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**DESCRIPTION OF RESEARCH METHODOLOGY IN
ACTA LINGUISTICA SCIENTIFIC JOURNAL**

**PĒTNIECISKO METOŽU APRAKSTS ZINĀTNISKI
PĒTNIECISKAJĀ ŽURNĀLĀ *ACTA LINGUISTICA***

BACHELOR THESIS

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RĪGA 2013

Anotācija

Bakalaura darba mērķis ir aprakstīt zinātniskajā žurnālā izmantotās lietišķās valodniecības pētnieciskās metodes. Tēmas aktualitāti var pamatot ar nepieciešamību nošķirt visbiežāk zinātniskajā žurnālā izmantotās lietišķās valodniecības pētnieciskās metodes. Turklāt darbs paplašina zināšanas un izpratni par pētniecisko metožu izmantošanu atkarībā no pētījuma tēmas. Pētījuma mērķis ir atrast, kura no pētnieciskajām metodēm zinātniskajā žurnālā *Acta Linguistica* tiek izmantota visbiežāk. Darbā ir izmantotas diskursa un statistikas analīzes. Pētījuma rezultāti ir iegūti, analizējot divdesmit lietišķās valodniecības zinātniskos rakstus. Iegūtie dati liecina, ka visbiežāk zinātniskajā žurnālā izmantotās lietišķās valodniecības pētnieciskās metodes ir kvantitatīvā metode. Visbiežāk izmantotā datu vākšanas metode kvantitatīvā pētījumā ir aprakstošs pētījums. Savukārt, visbiežāk izmantotā datu vākšanas metode kvalitatīvā pētījumā ir diskursa analīze.

Atslēgvārdi: pētījums, metodoloģija, lietišķā valodniecība, zinātniskie žurnāli, metodes

Abstract

The focus of the present paper is description of the research methodology in scientific journal of applied linguistics. The theme is important due to the necessity of distinguishing the mostly used research methods in scientific journal of applied linguistics. Besides, the paper increases the knowledge and understanding of the choice of the research methods which should be applied depending on the subject of investigation. Discourse analysis and statistical analysis have been applied to the research. The findings are based on the analysis of twenty scientific articles from journal *Acta Linguistica*. The obtained data has indicated that the dominating method used in scientific journal of applied linguistics is quantitative. While the prevailing quantitative data gathering technique is descriptive study, discourse analyse is the mostly common approach in qualitative researches.

Key words: research, methodology, applied linguistics, scientific journals, method

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INTRODUCTION

There are a large number of published studies devoted to the discussion of research methodology such as Cohen, Manion, Morrison (2000); Clough, Nutbrown (2012); Davies, Elder (2006); Barton (2006) in which the authors define different research methods applicable to variable investigation types. According to the author's knowledge and observations, no research has been conducted in order to detect the mostly used research methods in journals of applied linguistics. The study of research methodology applied to scientific journals of applied linguistics has become an important aspect of investigation due to necessity of description the correct method choice depending on the investigated topic. Much emphasis has been placed on theoretical description of research methodology with scant attention given to investigation of most frequently used methods in scientific journals of applied linguistics. The aim of this paper is to analyze *Acta Linguistica* the international scientific journal in order to distinguish the most commonly used research methods.

Thus, the research **goal** is to analyse and identify the mostly used research methods and data gathering techniques in the journal of applied linguistics.

In order to investigate dominating research method and data gathering technique, the author of the present paper has established the following **research questions**:

1. Which is the most commonly used method in scientific journals of applied linguistics?
2. Which is the dominating data gathering technique used in scientific journals of applied linguistics?

For conducting the research the **enabling objectives** are the following:

1. to study theoretical literature on research methodology and scientific journals of applied linguistics
2. to make random selection of different researches from *Applied Linguistics* journal
3. to analyse the data
4. to draw relevant conclusions

The **methods** applied to the research are both theoretical and empirical. While the theoretical implies literature review, analysis of secondary sources, the empirical deals with discourse analysis and statistical analysis.

The notion of applied linguistics and Swales' (1990) move analysis are discussed in chapter one. The second chapter presents the review of literature about the research and methodology that could be applied to the empirical research. Chapter three is devoted to the analysis of scientific journal.

1 SCIENTIFIC JOURNALS OF APPLIED LINGUISTICS

This chapter presents a review of literature related to the scientific journals of applied linguistics. The first subchapter discusses the notion of applied linguistics as well as discusses the main concerns of the study in applied linguistics field. Then the research methodology in applied linguistics is dealt with. The third subchapter focuses on definition of the term *journal* and distinguishes genre characteristics. The last subchapter presents moves and steps for structuring the introduction in research papers.

1.1 The Notion of Applied Linguistics

According to Akmajian linguistics studies a human natural language and communication (2001: 5). The main function of language is to link meaning and expression in order to share with the thoughts by providing verbal expression that would be comprehensive to other communication partners (ibid.). As stated Saussure, the founder of modern linguistics, the first reference where linguistics has been established as a separate science appeared in 1916 (2011: 13). The statement appeared as follows: ‘the fundamental idea of this course: the true and unique object of linguistics is language studied in and for itself’ (ibid.). This sentence highlighted the fact that linguistics should be counted as a separate knowledge field that should be distinguished from other sciences, and it should establish its independence by stating that the main object of its studies is language, the language system, ‘as distinguished by both external factors and from parole, the performance of acts of language by individuals in particular situation’ (ibid.). Linguistics consists both of the study of language structure and language use (Akmajian, 2001: 5)

Akmajian (2001) distinguishes the main questions of linguistics ‘How communication works?’ and ‘What is nature of language?’. Akmajian is sure that the questions of linguistics are complicated and cannot be answered by simple sentences. Therefore, linguistics represents an attempt to break down the complicated, broad questions in simpler, smaller ones in order to move closer to answers to larger questions (2001: 5- 6).

According to Lyon, applied linguistics is based on the applications of ‘the concepts and finding of linguistics to a variety of practical tasks’ (1981: 35). However, Davies and Mitchell highlight the fact that it is quite hard to define the term *applied linguistics* because according to Cook, for each individual applied linguistics means something different (2007: 1). Therefore, the problem of defining the term occurs (ibid.). Besides, if the function of applied

linguistics is not detected how can one understand what should be applied (ibid.). However, different authors attempted to explain the meaning of the term in various ways (ibid.). For example, Cook identified applied linguistics as ‘academic discipline concerned with relation of knowledge about language to decision making in the real world’ (ibid: 2). Similarly to Cook, Brumfit (1995) defines *applied linguistics* ‘as the theoretical and empirical investigation of real world problems in which language is a central issue’ (in Davies and Elder, 2006:3). Investigation where the contrasted with the laboratory or linguist’s intuition or guesses (ibid: 4). However, in this case there is no opportunity to research the *real world*, because people mostly learn the language in classrooms, and they are also not experiencing the *real world* (ibid.).

According to Lyons, applied linguistics ‘concerns the application of the concepts and findings of linguistics to a variety of practical tasks, including language-teaching’ (1981: 35). Applied linguistics is based on both general and descriptive branches of the subject as it contains theory and practice (ibid.). Besides, the author of the volume can be one person or it might be the collection of edited papers (ibid.). Davies introduced another definition of the term *applied linguistics* by quoting Schmitt and Celce Murcia (2002): ‘*Applied Linguistics* is using what we know about (a) language, (b) how it is learnt, and (c) how it is used, in order to achieve some purpose or resolve some problem in the real world’ (2004: 4). Besides, Schmitt and Celce Murcia pointed out that ‘the primary concern of applied linguistics have been second language acquisition theory, second language pedagogy and the interface between the two, and it is these areas which this volume will have to cover’ (ibid.). One more very interesting definition which was mentioned in Davies’ book called *An Introduction to Applied Linguistics* by Spolsky (2005) is that ‘applied linguistics [is now] it is a cover term for sizeable group of semi-autonomous disciplines, each dividing its parentage and allegiances between the formal study of language and other relevant fields, and each working to develop its own methodologies and principles’ (in Davies, 2007: 2).

It is very easy to distinguish linguistics and applied linguistics by memorizing that the first concerns theory and second is about data (Davies and Elder, 2006: 4). Applied linguistics does not deal with development of a new theory; its concern is a new collection of data (ibid.). Kaplan points out that applied linguistics ‘is likely to move towards the analysis of new data, rather than continue to argue new theory’ (ibid.). Kaplan and Grabe (2000) highlight that the term *applied linguistics* ‘raises fundamental difficulties, if for no other reason than that it is difficult to decide on what counts as *linguistics*’ (cited in Davies and Edler, 2006: 4).

To conclude, *applied linguistics* research is systematically conducted research that deals with different language issues in practice. Moreover, applied linguistics is about the collection of data and its analysis. The main concerns of applied linguistics are language acquisition, language teaching, translation, communication, etc.

1.2 Methodology in Applied Linguistics

According to Davies and Elder, there exist five perspectives of research description and those are: (1) the factors of the research that are involved from the context, (2) characteristics of educational research design by van Lier, (3) methods of collecting data, procedures of data analysis and types of data by Grotjahn, (4) other variants of research characteristics, and (5) 'the qual-quant continuum' (2006: 479). Further, the author will discuss each perspective in details.

The first perspective according to Davies and Elder from which the applied linguistic research can be described is called 'Contextual factors in applied linguistics' (2006: 479). Contextual factors are different aspects that influence practical linguistics in various ways (ibid). According to Brown and Rodgers (2002), the contextual factors that influence applied linguistic research are international and national, professional, institutional, local and personal (in Davies and Elder, 2006: 479). If the analysis of research should be done, the context of the paper should be taken in account (Davies and Elder, 2006: 480). Therefore, the person who analyses the research should pay attention to international and national context of the investigation (ibid: 480). In addition, there exists also possible influence of governmental organizations because exactly governmental institutions invest money into development of some particular science (ibid). For this reason, Brown (2001) is sure that 'political priorities tend to influence who will do such research and how' (cited in Davies and Elder, 2006: 480). It means that the research is influenced and standardized according to the particular organization or body (Davies and Elder, 2006: 480). Another context of the applied linguistics research is 'professional' (ibid). Each period of time reflects different key issues and concepts (ibid). Consequently, the period when the research has been conducted refers to the *trends* of those times (ibid). The third context is institutional. Brown and Rogers (2002) claim there are a number of different factors which influence the type and the quality of research (in Davies and Elder, 2006:479). Those factors are: size of the institution, availability of resources to support research, institutional policies and priorities' (ibid). In addition, Brown and Rogers mentioned that even the human resources involved, for

example, professors and administrators, influence the research paper (ibid). The analysis of the research paper can be made from point of view of local context (Davies and Elder, 2006: 480). Local context imply the specific circumstances and place where the research will be conducted (ibid). Local context intends to take into consideration such parameters as: physical background, time context, social and ethnic background, pedagogical context and psychological context (ibid).

Applied linguistics research can be described from the Lier's (1988) characteristics of educational research design (in Davies and Elder, 2006: 481). In addition, research can be analyzed in term of the degree of 'intervention axis' and 'selectivity axis' (Davies and Elder, 2006: 481-482). In other words, while the intervention axis deals with how the research is conducted, the selective axis concerns about collecting and presenting highly selected and precise investigation or more general information (ibid.). Furthermore, intervention, for example, is a highly formal experimental design with random treatment and control groups, informal classroom observations are a non-intervention study (ibid.). According to Lier (1988), both selectivity and intervention axes produce so called 'four territories': (1) controlling (i.e., the researcher conducts accurately planned experiment), (2) measuring (i.e., data focus is highly restricted, but intervention is minimal), (3) asking/ doing, and (4) watching (cited in Davies and Elder, 2006: 481). Lier highlights that 'each of these territories accounts for different types of research and has different potential audiences' (ibid.).

According to Davies and Elder, the third perspective from which applied linguistic research can be described is Grotjahn's (1987) approach (cited in Davies and Elder, 2006: 481). Grotjahn believes it is possible to classify the research in terms of methods of data collection which are experimental or non-experimental, data types which consist of qualitative or quantitative, and procedures of data analysis whether statistical or interpretive (in Davies and Elder, 2006: 483, in Nunan, 1992:4). According to different combinations of those factors, Grotjahn distinguishes two types of pure (i.e. exploratory-interpretive and analytical-homological) and five types of mixed (i.e. experimental-qualitative-interpretive, experimental-qualitative-statistical, exploratory-qualitative-statistical, exploratory-quantitative-statistical, exploratory-quantitative-interpretive, and experimental-quantitative-interpretive) data collection method, data types and data analysis procedures (ibid).

According to Davies and Elder (2006), there exist other sets of research characteristics in applied linguistics research description. In order to analyse and describe already existed research, it is important to look up for not only previously mentioned perspectives, but also to pay attention to more complicated concerns such as: 'time orientation, theory generation, variable description, and researcher perspective'. Time orientation deals with the amount of

time spent in gathering data. Time orientation perspective is classified as either cross-sectional or longitudinal. Cross sectional means that the research has been conducted over short period of time and involves a lot of participants, whereas longitudinal studies are conducted by a small number of participants and the research is carried out over long period of time. Other characteristic of research description is theory generation. Basically 'theory generation can take two forms: hypothesis forming and hypothesis testing'. In case of *hypothesis forming*, the researcher starts the investigation with very general questions and often has no hypothesis to begin with. In the result hypothesis usually is formed almost in the final stage of research and can be interpreted during the creation of research. Indeed, for qualitative research it is considered as advantage to form new hypotheses. However, *hypothesis testing* the studies begins with forming precise hypothesis and questions. Davies and Elder argued that 'Sometimes the hypotheses are stated; more often they are implicit in research questions'. Besides, *hypothesis testing* is considered as strength for quantitative research. In addition, Davies and Elder reported about two more perspectives of applied linguistic research description: variable description and researcher perspective. Variable description implies two categories: variable definition and variable operationalization. While variable definition deals with the researchers attempts to define research matter, variable operationalization supposes a clear outline of the variables of researches choice and undertakes proper description of the research process. The final parameter of applied linguistic research analysis is 'researcher perspective'. The researcher's perspective can differ in terms of either emic or etic. Emic perspective researches are willing to understand each detail of their studies, whereas etic researchers take an outsider's position during process of collecting data and have more objective point of view (2006: 484-486).

Applied linguistics research can be described from 'The qual-quant continuum' perspective (Davies and Elder, 2006: 486). There exist already established norms of qualitative and quantitative research. According to those characteristics or traditions, the author can analyze the paper (ibid). Both research methods take different approaches to gathering and analyzing information (ibid). The simplest way how to distinguish those two methods is to understand that qualitative method involves description of characteristics of people or events without taking into account measurements and amounts (Thomas, 2003: 1). Besides, according to Davies and Elder, interpretive research is the same as qualitative research (2006: 490).

In Appendix 2 Davies presented the difference between qualitative and quantitative approaches based on qual-quant research continuum (i.e. different categories in which those two types differ) (2006:490). Davies and Elder emphasize that each of the characteristics of

the research is represented by a continuum (2006: 489). Moreover this continuum ranges from the qualitative-exploratory end of the qual-quant continuum to the quantitative-experimental end (ibid). While to qualitative research belong case studies, introspection, discourse analysis, interactional analysis and classroom observations, to quantitative (i.e. statistical) analysis undertakes: descriptive, exploratory, quasi experimental and experimental studies (Davies ad Elder, 2006: 490) (see Appendix 2). However, survey research has two categories interview and questionnaire (ibid) (see Appendix 2). While questioner is a clear marker of quantitative research, an interview can be both qualitative and quantitative (ibid). One the one hand, if the author of the research interview more than a one person and then calculates the analyzed data it is quantitative approach (ibid). On the other hand, if only one person is interviewed the qualitative research takes place, because for the researched is more important to analyze one particular case without comparing it with others.

According to Davies (2006), there exist 12 research characteristics continua that describes whether the research is qualitative or quantitative (2006: 490-491). First point of those 12, is data type which is very simple whether qualitative (i.e. belongs to qualitative approach) or quantitative (i.e. belongs quantitative approach). Data collecting methods also differ; qualitative method undertakes non experimental data collection methods, but quantitative – experimental. While to qualitative approach belongs to non- intervention studies, quantitative approach forces the researcher to be highly intrusive especially when collecting the data for analysis. Other aspects according to which the research can be defined as qualitative or quantitative are: selectivity, variable description, theory generation, reasoning, context, time orientation, participants and perspective (see Appendix 2). Therefore, qualitative research is non-selective and has variable definition (see Appendix 2). Moreover, the number of participants for qualitative approach is small if comparing to quantitative. Perspective of qualitative research description is emic and context is natural. Usually in qualitative approach researcher formulates the general questions and in the end of the investigation forms hypothesis. The time take for qualitative research is longitudinal and the reasoning is inductive. As to quantitative research, the data collected is highly selected and undertakes deductive reasoning. Quantitative researchers produce the investigation in etic perspective within cross-sectional time orientation. Moreover, they prefer firstly to state hypothesis and than to prove or disapprove it. Indeed, quantitative approach supposes a clear outline of the variables of researches choice and undertakes proper description of the research process (i.e. variable operationalization). Context of quantitative researches is controlled. Besides, after discussion on those 12 categories, it is highly important to realize that in most of the cases there not will be 100 percent clear match of quantitative or qualitative approach.

Consequently, if the researcher in his/her project uses both methods in equal proportions it is considered as mixed method; otherwise, if characteristics of one research type prevail over another, the dominant approach will be considered as a method. Indeed, Davies brought out his example of such case:

...the same project might be leaning towards the non-experimental end of the data collection methods (say 20 percent along it) because largely observational but uses one set of test scores; the project might also be considered 60 along the data analysis methods continuum because the analysis are somewhat more statistical than interpretive; and so forth.

One more huge difference between the two methods is that, while, researchers of quantitative research value the concepts of replicability, reliability, generalizability and validity; the qualitative-exploratory method value dependability, conformability, credibility, and transferability (ibid.: 492-494).

To sum up, each perspective of research description evolves knowledge of the basic theories and deeper understanding of the chosen perspective theory. Moreover, the research can be described from more than only one perspective. Taking in account different aspects that influence applied linguistics and analyzing the research from different points of view gives a possibility to present more precise findings or breakthroughs in the investigated field.

1.3 The Journal Article as a Genre

According to Stevens and Cooper (2009) journal is 'sequential, dated chronicle of events and ideas, which includes personal responses and reflections of the writer on those events and ideas'. Besides, scholars use various words in order to define 'such collections of reflective writing: journal, log, workbook, diary, dialectical notebook'. There are number of different meanings of the term *journal*, some of them consider the collections of business cards, letters or documents that are compiled in a volume as a journal (2009: 5-6).

Stevens and Cooper (2009) distinguish different types of journals, depending on the journal type general characteristics and features differ. However, there are several main features of a journal such as the journal should be 'written, dated, flexible, archival'. Those characteristics are the key points to each journal not taking in consideration its type. Written meaning that journal is the written word and it should be whether written by pencil, by pen or typewritten by any other tool. Each entity of the journal should be dated so that the sequential order and the context of the articles would be clear. Flexible meaning that there are no special procedures of formatting and organising the text. Usually journals are indented for private use; however, there is a lot of exceptions in this case, again depending on the journal type.

Journals should be archival because after the time passes they help to examine daily life (2009: 5-7).

According to Stevens and Cooper (2009) in the past journals were 'handwritten books' that described the daily activities, interests, observations, problems and insights of the journal keeper. In Japan in the 10th century court ladies kept their 'pillow books' in stone pillows or were hiding them in the drawers. Nowadays these journals offer a great possibility of examining Japanese court life activities, intrigues, interests over 10 years. In 1600's Samuel Pepys wrote down in his journal about his financial progress. Stevens and Cooper are convinced that 'today it offers a vivid glimpse into many aspects of life in 17th century in London'. Modern journals provide a wide range of functions in a number of 'educational settings'. Stevens and Cooper distinguish nine types of journals: '(1) learning journals; (2) diaries; (3) dream books; (4) autobiographies or memories; (5) spiritual journals; (6) professional journals; (7) interactive reading logs; (8) theory logs; (9) electronic journals'. Applied linguistics articles are published in professional journals as they deal with practical investigations. Besides there are different reasons why academics use journals. Some people are writing journals in order to organise their work. Stevens and Cooper highlight that another possible reason of having journal is to 'experiment with a variety strategies to meet different work demands'. In addition, the last purpose is to 'reflect on their professional lives' (2009: 7-8).

According to Knight (1975), scientific journals started to appear in 1660s and since than the history of science began. The most important type of journal for academics to be familiar with is the scientific journal. Since that time, almost each research or scientific breakthrough were written in scientific journals. By 1850, there were very few journals that were mentioned to entertain the reader because most of them were publishing new investigations in science field. The majority of English Romantics who have made scientific revolutionary and English inventors were the authors of the first scientific journals. Moreover, the first scientific journals were publishing innovations in chemistry and botany. Afterwards, in 1860 started to appear scientific journals about the arts and philosophy. Of course, nowadays the majority of the articles of those times would not be so valuable, because; there exists a clear difference between science in ancient times and in contemporary world. (1975: 101-102).

According to Benson and Silver (2012), a scientific journal is a publication similar to the magazine where articles and reports deal with a particular discipline or subdiscipline. The target audience of scientific journals is usually students, professionals or professors of a particular area of science. In addition, scientific journal is a periodic that could be defined as a communication or informational scientific source. Moreover, it is highly important to share

the ideas in order to advance already existed knowledge. Successful publication of a scientific article in the well respected scientific journal gives career growth. Some of the journals publish information that focuses on very specialized field; in contrast, others contain more general information (2012: 7,11).

Robinowitz and Vogel (2009) emphasize the fact that there are ‘wide spectrum of areas of scientific research’. Moreover, there are three types of scientific journals. The first type identifies primary journals which mainly publish new findings or interpretations and discussions of already known facts and ideas. Such journals contain original articles and researches that are based on the reports of the experiments, observations that are conducted in universities, laboratories or in natural environment. The first type of scientific journals acquires the knowledge of specialists and professionals in the particular sphere in order to create innovative findings. Secondary journals contain previously published and gathered materials. Besides, review articles contain summary of researches of respected practitioners and are mostly based on the theory of others. The last type is tertiary types which contains articles about primary journals and are products of information and bibliographical activities.

1.4 Move Analysis of Scientific Journals

According to Biber and Connor (2007), Swales was first who developed the discourse approach on move analysis in research papers. This approach of moves analysis was created not only in order to educate the advanced non native English researcher how to write academic articles for different publications, but also to help the professionals who are planning to submit their articles to academic or scientific journals. Swales proposed ‘a series of moves, i.e. specific communicative functions performed by specific sections of the introductions – that define the rhetorical structure of research article introductions’. Biber and Connor emphasize, that Swales’ (1990) established moves for writing an introduction for scientific papers help to create performing communicative functions within the text. Moreover, Swales’ theory explains in details the moves and steps for coherent scientific text production (in Biber and Connor, 2007:25-27).

Swales’ model suggested three basic moves to research paper analysis which is called as the ‘Created Research Space mode’:

1. Establishing a territory
2. Establishing a niche
3. Occupying a niche (Swales 1990; cited in Biber, Connor, 2007:25)

According to Biber and Connor (2007), the scheme of moves shows rather predictable content and plan of research introduction. The first move introduces general topic of the research and undertakes three main steps. While the first step deals with ‘Claiming centrality’, meaning that the author is emphasizing the importance of the investigation in the particular area, the second step performs ‘Topic generalization’, particularly it represents general statement by highlighting the ‘frequency and complexity of the data’. The final step is based on ‘Reviewing items from previous literature’ where the author emphasizes important finding in the subject matter and situates current research (2007:25-27).

To illustrate three main steps in the first move, Swales offers his own examples:

1. The study of... has become an important aspect of...(Step 1)
2. A standard procedure for assessing has been...(Step 2)
3. X was found by Sand et al. (1972) to be impaired. (Step 3) (Swales 1990; cited in Biber, Connor, 2007:26)

As regards the second move, Biber and Connor emphasize (2007), that it is a key aspect of the introduction because it connects the first and the third move. The second move of the Created Research Space mode is known as ‘Establishing niche for about to present the research’. Moreover, move number three expresses the researcher’s view about the necessity of paper. ‘Establishing niche’ move consists of four steps which are ‘counter claiming, indicating gap, question raising, continuing a tradition’ (2007: 25-27). This move is manifested by the following Swales’ examples:

1. Emphasis has been on... with scant attention given to ...(Step 1)
2. The first group... cannot treat and is limited to ...(Step 2)
3. Both suffer from the dependency on ...(Step 3)
4. A question remains whether ...(Step 4) (Swales 1990; cited in Biber, Connor, 2007:27)

Biber and Connor (2007) insist that the last move greatly differs from previous two in a way that it requires more active participation of researcher in conducted paper, rather than just enumerating and analyzing previous findings. According to Biber and Connor remind that the third move is the only move in introduction where ‘the author express and enjoy their own accomplishment, pride, and commitment’. The third move starts with step one which is whether ‘*Stating research purposes or Describing the main feature in research*, then by *Announcing the principal findings*, and then finally by *Indicating the research article structure*’ (2007: 25-27). In order to better understand the essence of the steps, Swales offers the following examples:

1. The aim of the present paper is to ... (Step1.A)

2. This study was designed to evaluate ... (Step 1.B)
3. The paper utilizes the notion of ... (Step 2)
4. This paper is structures as follows ... (Step 3) (Swales 1990:58)

Biber and Connor (2007) are sure that this scheme highlights the fact ‘how different disciplines manipulate a common genre – in this case, research articles – to meet their own communicative needs’. Moreover, the understanding of writing the introduction in accordance to the moves gives the reader and the writer apprehension of academic research purposes and expectations. Besides, Swales moves establish discipline and norm in published articles (2007: 27).

According to Swales and Feak ‘move is a functional term that refers to a defined and bounded communicative act that is designed to achieve one main communicative objective. The length of a move can range from a single finite clause to several paragraphs’ (Swales and Feak, 2000: 35). Farneste is sure that moves most often are settled for exploring appropriate signals (2011: 21). Moreover, she suggests Kusel’s extended version of seven moves for research introduction which is based on Swales’ model:

1. Claiming centrality
2. Providing the topic background
3. Outlining previous research, i.e. providing general or specific account of it
4. Indicating the gap
5. Outlining the purpose or aims
6. Indicating the route (Kusel, 1992 cited in Farneste, 2011: 21).

There exist three main points which differ when comparing both moves models. Biber and Connor (2007) are convinced that the first point is that moves are determined ‘by communicative purpose that the writer is seeking to accomplish, whether that be done in one sentence or in five paragraphs’. Therefore, moves and steps applied to the introduction can be different in length. Besides, while some genres require complex move model with seven moves and different communicative purposes; others are based on the basic move model which contains three or four moves. Finally, according to Swales, ‘while some moves may realize through two or more different ‘step’, other moves may only be expressed in one general functional-semantic way’. Furthermore, depending on the genre of the paper some moves should be obligatory but some might be optional (2007: 31).

To summarise, moves are specific communicative purposes that establish common norm for structuring the introduction of research. Biber and Connor emphasize, that Swales was the first who built ‘Created Research Space mode’ that consisted of three main modes. Besides, each mode consists of several steps. However, this mode was too general; therefore,

Kusel find extended the scheme to seven modes. Still, there have not been created the scheme which could match each genre and communication purposes; so, depending on the genre of the paper some moves should be obligatory but some might be optional. Nevertheless, Swales' model suggested three basic moves which show rather predictable content and plan of research introduction (ibid.). Swales basic model is universal and unique guide which helps researcher to produce a successful and comprehensive to audience paper.

2 DESCRIPTION OF RESEARCH METHODOLOGY

This chapter presents the review of literature about the research methodology. It comprises four subchapters. The first subchapter is devoted to the notion of research. The second subchapter contains information about different types of the research and their characteristics. Afterwards the difference between method and methodology is discussed. Finally, the essence of metalanguage and metadiscourse applied to the research is examined.

2.1 The Notion of Research

According to Goddard and Melville (2004), *research* is a term which means not only gathering of new information, but it should be also associated with unanswered questions. Specifically, research is a process of getting new knowledge in order to extend the boundaries of unknown. Moreover, the word *unknown* in this context means not only questions established for the research, but also different aspects that have not existed. Therefore, research expands the competence in some particular field which has been ignored before. Everything that human has in modern society is a result of researches. Leedy (1989) defines research as ‘a systematic quest for undiscovered knowledge’ (in Goddard and Melville, 2004: 1).

In order to accomplish a good research, it has to be systematic. In this case *systematic* stands for well organised, planned and goal oriented research (Goddard and Melville, 2004: 1). Research is an endless process, because the answer on one question can erase another one (ibid.). New discovery will lead the researcher to another one, and there always will be something else to investigate (ibid.). For example, Marrie and Pierre Curies’ discovery of atom led them to another research which demonstrated the spitting of the atom in 1938 (ibid.: 2004: 2).

Similarly to Goddard and Melville (2004: 1-2), Kohtari (2008: 1) defines *research* as a systematic and scientific search for knowledge or information in particular sphere. Kohtari also highlights that research is a systematically ‘movement from known to unknown’ (2008: 1). Goddard, Melville (2004: 1-2) and Kohtari (2008:1) are sure that one investigation leads to another. Nevertheless, a research answers the particular questions and helps to gain the

knowledge it also brings out even more unknown facts that involve future investigation (ibid.). Kohtari posess research as an art of investigation (2008: 1). Moreover, it is an academic activity that makes a contribution to already existing knowledge for its advancement (ibid.). According to Kohtari, research is ‘a systematic method of finding solution to a problem’ which involves apprehension and formulation of theory (ibid.).

Goddard and Melville (2004) are sure that there might be different reasons why the research is conducted. Most often the research is a result of some particular need to know more about the subject matter. Goddard and Melille highlighted that the question *why?* is so common and normal for humankind; therefore, research automatically serves the same pursuit. Similar to the word *why*, research is natural for human, because both words undertake wiliness to know something new and undiscovered (2004: 1-2).

Kohtari (2008) is convinced that research aims at answering the questions in order to gain new knowledge that has not been investigated yet. However, still there are different reasons why people conduct the research. Kohtari enumerated five possible human’s motives for doing research. The first motivation is a desire to get a research degree together with its outcoming benefits. Some people decide to conduct research because of wiliness to answer the questions which still do not have answers. While ones are doing research due to their intellectual growth and joy, others research different subject matters in order to correct some issues in the society. Finally, the last motive for conducting a research is desire to become famous and respectable person (2008: 2).

Lowe (2007: 6) similarly to Kohtari (2008: 2) enumerates several reasons for conducting a research. Lowe also mentions educational degree, but she also highlights that very often people conduct research due to job promotion, in order to get more information about a workplace or for getting personal practice in some field (2007: 6). Lowe in her book introduces Howard and Sharp (1983) definition of research ‘research as seeking through methodical processes to add to one’s own body of knowledge and hopefully, to that of others, by the discovery of non trivial facts and insights’ (in Lowe, 2007:6). Their explanation of *research* is more detailed than Goddard and Melilles’ (2004:1-2) and Kohtari’s(2008: 1). Lowe is sure that people can discover the world in many different ways, but the most crucial is through experience (2007: 6). For instance, one can study and get knowledge of physical objects through feelings and emotions (ibid.). However, experience is totally opposite to research, because research is planned and conducted systematically (ibid.). Nevertheless, there exist some exceptions when research can be based on experience (ibid.). Particularly, research might involve experience when the process of investigation is developed on

reasoning. Besides, research could be taken as a human's tool for gathering more information about the world (ibid.).

According to Barton, research cannot exist in isolation, each research is connected with the previous one in the same scientific field, and each research is a part 'of growing body and each builds on previous work while also inspiring further investigations' (2006: 2). Menter, Elliot, Hulme, Lewin and Lowden (2011) after having analyzed various definitions of *research* came up to a conclusion that most often research does not mean discovering something new, but it is rather about establishing facts that might be already well known just for confirmation of observation. Moreover, they bring out their own understanding of the term *research* 'is systematic enquiry, the outcomes of which are made available to others'. *Inquiry* means 'to find out' something in order to develop precise formulation or to gain new knowledge and understanding. *Available outcomes* meaning that the author should share with his/her research outcome in order to expand the overall knowledge in some particular sphere, the access to this research should not be limited otherwise it is considered to be personal inquiry but not research (2011: 2-3).

Kumar argued that research is more than a set of skills, it is 'a way of thinking: examining critically the various aspects of your day to day professional work; understanding and formulating guiding principles that govern a particular procedure; and developing and testing new theories that contribute to the advancement of your practice and profession' (2011: 1). Besides, he insists that research is a manner of showing curiosity or inquiring in some particular science and analytical evaluation of observations (ibid.). Furthermore, research is a way to gather evidence for a practice (ibid.). Kumar admits that the information in research should be collected accurately; the materials for usage should be reliable in order to provide the reader with effective evidence (ibid.: 2). Research aims whether to provide answers to simple questions whether to formulate laws or theories (ibid.). The way research differs from non research, is that research should have certain characteristics and requirements such as: accurate, patient, careful, systematic, valid, critical and empirical study which involves testing or proving of hypothesis (ibid.: 2-4). By the word *empirical* Kumar means that the evidence collected should be based on real-life experience or observations (ibid.: 5). Moreover, research is considered to be valid when the findings could be verified by author of the research or other people (ibid.). Each subject matter must be under author's scrutiny and the research itself must be 'foolproof and free from any drawbacks' (ibid.: 8).

To conclude, after having analyzed various *research* definitions, it is worth to highlight that the main words which characterise the research are *systematic*, *inquiry*, *unknown*, and *investigation*. Further, by the term *research* the author of present paper undertakes 'systematic

inquiry conducted through methodical processes in order to get and some new information and expand boundaries of unknown’.

2.2 The Difference Between Method and Methodology

According to Kirsch and Sullivan (1992), method is the system of proceeding and obtaining the evidence; however, methodology deals with the theory and analysis of research process and how the research should be conducted and proceed. Moreover, they strongly believe that it is very important to bring out the difference between those two terms; as, often *method* and *methodology* are used interchangeably. The main goal of any method is to follow to the plain or certain procedures in order to accomplish a task. Each method consists of a detailed, logically well organized and ordered scheme. Kirsch and Sullivan as if compares method and methodology with theory and practice. Method is a theory that should be applied to practical study; therefore, all applicable methods together make research methodology (1992: 121; 356).

Cohen, Manion and Morrison (2000) claim that *method* is set of approaches applied to study for gathering materials in order to be used to explain, interpret and predict the findings. Besides, methods also include more specific characteristics for scientific enterprise, for example, forming hypothesis and concepts, building strategies and models, illustration of procedures. Therefore, while methods are focused on procedures and techniques of gathering the data, *methodology*, according to Kaplan (2000:45) , is:

to describe and analyze these methods, throwing light on their limitations and resources, clarifying their presuppositions and consequences, relating their potentialities to the twilight zone at the frontiers of knowledge. It is to venture generalizations from the success of particular techniques, suggesting new applications, and to unfold the specific bearings of logical and metaphysical principles on concrete problems, suggesting new formulations.

Thus, in Kaplan’s a goal of methodology is to provide the help for researcher to apprehend not the essence and products of scientific inquiry, but to understand the process of the study (2000: 45).

According to Clough and Nutbrown (2012) methodology is to ‘show how research questions are articulated with the questions asked in the field’. Different researchers and writers explain the essence of methodology in a slightly different way according to their own observations, disciplines and purposes. For example, for Miles and Huberman methodology seems puzzling because when analyzing their surveys, where they were asking about the issues that were unclear, one of the researchers pointed out ‘Everything is unclear and

puzzling. Improved methodology, however, raises confidence to much more significant plane and provides a more certain (though not absolute) base for action'. Consequently, it highlights the fact that the meaning of the term *methodology* depends on the field investigated. Therefore, Cohen, Manion and Morrison are strongly convinced that the design of the research is determined by the notion of 'fitness of purpose'. Although, there exist various different interpretations of the term *methodology*, all the definitions share a common idea of 'justification' (2012: 25; 37)

According to Kumar, 'research methodology is a way to systematically solve the research problem. It may be understood as a science of studying how research is done scientifically' (2008: 5). By learning research methodology future researchers study various steps that are adopted by a concrete research problem with the logic behind it (ibid.). It is not for researchers enough to know how to develop certain tasks of ideas; it is important to know which methods or techniques they could apply to a particular field of their examination (ibid.). Kothari is convinced that 'researchers also need to understand the assumptions underlying various techniques and they need to know the criteria by which they can decide that certain techniques and procedures will be applicable to certain problems and others will not' (2008: 8). Moreover research methodology is highly intellectual human process based on the investigation of subject matter and deals especially with the manner of data collecting, analyzing and performing (ibid.). Methodology helps the researcher to understand not only the products of scientific inquiry but the process itself (Kaplan, 1973 cited in Kumar, 2008: 9).

Seebohm (2004) is sure that methodology has not only positive aspects, but it also contain negative features. On the one hand methodology should dispel all existing doubts and destroy scepticism. Within this, on the other hand, methodology should also 'determine the scope and the limits of its claim for objectivity'. Particularly, it means that most often the objects of methodology are already known and function according to examinations steps. Consequently, Seebohm argues that a successful research can exist without methodology, because basic methodologies are already pre-given. Moreover, he is sure that 'methodology is the result of reflections on research practised in a field'. However, Seebohm insists that 'the method's task is not to discover the truth but rather to establish system of rules to avoid errors, as well as to determine the limits of method' (Seebohm; 2004: 51; 153).

To sum up, while method is a research strategy by which the researcher conduct inquiry into a subject or a topic, methodology deals with the explanation of the methods by which one may proceed a research. Moreover, the target of research methods is to find a solution to a research problem, but research methodology focuses on employment of correct strategy to

resolve the problem. Besides, research methodology has many dimensions and wider scope than the research methods. Research method is a part of research methodology.

2.3 Types of Research

Gratton and Jones strongly believe that research could be identified depending on context of the paper (2010: 7). Therefore, the research could be whether applied or pure (ibid.). However, the application of the findings in the research study by Kumar (2008: 9) is very similar to Gratton and Jones (2010: 7) deviation of research types. His pattern of 'application' can be also defined from the perspective of objective mode applied to the research (ibid.). Pure research is conducted in order to gain certain understanding regards particular issue or concept without stating the clear problem (Kumar, 2008: 9; Gratton and Jones, 2010: 7). This type of research does not carry any special value and contribution for other researchers; however, it adds knowledge to existing body (ibid.). Applied research corresponds to a certain problem which is formed and provides original solution to practical issue (ibid.). Gratton and Jones are sure that each pure research should be followed with another research where all findings would be applied to real life and testing would take place (2010: 7).

In Kohtari's (2008: 3) model, similarly to Kumar (2008: 9), Gratton and Jones (2010: 7), one type of research is identical, research can be either fundamental or applied. Fundamental research is most often conducted in order to establish some general theory; however, applied focuses on searching for a solution (Kohtari, 2008: 3). Moreover, fundamental aims to gather more information about some particular aspect in order to extended understanding of the subject (ibid.). According to Kohtari, fundamental research goal is to 'get knowledge for knowledge' (ibid.). Applied researches are aimed to influence a particular system or evaluation research are concentrated to find a solution for some particular practical issues (ibid.).

However, Kohtari (2008) offers his own classification of research type. One of the basic types of the research is analytical or descriptive. While analytical research deals with already established problem and well known facts in order to analyze the situation for making sufficient conclusions and making critical findings, the descriptive research do not control the variable but rather tries to identify the causes of certain issues and reports about them. Most often descriptive studies are used in order to acknowledge customer preferences, shopping rates etc. Besides, the main method used in descriptive research is survey (2008: 3).

There exists one more research deviation, according to Kohtari's (2008) classification, which consists of conceptual and empirical research type. Conceptual research is most often used by philosophers because the in such research authors most often reformulate and discuss abstract theory or themes. Conceptual research is needed for reformulation of existed theories or for creating and establishing new ones. On the one hand, empirical research is based on data and often relies on observations or experience. On the other hand, such research is experimental; therefore, the most important aspect of empirical study are facts. First of all researcher establishes hypothesis and then whether proves or disapproves it. Besides, the researcher can control variable for analysing the affects of manipulation. Moreover, according to Kohtari, 'evidence gathered though experiment of empirical studies is today considered to be the most powerful support possible for a given hypothesis' (2008: 4).

According to Brown's broad categories, there exist two main types of applied linguistics research: primary and secondary (Brown, 1988 cited in Davies and Elder, 2006: 478). Gratton and Jones (2010: 8) similarly to Davies and Elder (2006:478) define primary and secondary research. While secondary research is derived from publications and writing of others, primary research deals with data of original sort (ibid). Primary research is based on data that has been collected by the author of the inquiry (ibid). However, secondary refers to the research where the author uses already existing writings and does not derive original data (ibid).

Brown (2001) subdivides primary and secondary applied linguistics research into several braches (in Davies and Elder, 2006: 478) (see Appendix 1). Secondary research contains of two branches: library research which is based on secondary sources and literature review (see Appendix 1) . However, primary applied linguistics research has three general branches qualitative, survey and statistical research (see Appendix 1) . Qualitative applied linguistics research is based on 'many different traditions and data gathering techniques (including at least case studies, introspection, discourse analysis, interactional analysis, and classroom observations)' (see Appendix 1). *Case study* acquires gathering and presenting the information in details about a particular individual or group of individuals. *Introspection* is considered to be a self examination or deep look into one's thoughts and feelings. In addition *discourse analysis* examines the ways in which language is applied to the texts. *Interactional analysis* is mainly used for classroom applied linguistics research in order to describe and analyse teacher-pupil interaction. The method of directly measuring the behaviour and language applied in the classroom is called *classroom observation*. Survey research undertakes interviews and questionnaires (see Appendix 1). In addition statistical applied linguistics research 'involves descriptive studies, exploratory research, quasi-experimental

studies, and experimental research' (see Appendix 1). *Descriptive study* points out the patterns of a certain situation and helps to form general hypothesis. While *exploratory research* deals with the applied linguistics problem that is not clearly defined, *quasi-experimental study* deals with variable testing on the particular group. The difference between *quasi-experimental study* and *experimental* is that quasi-experimental researcher cannot manipulate control group (2006: 479.).

Logic, systematicness, tangibility, reliability and productivity are characteristics of experimental research (Nunan, 1992: 8). Moreover, according to Brown (1988), all those features should be a key strategy for conducting the experimental research; however, they should not be seen and demonstrated in the structure (in Nunan, 1992: 8). He believes that study is systematic if the researcher clearly follows procedure rules in order to avoid 'internal and external validity of the study' and to keep in order relevance and value of statistical procedures (ibid). The research should be written step by step; therefore, it needs to be logical (Nunan, 1992: 8). While *tangible* means study which undertakes collection of materials from reality, *replicability* stands for reproduction of the same results under similar circumstances by other author (ibid). Finally, Brown defines term *reductivity* as minimization of embarrassing aspects in the research which could be caused by language issues (in Nunan, 1992: 8). For such reduction of confusion for the researched is more advisable to use general patterns in particular field (Nunan, 1992 :8-9).

To conclude, there exist various classifications of research types. However, Brown's broad category of research types, show two main types of research: primary and secondary. While, primary research is subdivided into three general branches qualitative, survey and statistical research, secondary research contains library research which is based on secondary sources and literature review. Besides, each branch stands for different data gathering technique which helps to detect research type and methodology applied to the applied linguistics research.

2.4 The Notion of Metalanguage

Metalanguage plays very important role in each research which describes or analyzes language; therefore, for applied linguistics metalanguage is the primary tool for language definition and characterization. In addition, the author of the present paper will analyse specific linguistic signals in articles in order to form a brief overview of applied linguistics metalanguage. Maschel (2009) defines *metalanguage* by Becker's term 'linguaging'. Moreover, he changes the word *language* to *linguaging* to highlight the fact that it is

‘outgoing process’. There exist two types of discourse in languaging. The first type, when language is a tool through which one can see another world. In such case, the written subject is beyond the language. However, when one looks at the language for analysis of the process of using language as a tool, it is considered to be the second type. Besides, the second discourse relates even more to the term metalanguage than the first one. Particularly metalanguage is ‘the system of using language in order to communicate about the process of using language’. Furthermore, the main concept of metalanguage is ‘the semantic process which is at the heart of both employment and grammaticization of discourse markers’. Another interesting aspect is that in most of natural sciences, for example chemistry, biology etc., metalanguage consists of the international standardized terminology referred to description of different phenomena related to the particular study. As opposite to natural sciences, in other fields, such as applied linguistics or translation, metalanguage undertakes discussion of complex problems ‘that themselves refer to language – and they hardly favour unambiguous discourse’ (2009: 1; 124).

According to Maschel (2009), metalanguage involves the usage of discourse markers which are considered to be linguistic elements of metalanguage. He describes this idea as ‘languaging about the interactions, as opposed to languaging about the extralingual world’. Particularly, discourse markers deal with the text itself and perform as a separate linguistic category for metalanguaging (2009: 1-2).

Jaworski, Coupland and Galasinski (2004) describe metalanguage as unique communication structure which can represent and characterise the language itself. This fact gives the idea of general establishment of processes that are defined as ‘the metalinguistic function of language’. Particularly, the metalinguistic function is not self providing service in language and unusual style characteristic. It is how people represent language and communication on different levels and with variety of approaches. They emphasize the idea that metalanguage is ‘language about language’. However, this definition is too literary; therefore, they have decided to bring another more understandable definition which sounds like the following statement ‘metalanguage is language in the context of linguistic representations and evaluations’ (2004: 3-4).

Copeland (1984) similarly to other authors (e.g . Maschel (2009), Jaworski, Coupland and Galasinski (2004)) describe metalanguages as languages that have been created in order to describe languages for linguistic needs. From the view of Copeland metalanguage should ‘present cross-linguistic generalizations, state universal laws explaining these generalizations, and provide insightful language typology and adequate description of individual languages’. Metalanguage helps to get apprehension and knowledge of the different languages in the

world. Therefore, the metalanguage structure supposes to ‘interfere with the structure of the description of the object-language’. Semiotics serves as a reducing mechanism for the metalanguage interference along with the object-language descriptions (1984: 232).

Kudo (2004) in his book discusses Tarski’s point of view about metalanguage. He highlights, that Tarski does not draw general parallels between languages that have been *discussed about* and languages in which one can *discuss about*. Particularly, Tarski is sure that object and metalanguage should not be divided into *mention* and *use*. According to Kudo, Tarski proposes both terms in order to apply them in individual context: ‘the problem of giving a truth definition for one language, the subject matter of the discussion, in another language, the language we use to discuss the first language’. Moreover, there exist several common features that are obligatory for metalanguage. The metalanguage should not only state the truth for the object language in it, but also metalanguage should consist of the object language or should be translatable into it. Besides there should exist possibility to create and design names for the verdict of the object language. Kudo brings out Tarski’s explanation of the possibility of defining truth for the object language:

The solution turns about something positive, sometimes negative. This depends upon some formal relations between the object-language and its metalanguage; or, more specifically, upon the fact whether the metalanguage in its logical part is ‘essentially richer’ than the object language or not.

Kudo explains that in this case *essentially richness* is not a section of the notion of metalanguage (2004: 163).

When discussing the metalanguage another term that is closely associated with it is metadiscourse. According to Hyland and Tse (2004) metadiscourse is self reflective linguistic material referring to the evolving text and to the writer and imagined reader of the text. Moreover, the idea of metadiscourse emphasizes the fact that it is established on the aspect of writing as social commitment and ‘in academic contexts reveals the ways that writers project themselves into their discourse to signal their attitude towards both the propositional content and the audience of the text’. Metadiscourse propose a logical and motivated approach of collecting different devices that the author has used in order to organise the text in a rational way, under one heading, engaging readers, and signalling about their behaviour both to their material and their target audience. Hyland and Tse recommend Hyland’s theory that ‘metadiscourse helps relate a text to its context by assisting readers to connect, organize, and interpret material in a way preferred by the writer and with regard to the understandings and values of a particular discourse community’. If speaking about more general aim of metadiscourse, it should be seen as a ‘linguistic and rhetoric manifestation in the text’, according to Schiffrin, that serves for ‘bracket the discourse organisation and the expressive

implications of what is being said'. Metadiscourse is not only responsible for writer's ability to transform simple text into readers friendly, logical and coherent content, but also to create individuality, reliability in the text for establishing sensitive relationships between written words and the audience. Based on Hyland and Tse experience, metadiscourse is based on a range of different linguistic units, exclamatory punctuation, different quotes and clauses, sequence of the sentences. Consequently, the study of metadiscourse begins with 'functional classification and analysis of texts'(2004: 156-159).

According to Hyland and Tse (2004), model of metadiscourse consists of three main principles. The first main aspect it that metadiscourse differs from propositional aspects of discourse. The second important principle is that the term 'metadiscourse' is closely related to writer-reader interaction and communication through the text. Finally, the metadiscourse distinguishes external relations to the text with internal (2004: 159).

To conclude, the term metalanguage is very important aspect in applied linguistics researches because it helps orderly to characterize and to describe the language issues. Besides, the author of the present paper will analyse specific linguistic signals in articles in order to form a brief overview of applied linguistics metalanguage. Particularly, the term *metalanguage* and *metadiscourse* both serve to help to get apprehension and knowledge of the different languages in the world. While metadiscourse is self reflective linguistic material referring to the evolving text and to the writer and imagined reader of the text, metalanguage supposes to interfere with the structure of the description of the object-language.

3 THE ANALYSIS OF RESEARCH METHODOLOGY IN SCIENTIFIC JOURNAL OF APPLIED LINGUISTICS

This subchapter is dedicated to analysis of research methodology in scientific journal. Firstly, the author focuses on the description of methodology applied to the empirical studies.

Further, the author discusses the scope of the research explaining the criteria of the choice of the scientific journal of applied linguistics. Moreover, the description of procedure of journal analysis and evaluation has been presented. Consequently, the analysis of twenty scientific articles of *Acta Linguistica* is made. Finally the findings are discussed.

3.1 Methods of Research

In the present research discourse analysis is used for the investigation of research methodology used in scientific journal of applied linguistics in order to understand which qualitative and quantitative methods are most commonly used in practise of applied linguistics. According to Davies and Elder (2006), discourse analysis 'is what people in their everyday experience of language do instinctively and largely unconsciously: notice patternings of language in use and the circumstances (participants, situations, purposes, outcomes) with which these are typically associated.' However, Davies and Elder emphasize the fact that discourse analysis is conscious, deliberate systematic and objective research which aims at investigating facts and further to reveal them. Moreover, discourse analysis is rather applied linguistics method, but still it also belongs to other sciences, as it is considered to be multi-disciplinary field. Davies and Elder define discourse analysis as 'the study of language viewed communicatively and/or communication viewed linguistically'. Usually more detailed and extended versions of discourse analysis definitions contain such references 'with a concept of language in use or language above or beyond sentences, language as meaning in interaction, and language in situational and cultural context'(2006: 136).

Nunan (1992: 160) similarly to Davies and Elder (2006: 136) highlights that discourse analysis is developed within linguistics. In addition, discourse analysis 'have studied textual factors such as the use of reference and conjunction, which contributes to cohesive discourse (Brown, Yule, 1983 cited in Nunan, 1992: 160)

Paltridge (2006) argues that discourse analysis is based on everything that is necessary for successful communication; mainly it involves not only the acquaintance of the simple language structures (2006: 2). Discourse studies the way the use of language depends on the

participants and the way it affects them. Besides, it distinguishes ‘how the views of the world and identities are formulated through the use of discourse’ (Paltridge, 2006: 2).

In order to examine which method prevails over others in scientific articles, the author applied statistical analysis. According to Kohtari (2008), statistics in research is used in order to design paper, to analyse data and to present findings. Moreover, very often the data is analyzed in large volume; therefore, statistical analysis helps to reduce the amount of information and to present conclusions in more suitable and easy way for reader. Statistical analysis measures and summarizes classified or collected data (2008: 131).

Groom and Littlemore highlight that type of statistical analysis applied to the study depends on collected data and kinds of things which author wants to find out. Besides, statistical analysis has two broad categories: descriptive and inferential (2011: 28). Goodwin argues that the difference between descriptive and inferential is the same as the ‘distinction between samples and population’ (2010: 141). Descriptive deals with the researches where there is a large number of data that is difficult to understand at once (ibid.). Descriptive statistical procedure turns large data into the small for easy comprehension (ibid.). Moreover, descriptive statistics includes ‘the measurement of central tendency, variability, and association, presented in both numerically and visually (e.g., in graphs)’ (ibid.).

According to Goodwin (2010), the most common way of measuring central tendency is *mean*. *Mean* is also defined as arithmetic average which can be calculated by simply ‘adding the scores together and dividing by the total number of scores’. The formula looks like this: $X = \Sigma N / N$. Where X represents the *mean*, ΣN stands for the sum of individual scores and N is the total number of scores in the sample (2010: 142). For acknowledging the most frequently applied data gathering technique the central tendency should be measured. Consequently, for finding out the answers the author will calculate collected data and present arithmetic average.

3.2 Selected Articles

In order to investigate which research methodology is mostly used in scientific journal of applied linguistics the author of the paper has chosen twenty articles from *Acta Linguistica* journal. *Acta Linguistica* was first launched in 2007 (*Acta Linguistica*). This journal is a scholarly, international journal published by Eurasia Academic Publishers (ibid.). As proper academic journal, *Acta Linguistica* is peer-reviewed. Moreover, it is published regularly, up to four issues a year (ibid.). The aim of this journal is to present primary researches on all

aspects of theoretical and applied linguistics (ibid.). The journal publishes different researches on the nowadays essential issues that are related to the language, research methods, different fields and theories. Articles of *Acta Linguistica* are written in English, Russian or German in compliance with the Submission Rules (ibid.). *Acta Linguistica* ‘meets the international standards in metadata representation of academic journals’ (ibid.).

The author has chosen this journal because it is one of the well-known journals in the applied linguistics field. According to Thomson Reuters *Arts and Humanities Citation Index 2012*, the world's leading source of intelligent information for businesses and professionals, *Acta Linguistica* is in the tenth place in popularity rating (Thomson Reuters, 2012). Moreover, this journal is available online as well as in a printed version which is very useful for a reader. On the web site there is written the following about the open access policy ‘This journal provides immediate open access to its content on the principle that making research freely available to the public supports a greater global exchange of knowledge’ (*Acta Linguistica*). The target audience of *Acta Linguistica* are whether professors or students of this field. Besides, published articles belong only to professors and professionals of Linguistic (*Acta Linguistica*). Each article is a pure representation of outstanding scholarship with author’s original contributions to the field (ibid.). Another reason of such journal choice was the aspect that it is considered to be international publication, so this fact could provide the author with more reliable results.

The author has selected twenty scientific articles, from different volumes of *Acta Linguistica* published from 2007 till 2012. Therefore, all the articles are different by the size. Among the chosen articles, there are researches in the English and Russian language. The average length of the research articles together with references was 10 pages or 4000 words, except for three articles, which contained more than 20 pages or approximately more than 8000 words.

3.2 Procedure of Analysis

In order to conduct a research the following procedure of description of research methodology in scientific articles of applied linguistics should be observed:

1. to read the article carefully
2. to identify research methods and data gathering techniques applied to the article and count them
3. to support the choice of research methods with examples from the articles

In order to identify the dominating research method, the scientific articles from journal of applied linguistics have been examined from Grotjahn's (1987) model. Grotjahn believes it is possible to classify the research in terms of methods of data collection which are experimental or non-experimental, data types which consist of qualitative or quantitative, and procedures of data analysis whether statistical or interpretive (discussed in Davies and Elder, 2006: 483, discussed in Nunan, 1992: 4).

For acknowledging the prevailing research type, Brown's broad categories of research types adopted in 2001 were used as a main theory. According to Brown, 'qualitative research is based on 'many different traditions and data gathering techniques (including at least case studies, introspection, discourse analysis, interactional analysis, and classroom observations)' (Davies and Elder, 2006: 479). In addition statistical research or quantitative 'involves descriptive studies, exploratory research, quasi-experimental studies, and experimental research' (ibid.).

In addition, the author of the present paper will analyse specific linguistic signals in articles in order to form a brief overview of applied linguistics metalanguage. According to Maschel, metalanguage involves the usage of discourse markers which are considered to be linguistic elements of metalanguage (2009: 1-2). He describes this idea as 'linguaging about the interactions, as opposed to linguaging about the extralingual world' (ibid.). Thus, for acknowledging discourse markers of applied linguistic metalanguage, the author underlined specific linguistic signals and discourse markers.

3.3 Results and Discussions

3.3.1 Research Methods in Scientific Articles

The first research question was to find out which research method prevails in scientific journal of applied linguistics. On the basis of Grotjahn's (1987) model, there are three main aspects for distinguishing the research method:

1. data collection methods (whether through experiment or non experimentally)
2. data types (quantitative or qualitative)
3. data analysis procedures (statistical or interpretative)

Table 3.1 Research methods in scientific articles

Methods	Number of Articles	Percentage of Articles
Qualitative	6	30
Quantitative	10	50
Mixed Method	4	20

Following this model, the statistical analysis has shown that quantitative method prevails over qualitative and mixed methods (Table 3.1). While the dominant number of ten articles out of twenty applied quantitative method to their research, only four researchers conducted the study with the help of mixed method (ibid.). Moreover, according to the measurement of central tendency, qualitative research was used in 30 per cent of articles (ibid.). According to received findings, the most frequent data collection method is experimental which highlights the fact that predominant number of researches is based on authors' experience, observations and facts. Besides, statistical data analysis method prevails over interpretive. Therefore, articles focused on numerical data collection and statistical analysis to interpret that data are more commonly seen in scientific journal of applied linguistics.

According to Grotjahn's model, the research which contains experimental data collection methods is considered to be quantitative. As it can be seen in the example below,

(1) Material in this study is taken from the international academic journals, consisting of 70 discussion sections of research articles, written by different contemporary linguists in English and Arabic within the field of linguistics. (Sultan, 2011: 31)

(2) The data for this study were retrieved from two Jordanian and two British daily newspapers. In total, we collected 150 obituaries from the Jordanian newspapers and 150 from the British ones. (Khatib and Salem, 2011: 83)

(3) The first study was conducted with 125 participants (37 males, age range of 18 to 34 years, median = 21), the second with 109 participants (35 males, age range of 18 to 43 years, median = 21 years). (Lange, 2011: 99)

There are different data analysis methods. However, Grotjahn's distinguishes two of them interpretive and statistical. Statistical analysis deals with numerical data which is often presented in tables, for example,

(1) The following table demonstrates the frequency of these two categories of metadiscourse markers in Arabic and English articles and their total numbers and percentages. (Sultan, 2011: 33)

In addition, with the help of Grotjahn's classification, the authors of the article applied statistical analysis and presented data in percentages,

(1) More than half of the obituaries (62%) used either the expression *intaqalat ʔila raḥmatellah* or *intaqalah ʔila raḥmatellah* 's/he moved to the mercy of God'. Also, 2% of the obituaries included the expression *intaqalah ʔila ʔl ʔmjaad assamaaweyyah* 'he moved to the divine glory'. (Khatib and Salem, 2011: 83)

Seven articles out of ten quantitative researches deal with numbers, because in order to test the hypothesis, it is important to bring out facts that support authors' theory. The quantitative method acquires testing of empirical theories and hypotheses in order to structure the information and to identify overall patterns. Moreover, in order to conduct quantitative research it is important to make an observation of specific aspect as it was done in the article below,

(1) 6,144 four-year-old children tested with KiSS by preschool teachers beyond the KiSS validation studies (further called external tests). Wrong answers were not documented. (Zaretsky, Lange, Euler and Neumann, 2011: 26)

(2) Отличительной особенностью данного релятивного прилагательного является невозможность лексической сочетаемости с наиболее часто употребляемыми гипокористиками *honey* (*hon*), *sugar*, как нам кажется, вследствие отрицательной интерференции их прямого значения (не имеет смысла в качестве наименования адресата *little honey*, *little sugar*) (A distinctive feature of the relative adjective is the incapability of lexical compatibility with commonly used hypocoristic word *honey* (*hon*), *sugar*. As we might think, consequently their direct negative interference values (does not make sense as the name of the addressee person *little honey*, *little sugar*). (Sukhareva, 2011: 102)

From the first glance, Sukhareva's research might look like qualitative. However, when the context of the paper is viewed, there is no doubt that it is quantitative research. Sukhareva in her research investigates the relationship between the semantic properties of the relative adjectives *old*, *little* and those of various classes of American terms of address. For the analysis the author has made a random choice of 230 words from *The American Slang Dictionary*.

In four articles it has been difficult to identify the research method because it seems that it could be both qualitative and quantitative. Consequently, if the researcher in his/her project uses both methods in equal proportions it is considered as mixed method, otherwise if characteristics of one research type prevail over another, the dominant approach will be considered as a method. As it has been mentioned before, the mixed method is not often applied in applied linguistics articles. In addition, only in 20 per cent of researches analysed, the mixed method has been chosen as a main method for obtaining the findings, e.g.

(1) We analyzed the data quantitatively and qualitatively and we examined the effect of a number of extralinguistic factors such as age, gender, education, and career of the deceased on the type of language being used as well as on the most prominent features of the announcements. (Khatib and Salem, 2011: 84)

(2) Thus, it should be stated that while analyzing the semantics of the language signs denominating bread and other things connected with bread in Anglo Saxon culture, the anthropological factor can be deduced: those features which are important for mankind and its vital activities are represented most frequently. Bread was: 1) a source of satisfying hunger; 2) a symbol of wealth; 3) a symbol of life, growth, and development; 4) a symbol of faith and justice; that is, in the Anglo-Saxon model of the world bread symbolized practically any value – including spiritual and material ones. (Yanushkevich, 2010: 106)

In this example, the analysis of the vocabulary in Anglo-Saxon texts and examination of most frequent meaning of the word *bread* is done. On the one hand, the data collection method is non-experimental which stands for qualitative method. On the other hand, data is analysed from the quantitative perspective involving statistical analysis. A very similar situation is in the following example,

(1)The article focuses on the research of English historical core vocabulary evolution in the slang register of the English lexicon... The results obtained attested that language system always addresses this oldest part of the lexicon which is at all times ready to respond to the needs of the system not only to feed its nominative necessity but also the necessity in production of expressive layers of vocabulary. The processes of semantic transformation of historical core vocabulary aimed at producing new slang words demonstrate the work of the inner mechanisms as a reaction to the altering milieu. (Golutskikh, 2008: 67; 71)

The main difference in this article is that the author does not calculate the precise number of particular aspects, but rather examines the frequency in order to establish general patterns and theory for further investigation.

Qualitative research reformulates abstract theories or themes. Moreover, qualitative method most often involves description of people or events without taking in account numbers. Burns (2000) highlights that, ‘the qualitative researcher attempts to gather evidence that will reveal qualities of life, reflecting the ‘multiple realities’ of specific educational settings from participants perspectives’, this can be achieved by qualitative method which ‘attempt to capture and to understand individual definition, descriptions and meaning of events’ (cited in White, 2010: 34).

According to Grotjahn’s model, qualitative research undertakes interpretive data analysis methods. This aspect can be seen in following examples:

- (1) Some of the future volumes of the Contactological Dictionary of Slavic Languages will be devoted to the adaptation of contact-phasemes. And when the Russian influence is analyzed, we can switch to describing contact-lexemes and contact-phasemes created under Turkish, English, French, German or any other influence. Then we could describe the processes of adaptation in all other contact situations and compile a complete computer database. (Ajdukovich, 2009: 90-100)
- (2) The article deals with the study of contact and distant prerevolutionary effects being achieved by the pre-election propaganda speech producers while actualizing such manipulation targets as emotions and instincts of a collective recipient. (Antonova, 2010: 108)
- (3) Направление метафорических переносов фитонима *seed* показывает, что большинство фитометафорических значений относится к номинации объектов антропосферы, то есть непосредственно к человеку и окружающим его предметам. (The direction of metaphorical transfer phytonym *seed* shows that the most phyto-metaphorical values are related to the nomination anthrop sphere objects, that are, directly linked to the person and to the surrounded subjects). (Dekhnich, 2008: 31)

Dekhnich’s research decided to find the meaning of lexeme *seed* used in metaphors. She searches for the answers in different dictionaries such as *Historical Dictionary of American Slang* or *The Free Dictionary*; therefore, the data analyzed is non- experimental.

The researches that are based on non-experimental data collection method are also considered as qualitative, i.e. ,

- (1) A story *The Search for Tommy Flynn* presents an example of a monothematic text. The story tells about a tragedy of a man wounded at war: once strong and healthy, a young man becomes mentally impaired and the only goal of his life is to find a friend, Tommy Flynn, who had disappeared at that same war. (Mayerovich, 2008: 18)

The results of the investigation showed that the most frequently used method in scientific journal of applied linguistics is quantitative. The research shows that ten articles out of twenty applied quantitative method, taking into account four articles involving mixed-method. According to Thomas, quantitative method ‘focuses attention on measurements and amount on the characteristics displayed by people and events that researcher studies’ (2003: 1).

3.3.2 Data Gathering Techniques in Scientific Journal

According to Brown’s (2001) broad categories both qualitative and quantitative method involves different data gathering techniques (in Davies and Elder, 2006: 478). Each method is based on different data gathering techniques and traditions. While qualitative research consists of case studies, introspection, discourse analysis, interactional analysis, and classroom observations, statistical research or quantitative research involves descriptive studies, exploratory research, quasi-experimental studies, and experimental research. In addition survey research undertakes interviews and questionnaires and method depending on the research question could be both whether qualitative or quantitative.

Table 3.2 Data gathering techniques in linguistics journal

Research Types	Data Gathering Techniques	Number of Articles	Percentage of Articles
Interpretive	Case study	2	10
	Introspection	0	0
	Discourse analysis	8	40
	Interactional analysis	0	0
	Classroom observation	0	0
Survey	Interviews	0	0
	Questionnaires	1	5
Statistical	Descriptive study	9	45
	Exploratory research	2	10
	Quasi Experimental	5	25

	Experimental	0	0
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Following Brown's broad categories, the statistical analysis has shown that descriptive study prevails over other data gathering techniques (Table 3.2). While the dominant number of nine articles out of twenty or 45 per cent used descriptive study for achieving the findings, only 5 per cent researchers conducted the study with the help of questionnaires (ibid.). Besides, the second most frequently used data gathering technique is discourse analysis which occurs in 40 per cent of the researches analysed (ibid.). While descriptive study points out the patterns of a certain situating and helps to form general hypothesis, the discourse analysis examines the ways in which language is applied to the texts (ibid.). Therefore, predominant number of researches is based on authors' experience, observations and facts that help to point out a certain pattern in linguistics. Moreover, according to the measurement of central tendency, while case study was used in 10 per cent of articles the same as exploratory research, quasi experimental study was applied in 5 researches (Table 3.2). According to received findings, no researches had such gathering techniques as: introspection, classroom observation, interviews, interactional analysis and experimental research (ibid.). Besides, statistical data gathering techniques prevail over interpretive or qualitative.

Discourse analysis allows examining the ways in which language is applied to the texts. The discourse analysis of the speeches determines main intensifiers of the advice intention. As it can be seen in the example below,

(1) As the analysis of pre-election propaganda speech shows, negative basic emotions, human instincts and other genetic behavioral reactions are most frequently used by the speech producers as manipulation targets. (Antonova, 2010: 114)

The discourse analysis was used in eight articles; therefore, this data gathering techniques is a common practice in the scientific journals of applied linguistics. In addition, the objects of discourse analysis are not only speeches but rather all kinds of written, vocal and sign language used in different semiotic context. It can be seen from the following examples,

(1) In the text analyzed above there is only one marginal theme – the theme of the title, and it leads to the conceptual theme. A short story usually doesn't have a broad thematic network; still it may contain one or two sub-themes that finally become constituent elements of one conceptual theme of the text. (Mayerovich, 2008: 20)

(2) The paper also draws a diachronic historical and linguistic parallel between the images of the 'ancient Celt' and the way modern Celts are represented in the British mass media discourse. (Golubeva, 2011: 76)

Golubeva's article might look like descriptive study because the author tries to establish certain pattern of war terms used in newspapers and articles. In order to analyse various newspapers and journals, discourse analysis was used as a basic strategy. However, for precise description of the image of the ancient Celt, and how it has changed with the time, a case study was implied. In addition, both the discourse analysis and case study are qualitative methods. Above there is an example, which highlights the fact that the article involves case study as well:

(1) This paper researches how the war metaphor structures the media discourse concerning the political conflict between England and the Celtic regions. This investigation aims at combining historical, cognitive approaches, and Critical Discourse Analysis to single out destructive strategies employed by various British and American newspapers and journals between 1995 and 2006 to represent the struggle for dominance in war rhetoric terms. (Golubeva, 2011: 76).

According to Thomas, 'A *case study* is about seeing something *in* its completeness, looking at it from many angles' (Thomas, 2003: 15). Case study acquires gathering and presenting the information in details about a particular individual or group of individuals. Case study can be well seen in the examples above:

(1) The lexical semantics of the word can determine its weak or strong accentual position in the phrase, its intention to play the role of the topic or the comment. The bonds between the lexical meaning of the word and its potential accentuality could help to describe the different meanings of one and the same polysemic word in more detail. (Pavlova and Swetozarowa, 2010: 62)

The investigation of data gathering techniques in scientific articles of applied linguistics has shown similar result of the number of researches that used descriptive study and discourse analysis. According to the findings made, nine articles out of twenty undertake descriptive study. Descriptive study investigates the cause of phenomena and presents accurate and systematic facts for formulating certain pattern of hypothesis, for example,

(1) The paper addresses a repeatedly discussed question in alignment system typology, namely whether there are processes that turn full-fledged nominative constructions into ergative or vice versa. On the basis of his historical-typological theory of sentence pattern evolution, schematogony, the author strives for a deeper understanding of the historical relations between the two alignment patterns, taking the tripartite and active alignments into consideration as well. (Havas, 2010: 37)

(2) Задачей настоящего исследования является отслеживание частотности и лексической сочетаемости прилагательного *global* в корпусе текстов со-

временного американского английского языка за 2010 год с последующим анализом семантических сфер, в которых встречается это слово в современном мире, и семантической просодии данной лексемы, показывающей характер восприятия обществом феномена глобализации (The paper focuses on the notion of globalization in the texts from the year 2010 found in The Corpus of Contemporary American English. The context analysis of the adjective global reveals its typical collocations and semantic spheres and demonstrates the negative semantic prosody of this word in the modern English speaking world). (Sergeeva, 2012)

(3) The article is focused on the study into pragmatic aspects of combinability of colloquial terms of address and relative adjectives old, little in the informal English discourse. The aim of the research is to investigate the relationship between the semantic properties of the relative adjectives old, little and those of various classes of American terms of address. (Sukhareva, 2011: 98)

According to the measurement of central tendency, quasi experimental research was used in five articles out of twenty or in 25 per cent of total number of researches. Quasi-experimental researcher cannot manipulate control group. This type of data gathering technique answers on a question about how certain aspect impacts language. In addition, quasi experimental study avoids random chosen samples. Quasi experimental study can be noticed in the following examples:

(1) A total of 7,394 three-, four-, and five-year-old monolingual and multilingual children was tested in 2007-2010 in several studies conducted in the state of Hesse (Germany) in order to develop and validate a new language screening, the Kindersprachscreening (KiSS) [Euler et al. 2010; Neumann et al., in preparation; Neumann et al. 2011].

(Zaretsky, Lange, Euler and Neumann, 2011: 22)

(2) It aims at exploration of the impact of some sociological factors on the form and content of the obituaries as well as finding out the communicative functions conveyed by this particular means of communication. (Khatib and Salem, 2011: 80)

Khatib and Salem had two main issues: to analyze the lexical and stylistic difference in British and Jordanian newspaper announcements and to see whether cross cultural difference will influence the understanding of the read material distributed to two social groups; therefore, the best way for this particular research was to choose mixed method that contains discourse analysis, quasi experimental and descriptive data gathering technique.

Exploratory study was used only in two researches out of twenty. The research which relies on the exploratory study deals with the problem that is not clearly defined. In addition, descriptive study points out the patterns of a certain situating and helps to form general

hypothesis. Moreover, exploratory research is often based on secondary sources reviewing available literature. Above there is a sample of exploratory study:

(1) In this paper we will try to answer two questions which came up to me while I was working on the Bulgarian Contactological Dictionary of Adaptation of Contact-Lexemes under Russian Influence. The first one refers to the problem of selecting material for the dictionary. The other is purely a matter of conceptual and terminological nature and is related to the first one: why do we use terminological phrase 'contact-lexeme under dominant Russian influence' instead of the traditional term 'Russianism'? And why do we use the term 'contact-lexeme' instead of 'loanword'? (Ajdukovich, 2009: 90)

In the conclusion of this exploratory research, it is noted that a perceived problem does not actually exist.

According to research results, questionnaires occupy 5 per cent out of total number of articles. Questionnaires is not popular data gathering technique among applied linguistics researchers. In addition, questionnaires serve for asking questions in order to gather information from respondents. With the help of questionnaires it is very easy to compile the data and this data gathering technique does not acquire so much effort from the researcher, for example,

(1) The two questionnaires of the two studies asked a total number of 54 questions to be answered on a 6-point rating scale (1 = no affirmation, 6 = highest affirmation) about male display production (e.g., 'I have once considered writing a book'), female display reception (e.g., 'I like to read novels and other forms of literature such as plays'), and male verbal competition (e.g., 'If I have a conflict with a person of my sex, I seek the verbal confrontation in order to decide it in favor of myself'). (Lange, 2011: 99)

Lange has used survey research in order to collect the data from both genders. The author investigates male proneness to verbal display production. Questionnaires data gathering technique has helped him to prove his hypothesis.

To conclude, the investigation has shown that the descriptive study is dominating data gathering technique in scientific journal of applied linguistics. In addition, discourse analysis proved to be the second most frequently used data gathering technique. Besides, while descriptive study occupies 45 per cent of total number of articles, discourse analysis has been applied in 40 per cent of analysed researches. According to received findings, introspection, classroom observation, interviews, interactional analysis and experimental research has not been used in applied linguistics articles in the selected corpus.

Conclusions

The focus of the present paper is description of the research methodology in scientific journal of applied linguistics. The theme is important due to the necessity of distinguishing the mostly used research methods in scientific journals of applied linguistics. The aim of this paper was to analyze *Acta Linguistica* the international scientific journal in order to distinguish the most commonly used research methods. The research **goal** was to analyse and identify the mostly used research methods and data gathering techniques in the journal of applied linguistics. For indicating the dominating research method and data gathering technique, the following **research questions** were posed:

1. Which is the most commonly used method in scientific journals of applied linguistics?
2. Which is the dominating data gathering technique used in scientific journals of applied linguistics?

The results of the theoretical investigation demonstrated that the main concerns of applied linguistics are language acquisition, language teaching, translation and communication. Davies and Elder (2006) highlight that the research can be described from methods of collecting data, procedures of data analysis and types of data by Grotjahn (1987). In addition, while the target of research methods is to find a solution to a research problem, research methodology focuses on employment of correct strategy to resolve the problem. Brown's (2001) broad category of research classification allows acknowledging the prevailing data gathering technique. According to Brown, qualitative research is based on many different traditions and data gathering techniques including at least case studies, introspection, discourse analysis, interactional analysis, and classroom observations. Besides, statistical research or quantitative involves descriptive studies, exploratory research, quasi-experimental studies, and experimental research.

The findings of the empirical research showed that quantitative method prevails over qualitative and mixed method in scientific journal of applied linguistics. The dominating data gathering technique is descriptive study and discourse analysis. Besides, the examination illustrated that researchers tend to point out the patterns of a certain situation for forming general hypothesis involving descriptive studies. Moreover, the investigation showed that researchers aim at examining the ways in which language is applied to the texts involving discourse analysis.

The author of the present paper have not analysed methodology section but only methods applied to the research. Moreover, the intention is not to provide a detailed analysis of metalanguage but just underlined specific linguistic vocabulary. Thus, further research is needed to investigate the main tendencies of usage of other research methods. More international journals should be used for the investigation. The theme could be interesting for researchers and tertiary level teachers of academic writing.

Theses

1. The study of research methodology in scientific journals of applied linguistics allows to choose an appropriate method depending on the investigated topic.
2. The main concerns of applied linguistics are language acquisition, language teaching, translation and communication.
3. Research method is the system of proceeding and obtaining the evidence.
4. Grotjahn's model is based on description of research methods of collecting data and analysis of data procedures.
5. Metalanguage involves the usage of discourse markers which deal with the text itself and perform as a separate linguistic category.
6. The dominating method used in scientific journal of applied linguistics is quantitative.
7. The prevailing data gathering technique is descriptive study and discourse analysis.
8. Descriptive study investigates the patterns of a certain situation for forming general hypothesis.
9. Discourse analysis aims at examining the ways in which language is applied to the texts.

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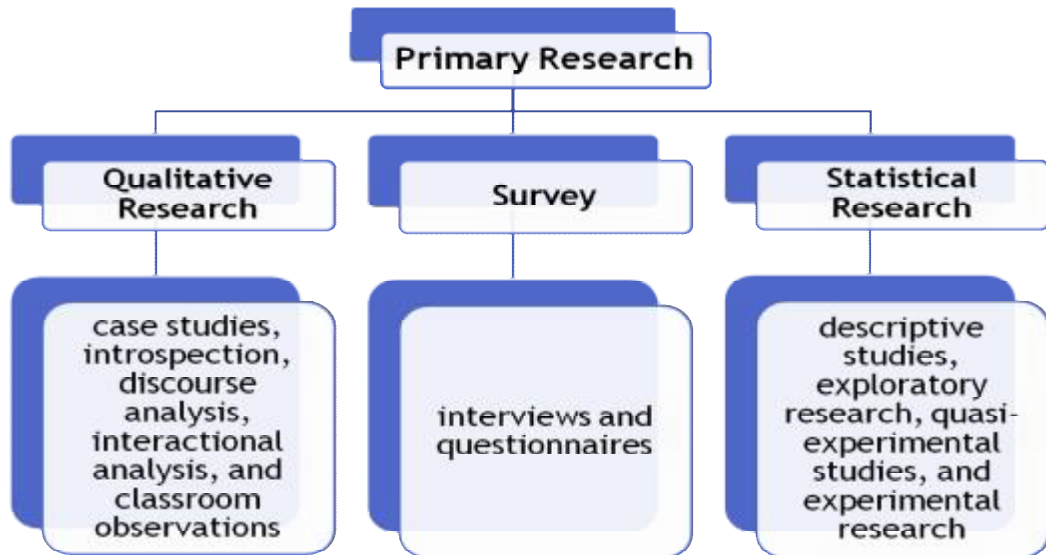
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Appendix 1

Primary Research Characteristics Continua



<i>Qualitative Exploratory</i>	<i>The qual-quant continuum'</i>	<i>Quantitative Experimental</i>
Qualitative	Data type	Quantitative
Non-experimental	Data collection methods	Experimental
Interpretive	Data analysis methods	Statistical
Non-intervention	Intrusiveness	High intervention
Non-selective	Selectivity	Highly selective
Variable definition	Variable description	Variable operationalization
Hypothesis forming	Theory generation	Hypothesis testing
Inductive	Reasoning	Deductive
Natural	Context	Controlled
Longitudinal	Time Orientation	Cross-sectional
Small sample size	Participants	Large sample size
Emic	Perspective	Etic

Davies, A., Elder, C. (2006: 490)

DOKUMENTĀRĀ LAPA

Bakalaura darbs „Description of Research Methodology in *Acta Linguistica Scientific Journal*” (Pētniecisko metožu apraksts zinātniski pētnieciskajā žurnālā *Acta Linguistica*) izstrādāts LU Anglistikas nodaļā.

Ar savu parakstu apliecinu, ka pētījums veikts patstāvīgi, izmantoti tikai tajā norādītie informācijas avoti un iesniegtā darba elektroniskā kopija atbilst izdrukai.

Autors: Aleksandra Mikucka _____ 22.05.2013

Rekomendēju/nerekomendēju darbu aizstāvēšanai

Vadītāja: assoc. prof. Monta Farneste _____ 22.05.2013

Recenzents: _____

Darbs iesniegts Anglistikas nodaļā _____ 22.05.2013.

Dekāna pilnvarotā persona: bakalaura/maģistra gala pārbaudījuma komisijas sekretāre/s _____

Darbs aizstāvēts bakalaura/maģistra gala pārbaudījuma komisijas sēdē

_____ prot. Nr. _____

Komisijas sekretāre/s: _____