

CHAPTER FIVE

INFLUENCE OF INFORMATION AND COMMUNICATION TECHNOLOGY ON THE ATTITUDES AND SKILLS OF ACADEMIC LIBRARIANS IN THREE SELECTED POLYTECHNIC LIBRARIES IN NORTH CENTRAL NIGERIA

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Abstract

This paper examines the influence of ICT on the attitudes and skills of academic librarians in three selected polytechnic libraries in North Central Nigeria. Survey research design was adopted to identify available ICT facilities, examine the extent to which ICT applications affect the attitudes and productivity of academic librarians, ascertain the ICT skills possessed by academic librarians, and to determine the extent to which ICT influences the professional skills of academic librarians in the selected libraries. The population of the study comprised twenty seven academic librarians. Structured closed ended questionnaire and checklist were used as instruments for data collection. Frequency counts, percentages and mean scores were used as techniques for data analysis. 27 copies of questionnaires were distributed, out of which 22 were completed and returned; representing 81.5% response rate. The findings revealed that computers, internet connectivity, power point projectors, scanners and printers were the dominant available facilities. It also showed that ICT has enhanced academic librarians' punctuality to duty, reduced their workloads, improved their zeal and made their work easier and faster. The academic librarians studied possessed ICT skills in word processing, application software, internet navigation, KOHA and E-granary software operations. The findings also revealed that ICT has influenced the professional skills of academic librarians in key areas such as cataloguing, classification, reference services, collection development, library management and public relations. The researchers recommend the need to design a policy for

the acquisition of ICT facilities, upgrade the existing ICT facilities, acquire latest cataloguing and classification software, and the need for the acquisition of digital cameras for the production and preservation of local audio-visual contents.

Keywords: Information and Communication Technology (ICT), Academic Librarians, Polytechnic Libraries.

Introduction

Many scholars and authors have given different definitions of the concept of information and communication technology (ICT). According to Faboyinde (2006) ICT is the fusion of information technology with that of communication. Blurton (1999), as cited by Ivwighrehweta (2013), sees ICT as a diverse set of technological tools and resources used to communicate, create, disseminate, store and manage information. Ekoja (2007) defined ICT as kits or equipment used for capturing, processing, storing, transmitting and accessing information. Within the purview of this paper, ICT can be defined as electronic devices that are used by academic librarians to perform their professional duties within the confines of Polytechnic libraries. Polytechnics play strategic roles in the educational, scientific and technological progress of Nigeria. Polytechnics basically train and produce middle level technical manpower necessary for the realization of Nigeria's developmental goals. The establishment of polytechnics in Nigeria is predicated on the need to produce needed manpower that are skilled in technology related disciplines. Aina (2008) affirmed that polytechnics are charged with the responsibility of training technicians and technologists who are indispensable for national development.

The first polytechnic in Nigeria is Yaba College of Technology, established in 1947. Polytechnics offer a two year course of study leading to the award of National Diploma (ND). This is followed by one year industrial attachment aimed at equipping graduates with practical experience before proceeding to the Higher National Diploma (HND). In north central Nigeria, aside private polytechnics, there are ten polytechnics owned by both federal and state governments. The achievement of the goals of the polytechnics, which essentially hinged on middle manpower training, to a large extent depends on the quality of polytechnic libraries. Polytechnic libraries are by their characteristics academic libraries set up to provide information services that are aimed at supporting teaching, learning and research in their parent institutions. Krubu and Osawaru (2011) defined academic libraries as libraries that are mainly found in tertiary institutions such as universities,

polytechnics, and colleges of education. Aina (2004) categorized academic libraries into university libraries and non university libraries. Polytechnic libraries, according to that categorization, are non- university libraries situated in polytechnics. The application of ICT in polytechnic libraries is germane to technological breakthroughs that polytechnics are essentially established to achieve. ICT has necessitated the need for academic librarians to re-skill and re-orientate their attitudes in their workplaces. Anaeme (2006) remarked that the emerging and fast growing ICT applications in libraries, especially academic libraries, have continued to revolutionize the pattern and attitude of library personnel. Obinyan and Unolabor (2013) stated that application of ICT in libraries has helped librarians, information specialists, and researchers to improve their information products and services. The application of ICT has gained prominence in all types of libraries. In line with global best practices in library and information services delivery, and in order to cope with the increasing demands for information by library users, polytechnic libraries use various types of ICT to support learning, teaching and research in their institutions. Librarians in all academic libraries are accorded same academic status and privileges like their lecturer counterparts in terms of employment and the rewards attached to it. They enjoy the status based on the provision of Decree No. 12 of 1995 which established the Librarians Registration Council of Nigeria (LRCN). Academic librarians are engaged in teaching and research, aside their professional duties in the institution's library. Ugah (2012) noted that Librarians academic status is patterned on the clinical model in medical profession which centers on teaching, research and service. This also entails that academic librarians must possess a minimum of first degree in library and information science, in addition to membership of the professional body.

The impact of ICT is felt on how academic librarians perform their tasks. In the long run, this affects their attitudes and productivity in the work place. It is therefore pertinent to stress that there is a nexus between the use of ICT, staff productivity and attitude to work. The application of ICT has brought dramatic changes to the roles of academic libraries and librarians. Today, academic librarians use ICT to carry out different tasks, particularly professional tasks, in their work places. Olakulehin (2007) noted that the use of ICT has enhanced the use of database, guided discovery, close-world exploration etc. Academic librarians have embraced the use of ICT in the performance of their professional duties with the aim of enhancing their skills and productivity. ICT is applied in collection development, classification, cataloguing, reference services, circulation, literature search, and inter-library loans among other functions. The adoption of ICT by academic

librarians is no doubt a daunting task. To buttress this fact, Tornero (2004) observed that the integration of ICT requires sophisticated change in the manner people think and act. It is crystal clear that ICT application in polytechnic libraries has multiplier effects on librarians' skills, attitudes and productivity. The efficacy of polytechnic libraries as information reservoirs is therefore a function of academic librarians' skills, attitudes and productivity. Today, polytechnic libraries are stocked with information resources in both traditional and electronic formats. These resources are predominantly managed by academic librarians. They are expected to be familiar with the emerging changes and challenges ICT present to them in their day to day chores, so as to remain globally up-to-date and competent. Based on the inestimable prominence gained in the application of ICT in polytechnic libraries, academic librarians could make good use of ICT tools in the performance of their professional tasks. Okonoko, Ufuoma and Promise (2013) demonstrated that ICT enhances library functions such as, compilation of accession lists, maintaining library statistics, charging and discharging of materials, compiling of overdue notices, keeping books in the reserves, and maintaining library rosters, among many others. Adekunle, Omoba and Tella (2007) noted that implementing ICT in libraries depends largely on librarians' attitude towards it.

For instance, Ramzan, as cited by Adekunle, Omoba and Tella (2007), reported that Librarians in Pakistan were not prepared to embrace the changes forced on them by the new technologies; and that most of them were uncertain about ICT applications in their libraries, and the benefits for their organizations; because they had little knowledge of ICT. ICT skills are competencies an individual possess in the use of ICT tools. It encompasses the ability to operate personal computers independently, in addition to the use of software and internet among other technologies. In short, ICT skills involve the ability to access, retrieve, store, manage, and disseminate information via computers and communication technologies. Academic librarians should be able to exploit the preponderance of available ICT to enhance unfettered access to information. To do this, it requires right attitude, re-tooling and re-skilling by the academic librarians. This study therefore aims to determine the influence of ICT applications on the attitudes and skills of academic librarians in three selected polytechnic libraries in north central Nigeria.

Statement of the Problem

With the current trend in ICT applications in library operations and services, there is the urgent need for attitudinal change, and re-skilling by librarians to meet the challenges of providing the requisite information to library users. There are

indications of attitudinal barriers to ICT applications among academic librarians which affect their productivity and attitude to work. Therefore, this study seeks to uncover the influence of ICT applications on the attitude and skills of academic librarians in three selected polytechnic libraries in north central Nigeria, with a view to filling the empirical information gap that exist. The application of ICT in actualizing the goals of polytechnic libraries hinge on academic librarians' attitudes and the ICT skills they possess. This no doubt has significant impact on their productivity in the work place. It is expected that academic librarians in the selected polytechnic libraries should utilize available ICT with greater enthusiasm, with a view to developing the right attitudes and skills in the performance of their tasks.

Objectives of the Study

The general objective of the study is to examine the influence of ICT application on the attitudes and skills of academic librarians in selected polytechnic libraries in north central Nigeria. The specific objectives of the study include the following.

- (i) To identify available ICT facilities in the selected polytechnic libraries in north central Nigeria;
- (ii) To examine the extent to which ICT application affects the attitude and productivity of academic librarians in the three selected polytechnic libraries in north central Nigeria;
- (iii) To ascertain the ICT skills possessed by academic librarians in the three selected polytechnic libraries in north central Nigeria;
- (iv) To determine the extent to which ICTs influence the professional skills of academic librarians in the three selected polytechnic libraries in north central Nigeria; and
- (v) To ascertain, and proffer solutions to, the challenges facing academic librarians in the three selected polytechnic libraries while adopting and using ICT.

Research Question

The study is guided by the following research questions

1. What are the available ICT facilities in the selected polytechnic libraries in north central Nigeria?
2. How do ICT applications affect the attitudes and productivity of academic librarians in the selected polytechnic libraries in north central Nigeria?
3. What are the ICT skills possessed by academic librarians in the selected polytechnic libraries in north central Nigeria?

4. What is the extent to which ICT influence the professional skills of academic librarians in selected polytechnic libraries in north central Nigeria?
5. What are the challenges facing academic librarians in the three selected polytechnic libraries while adopting and using ICT?

Review of Literature

Information and communication technology (ICT) has been defined and viewed from different perspectives by different scholars. Mohammed (2014) defined ICT as technologies used for collecting, storing, processing editing and passing on or communicating information, using telecommunication technologies such as satellite, radio and television, information networks, computer hardware and software, digital networks and internet. Anyakoha (2005) sees ICT as the electronic means of capturing, processing, storing and disseminating information. ICT remain a veritable tool for managing information in modern society (Etebu, 2010) Oni in Madu (2004) noted that ICT is used generally in libraries for housekeeping functions such as acquisition, cataloguing, circulation and serials. He further demonstrated that ICT in cataloguing unit enhance the establishment and maintenance of cataloguing database, name authority files, subject files and local authority, online public access catalogue (OPAC), inventory control and inventory statistics. Ayo (2001) demonstrated that ICT is used in libraries for database management, internet search, web management and general online services for their users.

Akintude (2004) demonstrated that ICT is used in libraries in several ways. These include library management and administration, processing of library materials, accessing off-line resources, processing of regular library services for users, inter-library cooperation and lending, and video conferencing. Several computer skills are required in libraries. Csapo (2002) listed some basic skills required in the library work place as using the computer and managing files, word processing, spread sheet database presentations, internet and e-mail. Babu, Vinayagamoorthy and Gopalakrishnan (2010) noted that contemporary library and information professionals need to acquire knowledge and skills in ICT as the services of more and many libraries are now centering on information technology, especially in educational institutions. Okiy (2005) reported that ICT is not fully embraced by most of the higher education libraries in Nigeria due to severe and pronounced low level of computer literacy among Nigerians. The problem is worsened by the acute shortage of technology literate staff in libraries. Faboyinde (2006) stated that there is a general absence of viable national information infrastructure in most countries of sub Sahara Africa which is attributed to paucity of funds and economic recession.

Chiware (2007) affirmed that poor funding, human resources, training and retention of skills, interconnectivity, and telecommunication infrastructures were the problems hindering ICT literacy acquisitions in libraries. .

Methodology

Survey design was used for the study in three selected polytechnic libraries in north central Nigeria. The population of the study comprised 27 academic librarians. The breakdown is as follows: Federal Polytechnic Library, Nasarawa (7), Kogi State Polytechnic Library (10) and Plateau State Polytechnic Library (10). A structured closed ended questionnaire and checklist were used to collect data relating to the objectives of the study. Descriptive statistics expressed in frequency counts, percentages and mean scores were the techniques used for data analysis.

Response Rate

Out of the 27 copies of questionnaire distributed to the respondents, a total of 22 (81.5%) copies were completed and returned.

Results and Discussion of Findings

Table 1: Available ICT Facilities in the Polytechnic Libraries studied

	Type of ICT	Lokoja	Nasarawa	Barkin Ladi
1	Computers	√	√	√
2	Internet connectivity	√	√	√
3	C D - R O M	√	X	√
4	Cataloguing and classification software	√	X	X
5	L A N	√	√	√
6	Digital camera	X	X	√
7	Power point projector	√	√	√
8	S c a n n e r s	√	√	√
9	P r i n t e r s	√	√	√

Key: Available = √, Not available = X

The study attempted to identify the type of ICT facilities available in the libraries studied. Checklists were used to ascertain the available ICT products. Responses in Table 1 revealed that computers, internet connectivity, power point projectors, scanners and printers were the dominantly available ICT products in the libraries studied. CD-ROMs were not available in Federal Polytechnic, Nasarawa library. Cataloguing and classification software were unavailable in both Kogi State

Polytechnic and Federal Polytechnic, Nasarawa libraries. Digital cameras were also found to be unavailable in Kogi State Polytechnic Library and Federal Polytechnic, Nasarawa library respectively.

Table 2: Extent of ICT Application on the Attitude and Productivity of Academic Librarians in the Libraries Studied.

S/No		SA	A	D	SD	%
1	ICT's enhanced my punctuality to duty	10(46)	8(36)	2(9)	2(9)	3.18
2	ICT's reduced my workload	8(36)	12(54)	2(9)	2(9)	3.36
3	ICT's increased my workload	6(27)	5(22)	2(9)	9(40)	2.04
4	ICT's enhanced my prestige	4(18)	13(59)	3(13)	2(9)	2.86
5	Makes me lazy at work	1(4)	2(9)	6(27)	13(58)	1.59
6	Improved my zeal at work place	5(22)	14(63)	1(4)	2(9)	3
7	ICT's make my work faster and easier	9(40)	10(46)	2(9)	1(4)	3.22

In order to determine the extent to which ICT affect the attitudes and productivity of academic librarians, respondents were provided with options to indicate their responses using a four point Linkert Scale of measurement; strongly agree, agree, disagree and strongly disagree. A criterion mean of 2.50 was used as decision rule and was calculated based on four point Linkert scale average of $4 + 3 + 2 + 1 = 10$ divided by $4 = 2.50$. The responses in table 2 indicate that ICT applications affect the attitudes and productivity of academic librarians, enhance punctuality to duty, reduce workload, improved staff zeal, and make work faster and easier. On the other hand, the responses revealed that ICT neither increase the workload of academic librarians, nor makes them lazy as indicated in Table 2; with means scores of 2.04 and 1.59 respectively.

Table 3: ICT Skills Possessed by Academic Librarians in the Libraries Studied

	ICT SKILLS	Frequency	Percentage
A Word Processing Operations			
1	Booting of computers	18	81
2	Opening a computer file	17	77
3	Deleting a computer file	12	56
4	Creating a folder	19	86
5	Copying a file from one flash drive to another	16	72
B Application Software			
1	Ms-word	18	81
2	Ms-excel	16	72
3	Ms-access	10	45
4	Power point	16	72
5	Library software	12	54
C Internet Skills			
1	Using the world wide web (www)	19	86
2	Sending email messages	21	95
3	Online chat	10	45
4	Downloading files	13	59
5	Use of search engines	16	72
D Use of Software			
1	KOHA	18	81
2	E-granary	11	50

Table 3 presents ICT skills possessed by academic librarians in the libraries studied. It was found from the responses that 19 (86%) of the respondents can create a folder. This is followed by 18 (81%) who can boot computers. Opening a computer file 17 (77%), copying file from one flash drive to another 16 (72%), and deleting computer file 12 (56%). On the ICT skills possessed by academic librarians in application software, it was found that the respondents were more skilled in Ms-word 18 (81%), followed by Ms-excel and power point 16 (72%).

Library software 12 (54%) and Ms-access 10 (45%). In addition to application software, the respondents possessed some internet skills such as sending e-mail messages 21 (95%), using the world wide web (www) 19 (86%), use of search engines 16 (72%), downloading files 13 (59%) and online chat 10 (45%). Also academic librarians expressed their skills in the use of library software. Out of the 22 respondents in the libraries studied, 18 (81%) seemed to be conversant with KOHA and 11 (50%) were familiar with E-granary software.

Table 4: How ICT Influenced the Professional Skills of Academic Librarians in the Libraries Studied.

	Professional Skills	SA	A	D	SD	Mean
1	ICT's has influenced my cataloguing skills	6(27)	12(54)	1(4)	3(13)	2.95
2	ICT's has influenced my classification skills	4(18)	15(68)	1(4)	2(9)	2.95
3	Improved my reference service skills	5(22)	13(59)	2(9)	2(9)	2.95
4	Enhanced my collection development skills	6(27)	12(54)	3(13)	1(4)	3.04
5	Developed my marketing skills	3(13)	16(72)	1(4)	2(9)	2.90
6	Influenced good management of the library	4(18)	14(63)	2(9)	2(9)	2.90
7	Enhanced my public relations with library users	10(46)	9(40)	2(9)	1(4)	3.27

Table 4 presents how ICT influenced the professional skills of academic librarians in the libraries studied. Using a criterion mean of 2.50, it was found that ICT influenced the professional skills of academic librarians in enhancing public relations with library users with a mean score of 3.27. This is followed by enhancing the collection development skills of academic librarians with a mean score of 3.04, cataloguing, classification and reference services skills (2.95), development of marketing and managerial skills of academic librarians both having mean scores of 2.90.

Major Findings

1. The findings revealed that the available ICT facilities in the libraries studied include computers, internet connectivity, power point projectors, scanners and printers. Conversely, CD-ROM, cataloguing and classification software and digital cameras were not available in some of the libraries studied.
2. On the extent to which ICT affect the attitudes and productivity of academic librarians in the libraries studied, the findings showed that ICT enhanced the respondents' punctuality to duty, reduced their workload, improved their zeal and makes their work faster and easier. The findings also revealed that ICT does not increase the workload of academic librarians, and ICT also does not make the respondents lazy at their workplace.
3. The findings on ICT skills possessed by academic librarians revealed that they possessed the following word processing skills: booting of computers, opening a computer file, deleting a computer file, creating a folder and copying a file from one flash drive to another. On application software, the respondents possessed Ms-word, Ms-excel, power point and library software skills. The respondents equally possessed internet skills in the area of using the World Wide Web, sending email messages, downloading files and use of search engines. The respondents are skilled in the use of KOHA and E-granary software.
4. The findings also showed that ICT has influenced the professional skills of academic librarians in the aspect of cataloguing, classification, reference services, collection development, marketing, library management and public relations.

Conclusion

Information and communication technology (ICT) remain a useful working tool in the hands of academic librarians in polytechnic libraries. ICT accords academics librarians the opportunity to showcase their professional skills and competencies in their workplaces. It is obvious that ICT has significantly impacted the attitude and productivity of librarians in so many ways. Academic librarians are in strategic positions to use ICT facilities available in their libraries, because they possess most of the skills required in word processing, application software, internet, and library software. Also, ICT has dramatically influenced the professional skills of academic librarians in the core service points of librarianship. Therefore, the attitude and skills of academic librarians to a large extent revolves around the application of ICT. This has shaped their perceptions about ICT, and has re-skilled them to cope with

emerging trends in library and information services in line with global best practices in academic libraries all over the world, and Nigeria in particular.

Recommendations

Based on the findings of this study, the following recommendations are made.

1. The Polytechnic authorities concerned should in conjunction with their library managements, design a policy for the acquisition of ICT facilities based on global best practices and local needs of their libraries.
2. Additional staff with the requisite ICT skills should be employed to acquaint new entrants with the ICT skills and competencies needed to cope with emerging growth and needs of library users
3. Academic librarians should be trained and retrained on Ms-access, library software, online chats, downloading files and use of E-granary.
4. There is the need, to upgrade existing ICT products and facilities in the libraries studied, so as to enhance the professional skills and competencies of academic librarians in the libraries studied.
5. The libraries concerned should create websites in order to enhance the internet skills of academic librarians, and to increase the visibility of the libraries.
6. There is the need to acquire latest cataloguing classification software in the libraries studied.
7. Digital cameras should be acquired to facilitate the production and preservation of audio-visual contents in the libraries studied.

References

- Adekunle, P.A., Omoba, R.O & Tella, A. (2007). Attitude of Librarians in Selected Nigerian Universities Toward the use of ICT. Retrieved from [http:// digital commons.un/edu/ libphil/prac](http://digitalcommons.un/edu/libphil/prac) on 25/10/2017.
- Aina, O. (2008). A Vision of Nigerian Polytechnics in the new Millenium. A Paper Presented at a Seminar on Improving Practical Training and Skills Acquisition in Nigerian Polytechnics at Kaduna from 10 – 12 February. P.12
- Akintude, S.A. (2003). New and Emerging Tools for Library Practice in the New Millennium, *Lagos Journal of Library and Information Science* 1(1) 67 – 72.
- Anaeme, F. O (2006). Information and Communication Technology (ICT) Intervention in Library and Science in *Nigeria Library and Information Science Trend* 4(1&2) 12 – 21.

- Anyakoha, M.W. (2005). Information and Communication Technology in Library Services Coal City Libraries 2 (1&2) Pp. 2 – 12.
- Ayo, T.A. (2001). Information and Communication Technologies and the Information Professional in the Information Age: The Nigerian Perspectives. A compendium of Papers Presented at the 39th Annual Conference and AGM of NLA at Sam Mbakwe Hall, Imo Concord Hotel, Owerri 17 – 22 June.
- Babu, B.R, Vinayagammorthy, P and Gopalakrish (2010). ICT Skills Among Librarians in Engineering Educational Institutions in Tamil Nadu. *DESIDOC Journal of Library and Information Technology* Pp.55 – 64.
- Chiware, E.R.T. (2007). Training Librarians for the digital Age in African University Libraries. Pre-IFLA satellite meeting, Durban, August. Available <http://www.ifla.org/iv/ifla73/satelit/programme-en-pdf>.accessed 30/2/10.
- Csapo, N. (2002). Certification of Computer Literacy. *The Journal* 30(1) 46.
- Ekoja, I.I. (2007). Information and Communication Technology (ICT) Librarian Knowledge, Use and Skills in Nigerian University Libraries. *The Communicate Journal of Library and Information Science* 9(1) 1 – 6.
- Etebu, A.T. (2010). Information and Communication Technologies Availability in Niger Delta University Libraries. Retrieved on May 20, 2013 from <http://unllib.un/.edu/lpp/etebuz.htm>.
- Faboyinde, E.O. (2008). The State of Information and Communication Technology in Selected Libraries in Lagos and Ibadan Metropolis in Libraries: Dynamic Engines for the Knowledge and Information Society. *Nigerian Library association 44th Annual National Conference and AGM. National Centre for Women Development Abuja*.
- Ivwhighrehweta, O. (2013). The Application of Information and Communication Technology on Academic Library Operations and Digital Library Services 3(1) 12 – 22.
- Krubu, D.E and Osawaru, K.E (2011). The Impact of Information and Communication Technology in Nigerian University Libraries retrieved from <http://digitalcommons.un/edu/libphi/prac/583>.
- Madu, E.C. (2007). Technology for Information Management and Service: Modern Libraries and Information Centres in Developing Countries. Ibadan: Evi-Coleman.
- Mohammed, Z (2014). Promotion and Utilization of Indigenous ICT Products and Services for National Development. A Paper Presented at the e-Nigeria 2014 Annual Information Technology Summit Organized by the National Information Technology Agency (NITDA) in collaboration with relevant

stakeholders from private and public sectors and the non-governmental organizations held at the Congress Hall, Transcorp Hilton Hotel Abuja between 18 and 20 November Pp1 – 3.

- Okiy, R.B.** (2005). Strengthening Information Provision in Nigerian University Libraries Through Information Communication Technologies in the Electronic Library. Emerald Group Publishing Limited 23(3) Pp 313 – 318.
- Okonoko, V.N., Ufuoma, E and Promise, A** (2013). The Application of Information and Communication Technology in College of Education Agbor, and Ogwashi-Uku Polytechnic Libraries. *Benue Journal of Library, Management and Information Science* 3(1) 153 – 163.
- Olakulehi, F.K.** (2007). Information and Communication Technologies in Teacher Training and Professional Development in Nigeria. Available at <http://tojde.anadolu.edu.tr/todje25/article-11.htm>. Accessed on 16/10/2010.
- Tonero, J.M.P.** (2004). Promoting Digital Literacy Final report EAC/76/05/: Understanding Digital Literacy. Barcelona: Gabinetede Communication Education.
- Ugah, A.D.** (2012). Academic status of Librarians in Nigerian Universities: An Analysis. *Nigerian Libraries* 45 (1) Pp. 78-93.