- After you have completed this questionnaire please hand it in at the issue desk as you leave the library

- - - - - - - - - - - - -

Questionnaire number: | | | | | |

P.T.O.

The information in this questionnaire will be used in a Master's degree study about library security in Natal libraries. As some questions are of a sensitive nature, ALL INFORMATION WILL BE KEPT CONFIDENTIAL AND ANONYMOUS!

Please do not hesitate to give honest answers to the questions Remember - ANONYMITY IS GUARANTEED - NOBODY WILL KNOW WHAT YOU ANSWERED! Thank you for your time and cooperation.

A. PERSONAL PARTICULARS

(Please answer all questions where possible)

1. Institution

   1.1. Durban Municipal Library ..... ☐
   1.2. University of Durban-Westville ..... ☐
   1.3. University of Natal, Durban ..... ☐
   1.4. University of Zululand ..... ☐

2. Sex

   2.1. Male ..... ☐
   2.2. Female ..... ☐

3. Age

   (Please state your age) .....

4. Status (students)

   4.1. Not applicable ..... ☐
   4.2. Scholar ..... ☐
   4.3. Undergraduate full-time student ..... ☐
   4.4. Undergraduate part-time student ..... ☐
   4.5. Postgraduate full-time student ..... ☐
   4.6. Postgraduate part-time student ..... ☐

5. Status (non-students)

   5.1. Not applicable ..... ☐
   5.2. Unemployed ..... ☐
   5.3. Employed ..... ☐
   5.4. If employed please specify what your profession is (i.e. Accountant, Clergyman, Lecturer, Mechanic, etc.)

   .....

6. If you are a student what academic course are you doing?

   6.1. Not applicable ..... ☐
   6.2. B.A. ..... ☐
   6.3. B.Comm. ..... ☐
   6.4. B.Sc. ..... ☐
   6.5. Education ..... ☐

6.6. Law .....
6.7. Librarianship .....
6.8. Medicine .....
6.9. Other. (Please specify) .....

7. If you are a student please rate your academic performance:

7.1. Not applicable .....
7.2. Poor .....
7.3. Fair .....
7.4. Good .....
7.5. Very good .....

8. Do you as a student receive financial aid?

8.1. Not applicable .....
8.2. Yes .....
8.3. No .....

B. LIBRARY SERVICE RATING

(Please answer all the questions)

9. How do you rate your library's service?

9.1. Very poor .....
9.2. Poor .....
9.3. Uncertain .....
9.4. Good .....
9.5. Very good .....

10. How do you rate the library's photocopy service?

10.1. Very poor .....
10.2. Poor .....
10.3. Uncertain .....
10.4. Good .....
10.5. Very good .....

11. How do you rate the security precautions/service in the library?

11.1. Not applicable .....
11.2. Very poor .....
11.3. Poor .....
11.4. Uncertain .....
11.5. Good .....
11.6. Very good .....

C. PERCEPTIONS AND USE OF LIBRARY SERVICES

12. How often have you used the photocopy facilities in the library in the last six months?

12.1. Never ☐
12.2. 1-2 times ☐
12.3. 3-4 times ☐
12.4. 5-6 times ☐
12.5. 7-8 times ☐
12.6. More ☐

13. How often have you used the library in the last six months?

13.1. Never ☐
13.2. 1-2 times ☐
13.3. 3-4 times ☐
13.4. 5-6 times ☐
13.5. 7-8 times ☐
13.6. More ☐

14. Have you ever been searched or questioned by the security staff in the library?

14.1. Never ☐
14.2. 1-2 times ☐
14.3. 3-4 times ☐
14.4. 5-6 times ☐
14.5. More ☐

15. Have you ever been inconvenienced because a book you wanted from the library was missing or stolen?

15.1. Never ☐
15.2. 1-2 times ☐
15.3. 3-4 times ☐
15.4. 5-6 times ☐
15.5. More ☐

16. Have you ever been inconvenienced by library books and magazines that have been mutilated (torn or cut out pages and pictures, ink marks, etc.)?

16.1. Never ☐
16.2. 1-2 times ☐
16.3. 3-4 times ☐
16.4. 5-6 times ☐
16.5. More ☐

17. What proportion of the library's users do you think has stolen books?

17.1. Very low .....
17.2. Low .....
17.3. Uncertain .....
17.4. High .....
17.5. Very high .....

18. What do you think is the rate of mutilation in the library?

18.1. Very low .....
18.2. Low .....
18.3. Uncertain .....
18.4. High .....
18.5. Very high .....

D. THEFT AND MUTILATION CHECK LIST

(Please answer all the questions)

19. Have you ever taken a book or other library material out of the library without checking it out?

19.1. Never .....
19.2. 1-2 times .....
19.3. 3-4 times .....
19.4. 5-6 times .....
19.5. More .....

20. Have you ever mutilated a library book/magazine (i.e. cut or torn out pages and/or pictures)

20.1. Never .....
20.2. 1-2 times .....
20.3. 3-4 times .....
20.4. 5-6 times .....
20.5. More .....

21. If you stole a library book did you return the book afterwards?

21.1. Not applicable .....
21.2. Never .....
21.3. 1-2 times .....
21.4. 3-4 times .....
21.5. Always .....

22. Is it easy to get past the library's security with stolen books?

22.1. Yes .....
22.2. No .....
22.3. Uncertain .....

E. REASONS FOR THEFT AND MUTILATION

23. Why do you think would a person remove a book from the library without checking it out? Is it because of ONE OR MORE of the following reasons?

Please tick the appropriate box(es)

23.1. Did not consider the needs of others ..... ☐
23.2. Did not think about the act but stole casually and thoughtlessly ..... ☐
23.3. To prevent fellow students/users from getting the same information so he/she could get a higher mark than they ..... ☐
23.4. He/she had no funds to buy his/her own copy ..... ☐
23.5. To add it to his/her own collection ..... ☐
23.6. Needed the illustrations in the books and magazines but could not photocopy them ..... ☐
23.7. Could not take out any more books as his/her loan quota was full ..... ☐
23.8. Unable to check out a book because the computerised check-out system was not working ..... ☐
23.9. To prevent the book from being put on the Reserve Shelf (Short Loans) section ..... ☐
23.10. Thought he/she would not get caught ..... ☐
23.11. Stole books as an expression of hostility towards the library and/or authorities ..... ☐
23.12. Just to see if he/she could beat the system ..... ☐
23.13. The book was not available in the local book shops so he/she could not buy a personal copy ..... ☐
23.14. It was a prescribed book he/she needed ..... ☐
23.15. For financial gain ..... ☐
23.16. Other (please specify) .....
.....
.....
.....
.....

24. How would you rate the chances of a person being caught with a book that was not checked out of the library?

24.1. Never ..... ☐
24.2. A slight chance ..... ☐
24.3. Not so good ..... ☐
24.4. Undecided ..... ☐
24.5. Good ..... ☐
24.6. Very good ..... ☐

25. Why do you think would library users mutilate library material? Do you think it is because of ONE OR MORE of the following reasons?
Please tick the appropriate box(es)

25.1. Not enough photocopy machines available ..... ☐
25.2. The book/magazine was already mutilated ..... ☐
25.3. He/she did not want other users to get the same information ..... ☐
25.4. Mutilate books as an expression of hostility towards the library or other authority ..... ☐
25.5. Did not consider the needs of others ..... ☐
25.6. User wanted the illustration(s) for him- or herself ..... ☐
25.7. Was not aware of the cost of mutilation to the library ..... ☐
25.8. It would be easy for the library to replace the torn out or mutilated section(s) ..... ☐
25.9. None of the above ..... ☐
25.10. Other (Please specify) .....
.....
.....
.....

26. What method do you think is used to mutilate library material?

26.1. Tearing out the page(s) ..... ☐
26.2. Cutting out the portion that is needed ..... ☐
26.3. Using string ..... ☐
26.4. Using a ball-point pen ..... ☐
26.5. Other (Please specify) .....
.....
.....
.....

27. Books in libraries are stolen and mutilated even though photocopy facilities are available. Do you think it is ONE OR MORE of the following reasons?
Please tick the appropriate box(es).

27.1. Did not feel like making copies ..... ☐
27.2. There was not enough time left as the library was closing ..... ☐
27.3. The queues at the machines were too long ..... ☐
27.4. The machines were out of order ..... ☐
27.5. There was no copying paper available ..... ☐

27.6. No small change available for use on the coin/slot machine(s) ..... ☐
27.7. Not able to buy photocopy cards for use on the card operated machines ..... ☐
27.8. The process of buying cards was too cumbersome ... ☐
27.9. It was too expensive to make copies ..... ☐
27.10. Other .....
.....
.....
.....

28. Punishment for stealing/mutilating library books is minimal so nobody is scared of the consequences of being caught.

28.1. Yes ..... ☐
28.2. No ..... ☐
28.3. Uncertain ..... ☐

29. What punishment would you say should a person, who is guilty of stealing/mutilating library material, receive?

29.1. A fine ..... ☐
29.2. Expulsion from the library ..... ☐
29.3. A fine and expulsion ..... ☐
29.4. Expulsion from the university ..... ☐
29.5. Prosecution in court by law ..... ☐
29.6. None of the above ..... ☐
29.7. Other (Please specify) .....
.....
.....
.....

Thank you for your kind cooperation

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