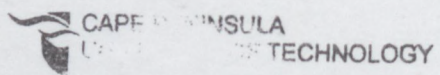


**SOCIAL MEDIA AS A MEANS OF
COMMUNICATION WITH EXTERNAL
STAKEHOLDERS**

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by

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Thesis submitted in partial fulfilment of the requirements for the degree

Magister Technologiae: Public Relations Management

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at the Cape Peninsula University of Technology

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June 2011

Signed

Date

Abstract

This research focuses on whether social media is an effective means of communication to external stakeholders and investigates communication between Cape Peninsula University of Technology (CPUT) to its student-stakeholder group on four levels of interaction; namely institution, faculty, department and subjects. It provides answers to the questions, "How does CPUT communicate to students?" "What is the CPUT student-stakeholder's preferred method of communication?" and "What content does the CPUT student-stakeholder want to hear about?" to answer the bigger question, "Is social media an effective means of communication to CPUT students?" Using a conceptual framework based on Edward Freeman's work on stakeholder communication and Grunig's communication theory, the research considers the role that social media could play in the communication mix; whether CPUT should communicate to students using a medium on which they are already active; as well as what is/are an appropriate method/s of communication to reach student-stakeholders. Findings include the students' perception of social media as well as the state of communication from CPUT to the students and the platform/s the student-stakeholder would prefer. Further research is recommended to consider the use of a mobile platform for communication to students.

Key words: social media, stakeholders, communication, education, media

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Dedication

For my loving parents, brothers and sister

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Glossary

**Terms,
Acronyms and
Abbreviations**

Definition/Explanation

Communication disciplines	This term refers to the communication disciplines taught at the Cape Peninsula University of Technology. These disciplines are Public Relations Management, Information Technology, Marketing and Journalism
CPUT	Cape Peninsula University of Technology
IT	Information Technology
PR	Public Relations
PRIAC	Public Relations Industry Advisory Committee
SADC	Fifteen countries make up the Southern Africa Development Community (SADC) namely Angola, Botswana, Democratic Republic of Congo (DRC), Lesotho, Madagascar, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, United Republic of Tanzania, Zambia and Zimbabwe

1. CHAPTER ONE: INTRODUCTION

This study explores “The use of social media for communication between CPUT and fourth-year communication students.” It focuses on whether social media is an effective means of communicating to the student body of Cape Peninsula University of Technology (CPUT) or are traditional communication methods, such as print publications (in-house newsletter) and email more effective? It investigates the type of information the student-stakeholder would like to receive in this communication, irrespective of how the message is delivered. The research questions, “What communication methods do students prefer?” and “What are the preferred methods of communication the four communication levels [i.e. communication from the institution (CPUT), the faculty, the department and the subjects]?”

1.1. Background

Cape Peninsula University of Technology (CPUT) is an educational institution, which offers “tuition in English, except for the Education courses at the Wellington Campus which are offered in Afrikaans” (Cape Peninsula University of Technology, 2011).

There are 31,545 students enrolled at the university in full time or part-time studies. The student body is located across six campuses, (Cape Town, Bellville, Mowbray, Granger Bay, Wellington and Stellenbosch) and within six Faculties (Applied Sciences; Business; Education and Social Sciences; Engineering; Health and Wellness Sciences; and Informatics and Design).

Separated by distance, it is important that 1. Institutional messages reach all students; 2. that Faculty messages reach students within the faculty; 3. that departmental (course) messages reach all students enrolled in each departmental course and 4. that subject lecturers are able to communicate to their classes. CPUT students are local, national and international as they come from all parts of South Africa, the 14 other SADC countries; the rest of Africa (particularly Gabon, Ivory Coast, Congo), and to a lesser extent Asia, North and South America and Europe.

1.2. Stakeholders

An analysis of CPUT stakeholder groups (Figure 1.1) highlights the seven stakeholder categories namely: government; industry; community and environment; financial sources; operational; students and staff.

The nature of the educational environment and its funding model creates overlaps between internal functions (operations, finance, teaching) and external stakeholders, particularly the role-played by past, present and future 'customers' (students) in the classroom, in industry and as fund-raising alumni.

This research is limited to the communication between CPUT and the student-stakeholder currently enrolled in studies at the Institution. To include the full student-stakeholder category (i.e. past and future students) would diffuse the focus of the research as alumni (past students) move into industry, community, government and even staff stakeholder categories after completion of their studies.

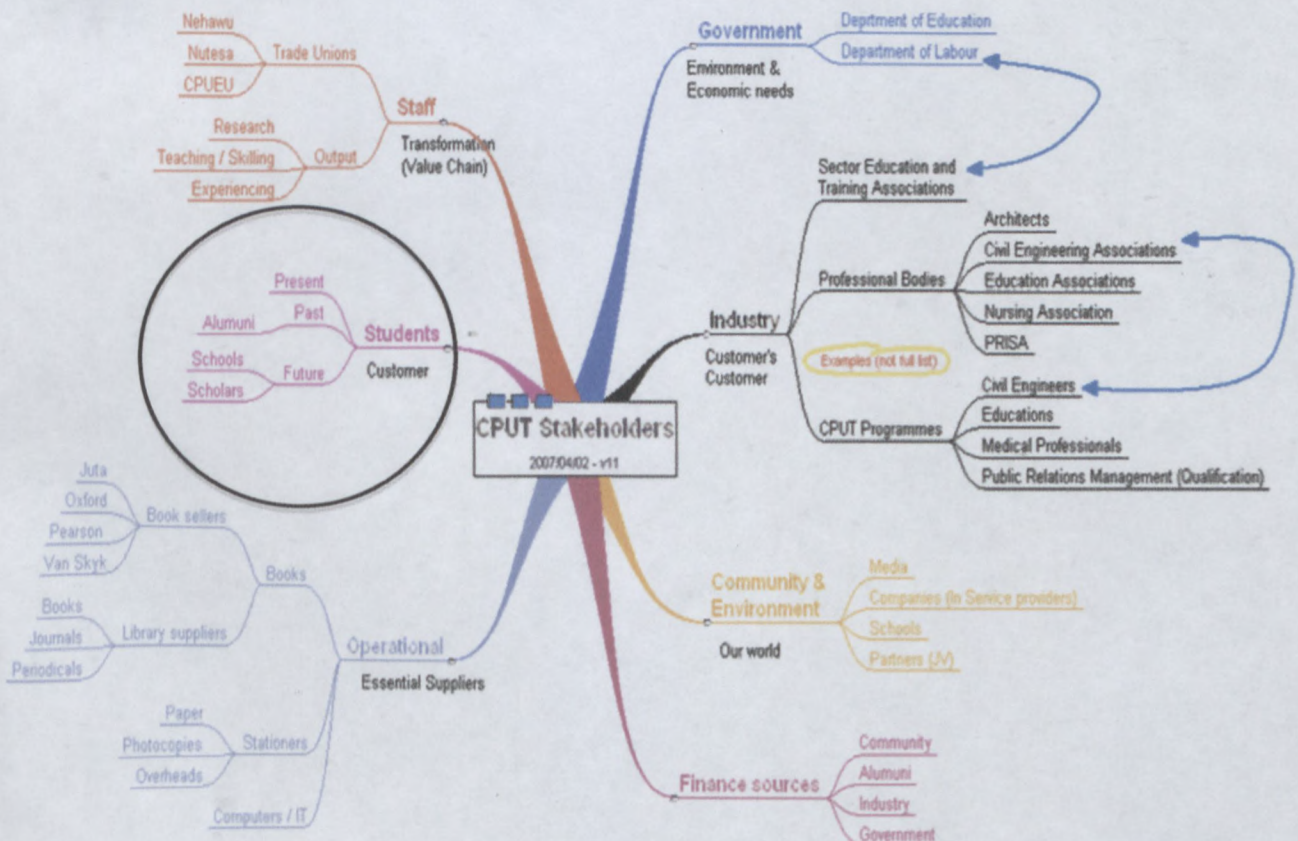


Figure 1.1: A mind-map of Cape Peninsula University of Technology's stakeholder categories.

1.3. Communication Methods

An environmental scan (Table 1.1) of CPUT's current communication status shows how Cape Peninsula University of Technology communicates with its full student-stakeholder category on four levels: as an education institution, per faculty, per department as well as per subject. It mentions briefly the overall purpose of the message (per student sub-category) as well as the method/means used to deliver the message.

Stakeholder groups

INSTITUTION	Message (purpose of message)	Means (method/media)
Past students	Funding: Support your university.	Alumni Office
Present students	Administrative: Including university term dates, registration dates, university policies, examination dates, examination results, fee payments, and availability of bursaries etc.	Website, Post and Email (newsflash)
Present students	Entertainment & competitions etc:	UniFM (Student radio)
Present students	Events & achievements etc	Student Media (Hub)
Future students	Why you should study at CPUT?	Meetings with school career advisors – school visits and open day exhibition.
FACULTY	Message (purpose of message)	Means (method/media)
Past students	Joint projects with industry etc	Limited
Present students	Administrative: Including acceptance, registration details & amendments, and academic records / results etc	Post, Fax or Telephone
Present students	Queries /administrative problems etc	Initiated by students
Future students	Why you should study at CPUT	Workshops & Interviews
DEPARTMENT	Message (purpose of message)	Means (method/media)
Past students	Getting closer to industry, placement of student interns etc	Departmental alumni function, PRIAC Meetings, Face to face meetings with interviews
Present students	Personal problems, individual complaints and class group complaints etc	Face to face meetings with HOD, which is initiated by students
Future students	Finding out more about courses	Face to face meetings with department initiated by future student.
SUBJECT	Message (purpose of	Means (method/media)

	message)	
Past students	References	Initiated by past students
Present students	Test dates, assessment due dates, and course content	Email, blackboard, face to face (in class), study guides
Future students	Answer queries	Initiated by future student

Table 1.1: An environmental scan of CPUT's current communications to all student-stakeholders

1.4. Research Problem

The development of digital communication tools adds new communication options to the list of traditional communication methods and tools used by CPUT to communicate to student-stakeholders. Digital social media networks have changed the way people communicate with each other; digital communication tools have made communication location free as well as shifted communication from a distribution focus to a conversational one (Boyd & Donath 2004 p. 17). What CPUT would like to know is whether it is possible to use social media as an effective means of communication between itself, and its student-stakeholders?

Communication messages developed by organisations should be strategized and carefully determined according to Steyn and Puth (2000 p. 63). Accordingly, so should their method of distribution be determined and strategized. Social media is defined by Holtz (Prentice and Huffman, 2008 p. 1) as a broad range of media channels, where Internet users generate content in a collaborative community environment.

Since its development, social media has benefitted organisations in a time of crisis, as communication reaches audiences instantly, there are no forced deadlines and no misinformed reporters (Prentice & Huffman, 2008 p. 1). Increasingly social networks like Facebook, Twitter and MySpace are common destinations for everyone, but especially students, to interact and socialize, a space outside the everyday world of 'school', a space to network, build culture, share information and learn (Boyd, 2007 p. 2).

1.4.1. Research Question

The research question is, "Is social media an effective means of communication between an educational institution (CPUT) and its student-stakeholders in the educational environment?"

In determining an answer to this question, the research divides the research question into two sub-question categories namely method of communication and content of communication. The sub-questions are:

How does CPUT communicate to students?

What is the students preferred method/s of communication from CPUT?

What are the right messages to communicate to student-stakeholders; a) from the institution; b) from the faculty, c) from the department and d) from the classroom (subjects)?

1.5. Research Aims and Objectives

The aim of the study is to establish, whether social media is an effective means of communication and whether CPUT students would prefer to use social media as the method of communication between the educational institution and themselves instead of other more traditional methods of communication.

The research objectives are to find sufficient information to be able to answer the research question "Is social media an effective means of communication between an educational institution (CPUT) and its student-stakeholders in the educational environment?"

The following information is required to answer the research question and to meet the aims and objectives of this research.

How does CPUT communicate to students at present?

Do the students consider this, the method used by CPUT, effective?

Does CPUT use social media as a means of communicating to any stakeholders at present?

What is effective communication?

What is social media?

What is the students' communication preference?

Is social media an effective means of communication?

Does a social medium hold any advantages over other media options?

What are the students' communications needs?

What are the most relevant messages that students wish to receive from the four communication levels within CPUT?

1.6. Rationale

This research will show whether social media could be used as an effective means of communication between an educational institution and its student-stakeholder. It will assess the foundation of social media and its ability to communicate to a student community; the student-stakeholder group at CPUT. It will compare the effectiveness of this communication with other traditional communication methods.

This information will assist CPUT and provide guidelines as to how best to develop a communication strategy to meet the needs of the current and future generation student-stakeholder. It will assist CPUT in understanding the communication needs of the students; and allow CPUT to improve the flow of information to the students and thus improve both effectiveness and efficiency. This knowledge, whether social media is an effective means of communication or not, will provide information to be considered in the development of organisational, institutional or corporate communication strategies as well as in the functional roles of public relations practitioners.

1.7. Significance

The consequence of understanding the student-stakeholder's communication needs means that CPUT will be able to create communication strategies that meet the student-stakeholder's needs. Successful or meaningful communication between CPUT and the student-stakeholder will open additional communication channels and allow CPUT to address student issues and concerns, which in turn will allow CPUT to improve the quality of its education. Understanding student-stakeholder needs will allow the institute to address and deliver appropriate, relevant messages to the student body.

This research will allow the institute to benchmark its current communication practice and give CPUT guidance as to the way forward. It will also assist CPUT to assess whether the emerging communication methods, accessed via the Internet, using applications such as Facebook, MXIT, YouTube, Twitter and Blogging, that can be delivered digitally (online or mobile) is one they need to invest further energies and money to develop or whether they can continue using older, more traditional, communication technology.

1.8. Assumptions

The research assumes that as the information economy gives way to the attention economy, the student-stakeholder will receive message more effectively and respond to them more quickly on social media platforms such as Facebook, MXIT, YouTube, Twitter and Blogging. These are platforms where the student body is already communicating with friends and family.

In addition, the research assumes the student-stakeholder is a digital native and is comfortable within the interactive social media and networking environment (Pierce, 2009 p. 1367).

Furthermore, the research assumes that the principles of effective communication remain constant irrespective of delivery mode. The final assumption is that the student-stakeholder is an external stakeholder as defined by Steyn and Puth (2000, pp. 192-193).

1.9. Preliminary Literature Review

Social media, defined by Holtz (Prentice and Huffman. 2008 p. 1) as the broad range of channels through which web users generate their own content in a collaborative community-driven environment, has changed communication. According to Prentice and Huffman (2008 p. 1), there is no press deadline to worry about, no intermediary and most of all information is distributed instantly, saving time.

Long-established public relations communication methods used to distribute corporate messages to stakeholders included traditional media, which was predominantly print, radio and television; as well as the legally required corporate publications such as the annual report and interim financial statements.

In addition, marketing, advertising or sales publications and promotions included all corporate brochures, reports and leaflets, which were directed at the external stakeholder; as well as the corporate in-house publication, which has a primarily internal focus, but were distributed to selected external stakeholders.

The development of the World Wide Web and its implementation outside the Internet's original academic environment during the mid 1990s significantly changed the corporation's communication environment. These new technologically based tools included websites, the intranet and email (electronic mail) for internal and external communication. In the late 1990s, organisations particularly the banks began to experiment with interactivity online.

Today, in addition to websites there are a number of new technology based communication tools including, Aggregators, Alerts, RSS (Really Simple Syndication) Bookmarking, Social Media, Social Networks, Facebook, MySpace, YouTube, Twitter, Blogs, IM, SMS, MXIT through which companies communicate with their customers and visa versa.

The speed of news over the different decades has changed. During the crisis of September 11, 2001 when the commercial airlines crashed into the world trade centre and pentagon, the world knew within minutes. As Craig (2005, pp 3-4) highlights "Television and radio stations ran live coverage; Internet outlets updated their information regularly." This was the fast speed of both the online environment, print and broadcast media.

However, at the time of the assassination of President William McKinley (USA) on September 11, 1901 there was no online media, let alone broadcast media, and as a result, the news of his assassination took days, weeks and months to travel across the town, states and world. People had to rely on word-of-mouth, where people had to drive into towns to spread the news. (Craig, 2005 p 4)

The proceeding examples emphasize the instantaneous nature of news in the 21st century or according to Rheingold & Kimball (2003). "For the first time I know what's in the minds of my colleagues on a day-to-day basis." During the Obama presidential campaign, Obama used the online environment to his advantage. This allowed him to dominate the presidential elections. He reached mass audiences, something his opposition had not been able to accomplish. (House 2008, web). Another example of the ability of social media is the casting of national votes during the 2008 American Idols, Season 8 competition. In the same competition, viewers to express their opinions (Marketing. 2008, web) used blogs and micro-blogs.

Social media according to Prentice and Huffman (2008 p. 2) provides a unique and effective way for crisis communication to defend and protect an organisations brand and reputation. Would it be an equally effective means of communication to students of the Cape Peninsula University of Technology?

1.10. Research Design

The research design is the overall approach that the research will take to gather the information to answer the research question or to test the thesis statement or hypotheses. (Hofstee 2006 p,113)

This research is empirical, positivist, exploratory and is a hybrid although mostly quantitative in a nature with some qualitative data. It makes use of a communication based method of data collection; namely a survey (a single, structured, self-administered, pre-tested questionnaire) to gather primary data needed to answer the question, "Is social media an effective way to communicate to CPUT students?" It also seeks to answers the following sub-questions, "What are CPUT student-stakeholders' communication preferences?" and "How does CPUT communicate to students?"

Empirical research is a way of gaining results through observation or experience. This allows for quantitative and qualitative analysis, provided that the ask questions that are clearly defined and answerable. (Lapan & Quartaroli, 2009 p.41-42) This is divided into two different types of research, namely Interpretivist research approach, which according to Andrade (2009 p.43) provides deeper insight into what you are trying to find out from those who live in it or who are apart of that environment (the students) and the positivist approach, where according to Welman et al (2000 p.6), "underlines the natural scientific method in human behaviour. Exploratory research is normally loosely structured and more focused on developing future hypotheses or question for further research, whereas the goal of formal research is to answer the research question or to test the hypothesis. (Lapan & Quartaroli, 2009 p.41-42)

The research is cross-sectional as it is carried out once, at the time of data collection, and thus presents a snapshot of a single point in time, rather than longitudinal or over an extended period of time.

Prior to beginning the research study and environmental scan was conducted to determine and benchmark the current status quo of CPUT's communication with the student-stakeholder. Its results are outlined in the preceding section 1.3 Communication Methods (Table 1.1).

1.11. Research Methodology

According to Henning (2004, p.36) "Methodology refers to the coherent group of methods that complement one another and have the goodness of fit to deliver data and findings that will reflect the research question and suit the research purpose." Unpacked this means that the methodology a research design determines how the researcher will delimitate the research population and thereafter the selection of the research sample; what methods the researcher will use as the research instrument or data collection instrument; as well as the analysis techniques to be used to arrive at an answer to the research question.

1.11.1. Population and Sample

As student-stakeholder population of CPUT is large, (approximately 31'545), and geographically spread-out; non-probability sampling or convenience sampling was selected. Firstly, it was necessary to select student-stakeholders who understood the CPUT communication strategy as well as their own communication needs from the institution, faculty, department and subjects, therefore these students could not be first year students. Secondly, it was important that these students were using social media so that they would understand the media and would have formed an opinion on its usefulness. Thirdly, the student-stakeholders needed to be mature enough to answer the questions without "venting" for the sake of it. It was thus determined that BTech students (fourth year) in the four communication disciplines within CPUT, namely; public relations, marketing, information technology and journalism; best fit the criteria. In addition, to obtain a complete communication perspective, it was important to get a part-time student-stakeholder perspective. It was decided to select the part-time public relations management BTech class, as they were the most accessible and comprised 40 students, which meant a single class would provide sufficient insight and information to determine if there were large differences in both the method and content perspectives of communication received from CPUT between the two groups.

The sample group comprised of 31 fulltime public relations management students, 15 marketing students, 13 journalism students, 25 information technology students and 40 part-time public relations management students.

1.11.2. Data Collection

The instrument of data collection was a survey developed for to gather primary data for this research. The questionnaire seeks information to assess whether social media is an effective means of communication between an educational institution (CPUT) and its student-stakeholders in the educational environment. The questionnaire needed to consider the unique structure of an educational institute to assess its communication across four levels: the institution, the faculty, the department and the subject; as well as the method each level used and its content (message). In addition, the questionnaire needed to consider stakeholder, communication and media theory in the educational environment. Table 1.2 outlines the development of the questionnaire.

Theories Stakeholder	Information The general populations and communication discipline the student	Type of questions Formal enquiry
-------------------------	--	-------------------------------------

Communication	are associated to Current communication effectiveness	Predetermined categories
Media	Social media as a communication tool and its effectiveness	Predetermined categories
Education	Content analysis of the right messages	Open ended questions

Table 1.2: Linking the literature to the research questionnaire

The questionnaire developed and pilot tested on the BTech public relations management students (2009) to ensure that the questionnaire would provide answers to the research question. Amendments were made prior to the distribution of the questionnaire (Appendix A) to the research subjects in 2010. All questionnaires were handed out during class time and returned to the researcher at the end of the class.

1.11.3. Data analysis

Once coded (Appendix B) and captured on Moonstats (a statistical programme) the results were analysed according to all students in the research as well as per individual discipline. The data provided detailed results for the whole group and for each individual student group, and obtained results on an institutional, faculty, departmental and, subject level.

1.12. Chapter Outline

Chapter 2 – Literature review

The literature review focuses on three theoretical areas with the public relations management discipline namely: stakeholder theory, communication theory, media theory and the requirements of the educational environment in which the research takes place. These theories are relevant in finding an answer to the question "Is social media is an effective means of communication between an educational institution (CPUT) and its student-stakeholders in the educational environment?"

Chapter 3 – Research Design & Methodology

Situated in the exploratory "radical humanist" paradigm (Burrell and Morgan, 1976 p. 22), this research is exploratory, empirical and quantitative. This chapter will expand on the research design and methodology, paying careful attention to the development of the questionnaire and selection of the population from which to collect data.

Chapter 4 – Findings

The survey findings are presented according to the concepts defined in the literature review and as utilized in the development of the questionnaire. As the population sample is the student-stakeholder group, the section is contextual and thus presented first. Communication theory results, which focus on the perception of communication used by the institution, the faculty, the department and subjects, are next. Media theory, which focuses on the preferred media tools students make use of as well as how the student-stakeholder would like to receive CPUT communication, is third.

Chapter 5 – Conclusion & Recommendation

This chapter brings together the main discussions of whether social media is an effective means of communication, whether it is students' preferred message of communication as well as the students' perception of the current communication methods. It evaluates the findings and places them back into the theory as outline in the literature review. Finally, this information will assist CPUT to develop a communication strategy to its student-stakeholder group, on four levels; the institution, the faculty, the department and the subject lecturers, and the conclusions makes recommendations as to how CPUT can improve communication with student-stakeholders

1.13. Conclusion

The research investigates the effectiveness of social media as a communication medium within Cape Peninsula University of Technology. It considers the impact of modern day communication technology as well as how the development of new communication mediums has changed the way organizations interact with stakeholders. Chapter Two, the literature review, investigates stakeholders and their relevance stakeholder to an organisation. It discusses how communication of messages is a strategic initiative by the organization to ensure effective interaction between the stakeholder and the organization. Finally, the review provides a critical analysis of previous research on social media and the effective use of it within the educational institution.

2. CHAPTER 2: LITERATURE REVIEW

2.1. Introduction

This study focuses on how Cape Peninsula University of Technology (CPUT) communicates to their students and questions whether social media, used within this tertiary educational environment, would be an effective way to communicate to this stakeholder group. An investigation of the research question, "Is social media an effective means of communication between and educational institution (CPUT) and its student-stakeholder in the educational environment) lead to a review of public relations management literature. In particular the main arguments presented in stakeholder theory (Freeman 1984; Donaldson and Preston 1995; Mitchel, Agle and Wood, 1997; Gibson 1997; Friedman and Miles, 2002; Phillips, 2003; and Grunig 1992), and communication theory (Grunig & Hunt, 1984; Steyn & Puth 2000;) were considered. As where the main theories of message distribution presented in media theory (Laughey, 2007; Solis 2009; Breakenridge 2008), social media (Scott 2007; Shirky 2008, Qualman 2009) and computer-mediated communications (Scobel & Israel 2006)

2.2. Public Relations

Public relations practitioners, according to Grunig (1992, p. 4), PRISA (Public Relations Institute of Southern Africa) (SACCI 2009) and Skinner et al. (2010, p. 4), manage organizational relationships through communication with stakeholders using strategically focused plans to manage the organizational message and its distribution. Accordingly, says Eyrich et al. (2008, p. 412), public relations practitioners have adopted online tools to strengthen media relations and to engage stakeholders in conversation and to allow the organization to reach a broader audience. Matching the message (content) with the method of distribution (media) represents a meeting point between marketing and communication as each media (distribution method) creates an audience in the same way the audience chooses the media that suits them, making each distribution method a unique product (Donnelly, 1996 p. 135). Therefore, for effective communication to take place it is important that there is a match between the message to be distributed and the method used to distribute it so

that the message reaches and communicates with the chosen stakeholder or stakeholder group.

2.3. Stakeholder Theory

Stakeholder theory is an organizational management theory developed by R. Edward Freeman (1984), which is based on the basic, broad shareholder model known as the input-output model. Freeman's model decides who counts, and how much, to an organization and applies this knowledge to define stakeholders as "*any groups or individual who can affect or is affected by the achievement of the organisations objectives*" (Freeman 1984, p. 4). Harrison and John (1996, p. 47) extend this definition to include influence, thus defining stakeholders as those people who influence the organization, its goals and activities as well as its management process.

Stakeholder categorization

Broadly speaking stakeholders are categorized as either primary stakeholders, also known as internal stakeholders (those stakeholder groups with a direct influence on the organization), or secondary stakeholders, also known as external stakeholders (those stakeholder groups without a formal connection to the company). Donaldson and Preston (1995, p. 72-74) developed a stakeholder model of three stakeholder approaches (descriptive, instrumental and normative) which explains what is being done to consider the needs, interests and wants of the stakeholders (descriptive); the potential impact the stakeholders may have on the organization (instrumental); and the reasons why any stakeholder should be considered (normative).

Argenti (Campbell 1997, p. 446) argues that Donaldson and Pearson's stakeholder approach has weaknesses, particularly its difficulty in defining a stakeholder, as he believes it is unrealistic to expect management to trade-off between stakeholders and their various expectations of the organization. Mitchell *et al* (1997, p. 853) agree highlighting that although stakeholder literature contains both broad and narrow definitions of stakeholder's categories, there is limited identification literature that can be used to identify stakeholder groups consistently. Mitchell *et al* (1997, p. 854) add the attributes of power, legitimacy and urgency to the stakeholder's relationships with the organisations. These attributes, with power and legitimacy being the two core elements, are used to determine 'salience,' which in turn will determine how the shareholder should be treated. In addition, Mitchell *et al* demonstrate that these attribute levels fluctuate and are dynamic therefore allowing stakeholders relationship with the organization to shift from one category to another.

Stakeholder identification

Steyn and Puth (2000, pp. 192-193) refer to customers as belong to the broadly defined external stakeholder group, while Amaral *et al* (2002, p. 11), suggest that in an educational environment, students should be considered to be internal stakeholders as participants in the daily life of the institution. However, with part-time students, internships, part-time jobs, and various timetable hours, the student-stakeholder who is broadly a consumer and purchaser of the institutional output or product (Freeman, 1984, p. 4), and is defined as an external stakeholder who has no input on strategic communications or messages.

Stakeholder relationships

Balance and integrity in relationship management forms the cornerstones of stakeholder theory. Reynolds *et al.* (2006, p. 285), affirms stakeholder theory is recognized as a management function in which individual relationships are considered and the various interests of all the stakeholder groups are held in balanced tension. Phillips *et al* in Bornsen *et al.* (2008, p. 480) in agreement with Reynolds, expands on this to add that this balance is directed by organizational management and ethics; as organizations must account for power and urgency as well as legitimacy in their actions. (Michell *et al.* 1997 p. 882). However, Rowley (1999, p. 72), believes it is not only information, or the quality of information, that is central to managing and developing an organization, but also the style of how that information is communicated to others that can influence relationships. Chen (2008, p. 1) deems relationships to be essential to an organization's survival thus making it imperative that the organization identify and nurture these relationships through effective communication. Mersham and Skinner (2009 p. 2) value the role of an established communication channel between the organization and its stakeholders. This channel is important, as even when these parties do not agree with each other or are not honest with each other, the communication channel will ensure that there is a mechanism in place to exchange points of views, feelings, thoughts and messages.

Gibson, (2000, p. 245) and Phillips *et al* (2004 p. 481) believes that although all stakeholders are not equal, all stakeholders should receive communication from the organization as all stakeholders have the potential to harm an organization and therefore should not be ignored. Gibson (2000, p. 246) encourages strategic public relations practitioners (and organizational managers) to weigh the potential threats and benefits posed by the various stakeholder groups carefully.

Stakeholder communication

However, organizations should not communicate randomly or communicate random information. Grunig (1992, p. 4) positions public relations management as the oldest concept used to describe the communication activities of organizations, and describes the overall planning, execution and evaluation of an organization's communication with internal and external stakeholders. Communication is, according to Halavais *et al* (2006 p. 4), the transmission of information from one person to another. However, this is more succinctly put by Laswell (Laughey, 2007 p. 9) in his chain of communication and propaganda theory as, "*Who says what in which channel to whom and to what effect.*" Indeed, strategic communication, supported by strategic management techniques, should govern the public relations practitioners' approach to stakeholder communication according to Steyn and Puth (2000, p. 17). Gibson (2000, p. 245), Freeman (2001, working paper) and Cooper (2003, p. 232) all use the three stakeholder approaches (descriptive, instrumental and normative) presented by Donaldson and Preston (1995, pp. 70-71) to develop problem-solving strategies to manage stakeholder communication. If organizations are to have sound relationships with its stakeholders, then there is a need for trust, which is built through commitment (Covey 2006, p. 22), and loyalty. Grunig & Grunig (2010, p. 1) take this concept of trust further and advise organizations to find ways to listen and "to engage their stakeholders in the new digital age."

2.4. Communication Theory

According to Mershham *et al* (1999 p. 2), Locicero (2007 p. 4), Staden *et al* (2002 p. 11), and Cleary (2008 p. 2) communication is defined as a two-way process, which sends or receives information through a channel. Similar to stakeholder theory and its broad identification classification, organizational communication is broadly divided into internal or external communication. Internal communication (verbal and/or non-verbal) is carried out within an organization, between the employer and employee, while external communication takes place between the organization and people outside the organization (Straden *et al* 2002, pp. 11-13). Duncan & Moriarty (1998, pp. 1-4) support the belief that organizational communication can influence relationships and that organizations should consider internal and external stakeholder communication as one during the planning and implementation of strategic communication. However, a plethora of new terms to describe strategies for organisations to build relationships has emerged in the last two decades. These terms include customer-focused, integrated marketing communications, relationship

marketing and data driven marketing to name but a few. The use of integrated marketing communication (IMC) in planning and evaluating strategic communication messages within communication disciplines is now accepted practice (Peltier *et al.* 2003 p. 95-95). The focus of integrated marketing communication is to ensure that the organization presents a consistent message across all communication platforms and that this message is relevant to all stakeholders as well as receiving the necessary attention (Du Plessis *et al* (2010, pp. 226).

Although public relations management is considered an integral part of marketing communications, Hunter (1999, p. 5), strategic communication, as a primary function of strategic public relations management, adds Steyn (2002, p. 1), has not received much attention. Steyn & Puth's (2000, p. 63) state that corporate communication strategy model underscores the need for successful organizational communication. It is essential to analyse the internal environment of an organization before developing a corporate communication strategy. When the environment is understood, identification of stakeholders, both internally and externally should be identified and key issues; messages and goals should be strategized. Once these are established a communication plan can be put in motion. (Steyn & Puth 2000, pp. 63-70)

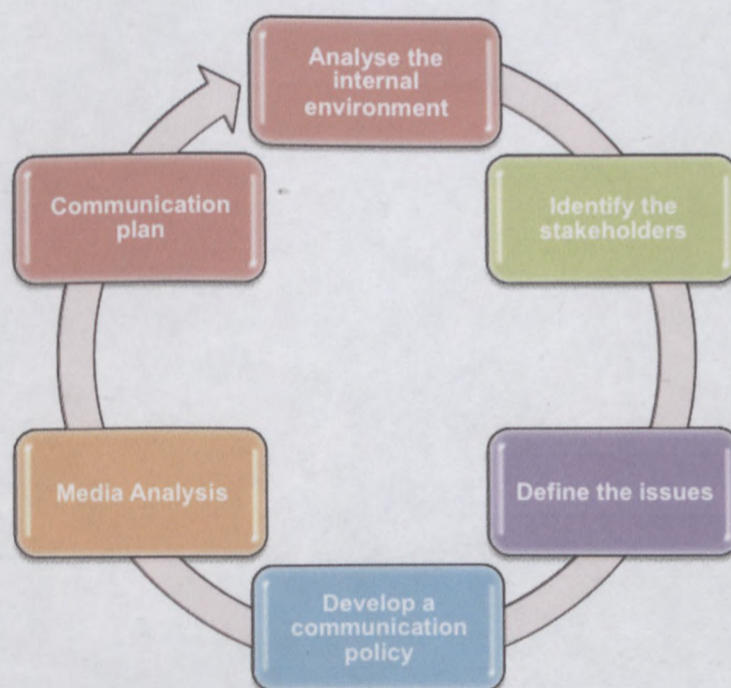


Figure 2.2: Steyn & Puth Model for developing a corporate communication strategy (2000 p. 63)

According to Steyn and Puth (2000 p. 66) who call for an integrated communication strategy because “managing communication with stakeholders as if they were

discrete and unconnected groups of people does not add value to the organisation” and because it is important to understand that the problem in organizational communication lies within the organization’s lack of understanding about stakeholders. According to Coughlan *et al* (2002 p. 49), there are five causes of ineffective communication namely; a) poor communication between people, b) lack of knowledge, c) incomplete documentation, d) lack of systematic process and e) poor management. These causes affect the relationship and shared understanding between organisation and stakeholders. Managing communication, especially in intercultural or multicultural environments, is important. According to Fielding (2006 p. 11) effective communication demands interaction and leads to people working together, and as management is about getting other people to do things, effective communication makes organisational management possible.

2.5. Media Theory

Communication from an organization to its stakeholders has traditionally used print media (corporate brochures, newsletters etc) and made use of television and radio for advertising or marketing messages. The introduction of communication platforms or the ability to communicate to the masses via various media has always changed society. Originally, information was shared between friends, family, community and marketplace via face to face communication.¹ As with every invention preceding it, the adoption of the World Wide Web, websites and multi-media as a communication platform changed the way society communicates.

Mass communication according to Mersham & Skinner (1999 p. 168) is the ability to take a message, multiply it and distribute to a large audience through mass media, which can be defined as technology devices used to disseminate the information. Mass communication, as a concept, has not changed, but the mediums used to distribute mass communication changed. It has moved from traditionally messages distributed through mediums controlled by gatekeepers to mediums that are individual, interactive and controlled by common sense.

According to Defleur (2010 p. 2), communication systems have been developed to shape the current society, where constant engagement in media messages has become a societal norm. Instead of the usual push method of communication a two-way flow of information has taken place, which according to Mersham (1999 p. 176), allows information to flow in two stages. The first stage allows regular mass media

¹ Technological inventions, which changed the way society communicates includes; the printing press by Gutenberg in 1454); the telegraph in 1794; the radio by Marconi in 1896; the television in 1925); the Internet in 1969; and the World Wide Web in 1990.

users to receive the information and the second stage allows gatherers to gain the information, build on it and pass it along in contrast to the traditional communication methods, which consisted of one-way communication, guarded and determined by gatekeepers. For example when newspaper editors' decided what society needed to hear and radio station managers' decided who says what on air.

Although the interactivity in society has changed, some still regarded traditional methods as an appropriate medium of communication. For example, according to Singh & Tiwari (2003 p. 1) traditional mediums still hold great value in rural areas, where news via television, radio and print material have an impact. Traditional media still fits the lifestyle of many developing countries, as access to high-end technology is not available (Rawan, 2002 p. 155) and traditional media is a source of entertainment for many rural audiences (Sighn & Tiwari 2003 p. 2). In addition, according Fogel *et al.* (2009 p. 153) many recent studies show that social networks, like Facebook, are used for entertainment and are not used to gather information; information dissemination is a major function of traditional media.

Technology made the change from old media to new media possible, where according to Baran & Davis (2009, pp. 22-24) new technologies made interactivity possible. According to Grunig & Grunig (2010 pp. 3-4) new media has made relationships between stakeholders and organizations easier than in the four decades of the 20th century. Grunig & Grunig believe the interactive nature of social media and digital media makes two-way interactive communication balanced as it allows organizations to listen to stakeholders, rather than one-way communication, which forces stakeholders to listen (only) to organizational messages. According to Argenti & Barnes (2009 p.47-75), new media has changed the rules of the game since its inception, it created a new space where individuals can update information; include photos, video and audio of events and news networks have started setting up a news platform for other individuals to access (Craig, 2005 pp. 7-8).

Although no longer considered extraordinary, electronic mail (Email) was the first form of new media, which is a) text based and b) allows audiences to receive information immediately (Habil & Galea, 2002). This form of communication has taken over face-to-face communication as well as the traditional memorandum in organizations as communication has shifted to the everyday use of computer-mediated communication (Daly 1993 pp. 1-3).

Email usage within universities is commonplace. It is used, extensively and in addition to an online content delivery mechanism or e-learning platforms, to communicate with students, but there are not many studies that look at how it can effectively be integrated into teaching and learning practices according to Hassini

(2006 pp.29-30). Don Polling's (1994), experiment in using email to communicate to students; found the advantage of email was that student believed their instructors were accessible via email; and, according to her, email eliminated miscommunication via the telephone (Hassini 2006 pp.29-30). Email breaks down the distance and time barriers and it shortens the cycle of written communication as well as improving productivity in speeding up the communication process. Habil & Galea, (2002 p. 3) agrees with Polling in saying that email eliminates the problems of bad telephonic communication; it breaks down the time barrier of communication and shortens the time of written communication.

Hassini's (2006 p. 31) research compare a course delivered solely through email with another in which email replaced some lectures and supplemented others. One of this study's findings was that whilst high scoring students were unaffected by the use of email, the low scorers were not and benefitted. "This suggests that the use of email as a supplement helps increase the overall performance of a class, something that should encourage instructors to make use of emails," according to Hassini (2006 p. 32).

Face-to-face communication and traditional communication methods have their benefits, mediated communication, especially computer-mediated communication, allows individuals to feel free, this means that they are able to express themselves in different ways, interacting with friends and family, where mass media channels such as social media allow users to be heard (Uhler *et al*, 2001 p. 271). Whether or not computer-mediated communication is effective substitute for face-to-face discussion in collective induction is open to debate, according to Daly (1993 p. 3).

Email communication is a commonplace within all organizations including education institutions. At Cape Peninsula University of Technology, it is a major communication platform to staff and students alike. It is important to keep in mind that students are actively on new media and the World Wide Web. It makes sense that using communication methods on which the students already have a presence rather than an additional medium would be more effective.

2.5.1. World Wide Web

According to Brown (2009 pp. 2-4)The World Wide Web (WWW) and its web 2.0 platform which allowed users to add content of words, pictures, sound and content gave birth to social media and changed communication forever. The World Wide Web changed communication into a two-way stream, where users created their own personalized websites, interacted in forums and as the web grew, so did its

possibilities, where individual users, not media houses, are able to reach a mass audience in delivering their message instantly. (Solis & Breakenridge 2009 p. xviii).

Technology and software are becoming more sophisticated, but at the same time more complicated say Scrobel and Israel (2006 pp. 225-226) but, technology is the way of the future, and it will allow businesses and people to find and share information. It is clear that society and organisations have entered into a new era of communication, in which stakeholders are in constant contact and able to interact instantly (Baran & Davis 2009 p. 26). Although according to Defleur (2010 p. 2), organisations are developing their communication mediums to suit the needs of the society they operate in. However, Godin (2007 p. 1-47) believes the "noise" (marketing, advertising and public relations) made by a company should be distributed in accordance with the company's product distribution system and that it is not possible to simply add new media onto an old business model.

Modern digital media namely, the World Wide Web, including the social media networks, have created a new interactive opportunity between organisations and their stakeholders. Scrobel (2006 p.220) believes stakeholders need a live interactive means of communication to relieve stakeholder or individual frustration with the typical organizations lack of response. According to Holtz (Prentice and Huffman. 2008 p. 1), social media guarantees your message the opportunity to be heard. This opportunity has resulted in the creation of companies such as '*hellopeter.com*' where stakeholders are able to interact with organisation and communities voicing their issues and concern, forcing companies to react. (*hellopeter.com*. 2008, web) as media can now reach vast audiences instantly (Prentice and Huffman 2008 pp. 4-5) and provides a unique and effective way for organisations to communication their brand and reputation, but that is not all "Social media ... is ultimately about good karma ... in the online world, your brand is exposed. Your actions, interactions and reactions (not to mention inaction) are being watched, critiqued and catalogued forever by Google" (Yinkaolaito 2009, web).

In addition, social media has become a space organisations use to deliver messages, from the CEO to the salesman, to consumers in the good times, but especially in crisis situations (Prentice and Huffman. 2008 p. 2). It is important, today, that organisations have corporate blogs, which stakeholders and corporate can use to interact, and for question and answer sessions. According to Grunig & Gurnig (2010 p. 19) these spaces are not just blogs, but all places where people can come in and raise concerns and ask questions.

However, today student is not a company adapting to new media and its various technologies but a digital native. A digital native is a person who grew up with new

media and its various technologies and uses socially interactive technologies such as social sites, messaging, instant messaging daily according to Pierce (2009 p. 1367), to fulfil social needs.

2.6. Education

The traditional educational environment of notice boards, class announcements and study guide communication no longer fits the requirements nor the lifestyles of the digital native. Neither does it fit the communication needs of the faculty (Smith & Rupp, 2004 p.106). However, according to Leng *et al* (2010 p. 644), interaction is the key to student engagement; and whether students are engaged in a face-to-face conversation (traditional) or an online 'mediated' discussion (new), both are an interaction between the students and their environment.

According to Smith & Rupp (2004 p. 100) online is increasingly common within tertiary education; however this online environment refers to elearning or online teaching platforms for distance learning, both of which have unique challenges. However (Hammond 2000 p. 260), for the online environment to be effective, tutors need to explain what is being attempted and why, for the learners to risk public online exposure although forums are used for quick and easy communication enabling learners to share and message each other.

Online education allows for the learner and teacher to access and conduct learning from any location; the home, the ability to teach anytime; the teacher, and the ability to respond at anytime; the learner. Communication among students allow learners to evolve through self-learning and according to Vonderwell (2003 p. 77), to learn from each other as social interaction can play an important role in the learning achievements of students. According to Smith *et al* (2011), there is still resistance within educational institutions about online learning as face-to-face settings have resulted in student achievements. In addition, online safety and online privacy remain an area of concern (Nosko *et al* 2010 p. 406).

According to Chen *et al* (2010 p. 1159), computer technologies play an important role in supporting students and their collaborative learning. The new generations of students are digital natives, who approach things differently. According to Evan & Haase (2001 p. 248), they state that the type of course and audience determines the type of delivery message. Further in their study, Evan & Haase (2001 p. 259), state that potential online business students believe that online offerings are less important than traditional class programs and that schools or educational institutions must

therefore ensure that their online mechanisms that are in place are of the same quality as traditional offerings.

According to Roblyer *et al* (2010 p. 134), higher educational institution has a well-established trend towards non-adoption of new technology and social media. and Zhao (2003 p. 215) says, that although there is a considerably large number of literature that provides advantages on online teaching and learning in higher education, however online education is subject to criticism of failing to maintain quality standards.

With the rapid development of online media, Zhao (2003 p. 214), states that the Internet and various web resources have boosted significantly the online teaching and learning platform, where according to Subrahmanyam *et al* (2008 p. 420), the internet has become a huge part of young people's life over the past decade. Social networks, such as MySpace and Facebook, are a common destination among young people and these social digital spaces are a medium for teenagers to feel safe and to be popular (Boyd. 2008 pp. 1-2). Social media is used as a networked space, outside of school life, for teens to "*work out an identity and status, make sense of culture cues and negotiate public life*" and "*in these places, they explore and forge their identities, socialize and write themselves into being*" (Rigby. 2008 p. 59). On the other hand according to Hamburger *et el*, social media is used to sustain existing offline relationships, although online only relationships also exist.

According to Thomases (2009), most college students are involved in social media, especially Facebook and many rely daily on networks such as Twitter, Facebook and RSS (Really Simple Syndication) reader, LinkedIn and the social bookmarking site, delicious. Interestingly, Biocca's (2000 p. 22) research says the television generation spent an equivalent of seven years watching TV, but the Internet generation will spend 20 years online.

2.7. Overall

This literature review unpacks three theories; stakeholder, communication and media theory and discusses previous research as to the best tool for student-stakeholder communication within the educational environment. The student-stakeholder is defined as an external stakeholder according to the criteria outlined by Steyn and Puth (2000, pp192-193). This review on stakeholders and communication theory reveals that stakeholders need relevant communication on a regular basis and the medium needs to be consistent and b) the interaction between stakeholders and an organisation is essential to promote a positive relationship, although having the

mechanism for any type of relationship, even a negative one is equally important. Mershham *et al* (1999 p. 2) It reveals that the message (content) and its delivery system (medium) play a role in effective communication, which is the purpose of a strategic communication strategy. Effective communication demands interaction and it is essential managing a successful organisation. (Fielding 2006 p. 11)

The literature endorses the impact that a change in communication technology has on society and that if communication has changed, then the way one communicates to stakeholders must also change. As Roblyer (2010) and Boyd (2008) revealed, the online world of communication in which interaction and two-way communication is common

Chapter 3 focuses on the research design and methodology of this empirical, positivist, exploratory research. It provides insight into how the investigation of the topic "Is social media an effective means of communication to external stakeholder?" took place. The study is within the radical humanist paradigm, which makes it an exploratory study. In this instance, the exploration is to consider the effectiveness of social media as a communication tool to students.

3. CHAPTER 3: RESEARCH DESIGN AND METHODOLOGY

3.1. Introduction

This research investigates whether social media is an effective means of communicating to the student body of Cape Peninsula University of Technology (CPUT). The research is an empirical study, which is exploratory in nature as it seeks to gain understanding as well as to identify the student-stakeholders preferred method or methods of communication on four levels, a) from the institution, b) from the faculty, c) from the department and d) from the subject lecturers. It also seeks to determine the current effectiveness of communication from the institution, the faculty, the department and the subject lecturers to the student-stakeholders.

It is quantitative as it and makes use of a survey to gather primary information to answer the research questions "Is social media an effective means of communication between an educational institution (CPUT) and its student-stakeholders in the educational environment?" through answering sub questions, namely; "How does CPUT communicate to students?" "What is the students preferred method/s of communication from CPUT?" and "What are the right messages to communicate to student-stakeholders; a) from the institution; b) from the faculty, c) from the department and d) from the classroom (subjects)?"

3.2. Research Design

The research is empirical as it is "based on observations and measurements of reality (Trochim, 2006) and non-experimental as "the variables ... are not manipulated by the researcher and are studied as they exist" (Lapan and Quartaroli, 2009 p 60). It makes use of a survey (a single, structured, self-administered, pre-tested questionnaire) to gather primary data to answer the research question. It is positivist in approach as it "relies on numbers and on the researchers's skill a mathematical or statistical analyst" (Remenyi and Money, 2004) to answer the research question. Positivism, according to Welman *et al* (2005 p.6), is the study of observable or measureable human behaviour.

This approach is also known as a quantitative survey. According to Hopkins (2008), "In quantitative research your aim is to determine the relationship between one thing (an independent variable) and another (a dependent or outcome variable) in a population. Quantitative research designs are either descriptive (subjects usually

measured once) or experimental (subjects measured before and after a treatment). A descriptive study establishes only associations between variables. An experiment establishes causality." However according to Welman *et al* (2005 p.6) the purpose of a quantitative study according to is to evaluate objective data consisting of numbers. A quantitative study allowed the researcher to obtain a statistical analysis of how many students, in this instance, agreed with each other or chose the same options. It allows the researcher to see patterns within the study and provides statistical data to support conclusions drawn by the researcher. Welman *et al* (2005) states that a quantitative study is not to deal directly with everyday life, but rather with abstraction of reality as the researcher makes use of specific measurement instruments used to collect data.

According to Burrell and Morgan (1976 p. 22), this research which is exploratory in nature would sit within the radical humanist quadrant. While radical humanist quadrant has much in common with the interpretivist (explain) quadrant which seeks to understand the fundamental nature of the world, the radical humanist view emphasises the importance of transcending or overthrowing an existing social structure. The research question in this study focuses on whether social media is an effective means of communicating to the student body of the Cape Peninsula University of Technology instead of other more traditional methods of communication.

3.3. Research Hypotheses

The research hypotheses is that social media is an effective means of communication between an educational institution (CPUT) and its student-stakeholders in the educational environment.

The key concepts involved in this research are effective communication, student-stakeholders, social media, other communication media and relevant messages.

The research question is "Is social media an effective means of communication between an educational institution (CPUT) and its student-stakeholders in the educational environment?"

The sub-questions are "How does CPUT communicate to students?" "What are the students preferred methods of communication from CPUT?" And "What are the right messages to communicate to student-stakeholders; a) from the institution; b) from the faculty, c) from the department and d) from the classroom (subjects)?"

To be able to answer these questions the following information must be obtained namely: The nature of CPUT's current communication method and its effectiveness; the nature of the student-stakeholders preferred communication method/s and its

effectiveness; whether one medium has advantages over any other media options; and the communication needs of the student-stakeholder.

3.4. Research Methodology

The research made use of an interrogation or communication mode to collect the primary data to provide information to answer the research question rather than an observational method. Surveys are often used for exploratory and attitudinal studies and are a common methodology for exploratory social research as well as for the testing of hypotheses and make use of structured questionnaires administered via interview, telephone, email and even self-administered. (Cooper and Schindler 1998 pp. 13-141)

Surveys are usually quantitative in nature, although they can be quantitative and qualitative if they make use of open and closed questions. Surveys, normally but not always, provide numeric data that is analysed to provide a broad overview of a situation, an answer to a problem or to a particular direction for a business decision (Hoinville and Jowell 1978 pp 1-3) amongst many others. Usually surveys are used to gain a representative sample of a large population (Mouton 2001 p. 10; Alreck and Settle 1985 p. 6-10). Although most surveys make use of probabilistic sampling, many, such as market research, make use of non-probabilistic sampling (accidental, convenience or quota).

Strengths

According to Welman et al (2005 p. 93-97) Survey advantages include the ability to generalise about large populations, although this is dependent on the use of probability sampling design as well as high reliability and construct validity. Reliability is conditional on the questionnaire construction and validity is dependent on the standard of control used in questionnaire administration. Surveys are a popular research methodology as they comprehensively measure simple and complex things; customizable, versatile, flexible and efficient as information on a large population can be obtained from a small sample. The survey or questionnaire is a cost-effective means of gathering data from a large group of people. The survey allows the responder to be free of influence by the researcher (interview effects) and enables the researcher to conduct a statistical analysis of the answers and enables the researcher to narrow-down broad responses or focus the hypotheses for further research.

Weaknesses

However according to Welman et al (2005 p. 93-97) surveys also have limits which include superficiality (lack of insight or depth of insight is limited) which is characteristic of opinion polls, as well as a number of other errors including sampling error and questionnaire error as well as interview effects and data capture errors. The sample group might not fill in the questionnaire appropriately, as there might be questions they have that they are unclear of and thus unable to gain access to the researcher. A questionnaire is not an interview or a focus group and thus there may be some gaps in the answers. In addition some of the sample group will not return the questionnaire, However according to Alreck and Settle 1985 p. 6-10) surveys are neither perfect or decision dictators.

3.5. Data Collection

3.5.1. *Data Collection Instrument*

(See Appendix A for the questionnaire)

The research instrument used to gather primary data was a single, structured, self-administered, pre-tested questionnaire, which contained open ended and closed ended questions. The use of a questionnaire or quantitative study was best for this research, due to the large sample group, which was a non-probabilistic sample and thus the findings cannot be generalised into a representation of the entire institution.

Although predominately quantitative, the research instrument was designed to provide a mix of quantitative (closed questions) and qualitative (open-ended questions) information for analysis. . The quantitative analysis will provide a statistical outcome on closed ended questions and the qualitative will provided a perception on the open-ended questions.

Purpose

The purpose of the questionnaire was to gather information on the student-stakeholders preferred method of communication within the four levels, the institution, the faculty, the department and the subject lecturers; and to determine the type of information they would like to receive in this communication and the current methods used by the institution to communication with them.

Questionnaire structure / Creating questionnaire sections.

The research instrument used was a questionnaire designed by the researcher and piloted in 2009. The structure covered 4 areas, the institution, the faculty, the department and the subject lecturers. According to Alreck (1985 p.161) grouping items into sections will create a more simplified, easy to understand environment. The questionnaire for this study was grouped in term of categories used throughout. According to Hofstee (2006 p.116) it is important to test your questionnaire in order to make sure it meets your requirements and answers your question. The questions on subject lecturers needed to aim at each department seperately, hence it needed to be relevant to each group individually as well.

According to Alreck (1985 p.98), each question must focus on a specific topic or issue. The questions in the questionnaire for this research was designed to find out social media as an effective means, how the use of it is currently being used and what the perception of the institution, the faculty, the department and the subject lectureres communication is. The questions focused on these four groups in the questionnaire.

Question development

The questionnaire was developed to gather primary data, which would provide information that could be statistically analysed to provide a answer to the research question and insight into the student-stakeholders preferred method of communication and their communication or relevant message needs.

According to Alreck (1985 p. 119-120), there are two types of survery questions, unstructured and structured questions. Structured question are know as closed ended questions, which allowed the researcher to provide the slective answers the researcher wanted the audience to focus on. Unstructured questions, known as open ended questions, which does not state the dimension that the respondant is supposed to respond to.

This study presented the target audience with both closed ended and open ended questions. Closed ended questions were asked to ensure that students answered according to what was relevant and current. Open ended questions were used in order to monitor the similarities in what students wanted to be communicated about.

Question measures (closed questions)

The questionnaire made use of open and closed ended questions. The closed ended questions will help the researcher narrow down the main types of communication

tools used by the institution and which ones the student-stakeholder prefers. According to Alreck (1985 p. 119-120) closed ended questions allows researchers to provide feasible results.

This study allowed the statistical results, to give the researcher an idea as to how many students made use of the various channels of media.

Closed ended questions allows for the respondent to provide a clearer border scope in relation to the questions asked. Closed questions allowed restriction, so that the study is focused and not out of control. Too many various answers may have lead to unclear findings.

Likert Scale was used as the measure to gather data from the close questions. This was used in order to measure how effective social media is from CPUT, Faculty, Department and Lecturers to student. It was important to measure whether it was poor or good, thus the likert scale was used. According to Welman et al (2005 p.156-157) a likert scale is a popular form of collecting data, as it is easier to compile than any other attitude scale. It shows the person filling in the surveys perception. Welman continues by saying that a Likert Scale is easy to compile and can be used on multidimensional attitudes.

Why the Likert Scale, well the likert scale allowed for a rating of communication, which would have given the researcher an idea as to how well the communication was and how effective the communication was. According to Maree (2010 p.167), the likert scale is good if the researcher wants to measure a construct. The likert scale allows for a precise answer from the respondents.

There were however, in the study open questions, to give the respondents an opportunity to provide the researcher in determining the type of information students would like communicated by the institution, the faculty, the department and subject lecturers. With open-ended questions, the researcher could develop trust and openness with the respondents.

The questions were analysed by means of a code created to capture the questions. This was done in order to effectively group the results so that it is easier to understand and read. See Addendum B

3.5.2. Readability & Validity

A pilot study was done with the questionnaire, in order to test the validity of the questions asked. It was thus a sufficient instrument to implement and answered the research questions. The questionnaire was put together using the aim of the study, and what answers the researcher was trying to unfold.

The pilot was conducted in 2009, with 40 public relations full time students. These students were actively involved in social media, however their mobile device usage on social media was limited, as not many students had access to smart phones.

The pilot study revealed a similar result as in the current study, however the difference was that not all students were actively involved in social media networks, but they were on some network or the other.

3.6. Research Population

The research population comprises the Cape Peninsula University of Technology (CPUT) student-stakeholder population, which numbers 31,545. These student-stakeholders study in six different faculties and geographically spread across six different campuses (Cape Town, Bellville, Mowbray, Granger Bay, Wellington and Stellenbosch).

With 31,545 students, time constraints, and geographic spread and the difficulty in obtaining accurate and up-to-date student-stakeholder information, the research decided against the use of a probability sample of the population. Simple random sampling was not an option due to the unavailability of computerised student information. In addition as this research is exploratory and more likely to generate more hypotheses for future testing rather than prove or disprove a hypothesis, it was not necessary to be bound by a probability sample.

3.6.1. Research Sample

The student-stakeholder population was narrowed into a sampling frame of the four communication disciplines taught at Cape Peninsula University of Technology (CPUT). This sampling frame was further narrow into the fourth year students studying towards their one-year BTech degree in Journalism, Information Technology (IT), Public Relations Management (PRM), all situated within the Faculty of Informatics and Design; and the BTech degree in Marketing, situated in the Faculty of Business. These four communication disciplines were judged to be more likely to be aware of social media and social networks than any other disciplines within the institution as new communication media has already or will impact on it practice in the new future. Journalism has already seen the advent of grassroots or citizen journalism and its impact on the methods used to gather news as well as detrimental effect on the sustainability of traditional media business models. In addition, online

publications have emerged as competitors in this space. Journalists have to monitor online activity to find potential newsworthy stories and abreast with breaking stories. Marketers have both traditional and online marketing tools at their disposal as organizations move from retail outlets to online access. Public relations practitioners are moving from press releases and media liaison to building communities online through social media and social networks to engage in conversations with their customers and complainants alike.

3.6.2. *Non-probability sampling*

Non-probability sampling was used in this research. Although the sampling is convenience sampling or accidental/incidental sampling and cannot presume to be representative of the university as a whole, the researcher felt that the insight gained from this empirical and exploratory research would generate interesting hypotheses for future study. (Welman et al, 2005 p. 52)

The study focused on all BTech students within the four communication disciplines and not randomly selected students. It made use of only those four communication disciplines, as communication is a core-function within all these disciplines. In addition, it was necessary to select student-stakeholders who understood the CPUT communication strategy as well as their own communication needs from the institution, faculty, department and subjects, therefore these students could not be first year students. Then, it was important that these students were using social media so that they would understand the media and would have formed an opinion on its usefulness. Furthermore, the student-stakeholders in the sample needed to be mature enough to answer the questions without “venting” for the sake of it. Thus, it was decided that the BTech students (fourth year) in the four communication disciplines within CPUT, namely; public relations, marketing, information technology and journalism; best fit the criteria. However, to obtain a complete communication perspective, it was important to get a part-time student-stakeholder perspective and it was decided to select the part-time public relations management BTech class, as they were the most accessible. The PT cohort comprised 40 students, which meant a single class would provide sufficient insight and information to determine if there were large differences in both the method and content perspectives of communication received from CPUT between the two groups.

3.6.3. *Sample Size*

The sample group comprised of 110 BTech student-stakeholders comprising; 31 fulltime public relations management students, 15 marketing students, 13 journalism

students, 25 information technology students and 40 part-time public relations management students.

3.7. Data Collection

The questionnaires were distributed in the student's class period, in order for the researcher to receive all questionnaires handed out immediately. By doing this, it allowed for immediate response from students, ensuring that all present students were targeted, however in doing this, students who were not present would not have been given the questionnaire to answer.

3.8. Data Coding

The questionnaire designed, allowed students to choose more than one option provided (in the closed ended questions). This meant that the researcher needed to code each answer under each question with a yes no format.

In the open-ended questions, the researcher needed to find similarities and draw overall conclusions.

In coding the data, the researcher realized that she was unable to use the answers to question 11, as it was not relevant to Marketing and IT. The PR questionnaire was accidentally sent out to the Marketing and IT disciplines. The question did not affect the survey or the purpose of the survey.

3.9. Data Capture and Data Editing

The data was captured using the moonstats programme. This programme is a statistical software programme, which was designed as an educational programme tool.

(moonstats.co.za) The programme allowed for each question and section to be set up according to the researchers needs and questionnaire structure.

The programme also allowed for easy editing

3.10. Data Analysis

3.10.1. Closed Questions Data Analysis and Limitations

The data was analyzed using moonstat, which provided the researcher with the mean and mode of the data captured. Analysing the set data was quiet complex, as there

were question that needed an overall response and then there were questions that needed individual group response. In capturing the data, I needed to capture each group into a separate moonstats document, in order for me to see the similarities and differences between the groups.

According to Maree (2010 p.161-164) closed ended allows for a list of responses from which the respondent may choose their answer. With closed ended questions the advantage is that they are quick to answer and coding of the data is easy, however, the disadvantage of closed ended question is that the responses given may not have been thought of by the respondent and the one they would prefer may not be an option. The answers would thus not provide detail like open-ended questions.

3.10.2. Open Questions Data Analysis and Limitations

Students were asked open-ended questions on how communication can be improved on all four levels (the institution, the faculty, the department and the subject lecturer. The following was revealed). In analysing these question I needed to look at the similarities in what students said and what stood out the most in terms of relevance.

According to Maree (2010 p.161) there are many advantages and disadvantages if open ended question. In an open-ended question, a respondent is able to reveal their thoughts and opinion in an open and honest manner, and may allow for them to answer more effectively, however open-ended questions may lead to some difficulty when coding the data from a large audience.

3.11. Shortcomings and Sources of Errors

The method used, allowed the researcher to gain an idea of what students preferred method of communication were from all 5 levels, the institution, the faculty, the department and the subject lecturers.

The closed-ended questions allowed the researcher to compare the channels students used, to the preferred method of communication. This allowed the researcher to see whether students were using the mediums they suggested as possible ways that the 5 levels could communicate the student body. The open-ended questions allowed the researcher to draw possible conclusions to the trends between the sample groups, to see if their needs are similar.

Chapter 4 focuses on the data found in distributing the questionnaire. It outlines the chapter into four sections, the stakeholder (the environment), communication theory, media theory and education.

4. CHAPTER 4: FINDINGS

4.1.1. Introduction

This chapter reports on the findings of survey research conducted to answer the question, "Is social media an effective means of communication between an educational institution (CPUT) and its student-stakeholders in the educational environment?" The research investigated the methods used by CPUT to communicate to its students from four levels (institution, faculty, department and subjects); content of this communication; as well as the student-stakeholder preferred method of receiving communication from CPUT. The aim is to determine whether social media is a communication option for CPUT to communicate to its student-stakeholder.

4.2. Population

Cape Peninsula University of Technology (CPUT) is an educational institution, which has 31,545 student-stakeholders group, excluding potential students and past students. The student body is located across six campuses, (Cape Town, Bellville, Mowbray, Granger Bay, Wellington and Stellenbosch) and within six Faculties (Applied Sciences, Business, Education and Social Science, Engineering, Health and Wellness; and Informatics and Design).

4.2.1. Student-Stakeholder Sample

The population sample of student-stakeholders comprised 110 fourth year students (BTech) studying towards a degree in one of the communication disciplines as follows:

Communication discipline	Campus	Faculty	Number	%
FT Public Relations	Cape Town	FID*	31	28.18
FT Information Technology	Cape Town	FID	27	24.55
FT Journalism	Bellville	FID	13	11.82
FT Marketing	Cape Town	Business	15	13.64
PT Public Relations	Cape Town	FID	24	21.82

*FID: Faculty of Informatics and Design. FT: Full time PT: Part time.

Table 4.1: A summary of the sample.

4.2.2. Sample profile.

Group	Gender		Age				Race			
	M	F	17-20	21-23	24-27	28+	B	C	W	O
Information Technology	21	4	0	15	7	1	4	8	10	0
Journalism	2	11	0	8	4	1	3	5	2	3
Marketing	6	6	0	8	1	5	5	8	2	0
Public Relations	4	21	9	14	4	1	9	15	6	0
Part Time	3	20	0	8	8	4	5	8	5	2
TOTAL	36	62	9	53	24	12	26	44	25	5

Table 4. 2.1 The Gender, age and racial groups who filled out the questionnaire.

The entire population that filled in the questionnaire were 100 students within four disciplines, Information Technology, Journalism, Public Relations and Marketing.

As you can see from the above table 62% of students are females between the age of 21 and 23. 44% of the students who filled out the questionnaire were coloured students, with a 51% split between black and white students.

4.2.3. Cell phone model

Cell phone make:	Number	Percentage
Nokia	29	26
Blackberry	27	24
No cell phone	0	0
Samsung	16	14
Sony Ericson	7	6
Iphone	6	5
LG	5	4
Other	5	4
HTC	4	3
Not Answered	11	10
Total	110	100

Table 4.2.3.1 The type of cell phone favoured by the student-stakeholder sample.

As you can see from the above table all 99 out 110 students surveyed has a cellphone, the other 11 students did not answer the question. 50% of the surveyed students either had a Blackberry or Nokia cell phone. 26% of the respondents had a Nokia model cell phone, and 24% had blackberry. Other cell phone models included iPhone, HTC, Samsung, LG, Sony Ericson and Vodaphone.

4.2.4. Closed-ended Questions: Quantitative Results.

4.2.4.1. Question 1: Are you involved in social media? (e.g: Facebook, Twitter, MXIT, YouTube, etc)

Are you involved in social media?	Yes	No	NA	Yes%	No%
Total student-stakeholder (110)	101	5	4	91	4
FT Journalism student-stakeholders (13)	13		0	100	0
FT Information Technology student-stakeholders (27)	26	1	0	97	3
FT Marketing student-stakeholders (15)	13	2	0	87	13
FT Public Relations student-stakeholders (31)	26	1	4	84	3
PT Public Relations student-stakeholders (24)	23	1	0	96	4
Total	110	110	110	100	100

Table 4.2.4.1 Students involved in social media networks

It is interesting to see that 91% of students are involved in social media networks, with a 4% not involved. As you can see from the above table within the various disciplines, within Journalism 100% are involved, within IT 97% are involved, within Marketing 87%, Public Relations 84% and Part Time 96% of students are involved.

4.2.4.2. Question 2: What social media tools do you prefer?

Student-Stakeholders	a	b	c	d	e	f	g	h
Total student-stakeholder (110)	93	82	57	34	29	39	3	7
FT Journalism student-stakeholders (13)	11	12	9	2	4	3	0	0
FT Information Technology student-stakeholders (27)	22	21	7	4	7	15	2	5
FT Marketing student-stakeholders (15)	13	11	1	1	5	3	1	1
FT Public Relations student-stakeholders (31)	26	22	22	16	9	7	0	1
PT Public Relations student-stakeholders (24)	21	16	18	11	4	11	0	0
Total %	84	74	51	30	26	35	2	6

Key: a) Email, b) Facebook, c) Twitter, d) Blogging e) MXIT, f) YouTube g) None h) Other.

Table 4.2.4.2 Summary of Question 2: Social media preferences.

84% of students make use of email, followed by a 74% using Facebook and 57% Twitter. If you add up the amount of students who use each social network and divide the amount, you can see that 55% of the students make use of more than one social network. Email and Facebook are used by more students than any of the other available social network sites.

4.2.4.3. Question 3: What social media tools do you use?

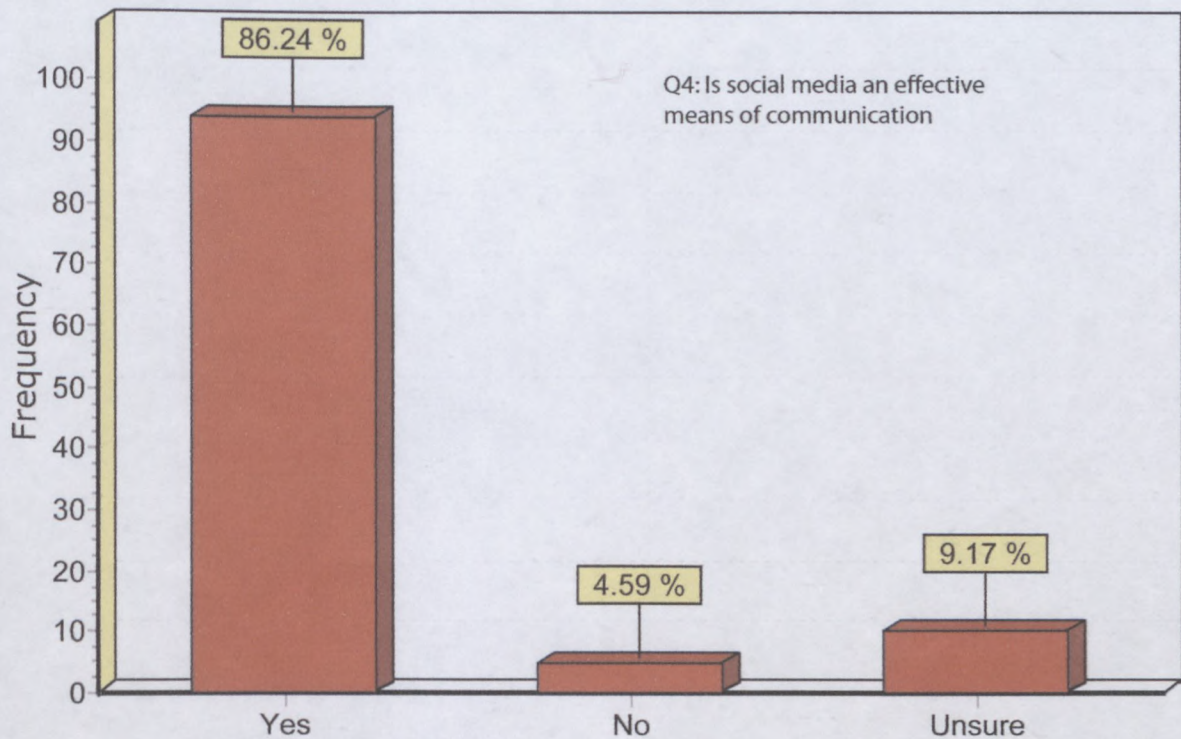
Student-Stakeholders	a	b	c	d	e	f	g	h
Total student-stakeholder (110)	96	102	70	60	42	51	1	16
FT Journalism student-stakeholders (13)	10	13	9	6	5	4	0	1
FT Information Technology student-stakeholders (27)	24	24	6	4	7	17	1	10
FT Marketing student-stakeholders (15)	13	13	1	2	8	6	0	0
FT Public Relations student-stakeholders (31)	27	29	30	28	15	13	0	4
PT Public Relations student-stakeholders (24)	22	23	24	20	7	11	0	1
Total	87.2	92	63	54.5	38.1	46.3	0.09	14.5

Key: a) Email, b) Facebook, c) Twitter, d) Blogging e) MXIT, f) YouTube g) None h)

Table 4.2.4.3 Summary of Question 3: Social media preferences.

4.8% more students use Facebook than email within the four disciplines. Email was used by 87.2% of students, whereas 92% of students used Facebook. Social networks like Twitter received 63%, Blogging 54.5%, Mxit 38.1% and YouTube 46.3%. This indicates that 70% of students use more than one social network tool.

4.2.4.4. Question 4: Is social media an effective means of communicating to students?



Graph 4.2.4.4.1: Question 4 summary as a combination of all communication disciplines tested at Cape Peninsula University of Technology

From the above graph you can see that 86.24% of students believe that social media is an effective means of communication. Question 2 indicated that 55% of students who answered the questionnaire makes use of more than one social media tool. With 74% of them making use of at least one social network tool.

If you look at the table below, you will see that students in each discipline that believes that social media is an effective means of communication ranges between 70% and 97%. 84.62% of Journalism, 70.37% of IT, 93.33% of Marketing, 96.77% of Public Relations and 87.5% of Part Time students.

Student-Stakeholders	Yes	No	Unsure
FT Journalism student-stakeholders (13)	84.62%	7.69%	7.69%
FT Information Technology student-stakeholders (27)	70.37%	11.11%	18.52%
FT Marketing student-stakeholders (15)	93.33%	6.67%	0%
FT Public Relations student-stakeholders (31)	96.77%	0%	3.23%
PT Public Relations student-stakeholders (24)	87.5%	0%	12.5%

Table 4.2.4.4 Summary of Question 4: Social media preferences.

4.2.4.5. Question 5: How effective is the use of social media from CPUT?

Student-Stakeholders (110)	a	b	c	d	e	f	g	h	Total
Dnt Use it, not at all effective	30	50	50	54	65	65	49	42	50%
Use it, but not effective	8	6	10	10	5	3	1	3	4.5%
Ok	18	19	19	21	6	16	3	5	13.37%
Use it effectively	24	15	7	9	6	4	0	3	8.5%
Use it very effectively	26	15	13	5	11	5	0	3	9.75%

Key: a) Email, b) Facebook, c) Twitter, d) Blogging e) MXIT, f) YouTube g) None h)

Table 4.2.4.5.1 Summary of Question 4: Social media preferences.

50% of the student respondents believe that CPUT does not make use of social media effectively. With a 9.75% of students who believe that they use it effectively. From the above table it is clear that CPUT does not make use of Social Media effectively.

4.2.4.6. Question 6: How effective is the use of social media from Faculty?

Student-Stakeholders (95)	a	b	C	d	e	f	g	h
Dnt Use it, not at all effective	26%	52%	47%	50%	72%	68%	44%	49%
Use it, but not effective	11%	12%	7%	12%	3%	4%	3%	1%
Ok	23%	12%	12%	11%	3%	5%	0%	6%
Use it effectively	16%	9%	4%	6%	2%	0%	1%	1%
Use it very effectively	0%	3%	14%	7%	2%	3%	1%	1%

Key: a) Email, b) Facebook, c) Twitter, d) Blogging e) MXIT, f) YouTube g) None h)

Table 4.2.4.5.2 Effective use of social media from the faculty of informatics and design

26% of the students believe that email is not used by CPUT and around 50% of the students believe that social media is not used at all from the faculty of informatics and design. 23% of students believe that email is used ok and between 3-9% of student believe that social media is used on an ok level.

Student-Stakeholders (15)	a	b	c	d	e	f	g	h
Dnt Use it, not at all effective	6	6	10	10	8	8	7	7
Use it, but not effective	1	1	0	0	0	0	0	0
Ok	0	1	0	0	1	1	0	0
Use it effectively	3	4	1	0	1	2	0	0
Use it very effectively	5	1	0	1	1	0	0	0

Key: a) Email, b) Facebook, c) Twitter, d) Blogging e) MXIT, f) YouTube g) None h)

Table 4.2.4.5.3 Effective use of social media from the faculty of Business

As you can see from the table above 50% of the students believe that the faculty does make use of social media and the other 50% believe that the faculty does not make use of social media.

4.2.4.7. Question 7: How effective is the use of social media from Departments?

Student-Stakeholders		a	b	c	d	e	f	g	h
		%	%	%	%	%	%	%	%
FT Journalism student-stakeholders (13)	Don't Use	30	50	80	77	80	80	100	90
	Use, Not effective	0	20	10	22	0	0	0	0
	Ok	10	10	10	0	0	20	0	10
	Use it	30	10	0	0	20	0	0	0
	Use it effective	30	10	0	0	0	0	0	0
FT Information Technology student-stakeholders (27)	Don't Use	24	52	80	71	77	71	77	70
	Use, Not effective	16	8	0	9	4	4	11	0
	Ok	32	8	5	4	0	4	5	20
	Use it	8	13	5	9	9	4	0	0
	Use it effective	20	17	10	4	9	14	5	10
FT Marketing student-stakeholders (15)	Don't Use	35	42	81	81	58	72	85	85
	Use, Not effective	7	7	0	0	0	0	0	0
	Ok	0	7	0	0	16	0	0	0
	Use it	21	28	18	18	16	18	14	14
	Use it effective	35	14	0	0	8	9	0	0
FT Public Relations student-stakeholders (31)	Don't Use	12	58	26	35	93	89	90	90
	Use, Not effective	9	20	6	22	3	6	0	0
	Ok	35	17	33	19	3	3	9	10
	Use it	25	0	6	9	0	0	0	0
	Use it effective	16	3	26	12	0	0	0	0
PT Public Relations student-stakeholders (24)	Don't Use	25	54	30	50	90	90	100	100
	Use, Not effective	12	9	0	0	4	5	0	0
	Ok	33	22	21	18	4	5	0	0
	Use it	8	4	4	9	0	0	0	0
	Use it effective	20	9	43	22	0	0	0	0

Key: a) Email, b) Facebook, c) Twitter, d) Blogging e) MXIT, f) YouTube g) None h)

As you can see from the above table in the journalism department 65% of the students believed that social media tools were not used in the department. The other 35% was scattered between used, but not effectively and ok. Use of social media tools.

In the IT department 58% of the students believed that social media was not used by the department, however 9% said that it was used effectively and another 5% said it was used.

In the Marketing department 59% of the students said that social media tools were not used by their department. 16% said that it was used and 6% said it was used effectively.

In the Public Relations department 54% of the students said that social media was not used by the department. 11% said that the use of social media by the department was ok.

In the Part Time group, 59% of the students said that social media was not used by the department, with a 11% stating that it is ok.

4.2.4.8. Question 9 How effective is the communication from CPUT?

In determining the effectiveness of communication from the institution it was found that 46% of students thought that the communication was poor from CPUT.

43% of students viewed the communication from CPUT as being at an effective level. As shown in the graph below only 11% of students thought the institution's communication was good.

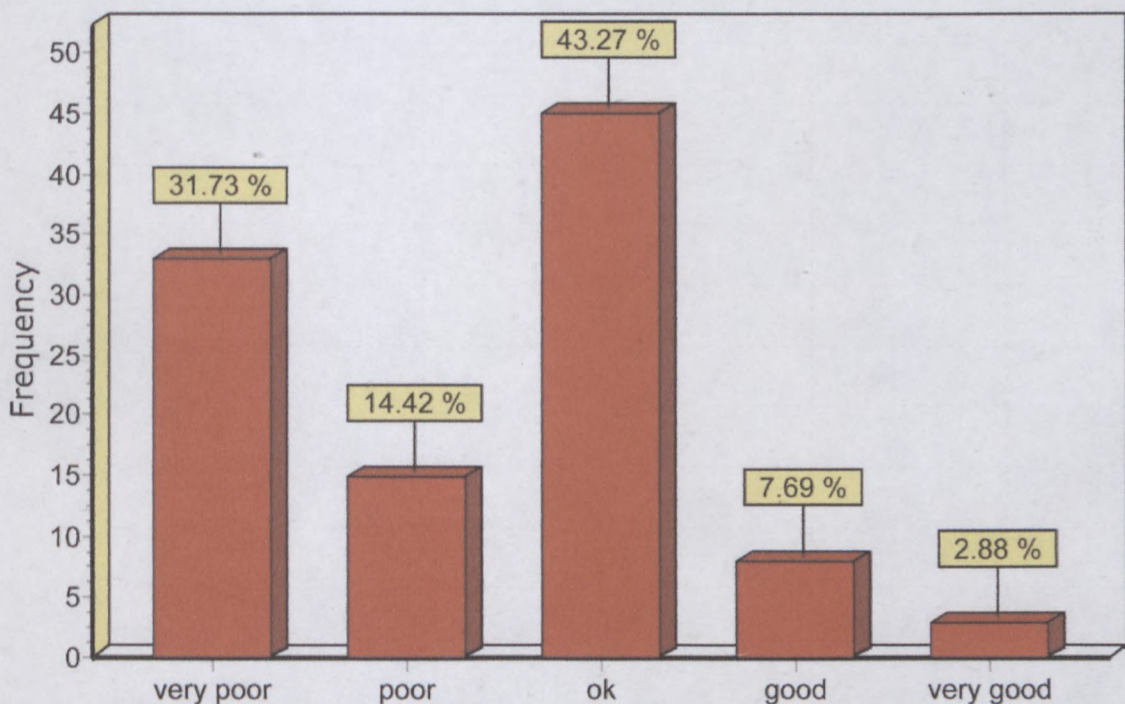
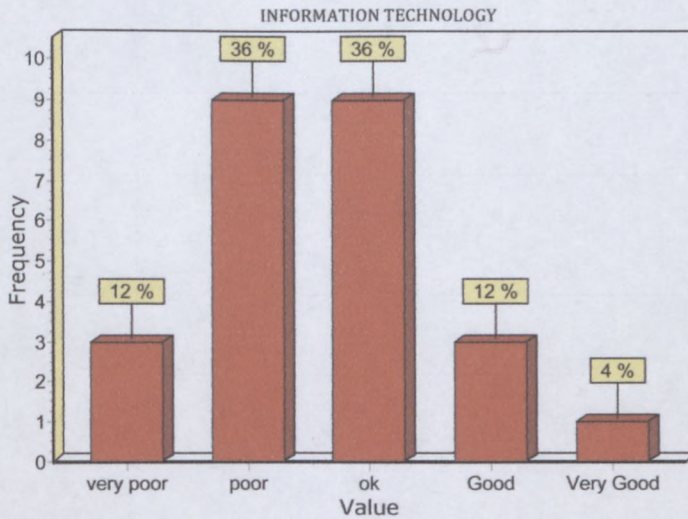


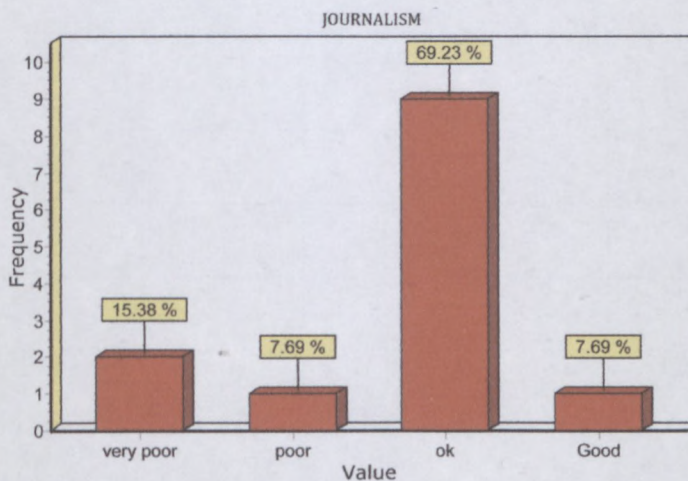
Figure 4.2.4.8: The effectiveness of communication from Cape Peninsula University of Technology as viewed by all respondents from the four communication disciplines.

4.2.4.9. Question 10: How effective is the communication from Department?



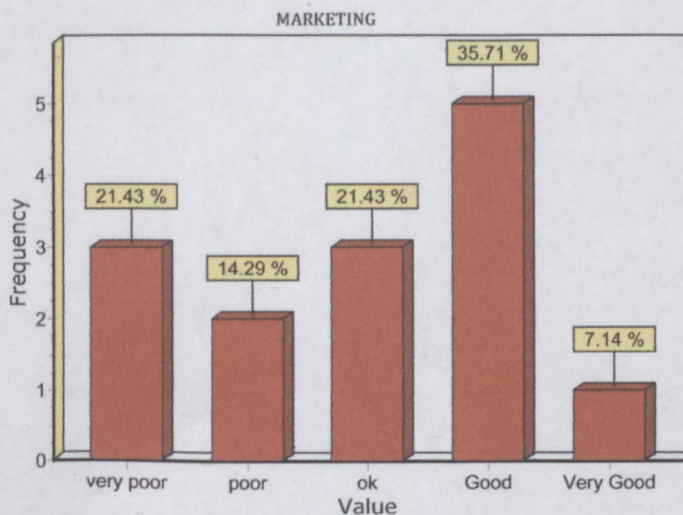
Students in the Information Technology department did not provide a good analysis of communication from their department. 36% of students believe that communication was poor, where 36% said it was ok, with only 16% stating it was good.

Table 4.2.4.9.1: Effective use of communication from IT



Students in the Journalism department has a slightly different outcome than that of IT, where 69.23% of student believe that communication was ok, and 7.69% good. With only a 17.38% stating it was very poor and 7.69% saying it was poor.

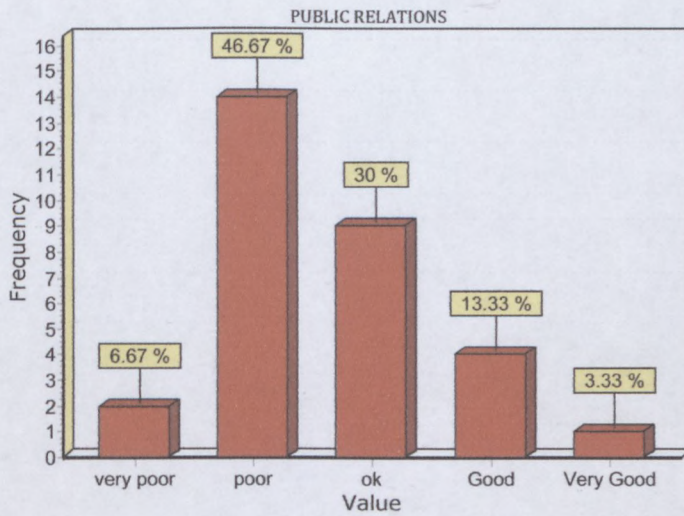
Table 4.2.4.9.1: Effective use of communication from Journalism



In Marketing department students believed that communication from their department was good, with a 35.71% of students who believed so and 7.14% who believed it was very good. 21.43% of students thought

it was very poor and 14.29% thought it was poor.

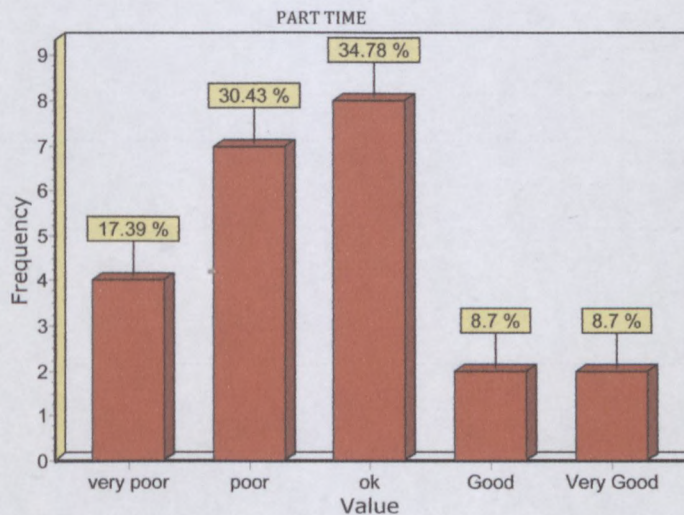
Table 4.2.4.9.1: Effective use of communication from IT



Unlike the Marketing students the Public Relations students believed communication was poor, with 46.6% of students stating that communication was poor and 6.67% stating It was very poor.

Table 4.2.4.9.1:

Effective use of communication from IT



In the Part Time section students believe that communication from their department was not good, with 30.43% stating that it was poor and another 17.39% stating it was very poor. 34% stated it was ok.

Table 4.2.4.9.1: Effective use of communication from IT

4.2.4.10. Question 11: How effective is the communication from Subject Lecturers?

From subject lecturers students viewed communication as good. Hardly any students thought lecturer student communication was lacking.

85% of students believed that subject lecturers communicated effectively to them. However communication from lecturer to student stills needs work, as 34% of the 85% believe it was of an “ok” standard.

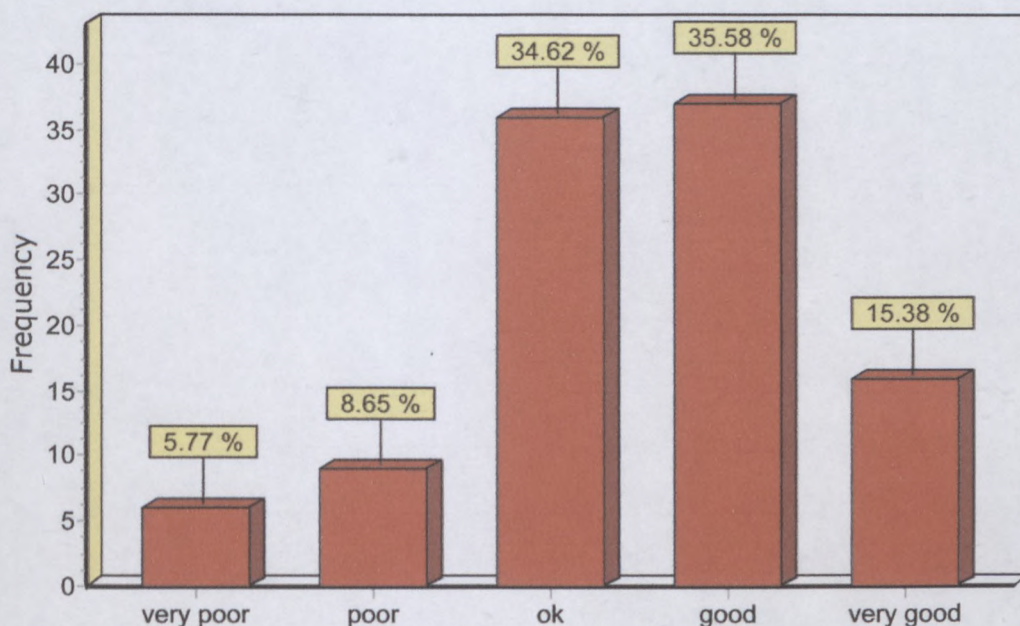


Figure 4.2.4.10: Effective communication from subject lecturers as viewed by the overall respondents.

Student-Stakeholders	Very poor	Poor	Ok	Good	Very Good
FT Journalism student-stakeholders (13)	0%	7.69%	53.85%	23.08%	15.38%
FT Information Technology student-stakeholders (27)	8%	8%	32%	40%	12%
FT Marketing student-stakeholders (15)	7%	0%	28.57%	21.43%	42.88%
FT Public Relations student-stakeholders (31)	3.33%	16.67%	50%	30%	0%
PT Public Relations student-stakeholders (24)	4.35%	4.35%	13.04%	52.17%	26.09%

Table 4.2.4.10: Effective communication from subject lecturers as viewed by the overall respondents.

From the Public Relations Full Time student's 50% said that communication from their subject lecturers were ok, however from the Public Relations Part Time students the numbers were reversed, where 52.17% said that communication from their subject lecturers were good.

From the Marketing department 42.88% said that communication from their subject lecturers was very good, with a 28% who said that the communication was ok.

From the Journalism students 23.08% said that communication from their subject lecturers was good, with a 53.85% saying it was ok.

From the Information Technology students 40% of students said that communication from their subject lecturers were good.

4.2.5. Open-ended questions: qualitative results.

Students were asked open-ended questions on how communication can be improved on all four levels (the institution, the faculty, the department and the subject lecturer. The following was revealed). In analysing these question I needed to look at the similarities in what students said and what stood out the most in terms of relevance.

4.2.5.1. Question 12 In your opinion how can CPUT improve on communication to students?

Email Communication

As you can see from the statistical finding 84% of the students made use of email, however believed that CPUT did not make effective use of the email as a communication medium. Student believe that currently communication was not effective from the institution and felt that their needed to be a channel that students could obtain communication.

From a PT student the following was stated; "in 5 years I have received 3 pieces of communication and all of them months later. I have always had to continually correct contact details, where CPUT could make an effort to receive information timorously would be the first step. Secondly they could move over to communicating through email, if details are captured directly."

Respondents revealed that there should be regular attempted communication from CPUT, where it was suggested that they employ secretaries for each department that could feed relevant information to students on behalf of the organization. "At the moment communication is one-sided. CPUT just communicate during registration

period. Send monthly/ quarter newsletter (email). Have a Facebook page that includes events. Interact with registered students.”

Social media

It was revealed that 91% of students are involved in social networks and 86% believed that social media is an effective means of communication.

“Since students spend most of their time on Facebook and Twitter, CPUT should use these social media to communicate with/ to students.”

Another students stated that in her one subject where they made use of social media it worked, “With Media Studies Twitter worked very well. CPUT should try the social media tools”

Students also believe that CPUT should make use of the platform that students are involved in, “By using social media channels more effectively and engage the students this way. Get the where they are.”

Mobile

From the information gathered, students also wanted mobile communication. This means that CPUT needed to send sms's and utilize the mxit platform to communicate to students. “The institution needs to make applications more accessible, by upgrading their network speed. Network problems needs to be sorted out so that students can effectively access e-learning on and off campus.”

Overall

One of the consistent requests made was that CPUT needs to fix there current channels like e-learning, the website and the email system, before embarking on new adventures. Students felt that although e-learning is great, access to it was problematic.

Another means of communication that students require is a call center, where they can find out information they need on a personal level. “Communication should be sent using platforms that ensyre students receive it. Many students do not check website for upgrades.

4.2.5.2. *Question 13 In your opinion how can Department improve on communication to students?*

Part Time students asked for regular communication from their department. They needed departments to start engaging with students via social media on a regular basis. "Regular communication", "Being on all the social networks that that students regularly use."

Students also suggested that they be communicated to via mobile. "Using smses would be an advantage and by sending emails." "For part time students they could make use of smses."

Information Technology students believed that their department needed to make better use of communication platforms. "using other means of communication other than webCT." There needed to be an improvement in the current communication system as one students suggested, "Improve email system, improve webCT system." Another suggestion made by a student was the development of a departmental blog and active posts placed up on webCT (which is a current system used to communicate to students)

Journalism students (69.2%) believed that communication from their department was ok. When asking them about improvement on communication, they responded by saying that communication was satisfactory from their department. "the communication is fine, but needs to be improved on sending emails faster to students."

Their were students who provided some improvement on regulation of information. "Have a newsboard or letter cause email never work." "set up facebook groups with updates."

35% of **Marketing** students believe that communication was good, however in asking them how their department could improve responses included, "create a facebook group with job opportunities, student icans, bursaries, upcoming events etc."

Students should be made aware of communication platforms. " Firstly, by making students aware of these social media platforms.

Public Relations students believe there needs to be more use of social media and active in communication. "email them constantly." "Make use of the social media mechanism much more e.g. twitter."

There should be a fast response time and student information should be acted upon immediatly. "They should have a quicker response time when replying to emails, etc."

4.2.5.3. *Question 14 In your opinion how can Subject Lecturers improve on communication to students?*

Email

Lecturers should set up email address of students and communicate via email, as e learning does not always work effectively. There is a lack of response from lecturers via email when contacted by students, which makes communication between students and lecturer difficult.

Social media

Blogs and facebook should be used, so that students can have debates and discussions. Some students believe that some of their lecturers communicate effectively to them via twitter, email and other social media mechanisms.

Overall

Overall communication does occur from lectures to students, however, it could be improved. Students believe that each lecturer needs to commit to one communication mechanism, so that students know where to seek information and where to communicate. There are some lecturers who do not communicate to their students at all and they are difficult to get hold of. Students feel that lecturer's need to chose their communication platform and be consistent with it.

4.2.5.4. *Question 15 What would you like to be communicated about from CPUT?*

Students require useful information, that will be beneficial to them. "Useful stuff like holiday dates , how to use the library off campus, lecturer changes appointments, departmentheads/ changes/appointment subject structures"

Students want regular communication of important dates and important events that they can get involved in. "All the decisions that involve us the students at the end of the day and to be in the process of decision making"

Any changes that effect the students needs to be communicated to them regularly and via an effective means of communication. "Any changes within departments, events and updates on students/ activities." "More events that students like, more student discounts and benefits offered by external institutions, more financial advice like a gumtree type style." "Events, achievement, research papers that have been conducted at CPUT relevant to studies(department)."

5. Chapter 5: Conclusion and Recommendations

5.1. Introduction

In researching "social media as an effective means of communication to external stakeholders", I found that the following were revealed in the study, stakeholder theory, communication theory, media theory and education.

5.2. Conclusion

5.2.1. *Stakeholder theory*

The nokia model cell phone consumer rate is slowing declining. Since the introduction of android cell phones, nokia has lost its lead in the cell phone market worldwide, where according to Nokia boss Stephen Elop (2011), the nokia company has lost its clientele (and is slowly down spiralling) to more sophisticated upmarket cell phones.

All of these cell phones has the needed software to access the social media platform such as twitter, facebook and mxit. Within South Africa, and especially within CPUT, the use of blackberry phones are expanding and students are making use of this device.

The stakeholder literature revealed that all stakeholders should be considered, as with the emerging change in communication, it is important to create an environment that suits the needs of all stakeholders. On an institution level, CPUT needs to find a neutral platform to best gets their message across. From the literature, it revealed that not all students are actively involved in CPUT email services; hence not all students tend to read the mass e-mails sent out. It was revealed that communication from CPUT to mass audiences is not effective, as students do not have access to the information.

Faculties have little to communicate to their students, as revealed in the findings, however, student's need to feel involved and part of the student body group. The findings revealed that students want to know what the faculty is up to and what other disciplines are involved in. The literature revealed that not all stakeholders are treated equally, being actively involved with one discipline, may cause future harm to the faculty.

The literature speaks about trust and potential threats posed by stakeholders. From the findings it was revealed that the student stakeholder group are not aware of

important information such as exam timetables, departmental activities and timetable changes.

Most scholars speak about trust, commitment and loyalty within organizations. Within the findings it revealed that students feel satisfied with the communication from subject lecturers, as subject lecturers engage with students through medium that suited both parties, such as email and twitter.

5.2.2. *Communication Theory*

Social media has evolved and is a continuing trend among the youth today. However, it is still a dynamic process and is rapidly growing with technology advancement. As communication is still changing, it is recommended that communication between educational institution and students reflects this ongoing change.

Students should be taught about all mediums of communication, and understand how to utilize them effectively. Like Grunig (1992 p.4) states in his study, public relations and communication management describes the overall planning, execution and evaluation of an organization's communication with both external and internal publics. This means that current and future communicators should be fluent in all communication channels. Therefore, not only should communicators understand this platform, but all corresponding disciplines, so that communication within and outside an environment remains consistent. As the findings revealed, students are either not receiving communication to or they are receiving communication through a consistent platform

The literature reveals that Communication looks at transmitting information from one person to another. In other words, who says what to whom and to what effect. It is the central point of managing and developing an organization. If students are not communicated to on all four levels, (the institution, the faculty, the department and the subject lecturer), then the flow of information between students and their institution and all sense of belonging and trust is will be lost.

In today's business world, organizations have developed a communication system that is relevant to the society within which they operate. Educational institutions need to establish what is the best way to communicate to both students that are full time and those that are part time. From the results found using the part time sample, many students do not have time to access their CPUT email account, which is where students receive communication. This means the institution will need to create an environment that suits the needs of all students.

5.2.3. Media Theory

According to the literature read, traditional media tools are not part of lifestyle of students and faculties. Students engage daily with online platforms and traditional methods are hardly considered as a means of communication by the new generation. Print media is not part of students preferred method of communication and thus students no longer accessed them for communication purposes.

Social media makes it easier for students to access information. Like Grunig and Grunig stated in their study, new media has made relationships more possible to maintain over a longer time frame.

Students thus prefer communication via online platforms, whether it be email or social channels.

5.2.4. Education

Change is ongoing, and with the rapid change in both technology and communication, it is difficult to establish a stable online social platform within education.

In surveying the respondents it was found that within the educational environment email is the main platform of communication. According to the literature read, many scholars believe that social media has taken over the business world, and if this is the case, then educational institution should be communicating within the new media platforms available, so that students become actively involved and are able to enter into the business world fluent in the social platforms.

The literature also indicated that social platforms are an emerging trend among the youth, as students are actively involved in social platforms for personal use. This indicates that it should not be difficult for institutions, faculties, departments and subject lecturers to actively engage students in social media.

The findings did reveal that although email was actively used by the institution, the faculty, the departments and the subject lecturers students still preferred to be actively engaged and communicated with, through social media.

5.3. Overall

5.3.1. *Radical humanist paradigm*

According to Burrell and Morgan, the radical humanist paradigm is mainly concerned with releasing constraints that limit human potential. This paradigm was thus a justifiable paradigm for this study. This study measured the perception of students and their preferred methods of communication from four levels, the institution, the faculty, the department and the subject lecturers.

The radical humanist paradigm is used to justify desire for revolutionary change, in other words, the perception, needs and wants of the individual user. The study measured the student's needs and their perception of current communication within the education environment. The literature revealed that the environment determined the communication system used, If students required different types of communication within their four different environments.

5.4. Recommendations

- After engaging in all the available literature and after evaluating the data, it is my recommendation that on an institutional level, that the institution should engage with students via mobile applications. All students surveyed had access to a cell phone, but not all students had access to email, either because they had no Internet or no time in which to access the Internet.
- It is my recommendation that faculties start engaging with their students, in order to maintain relationships with those students when they leave the institution. CPUT students actively engage in industry activities when placed there to complete in-service training. Therefore it important that the faculties continues to communication with both their past and present students.
- Departments need to communicate with students in order install a sense of belonging in the students. As show in the results students would like their departments to communicate with them and keep them informed on current changes and happenings within the department.
- Subject lecturers have different expectations and requirements from students and vice versa, therefore it is, recommended that each lecturer make use of a platform that will best suit them and students. From the findings, it was clear that not all students have access to email 24/7, however they all have access to a cell phone.

It is therefore possible to communicate to all students via sms or even various social media platforms, such as twitter and facebook.

5.5. Final Note

The research aims to determine what the students preferred method of communication is from an institutional, faculty, departmental and subject lecturer level. It also investigates the perceived current level of communication from the institution, the faculty, the department and the subject lecturers.

The research contributed towards what the best method of communication is, and the study revealed that both email and social media is the preferred method of communication. It also revealed that students have constant access to social media domains, although not email.

The literature revealed that although the business world is actively involved in social media, each environment is different and has different requirements. These requirements are to be established based on the goals and objectives of the organization.

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7. APPENDICES

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7.1. APPENDIX A: Questionnaire

Dear Student

Please consider taking the time to answer my questionnaire. I am an Mtech: Public Relations Management student. The purpose of my study is to research students preferred method of communication at Cape Peninsula University of Technology. Your participation in this study will be highly appreciated.

Questionnaire

Topic: *'Social media in an educational environment as an effective means of communication with external stakeholders'*

Department:	PR	Marketing	IT	Journalism
Age:				
Cell phone make				
Gender:	<i>Male</i>		<i>Female</i>	
Race:	<i>B</i>	<i>C</i>	<i>W</i>	<i>Other</i>

1. Are you involved in social media? (E.g. facebook twitter, Mxit, YouTube)

Circle your answer

a. Yes

b. No

2. What social media tools do you prefer?

Circle your answer

a. Email

e. Mxit

b. Facebook

f. YouTube

c. Twitter

g. None

d. Blogging

h. Other

3. What social media tools do you use?

Circle your answer

- a. Email
- b. Facebook
- c. Twitter
- d. Blogging
- e. Mxit
- f. YouTube
- g. None
- h. Other

4. Is social media an effective means of communicating to students?

Circle your answer

- a. Yes
- b. No
- c. Unsure

5. How effective is the use of social media from CPUT?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

Email	1	2	3	4	5
Facebook	1	2	3	4	5
Twitter	1	2	3	4	5
Blogging	1	2	3	4	5
Mxit	1	2	3	4	5
YouTube	1	2	3	4	5
None	1	2	3	4	5
Other	1	2	3	4	5

6. How effective is the use of social media from faculty?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

Email	1	2	3	4	5
Facebook	1	2	3	4	5
Twitter	1	2	3	4	5
Blogging	1	2	3	4	5
Mxit	1	2	3	4	5
YouTube	1	2	3	4	5
None	1	2	3	4	5
Other	1	2	3	4	5

7. How effective is the use of social media from department?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

Email	1	2	3	4	5
Facebook	1	2	3	4	5
Twitter	1	2	3	4	5
Blogging	1	2	3	4	5
Mxit	1	2	3	4	5
YouTube	1	2	3	4	5
None	1	2	3	4	5
Other	1	2	3	4	5

8. How effective is the use of social media from subject lecturers?

Circle your answer

don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

Email	1	2	3	4	5
Facebook	1	2	3	4	5
Twitter	1	2	3	4	5
Blogging	1	2	3	4	5
Mxit	1	2	3	4	5
YouTube	1	2	3	4	5
None	1	2	3	4	5
Other	1	2	3	4	5

9. How effective is the communication from CPUT?

Circle your answer

1= very poor

2= poor

3= ok

4=good

5= very good

1

2

3

4

5

10. How effective is the communication from you department?

Circle your answer

1= very poor

2= poor

3= ok

4=good

5= very good

1

2

3

4

5

11. How effective is the communication from lecturers?

Circle your answer

1= very poor

2= poor

3= ok

4=good

5= very good

1

2

3

4

5

12. In your opinion how can CPUT improve on communication to students

13. In your opinion how can your department improve on communication to students

14. In your opinion how can your subject lecturer improve on communication to students

15. What would you like to be communicated to about from CPUT?

Thank You 😊

7.2. APPENDIX B: Questionnaire Coding

Questionnaire

CODING

Topic: 'Social media in an educational environment as an effective means of communication with external stakeholders'

Department:	PR	PR PT	Marketing			IT	Journalism		
	1	5	4			2	3		
Age:	17-20		21-23			24-27		28+	
	1		2			3		4	
Cell phone make	BB	Iphone	HTC	Nokia	Samsung	LF	SE	None	Other
	1	2	3	4	5	6	7	8	9
Gender:	Male					Female			
	1					2			
Race:	B	C	W			Other			

1. Are you involved in social media? (E.g. facebook twitter, Mxit, YouTube)

Circle your answer

- a. Yes 1
- b. No 2

2. What social media tools do you prefer?

Circle your answer

- a. Email 1
- b. Facebook 2
- c. Twitter 3
- d. Blogging 4
- e. Mxit 5
- f. YouTube 6
- g. None 7
- h. Other 8

3. What social media tools do you use?

Circle your answer

- a. Email 1
- b. Facebook 2
- c. Twitter 3
- d. Blogging 4
- e. Mxit 5
- f. YouTube 6
- g. None 7
- h. Other 8

4. Is social media an effective means of communicating to students?

Circle your answer

- a. Yes 1
- b. No 2
- c. Unsure 3

5. How effective is the use of social media from CPUT?

Circle your answer

1 = don't use it and not at all effective

2 = Use it, but not effectively

3 = ok

4 = use it effectively

5 = use it very effectively

Email	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Facebook	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5
Twitter	<input type="checkbox"/> 1	<input type="checkbox"/> 2	<input type="checkbox"/> 3	<input type="checkbox"/> 4	<input type="checkbox"/> 5

Blogging	1	2	3	4	5
Mxit	1	2	3	4	5
YouTube	1	2	3	4	5
None	1	2	3	4	5
Other	1	2	3	4	5

6. How effective is the use of social media from faculty?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

Email	1	2	3	4	5
Facebook	1	2	3	4	5
Twitter 1	2	3	4	5	
Blogging	1	2	3	4	5
Mxit	1	2	3	4	5
YouTube	1	2	3	4	5
None	1	2	3	4	5
Other	1	2	3	4	5

7. How effective is the use of social media from department?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

Email	1	2	3	4	5
Facebook	1	2	3	4	5
Twitter 1	2	3	4	5	

Blogging	1	2	3	4	5
Mxit	1	2	3	4	5
YouTube	1	2	3	4	5
None	1	2	3	4	5
Other	1	2	3	4	5

8. How effective is the use of social media from subject lecturers?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

Email	1	2	3	4	5
Facebook	1	2	3	4	5
Twitter1	2	3	4	5	
Blogging	1	2	3	4	5
Mxit	1	2	3	4	5
YouTube	1	2	3	4	5
None	1	2	3	4	5
Other	1	2	3	4	5

9. How effective is the communication from CPUT?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

1

2

3

4

5

10. How effective is the communication from you department?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

1

2

3

4

5

11. How effective is the communication from lecturers?

Circle your answer

1= don't use it and not at all effective

2= Use it, but not effectively

3= ok

4= use it effectively

5= use it very effectively

1

2

3

4

5

12. In your opinion how can CPUT improve on communication to students

13. In your opinion how can your department improve on communication to students

14. In your opinion how can your subject lecturer improve on communication to students

15. What would you like to be communicated to about from CPUT?

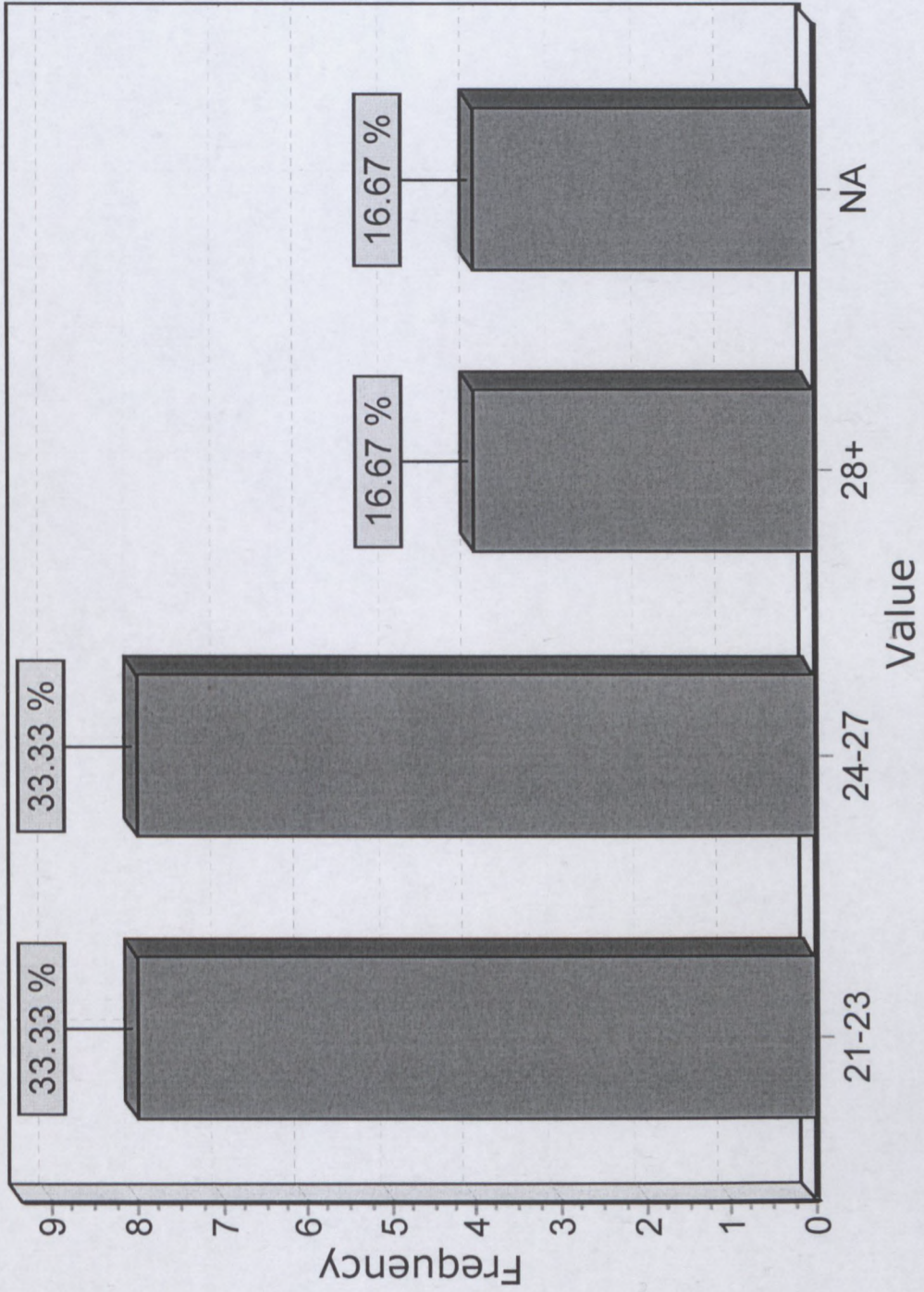
Thank You ☺

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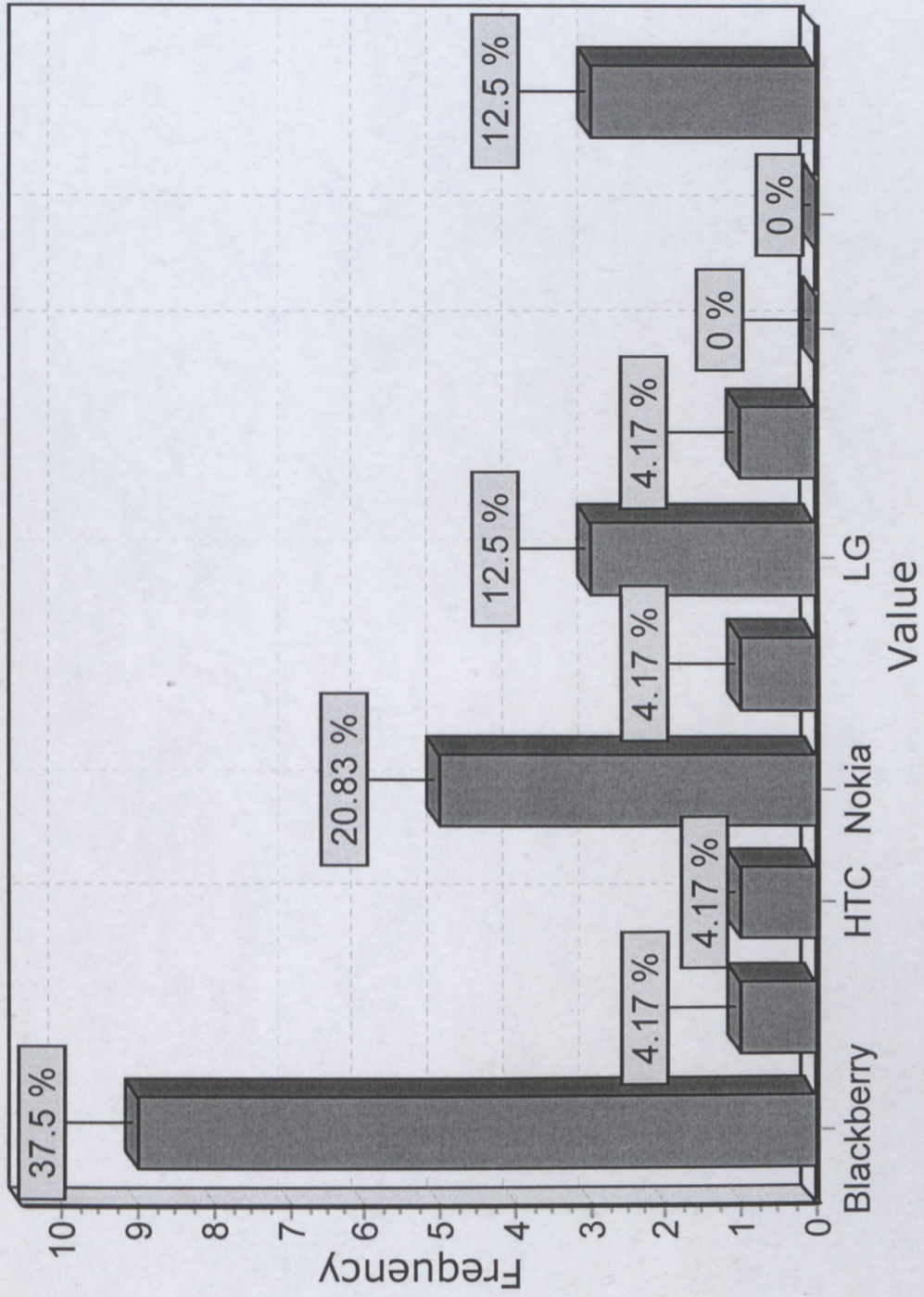
7.3. Appendix C: Full results

7.3.1 Part Time Results

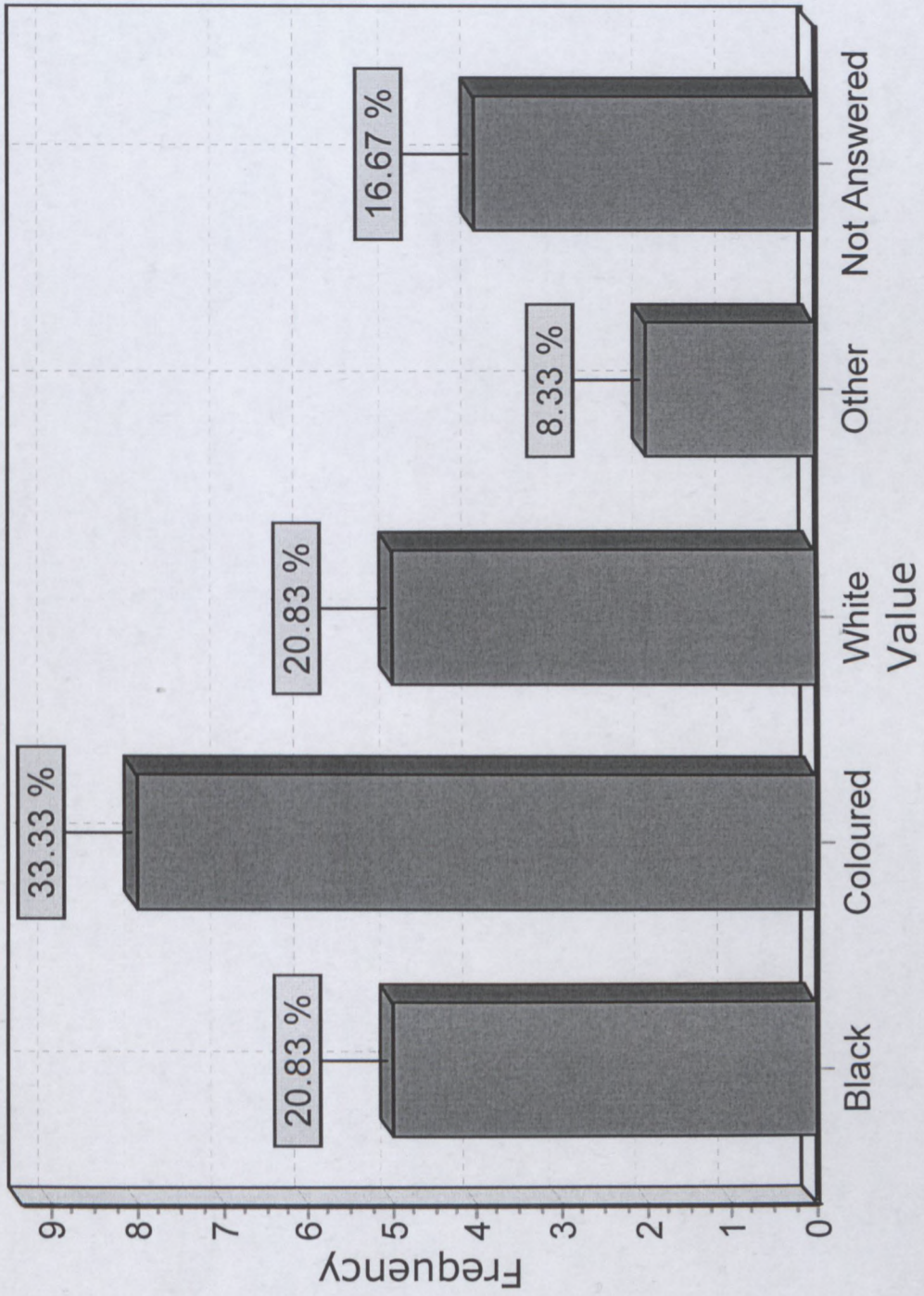
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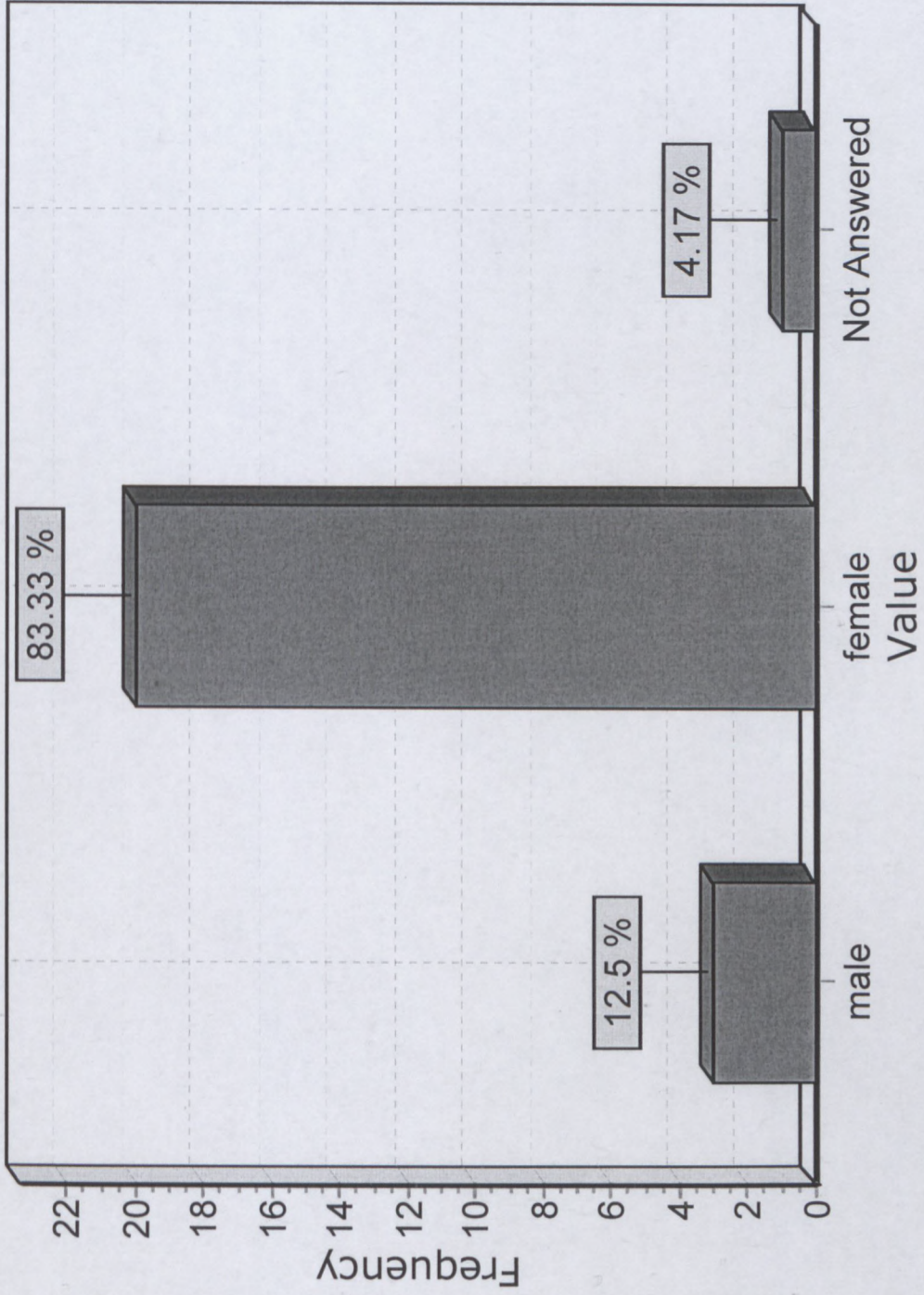
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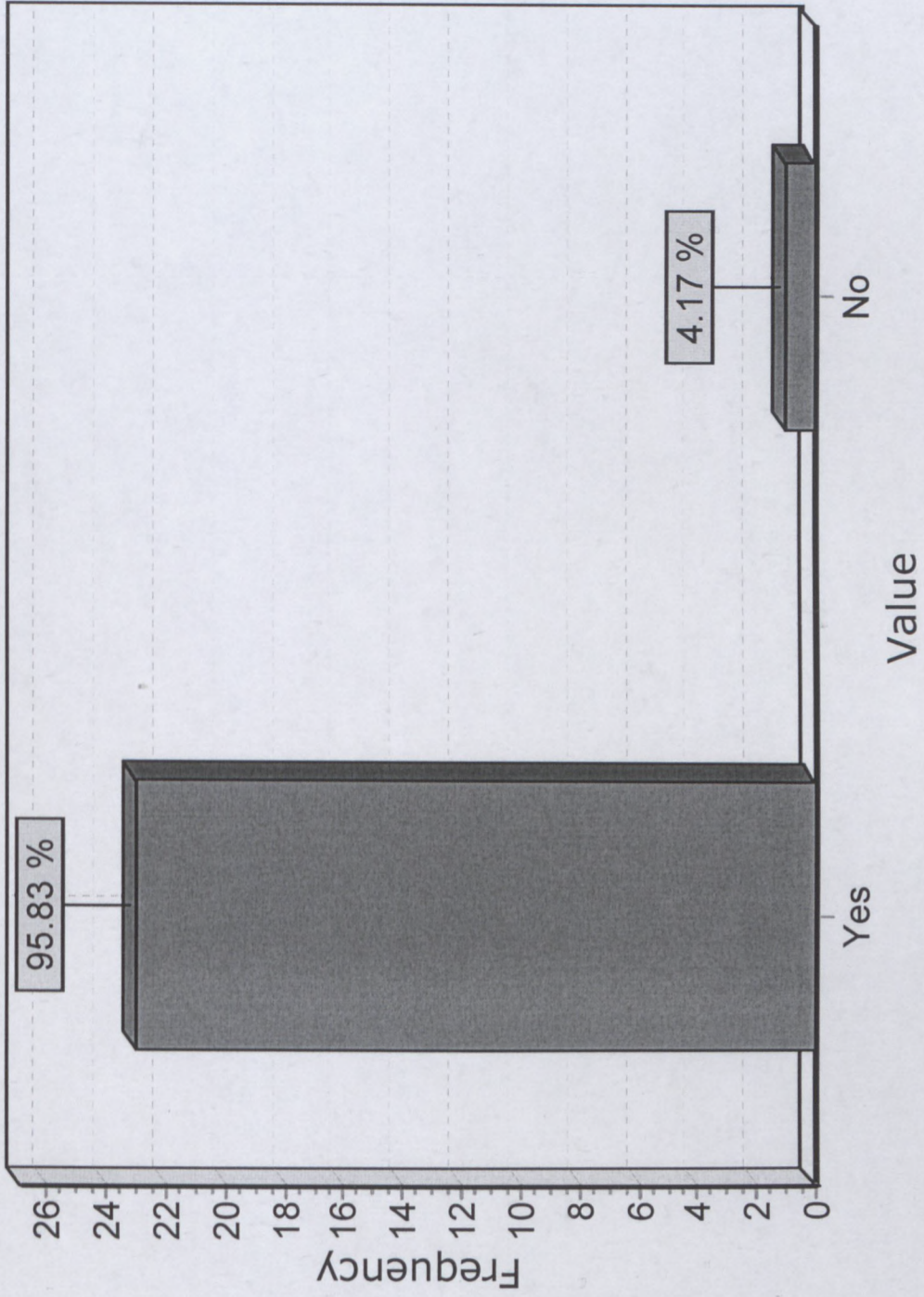
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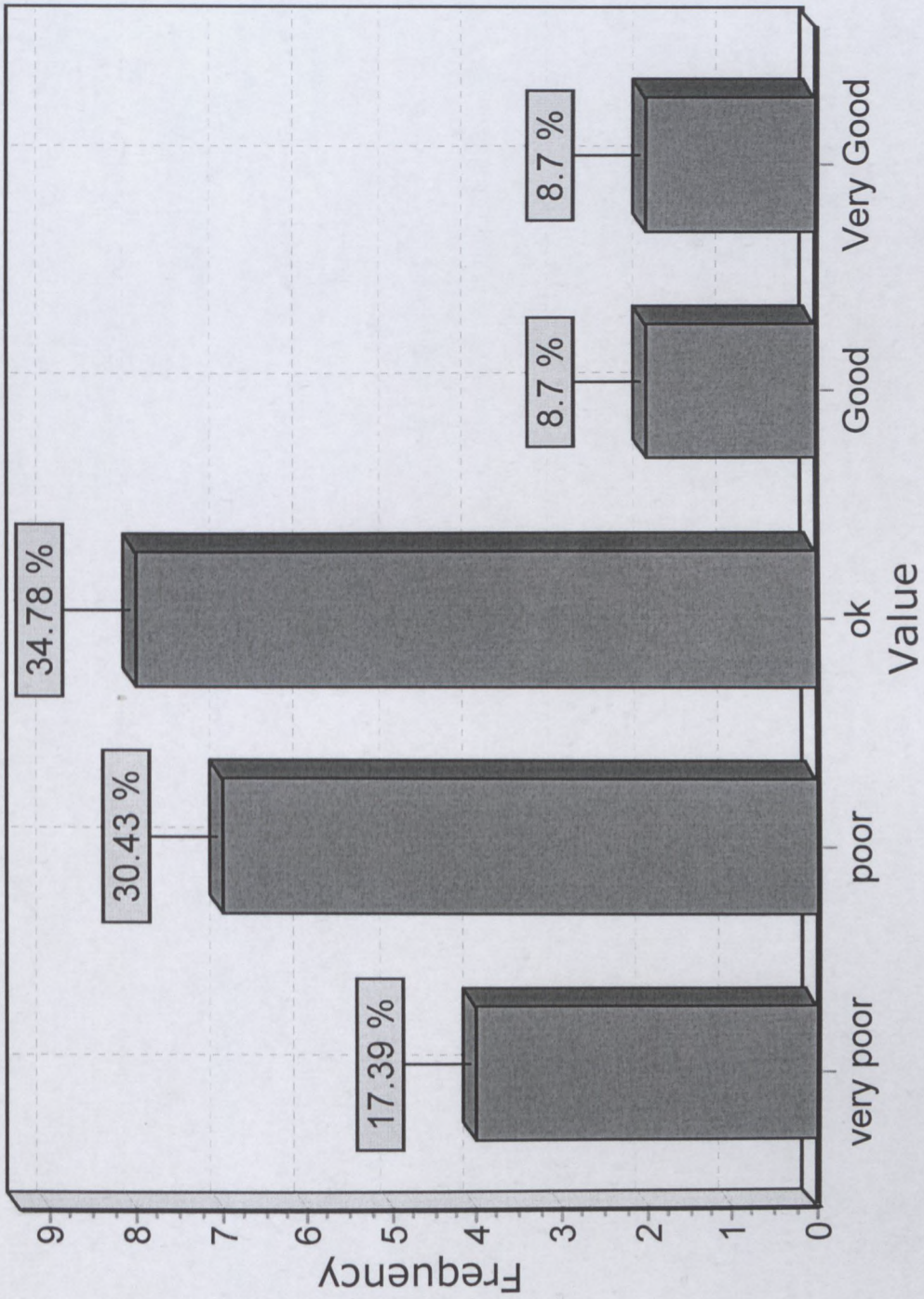
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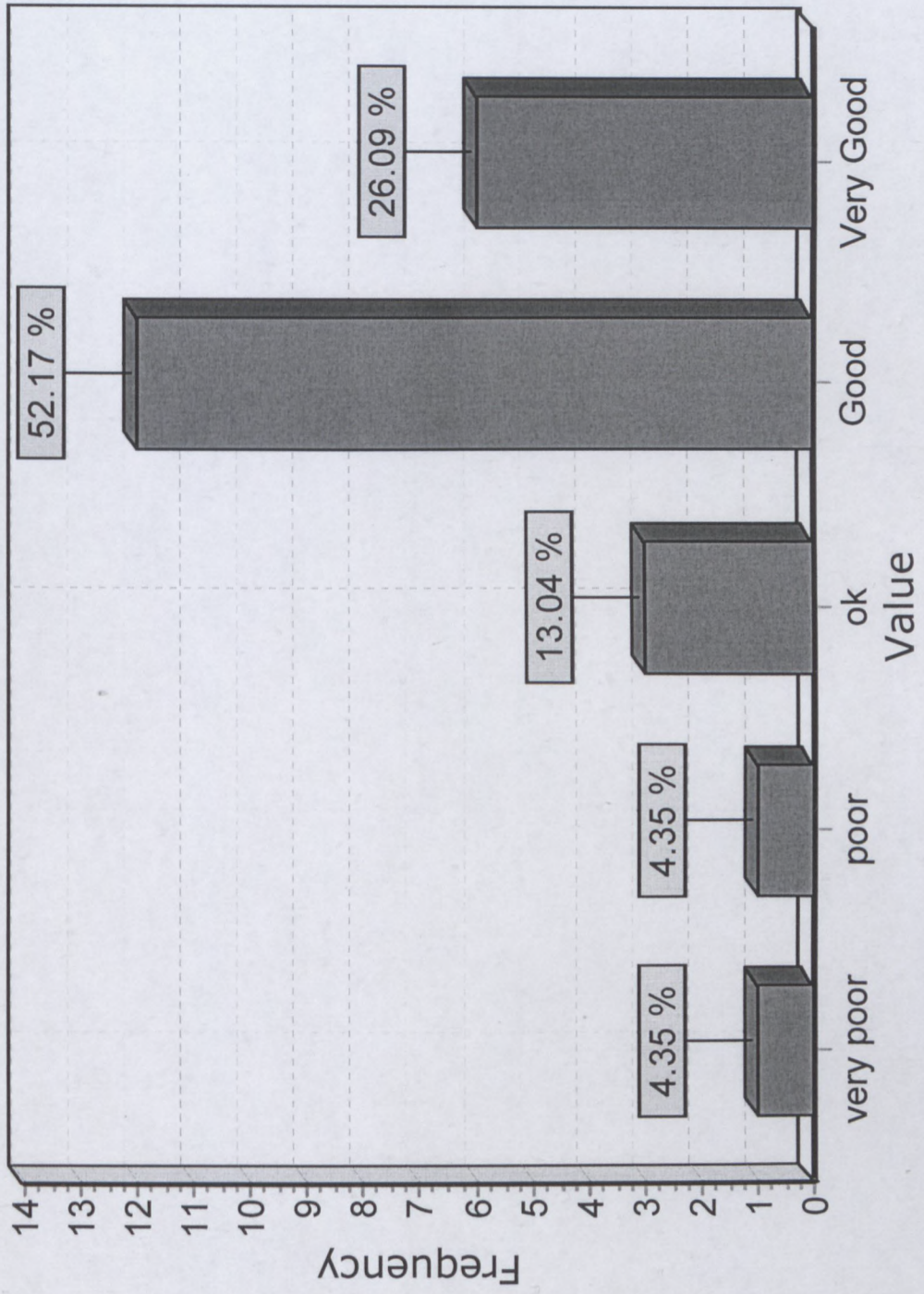
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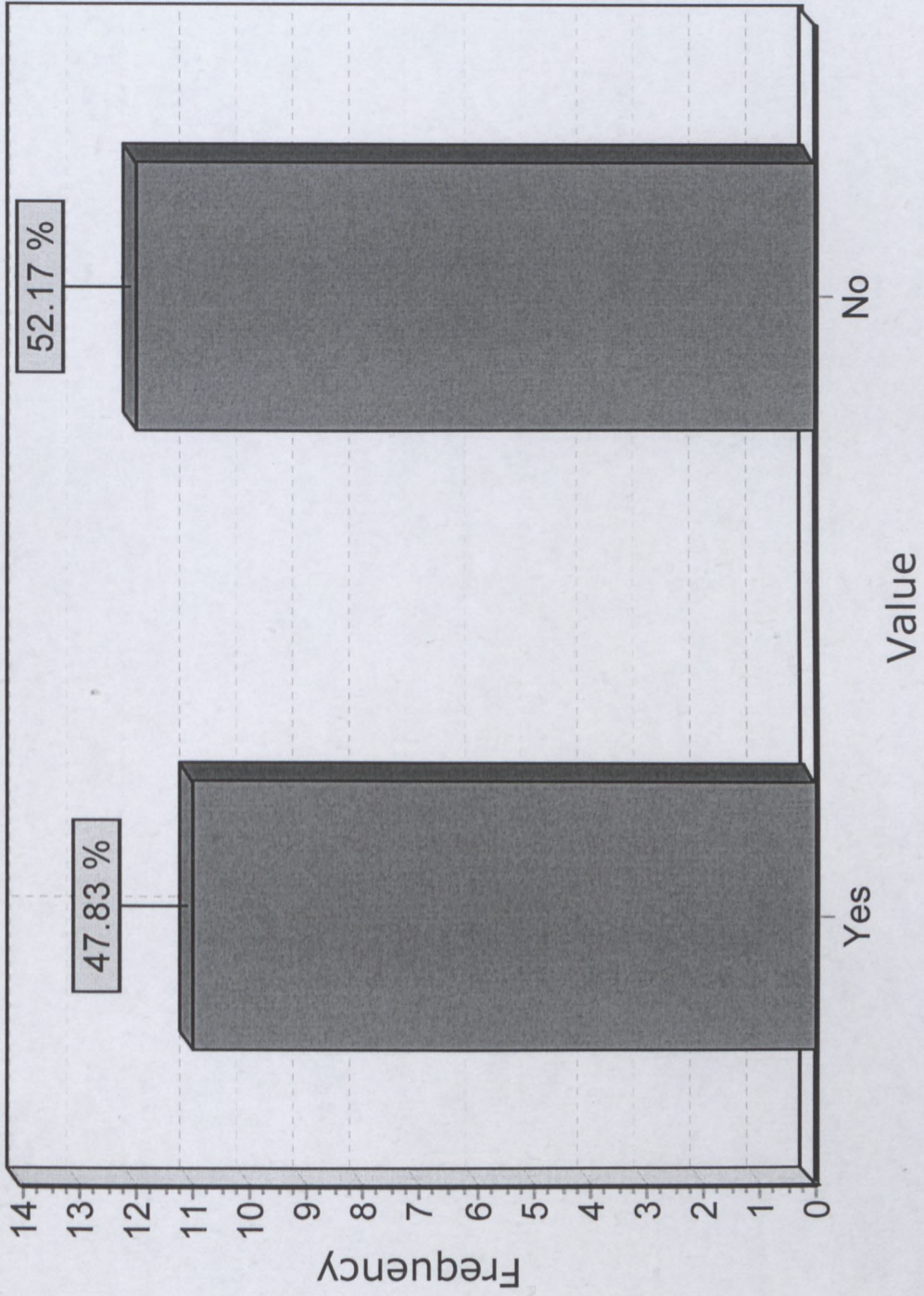
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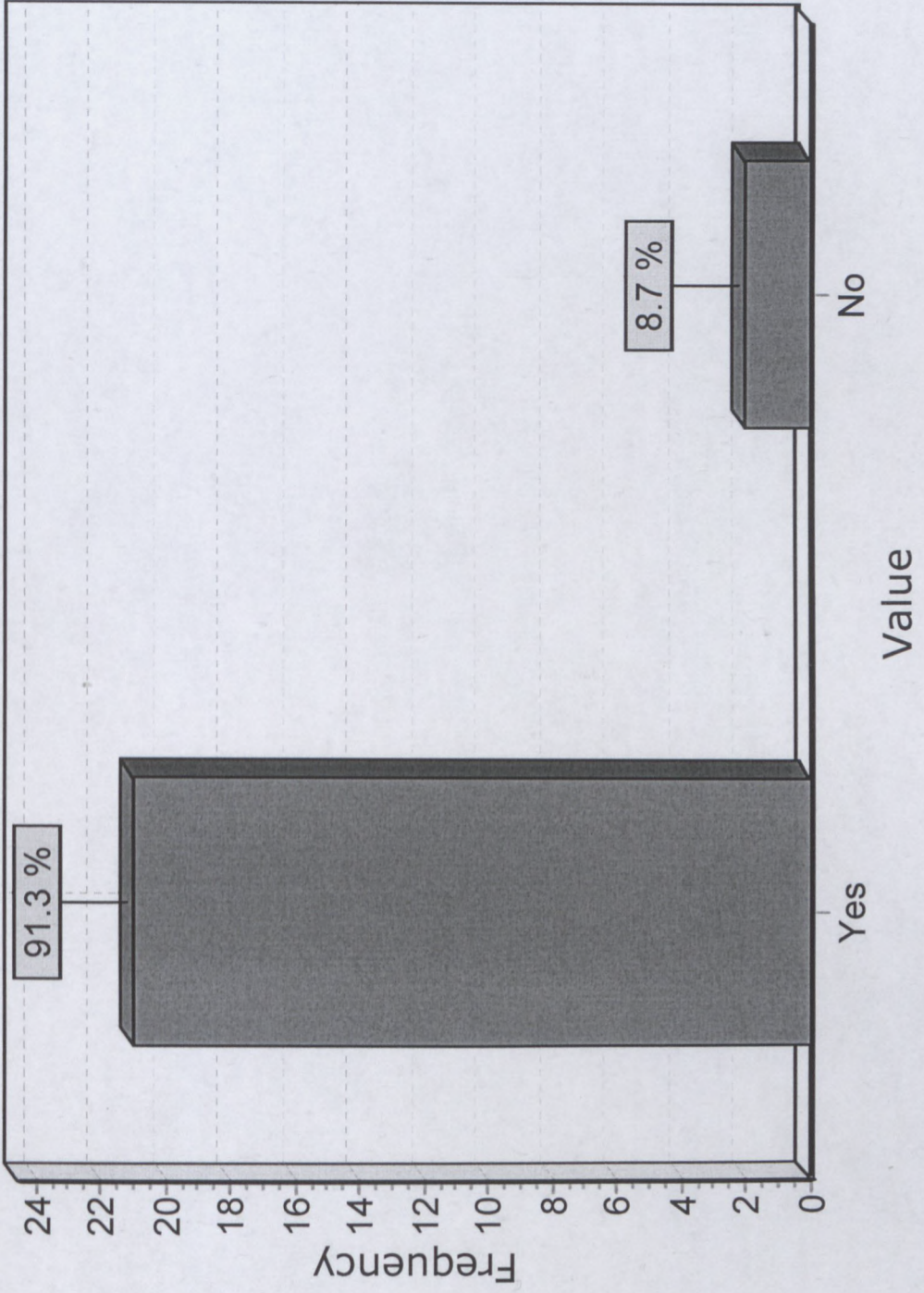
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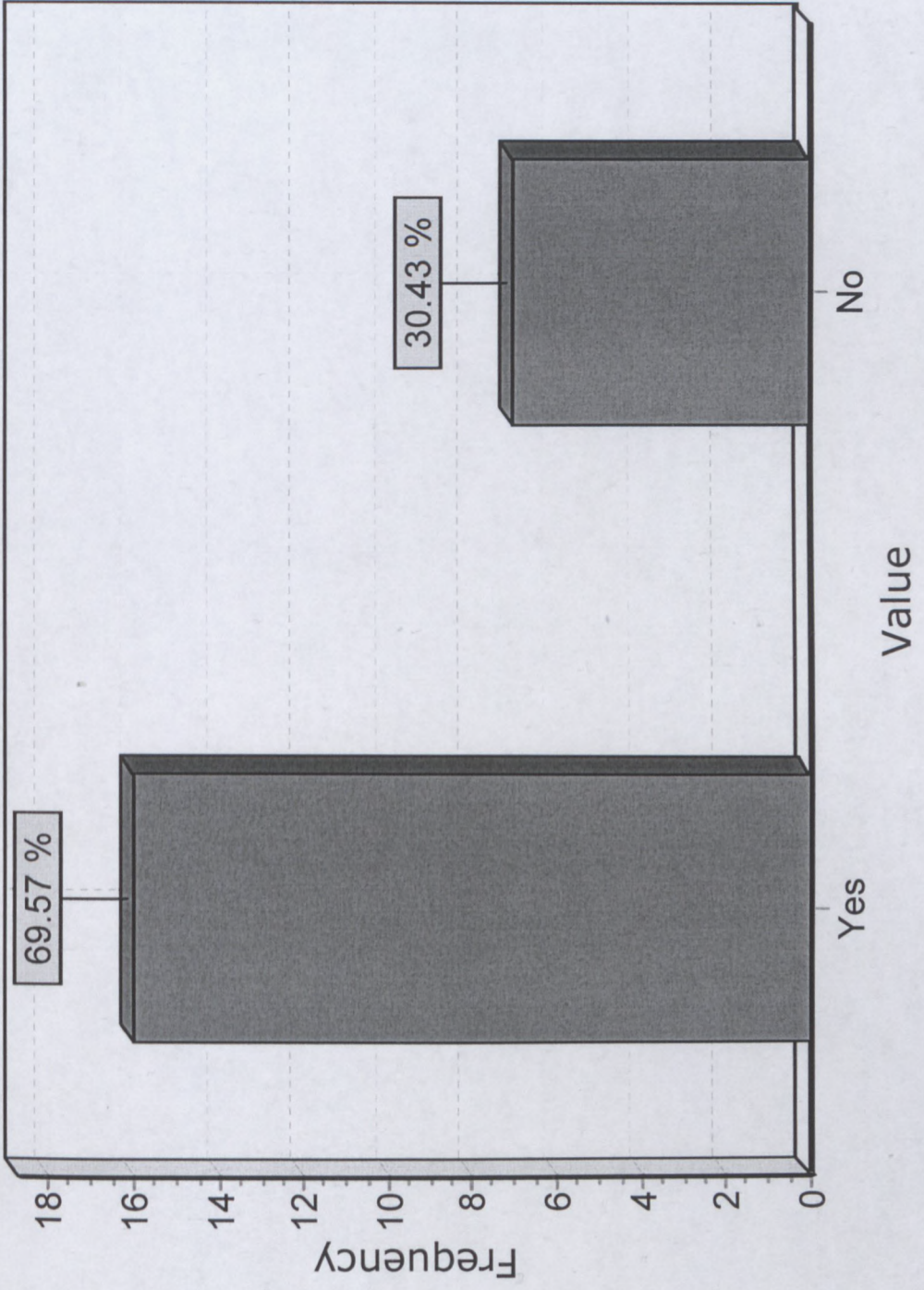
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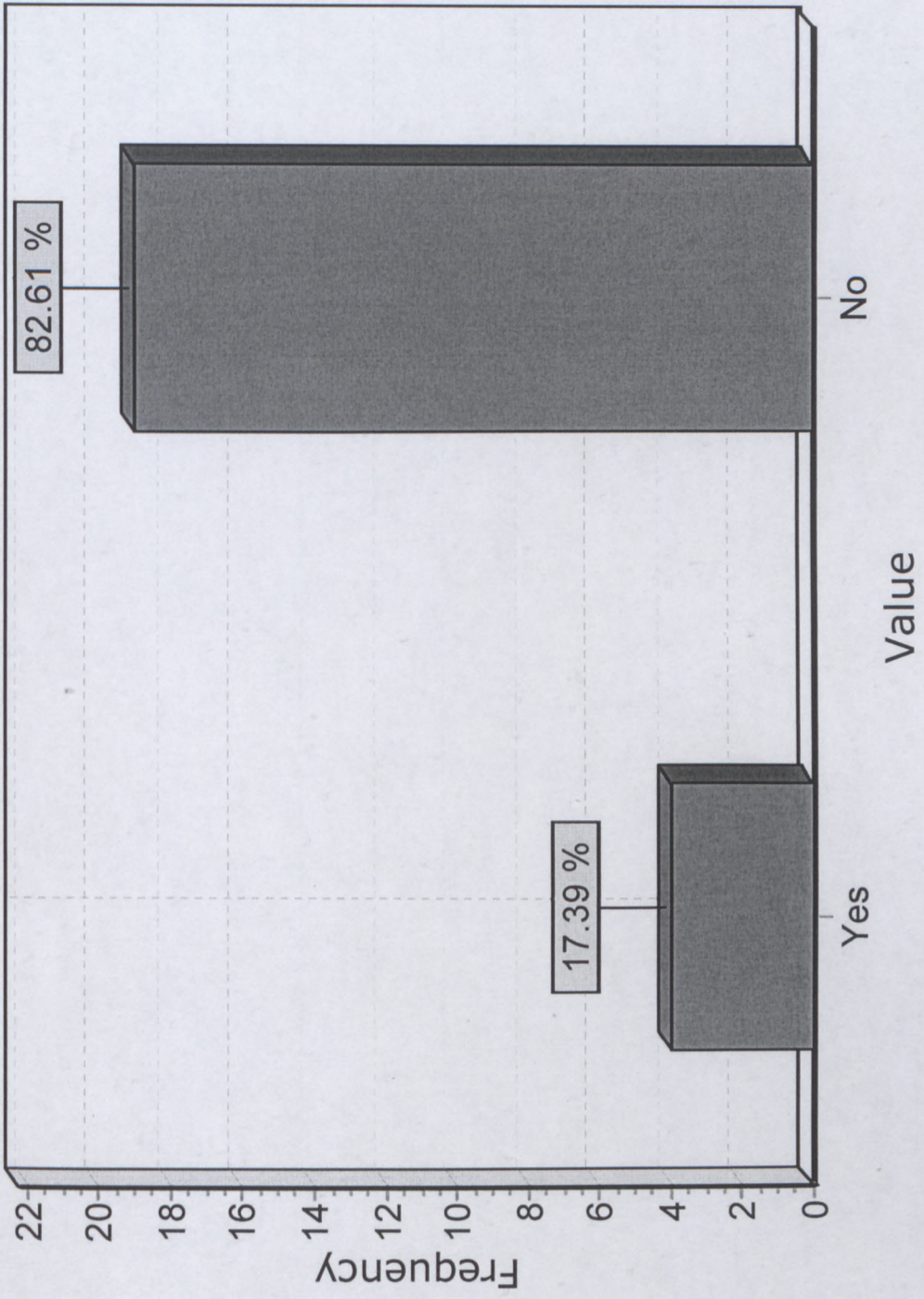
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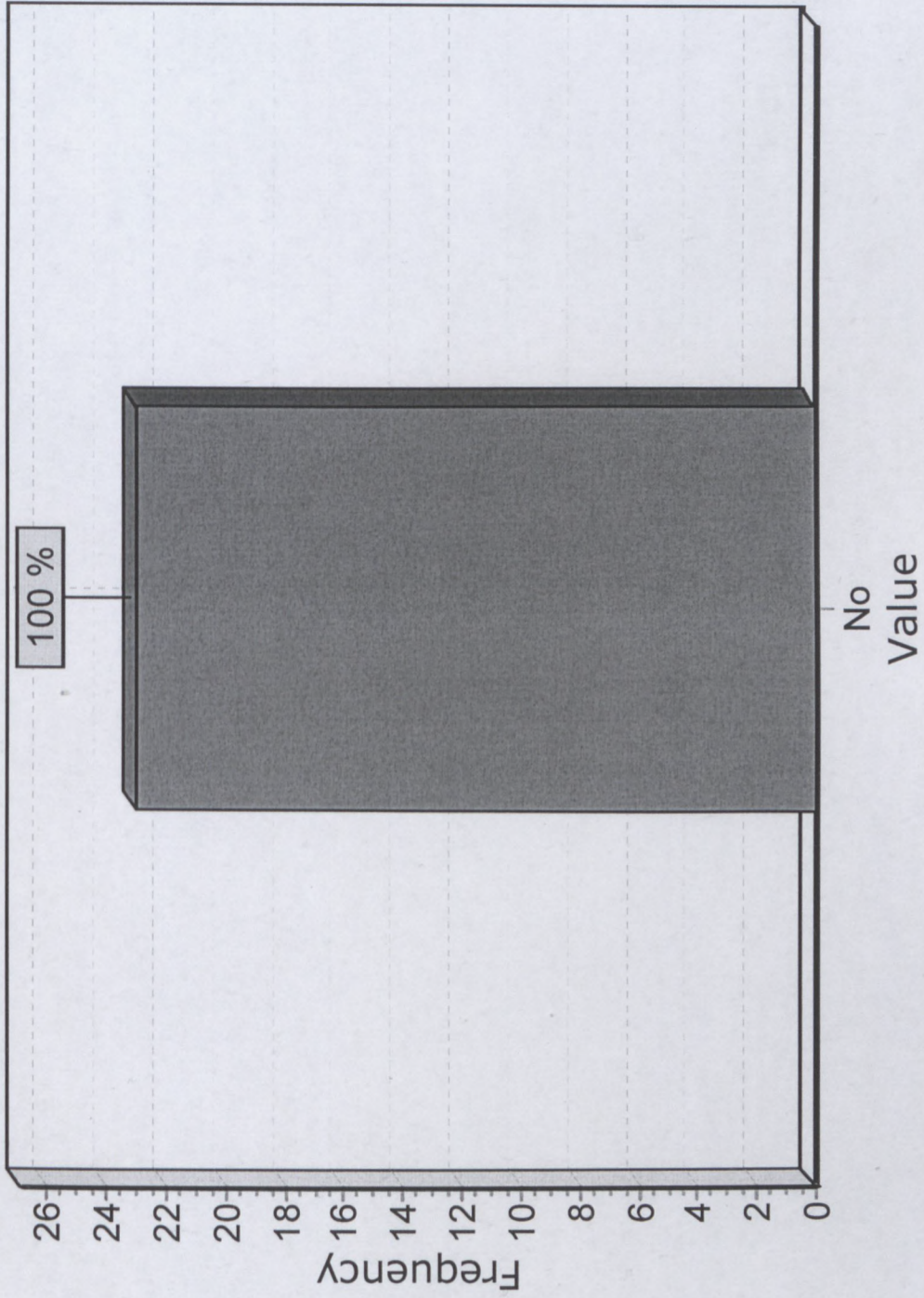
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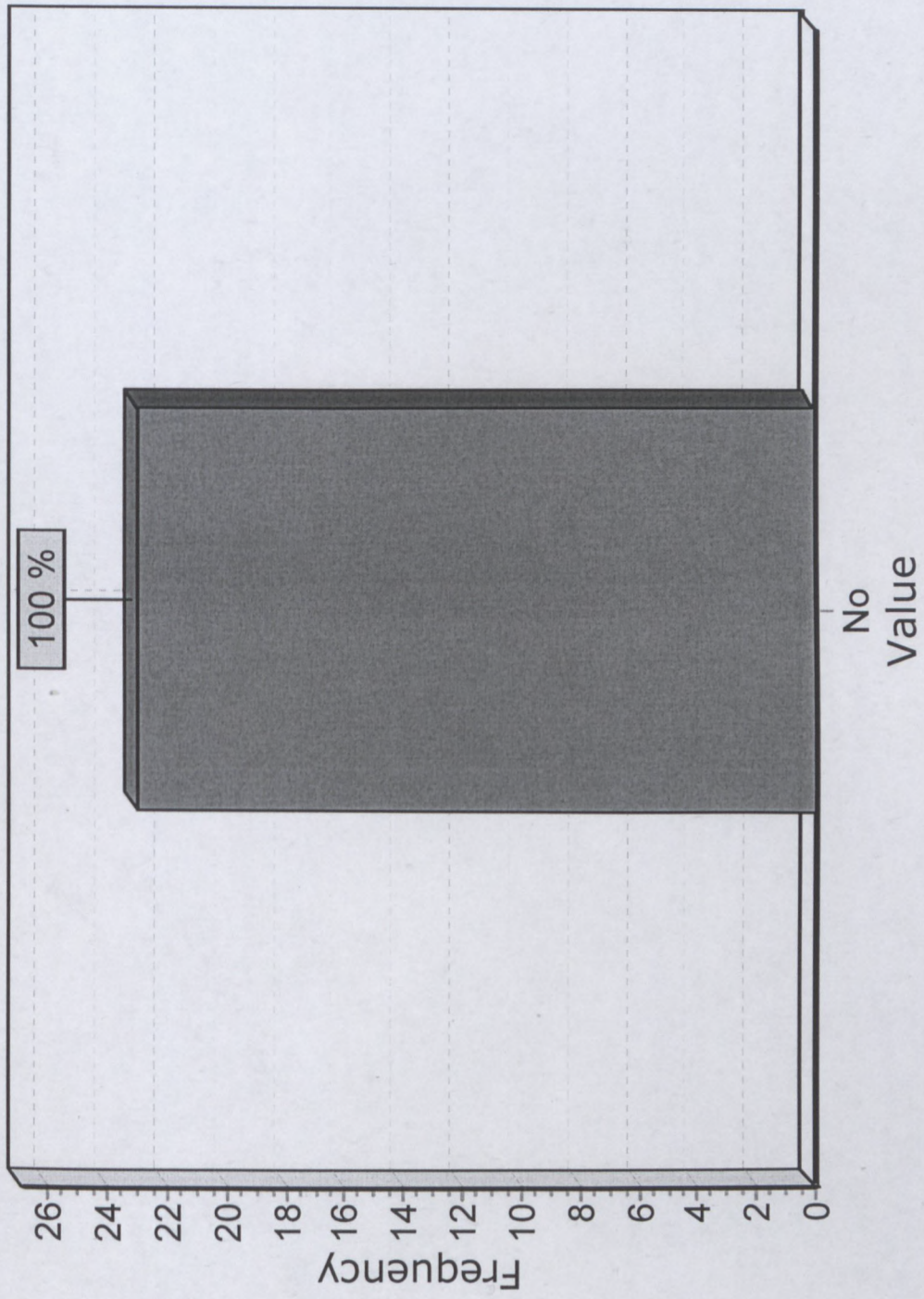
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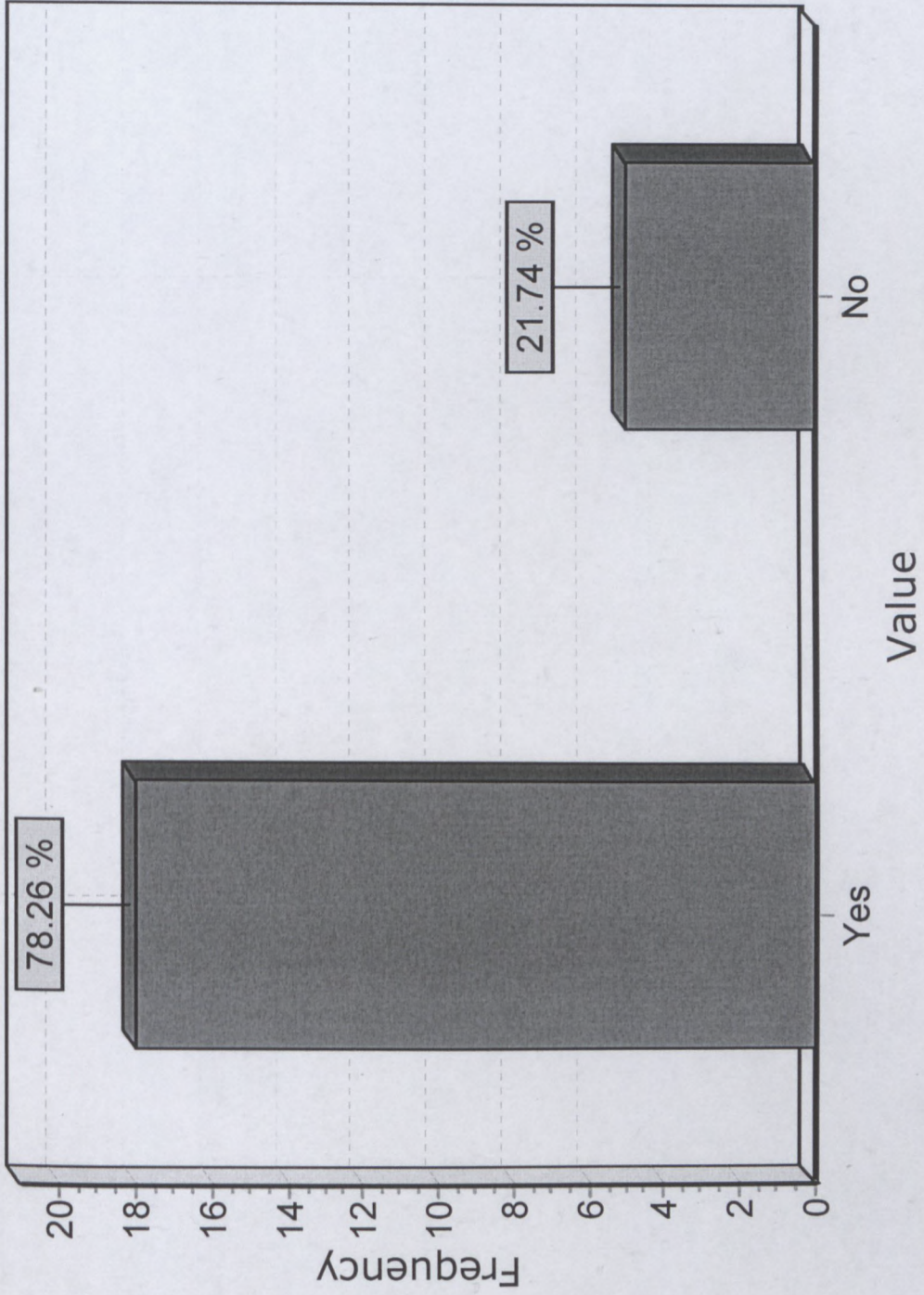
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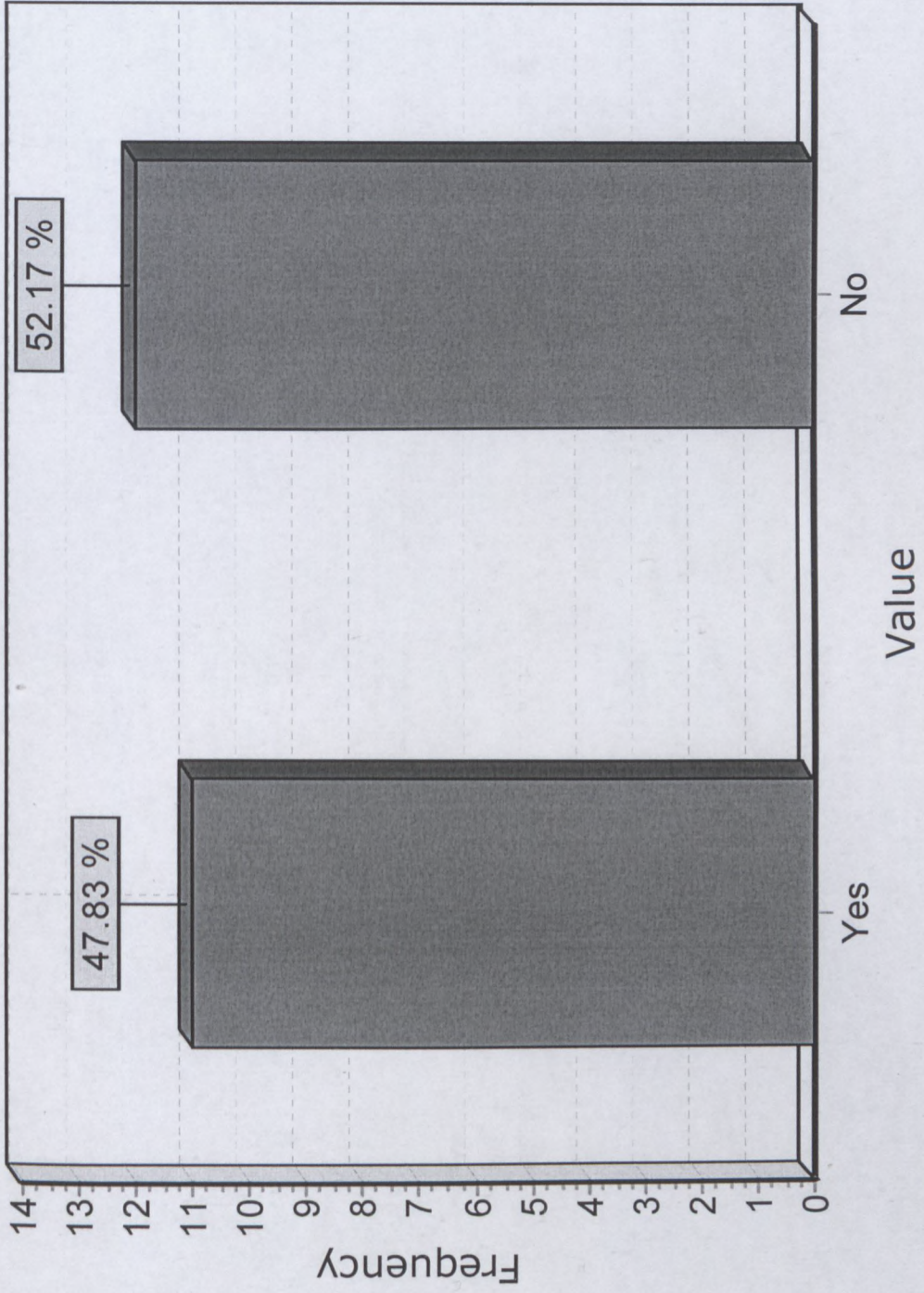
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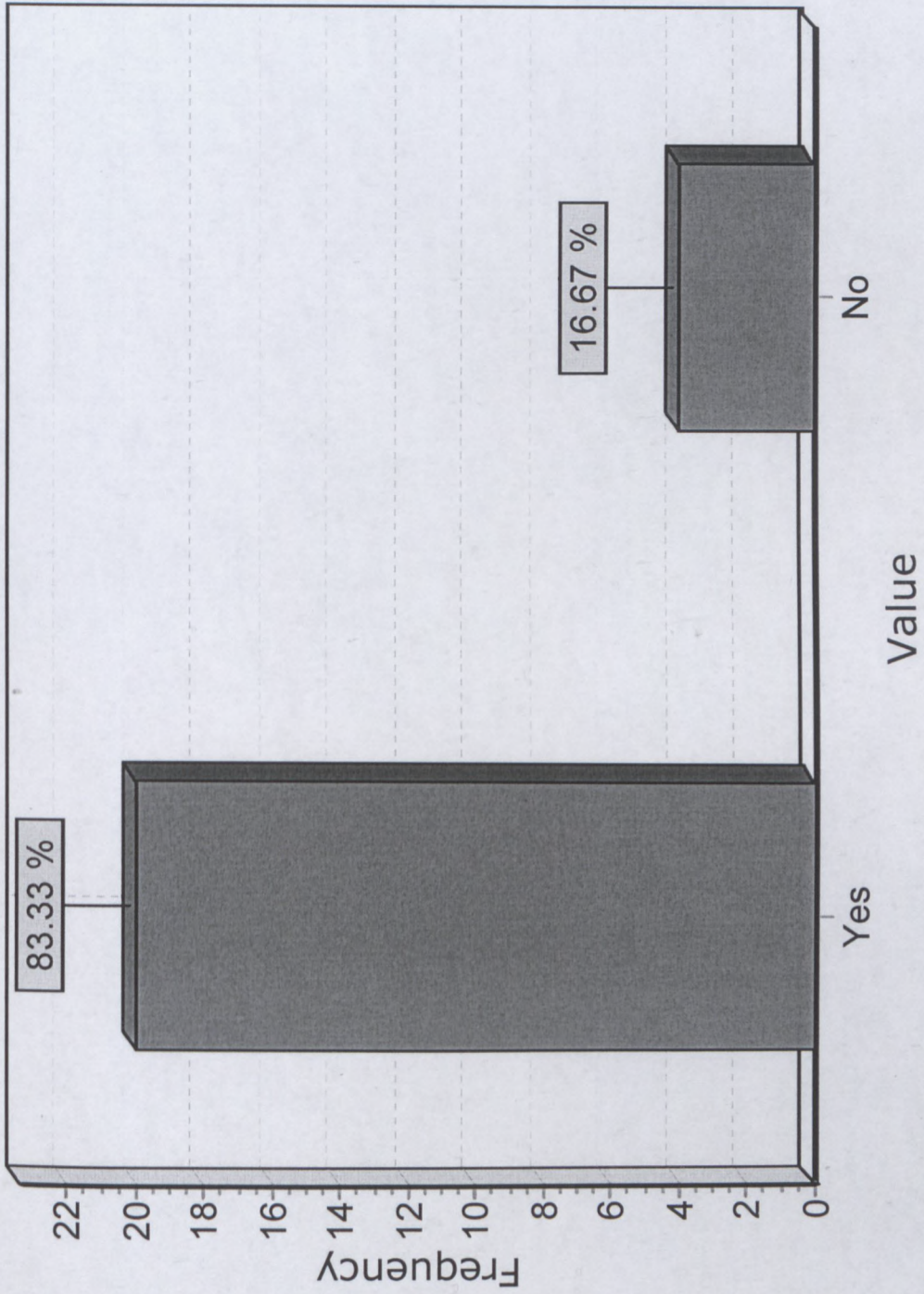
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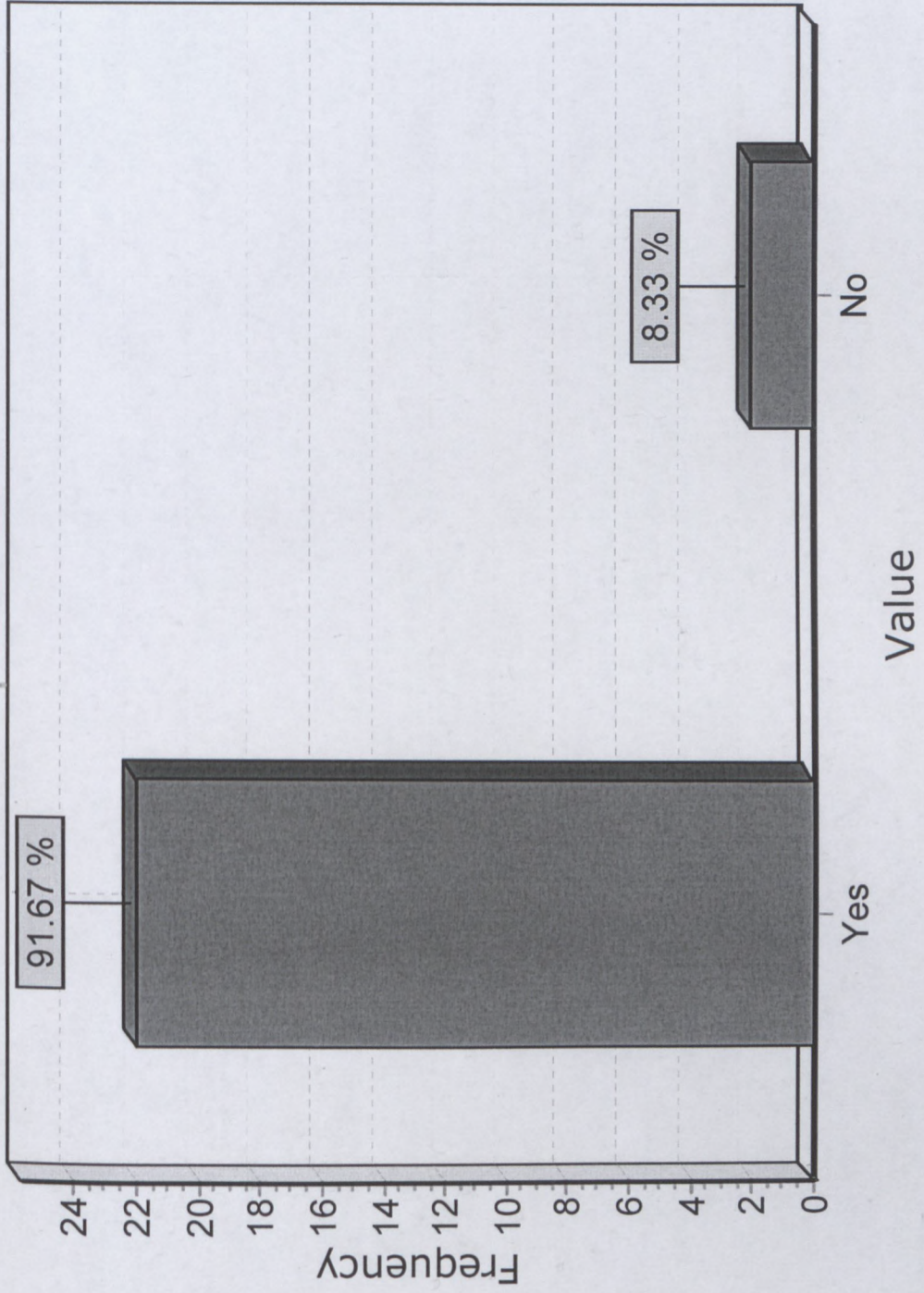
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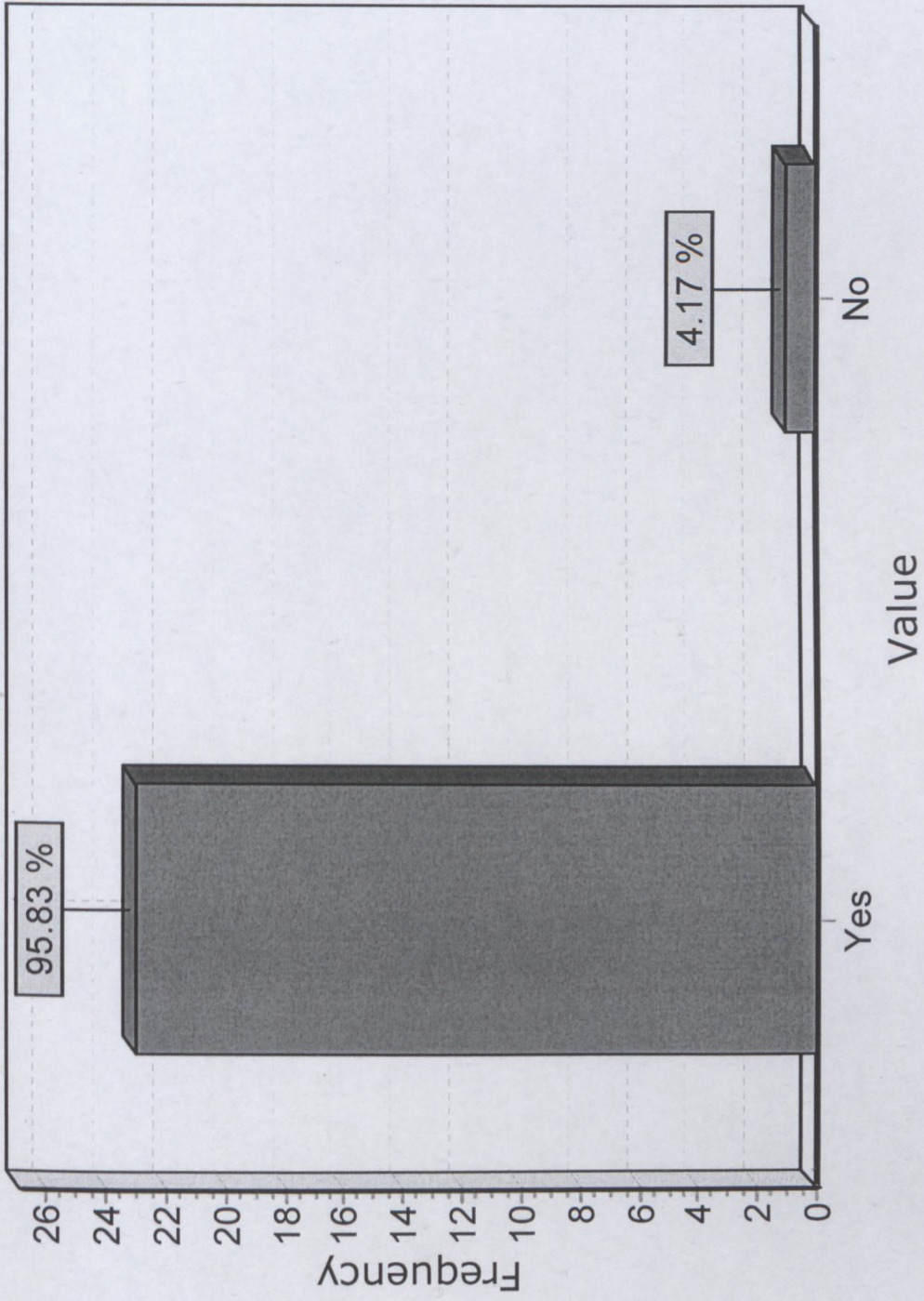
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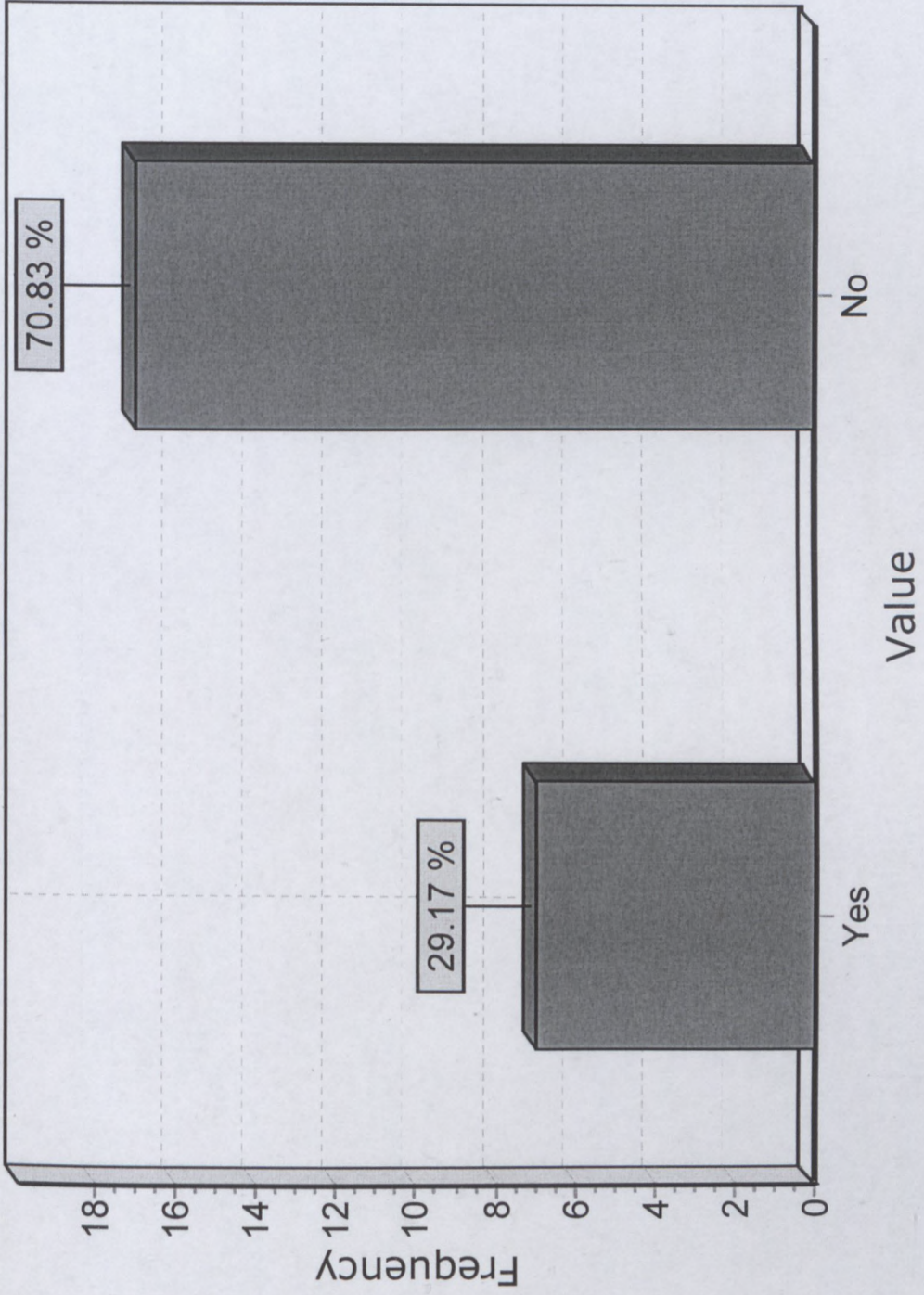
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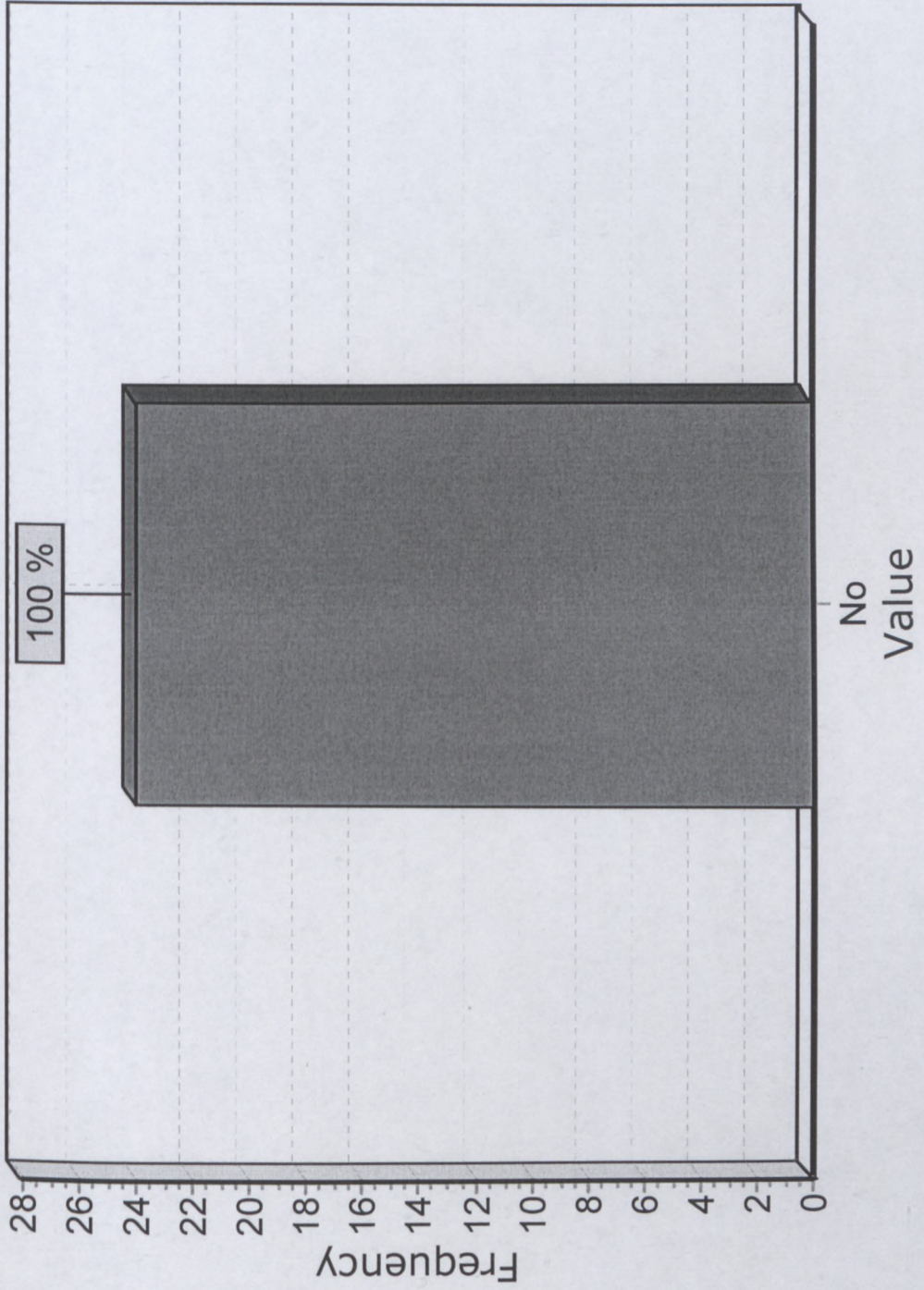
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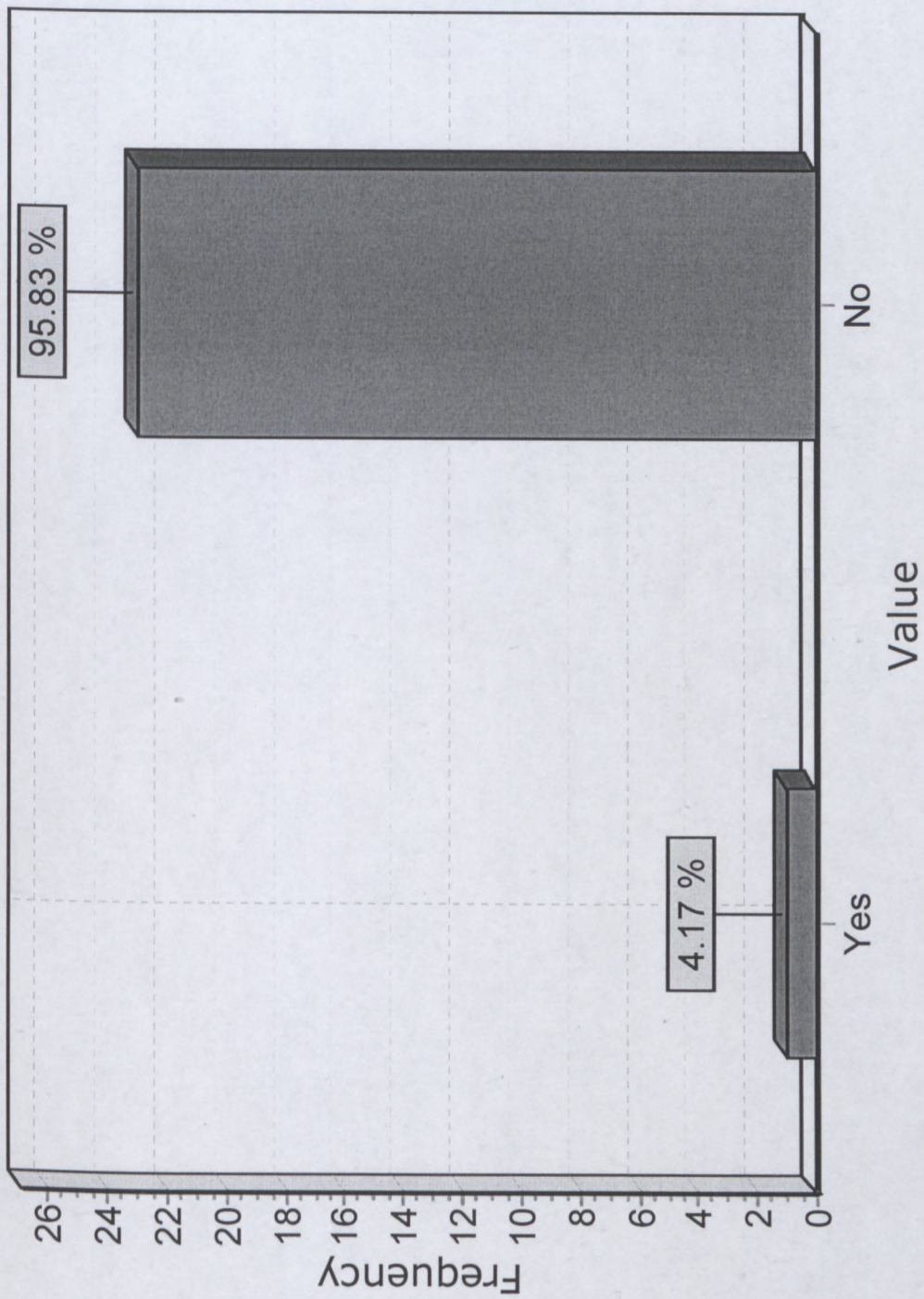
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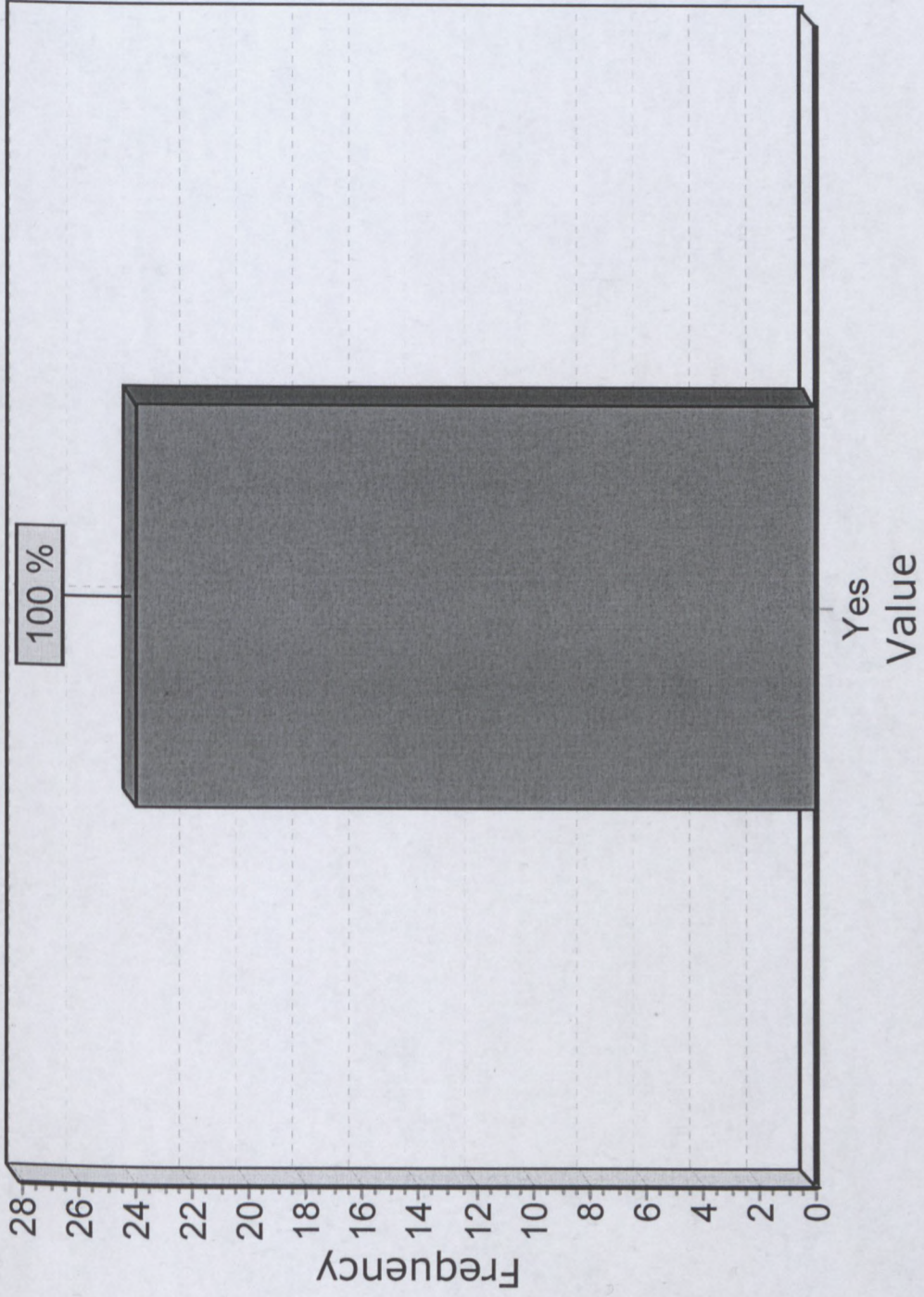
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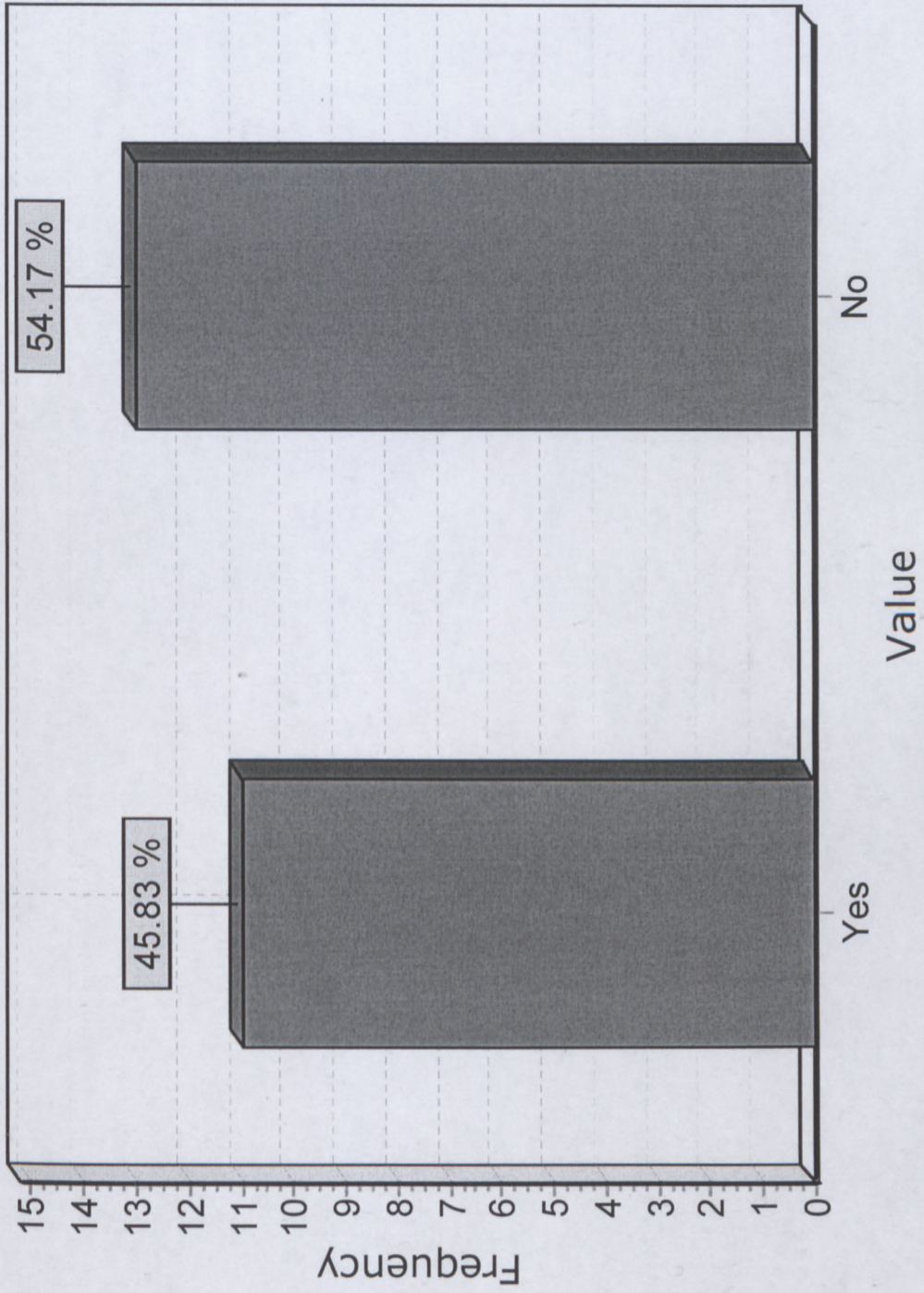
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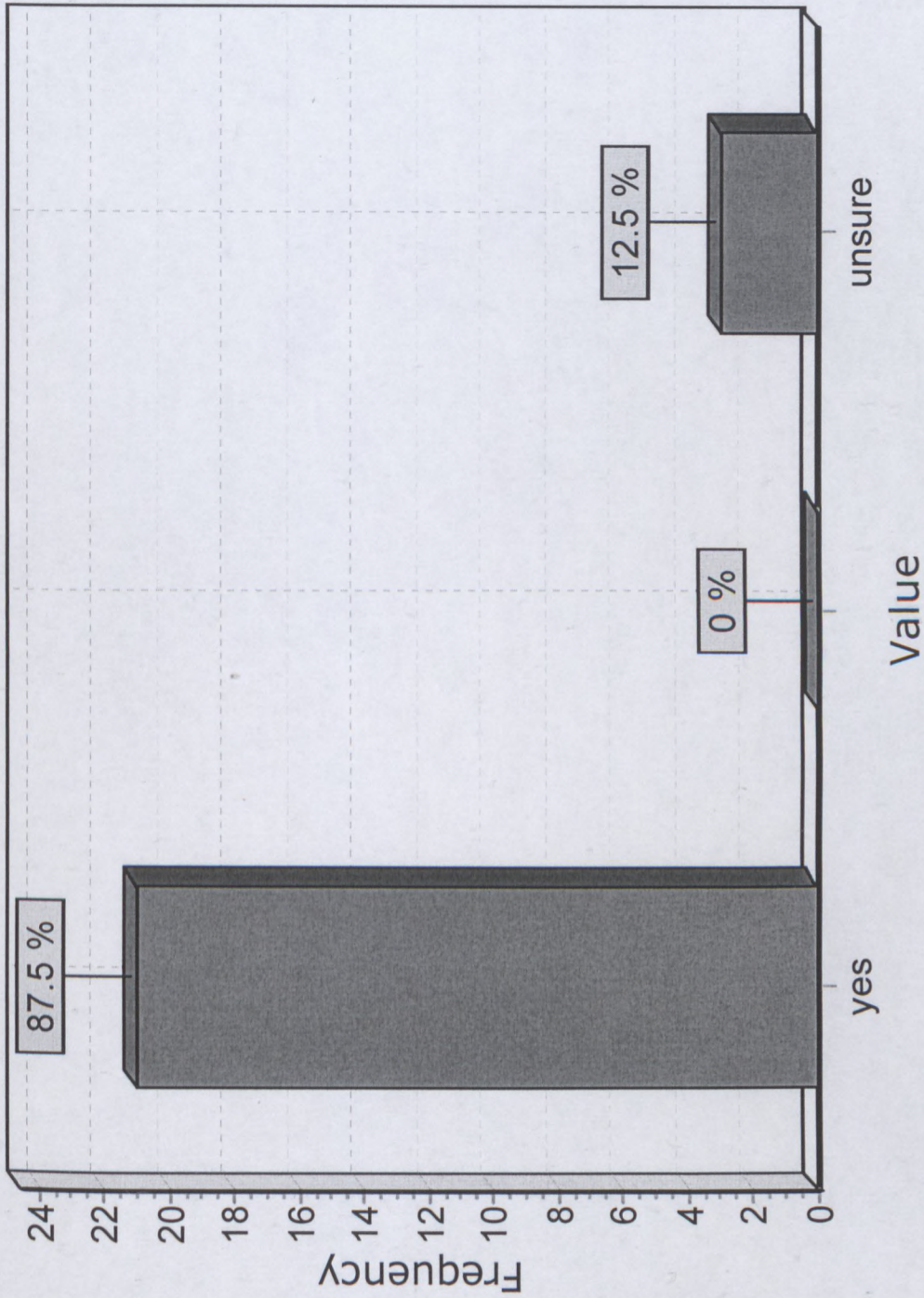
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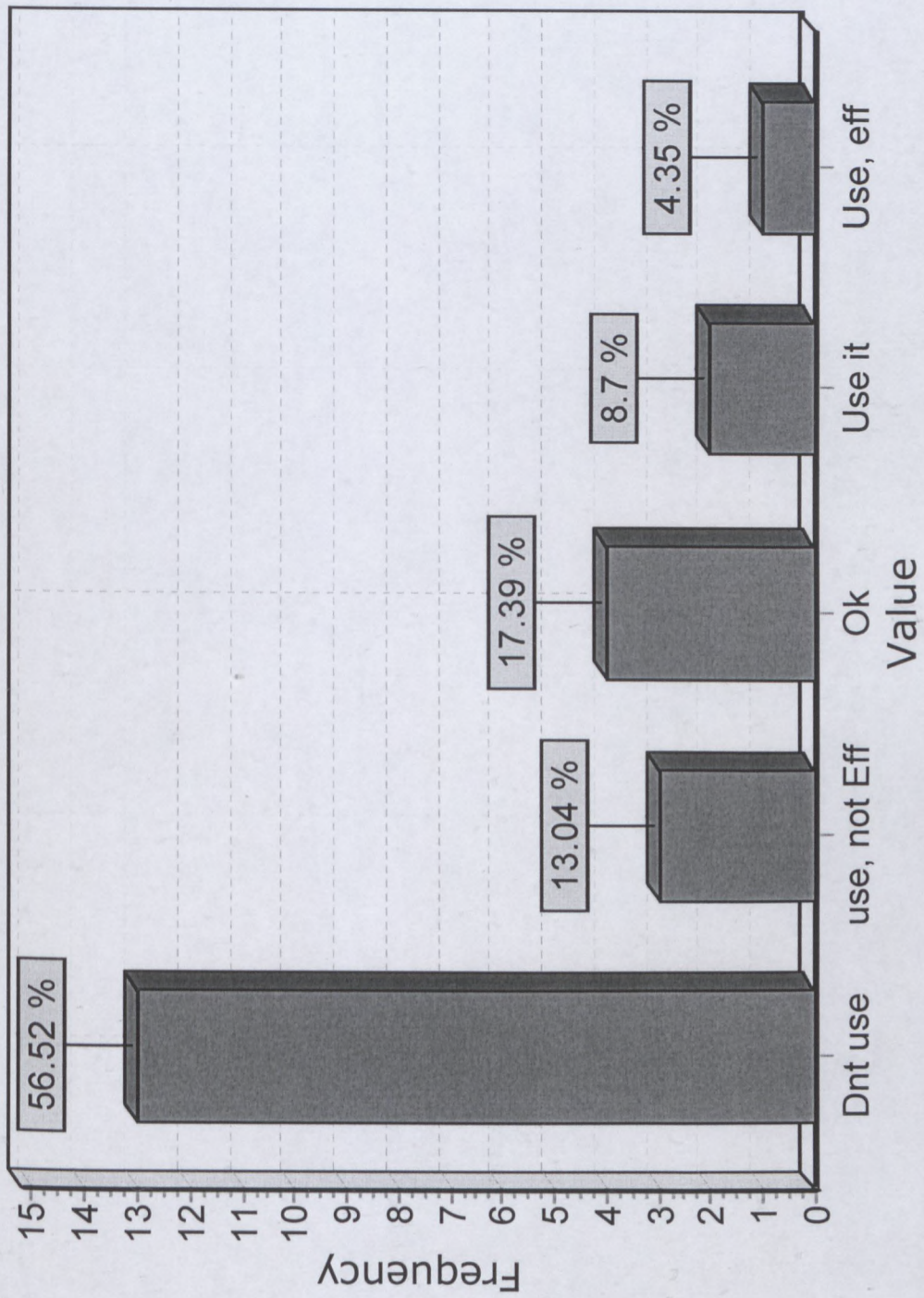
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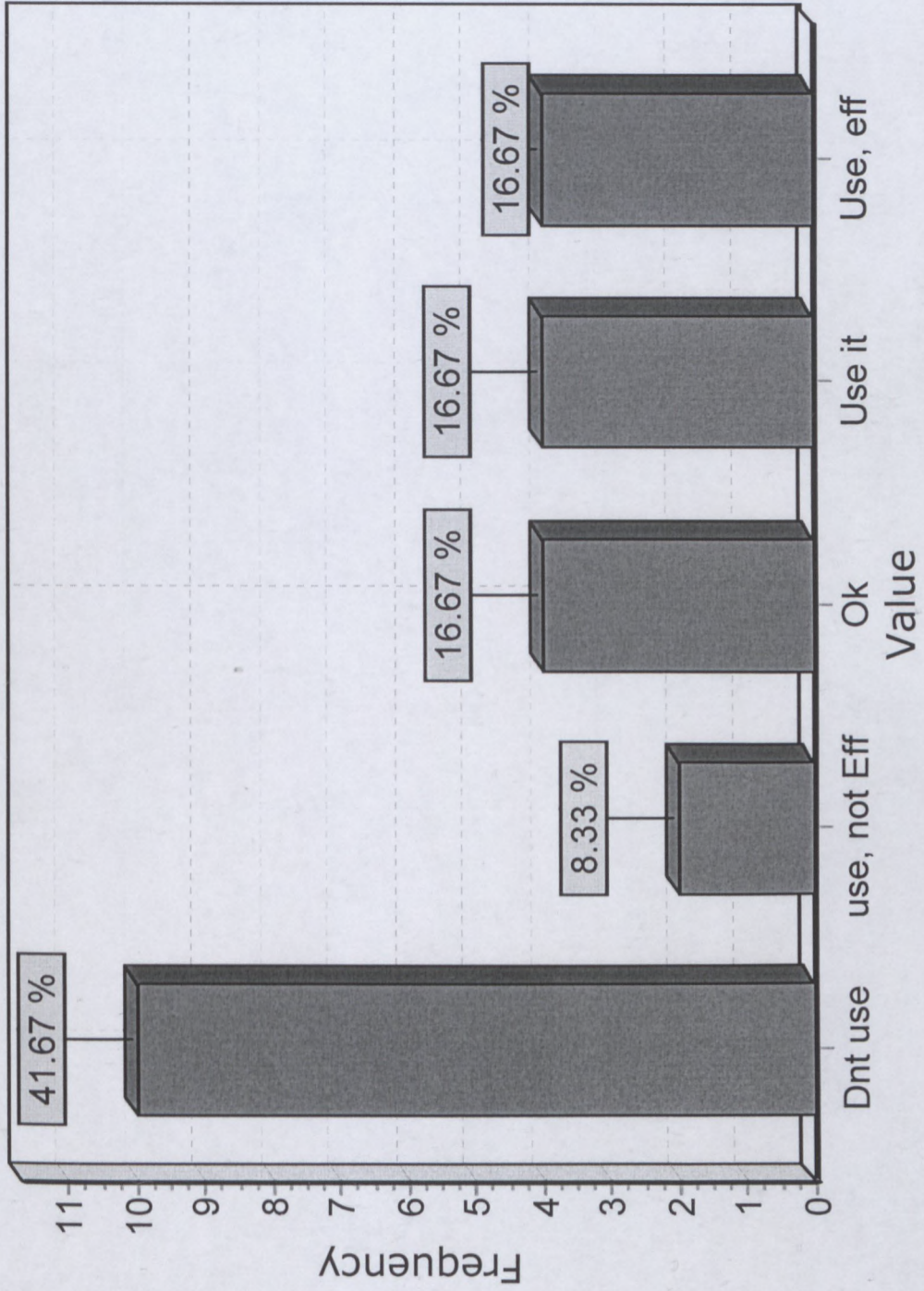
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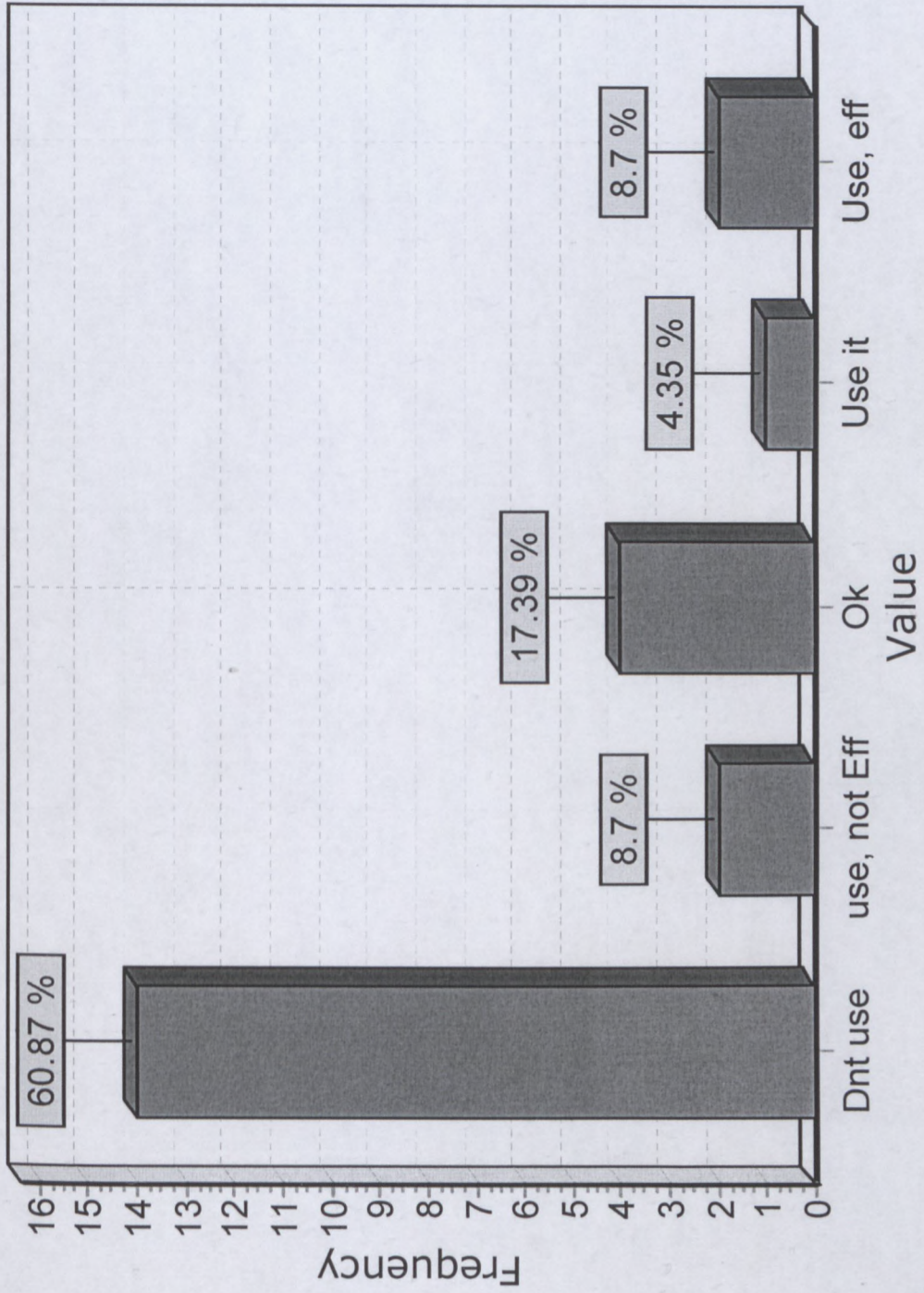
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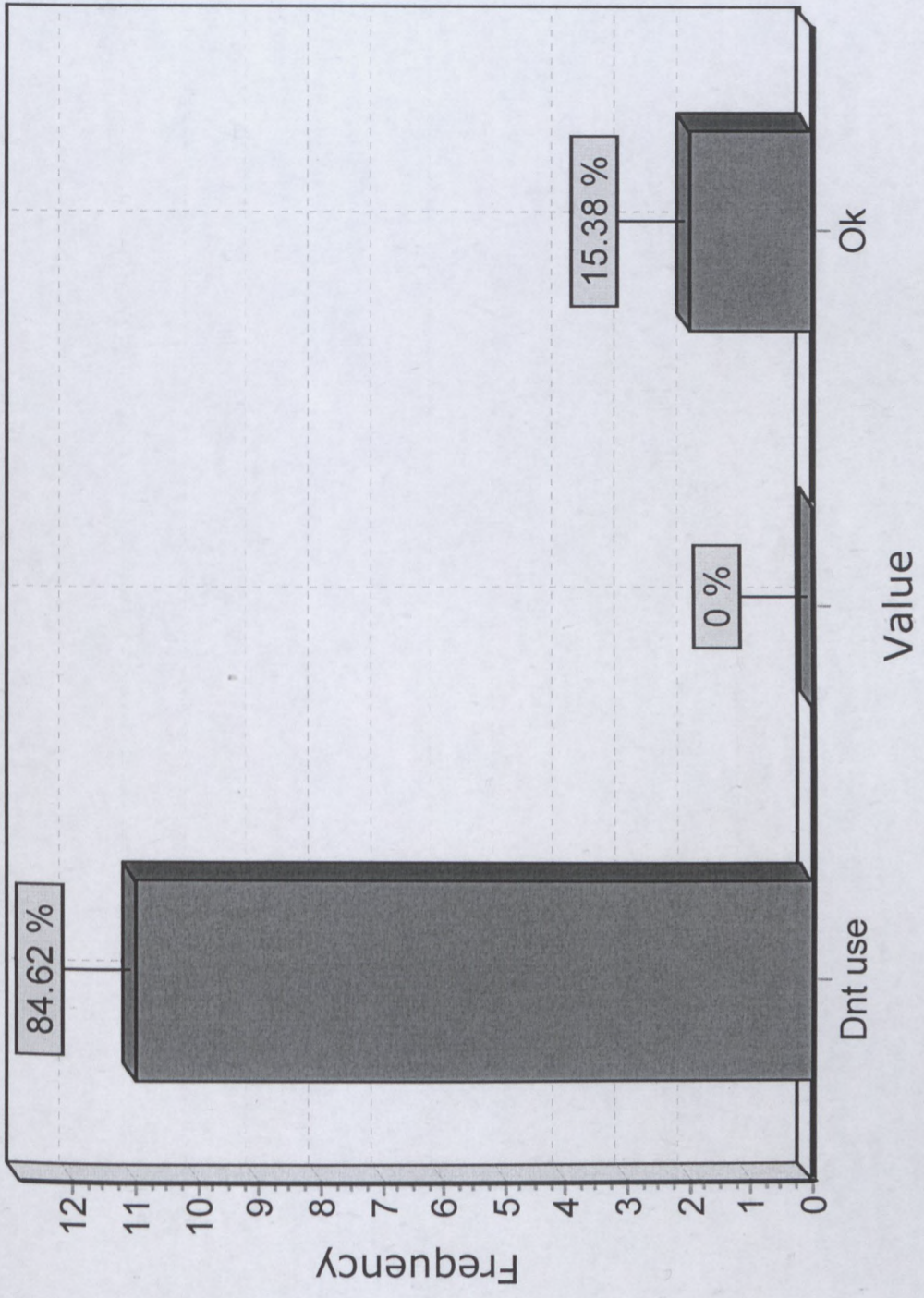
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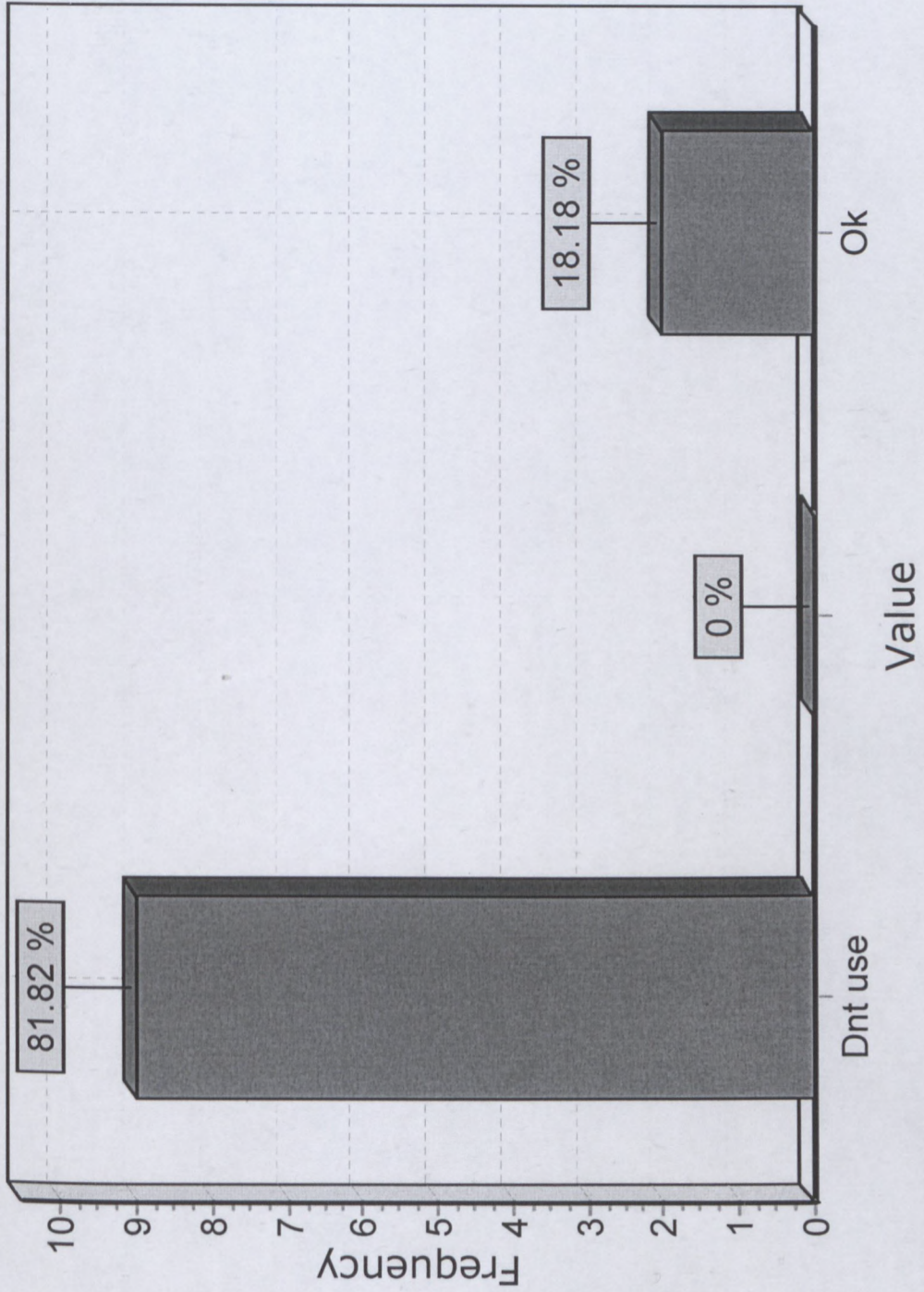
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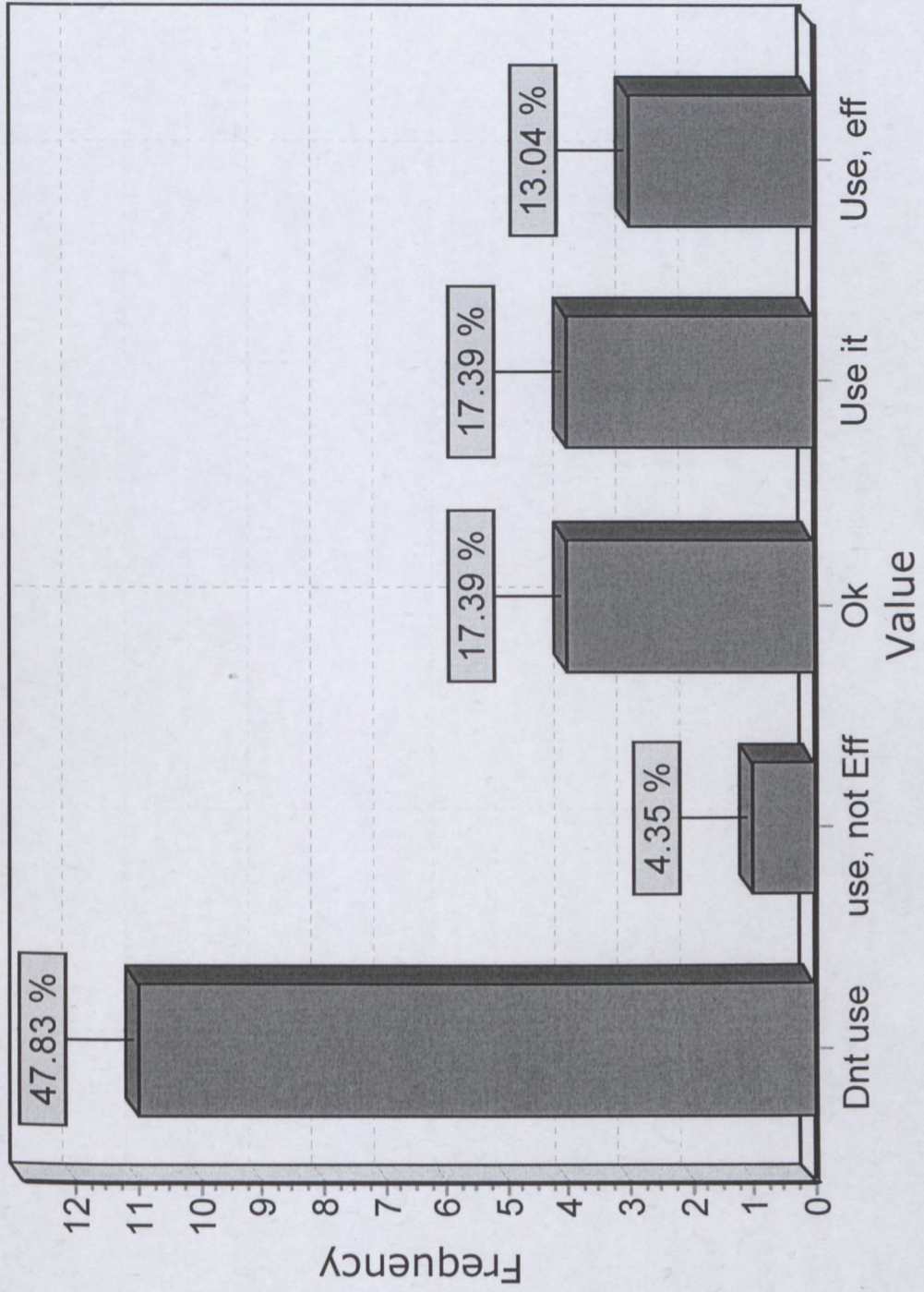
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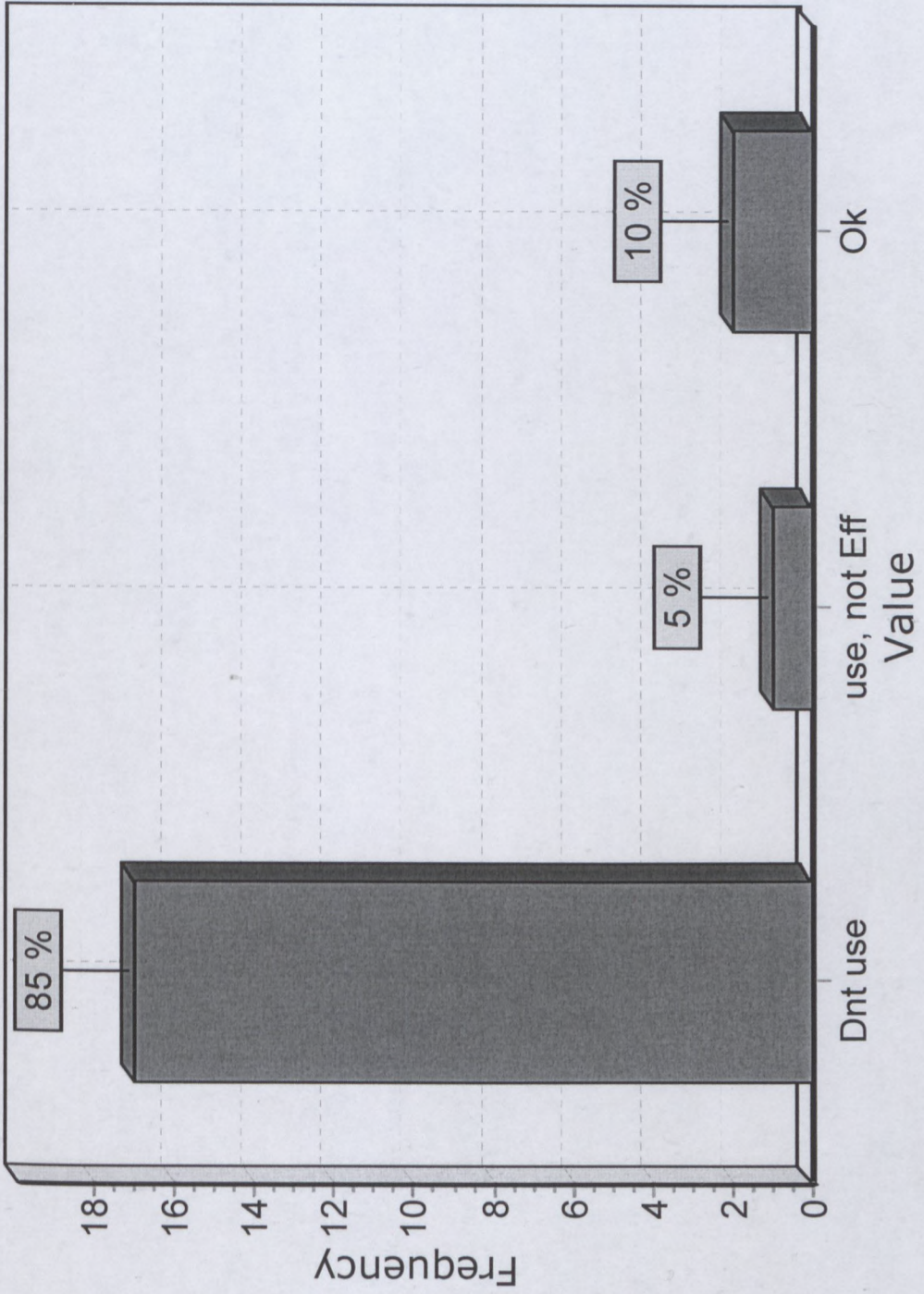
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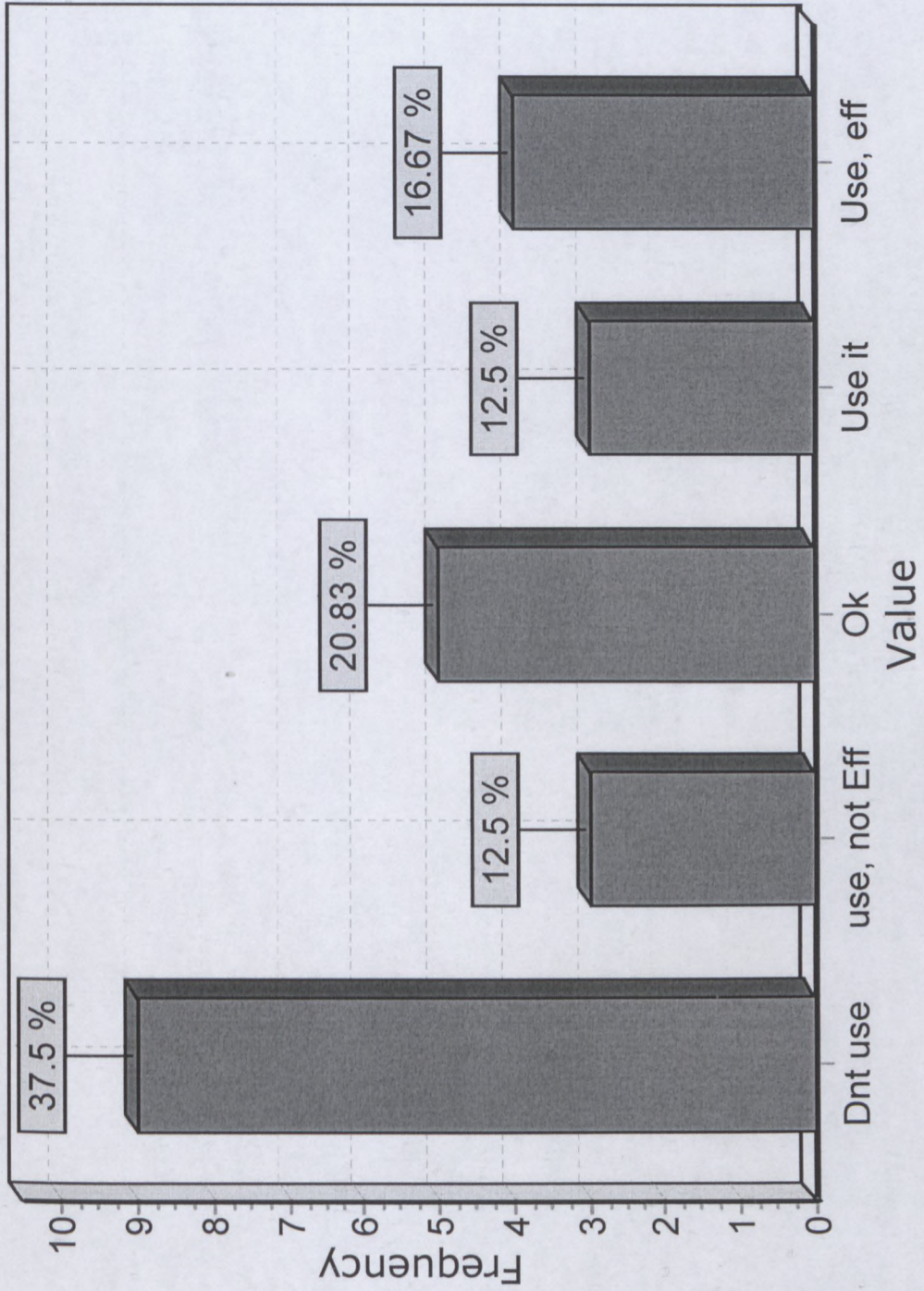
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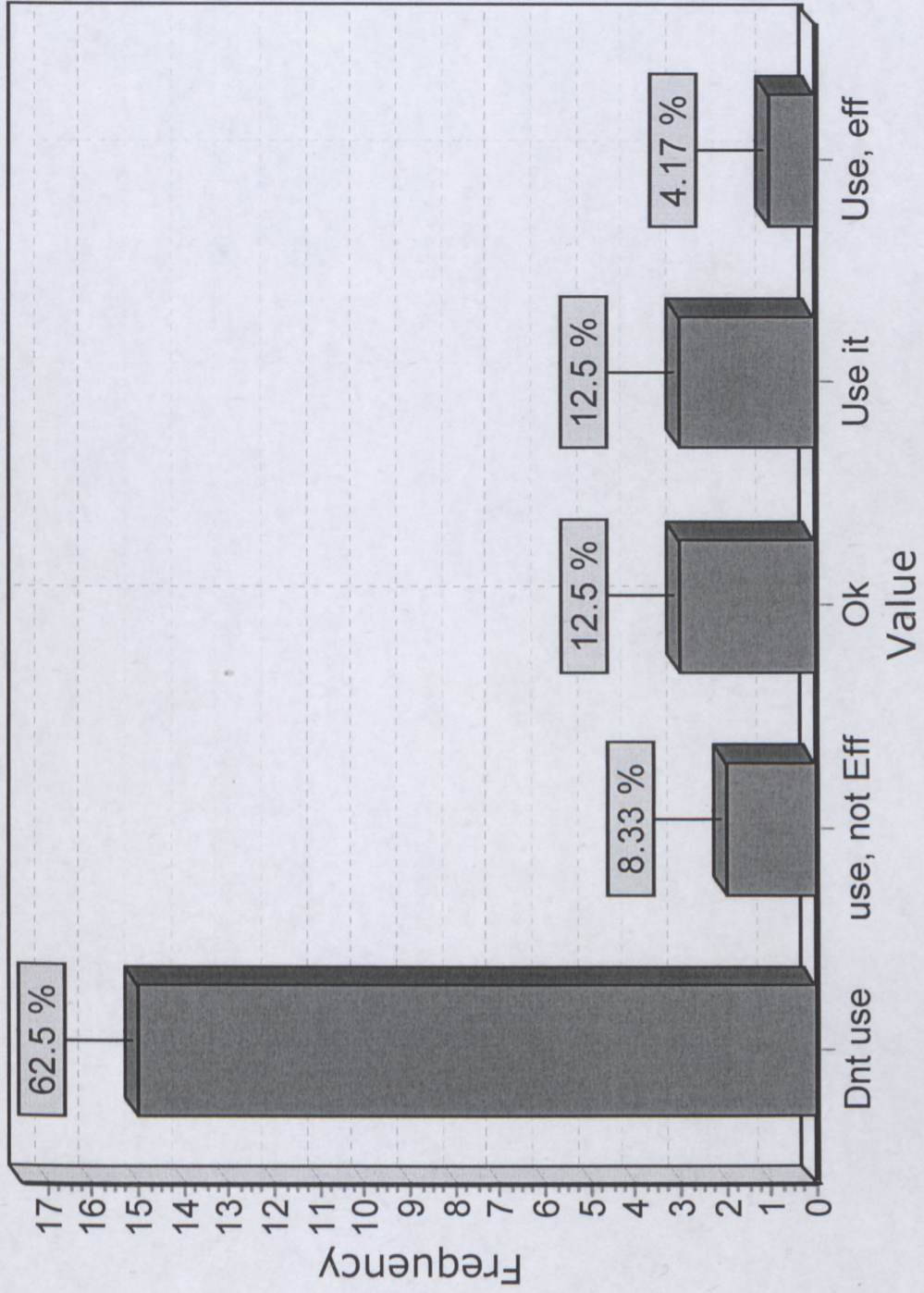
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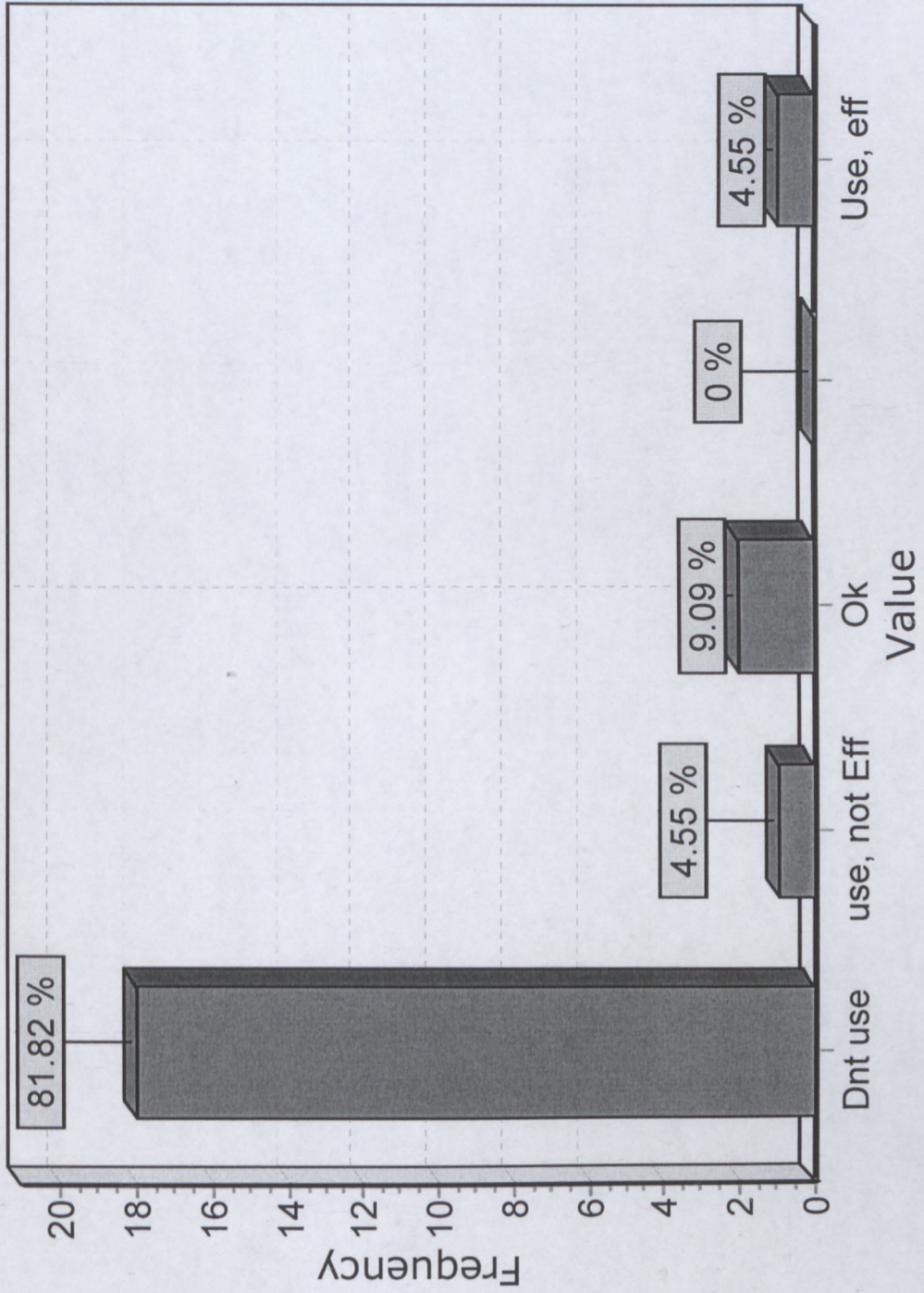
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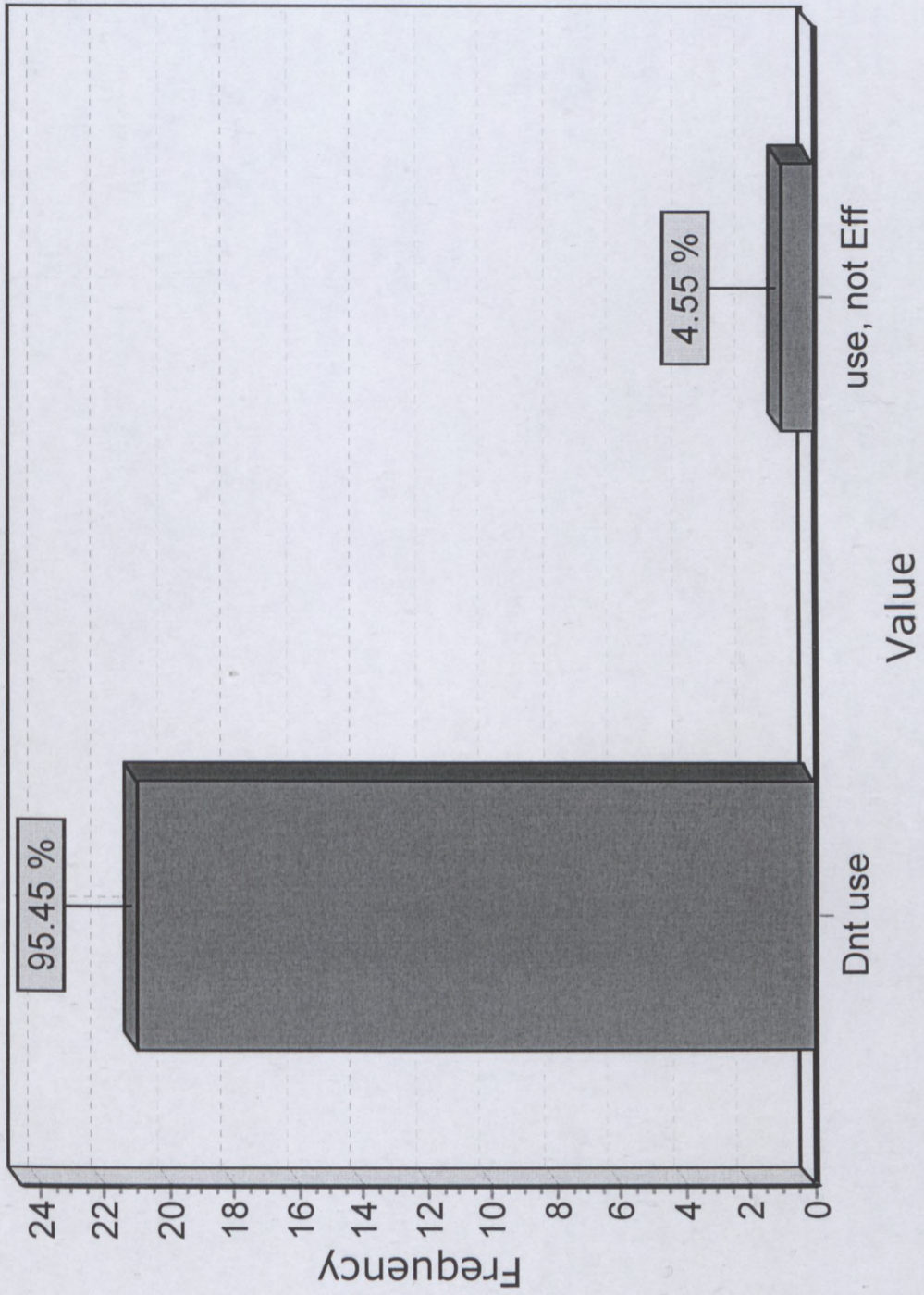
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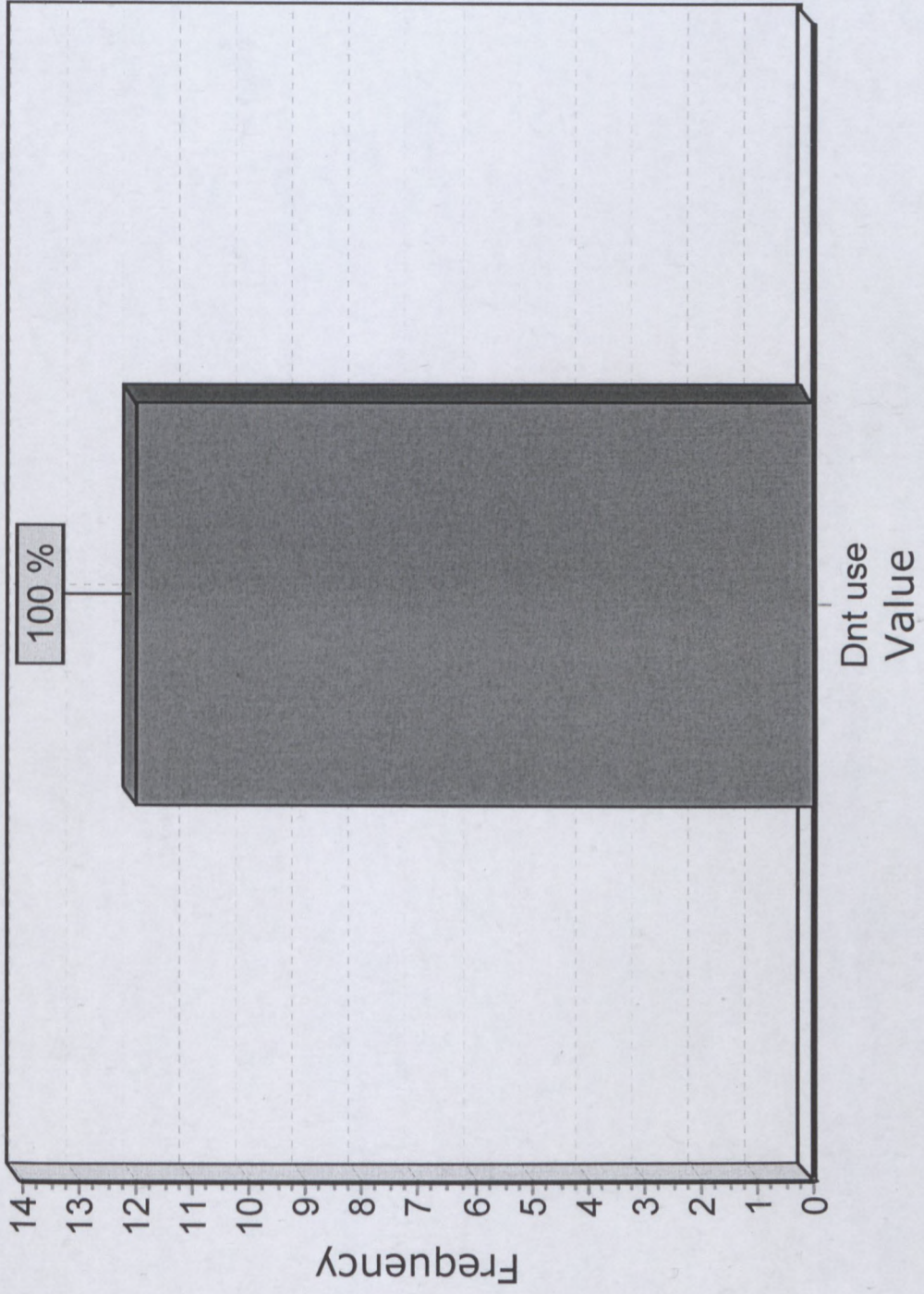
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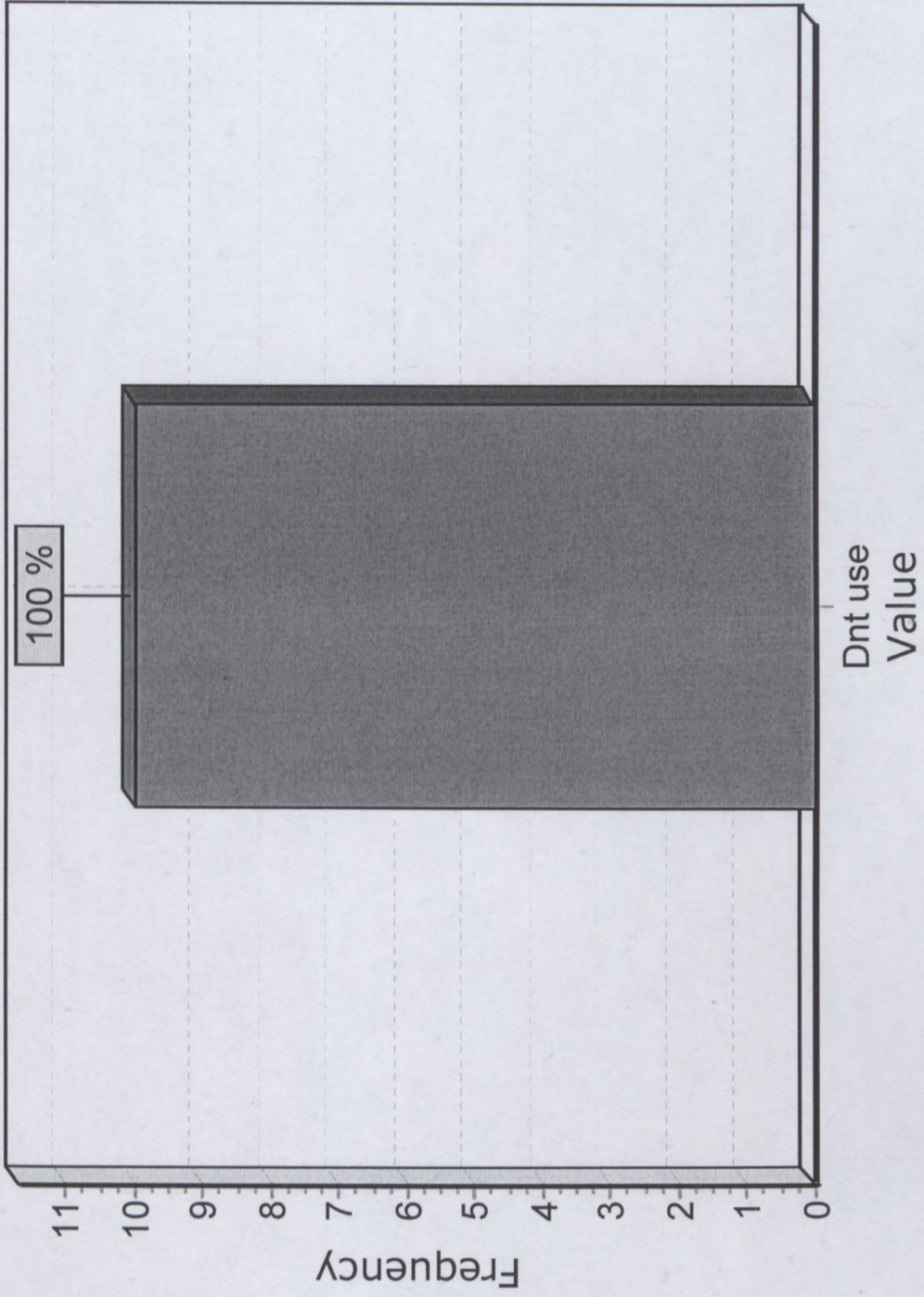
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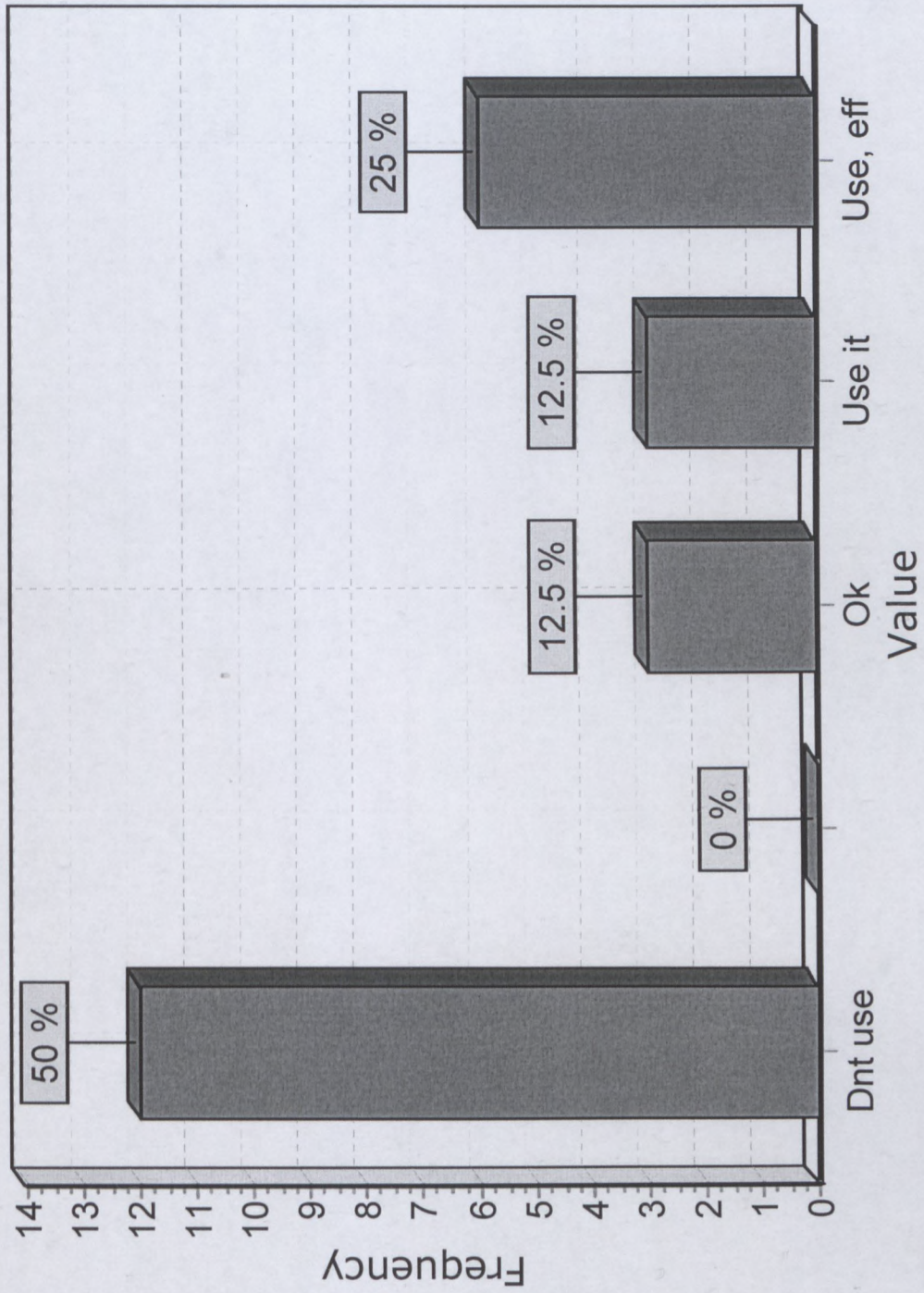
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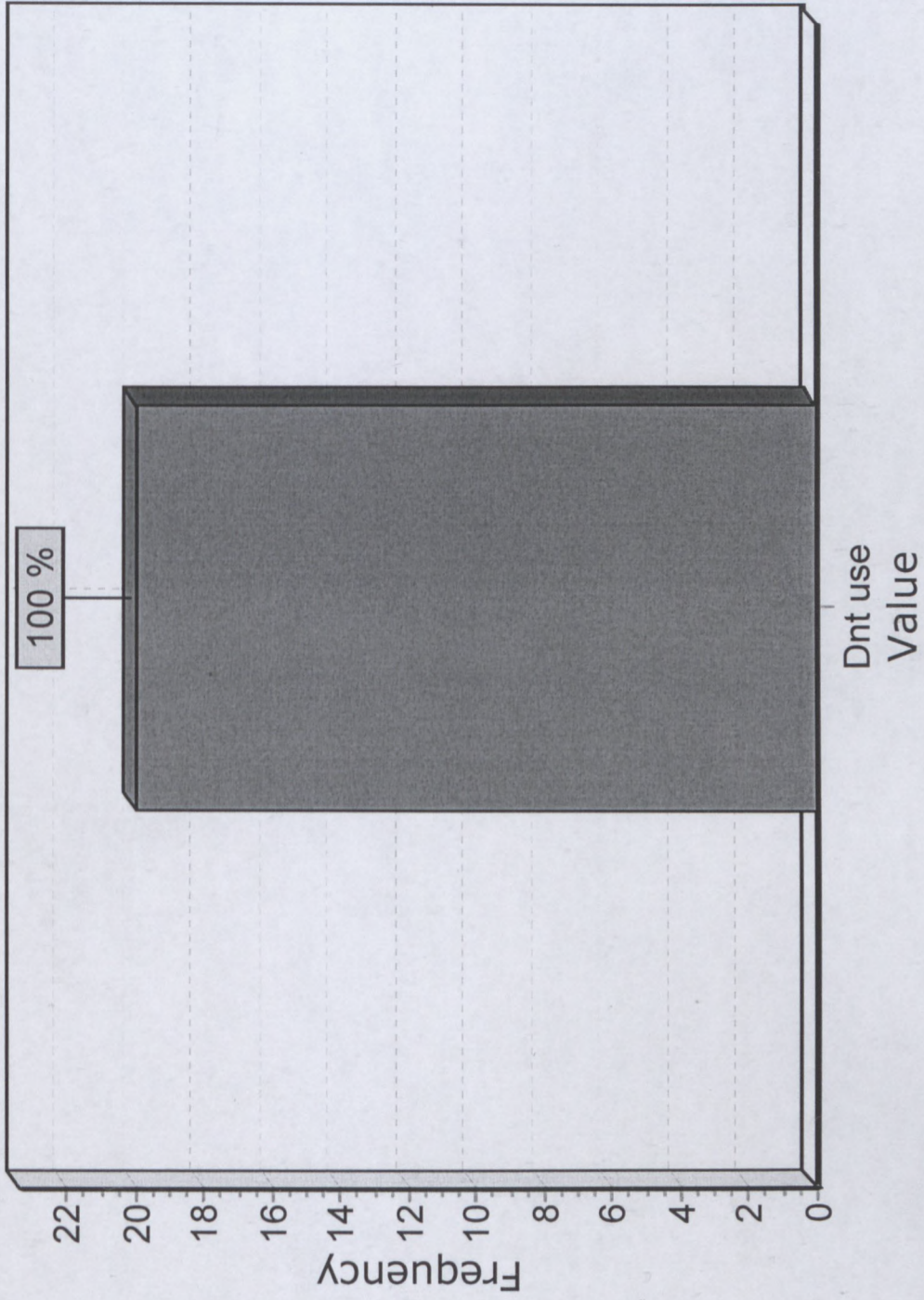
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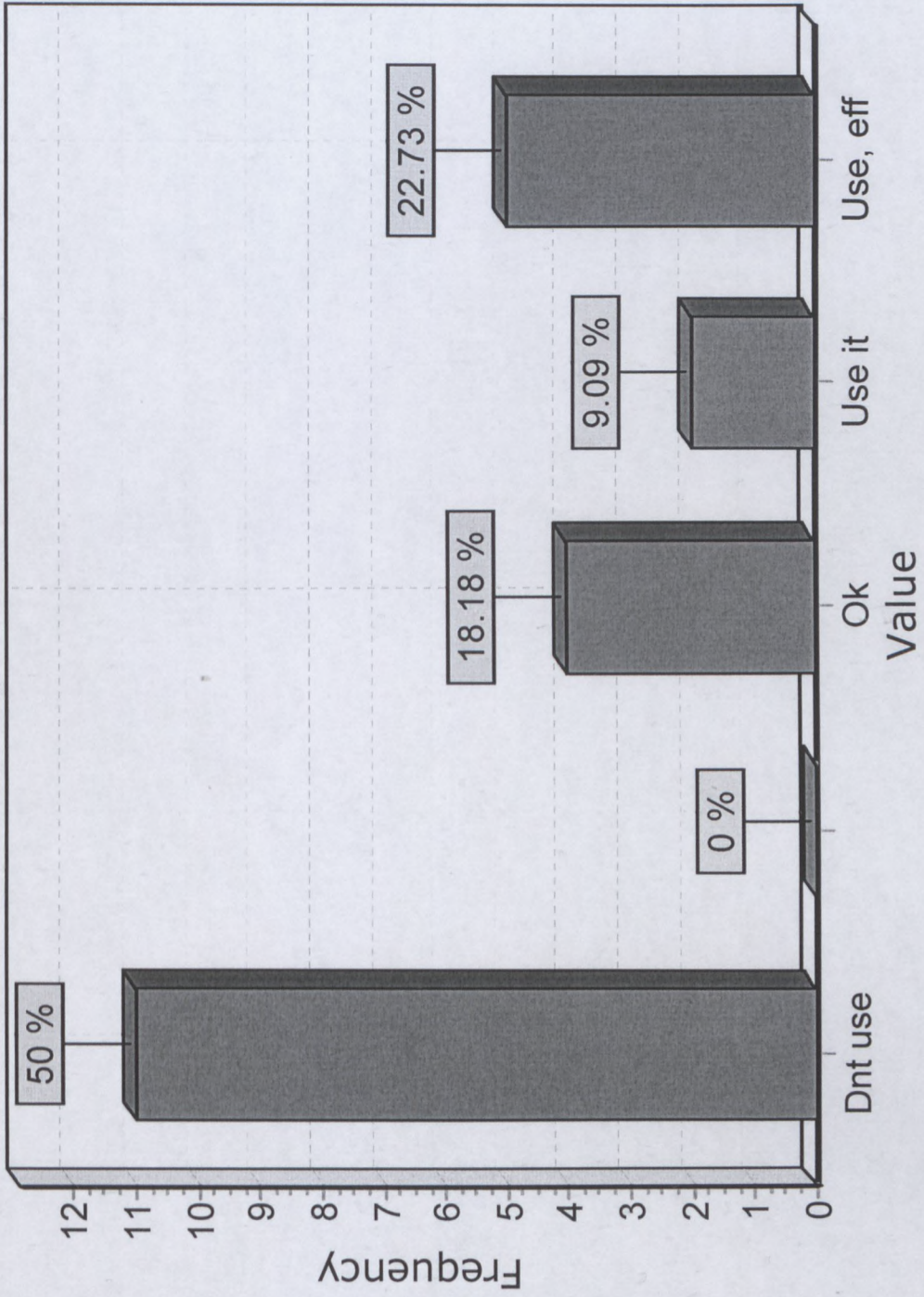
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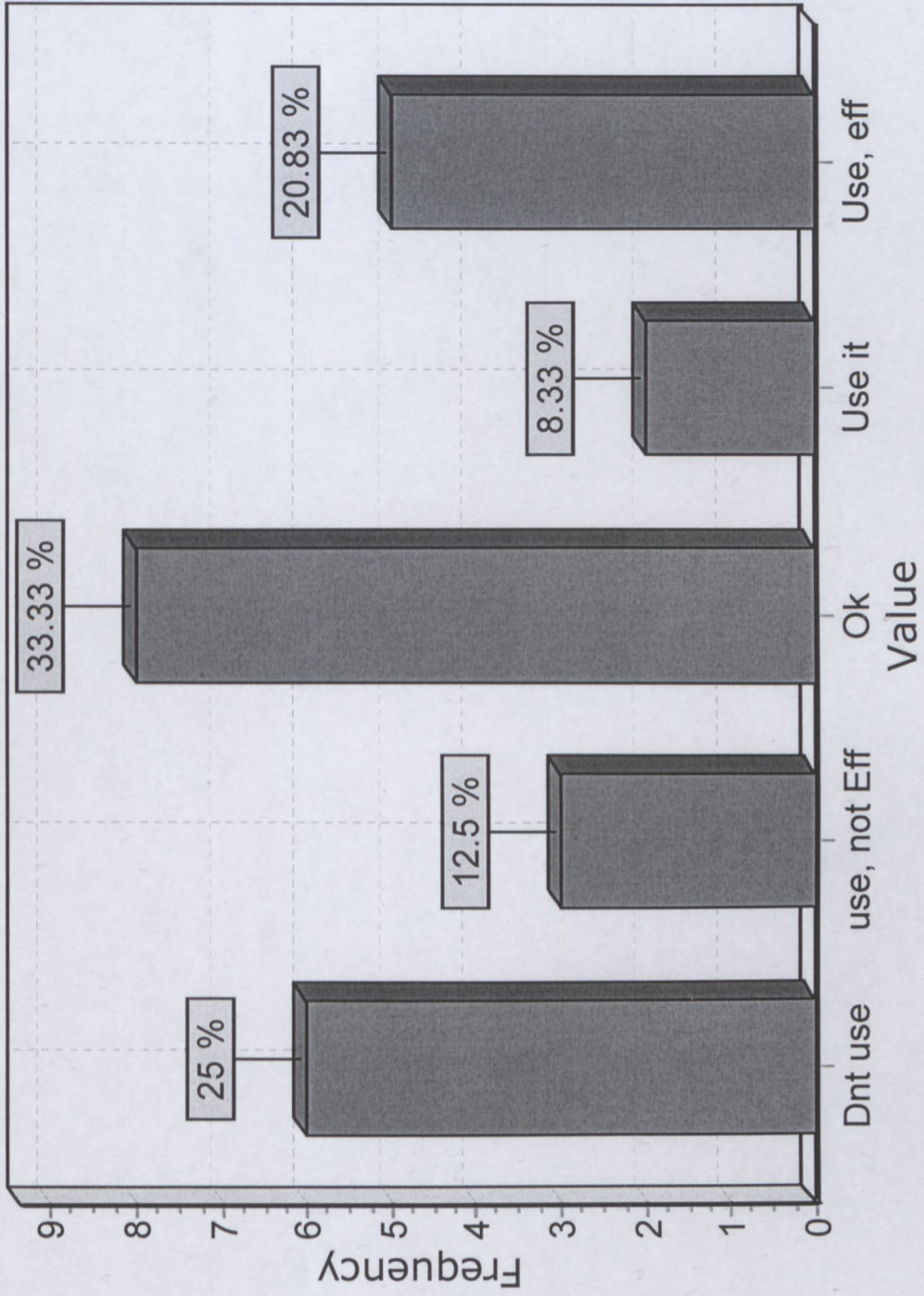
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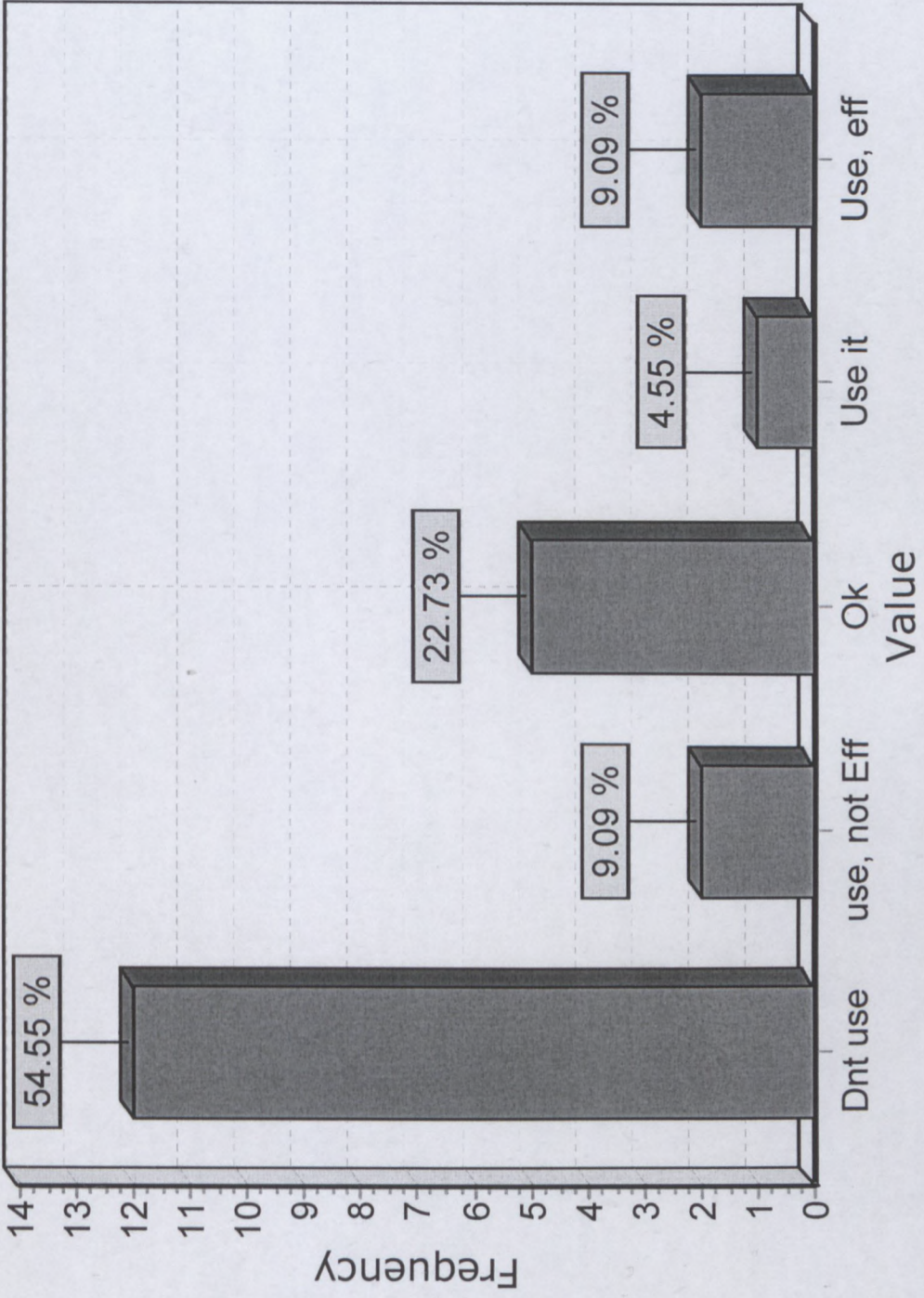
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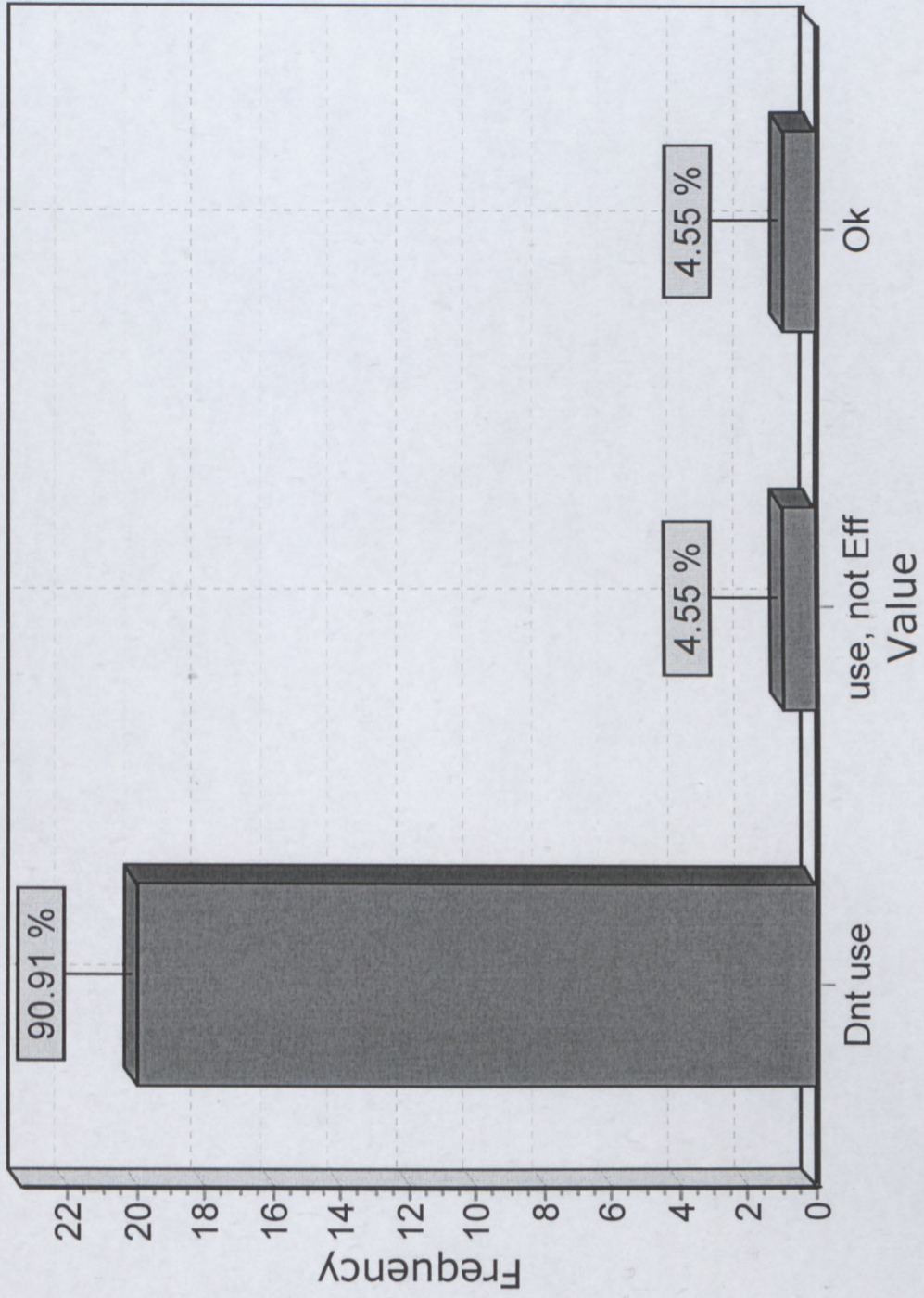
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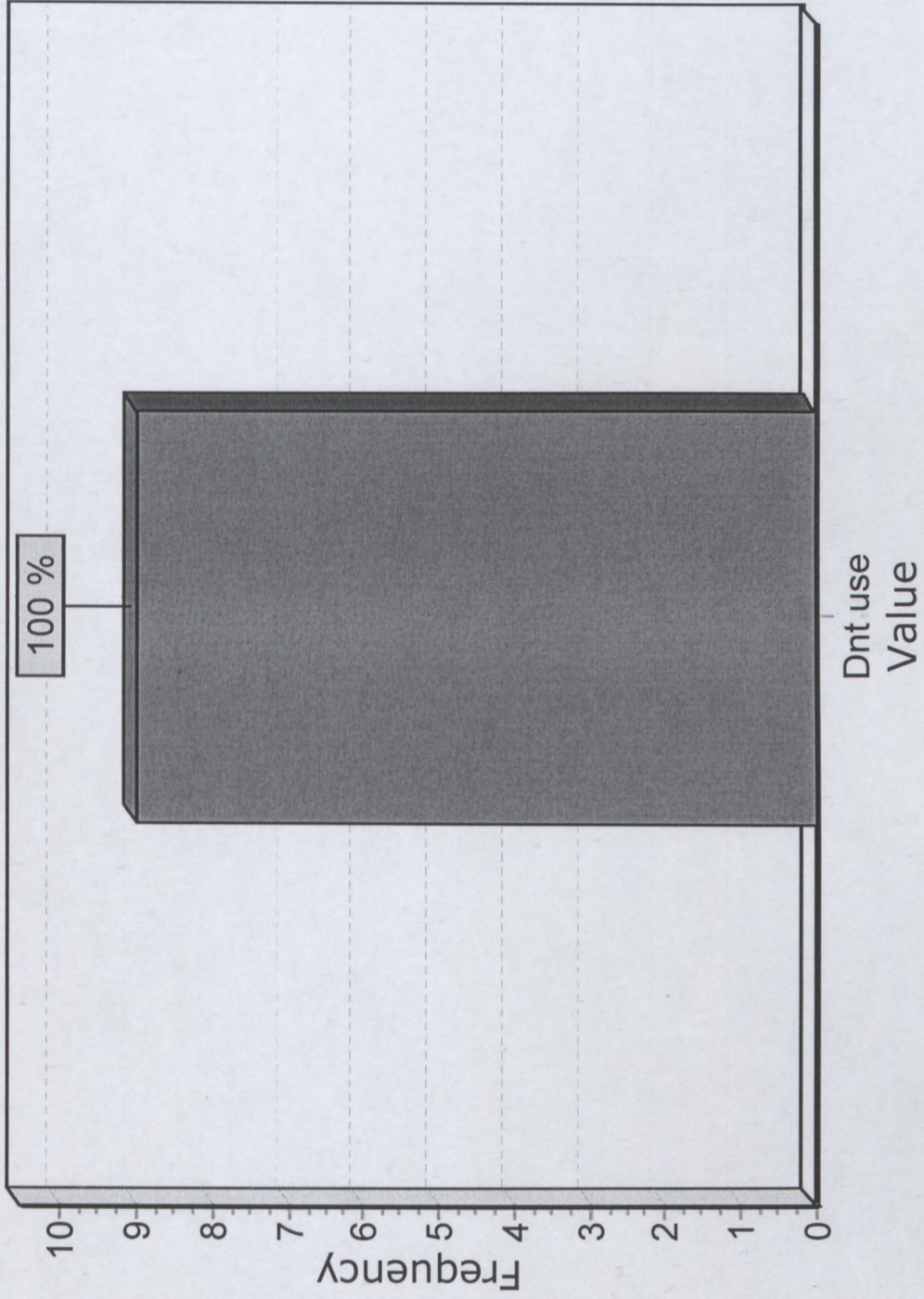
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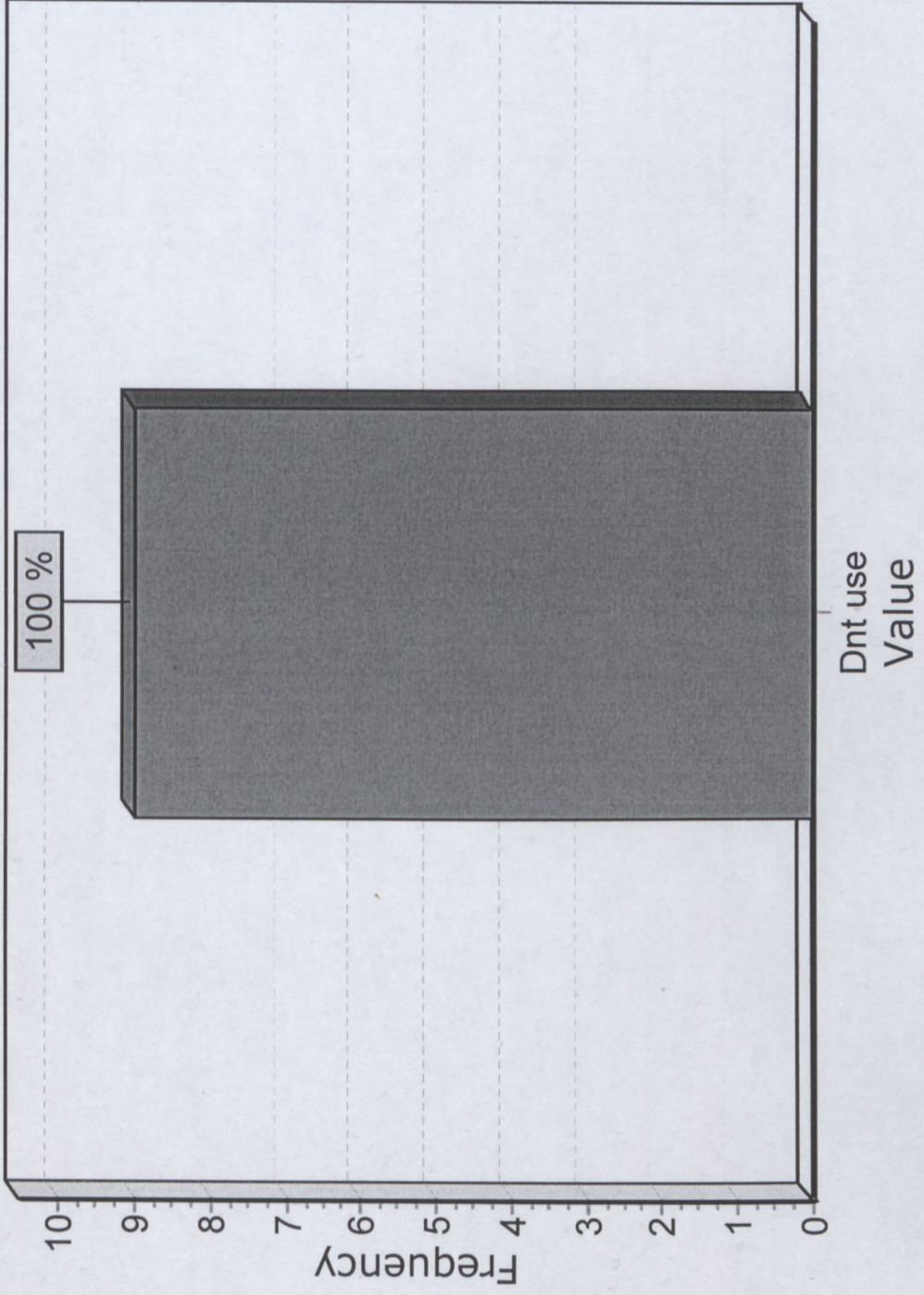
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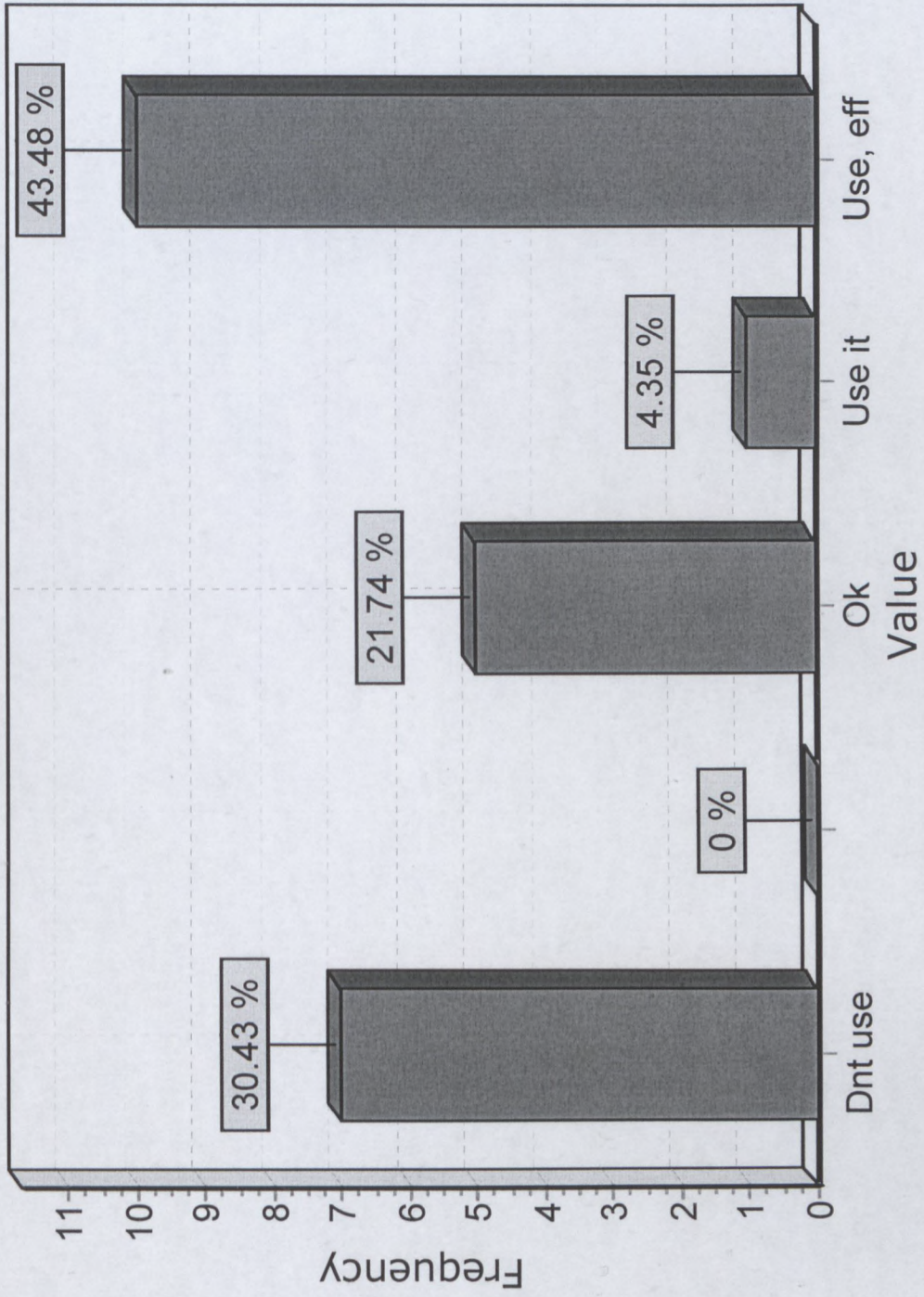
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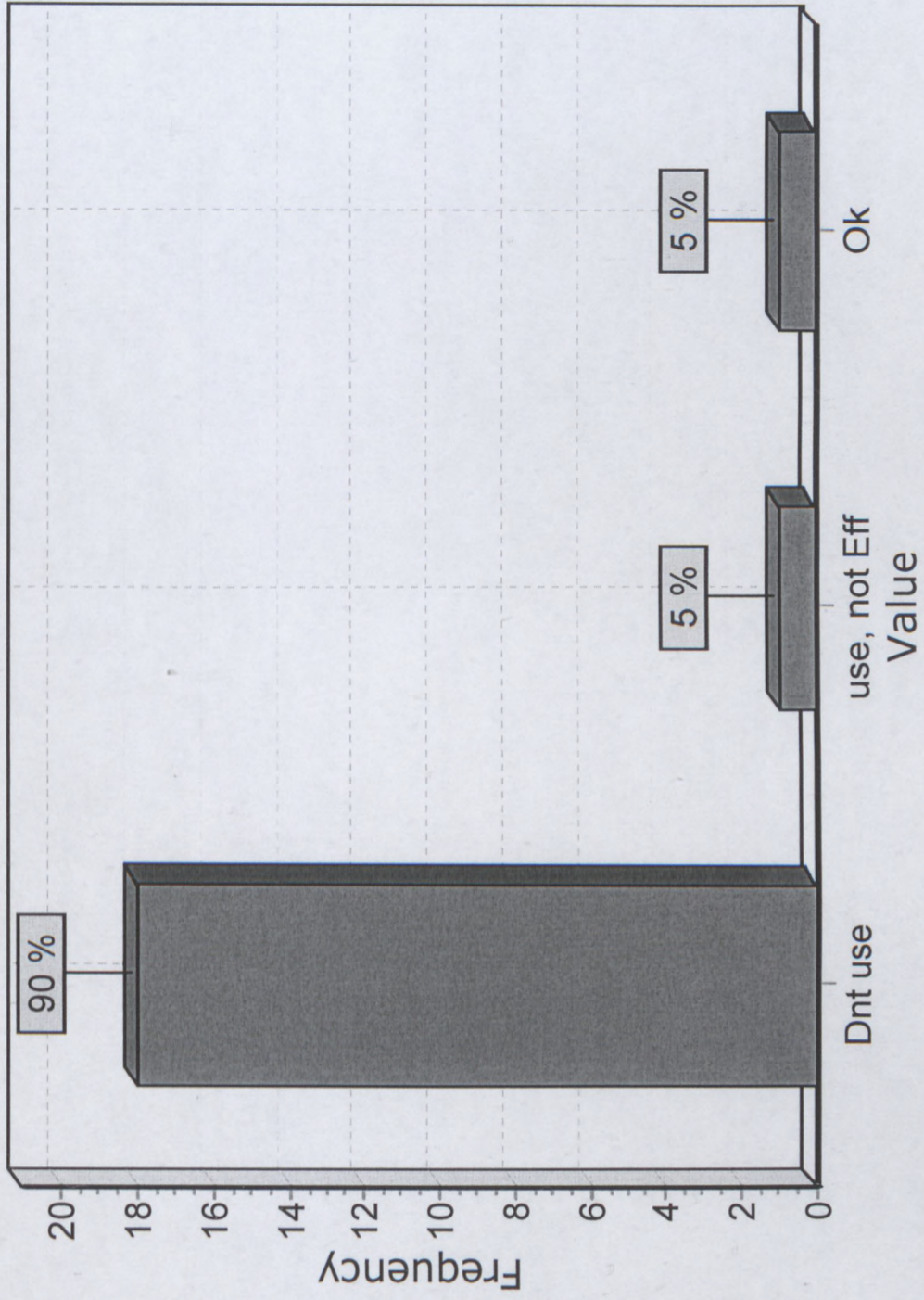
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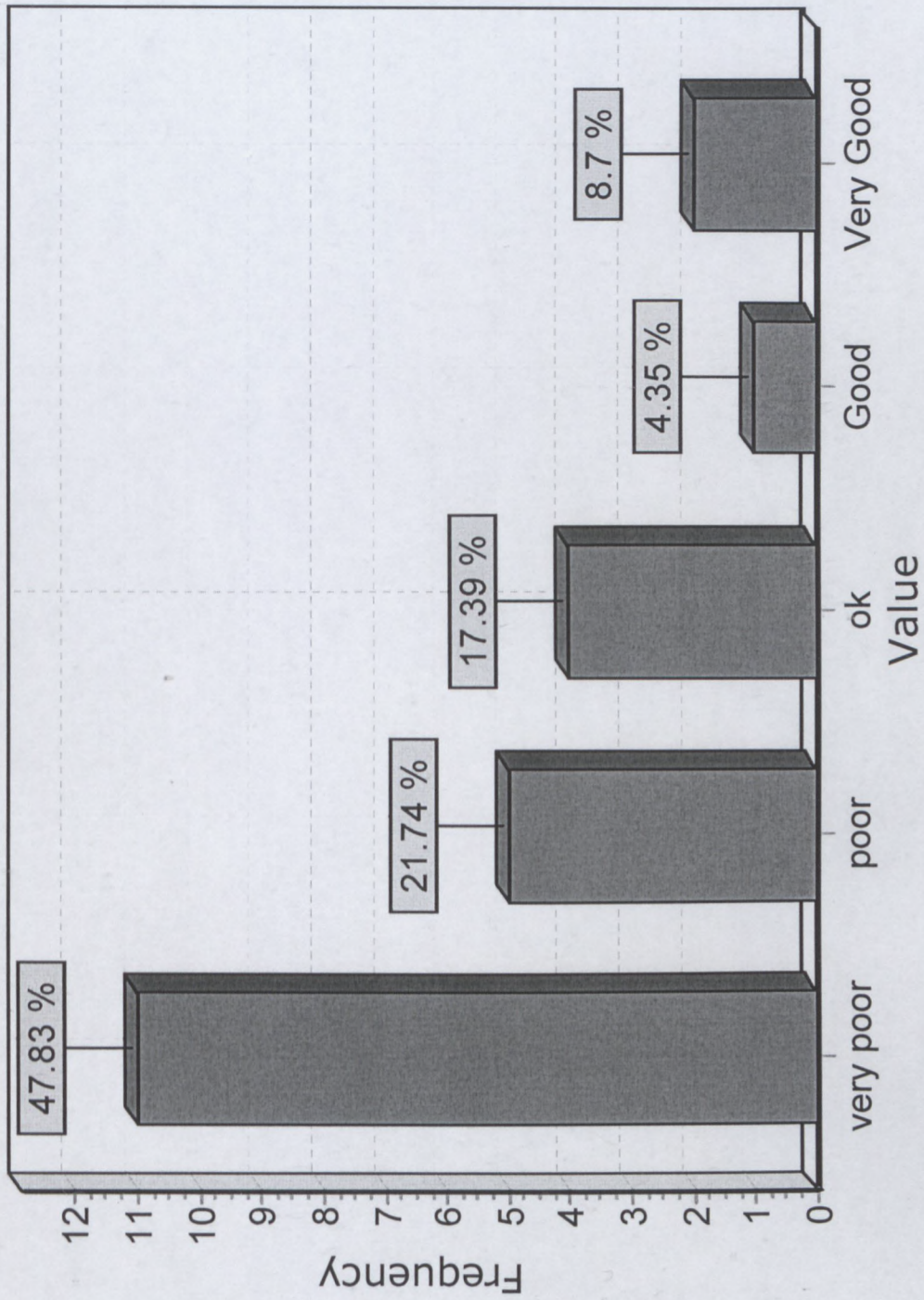
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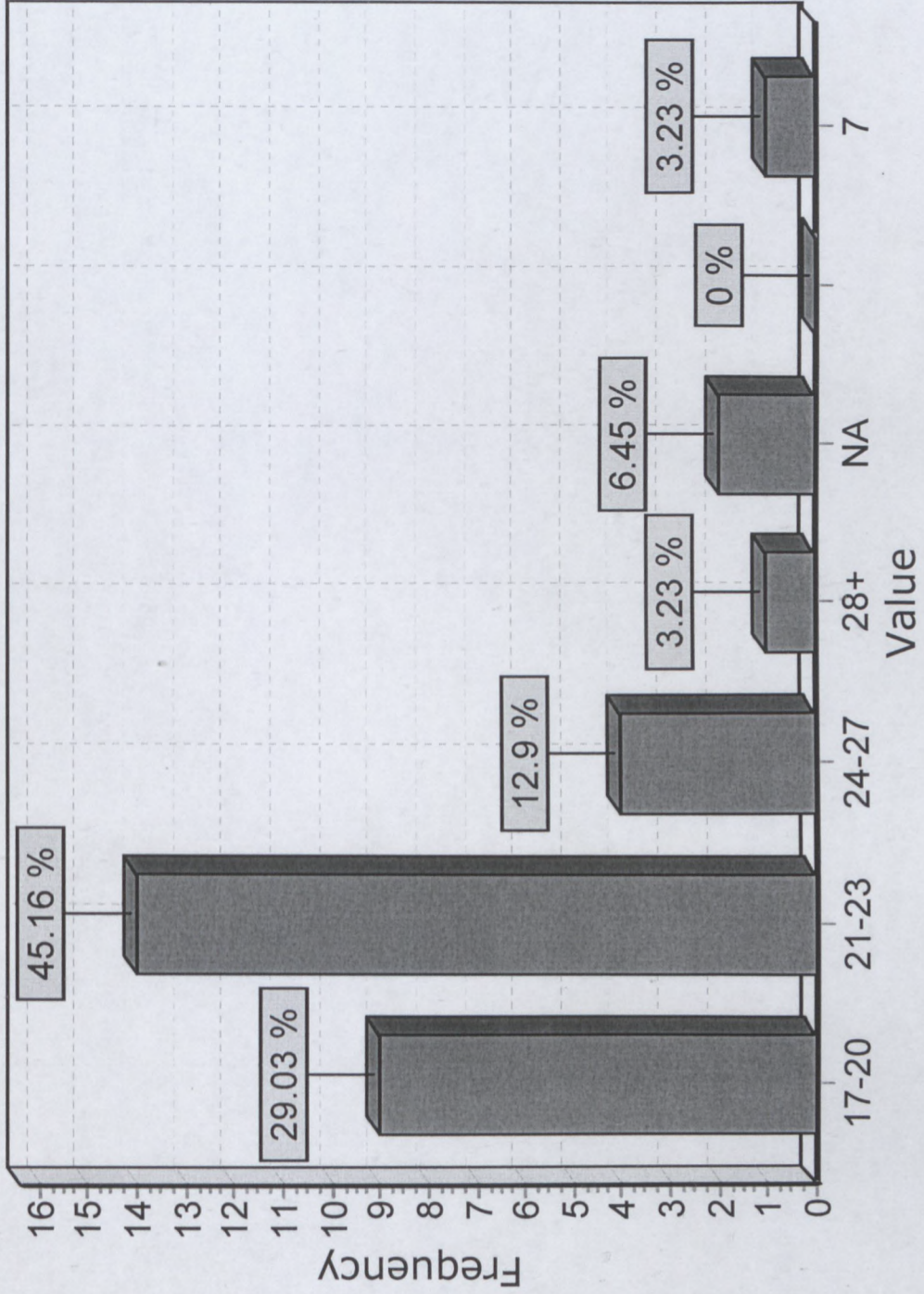


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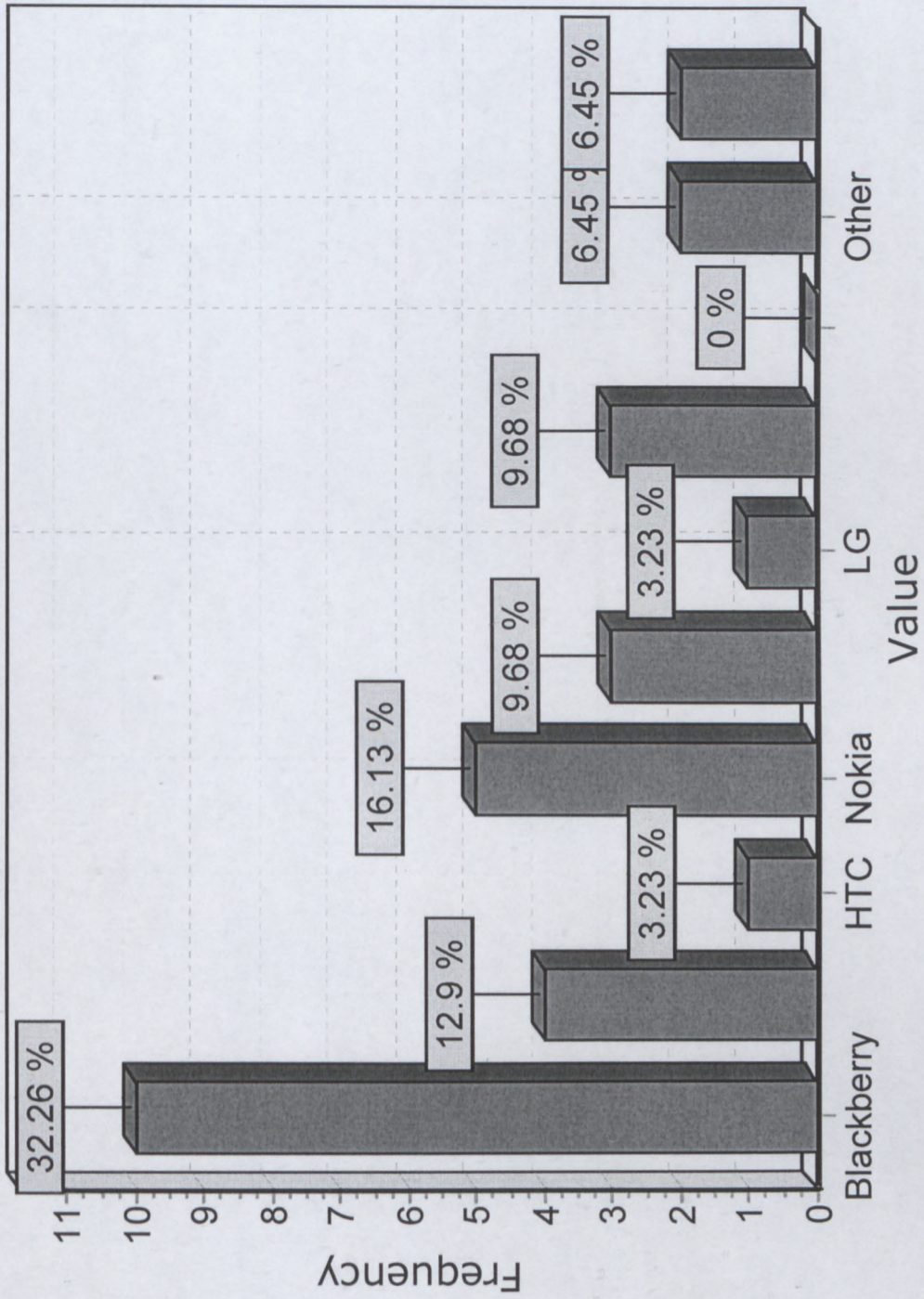


7.3.2 Public Relations Results

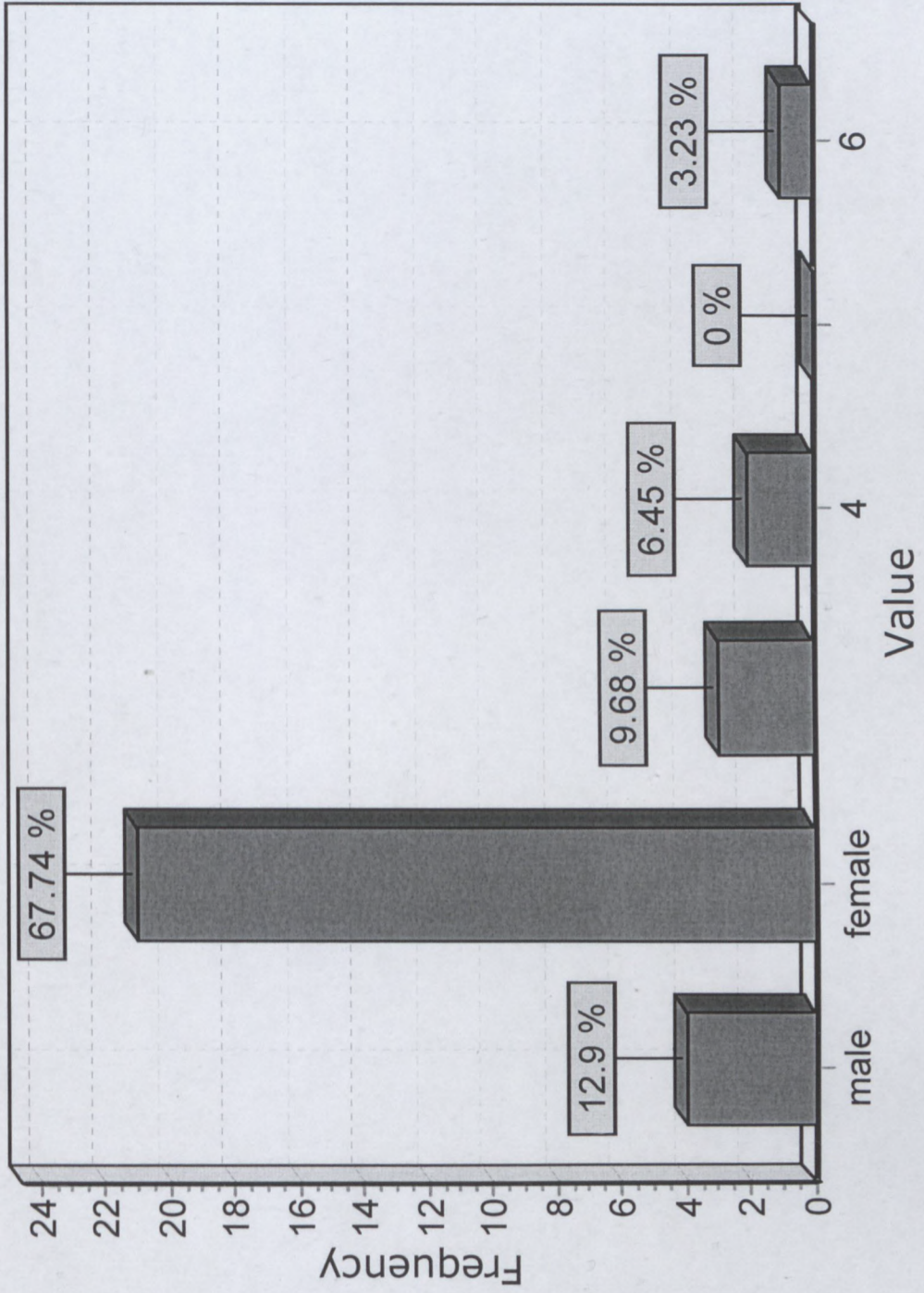
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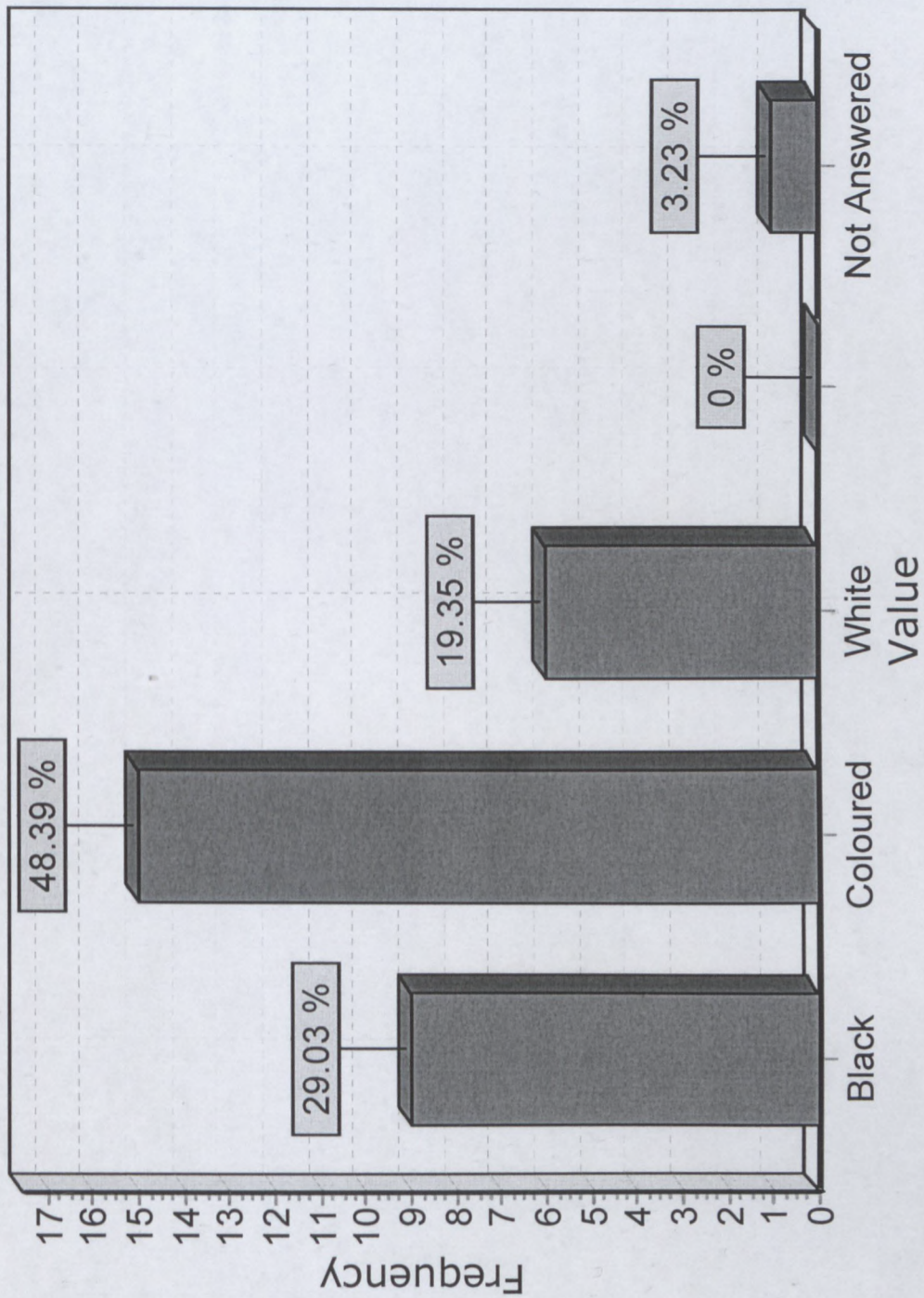
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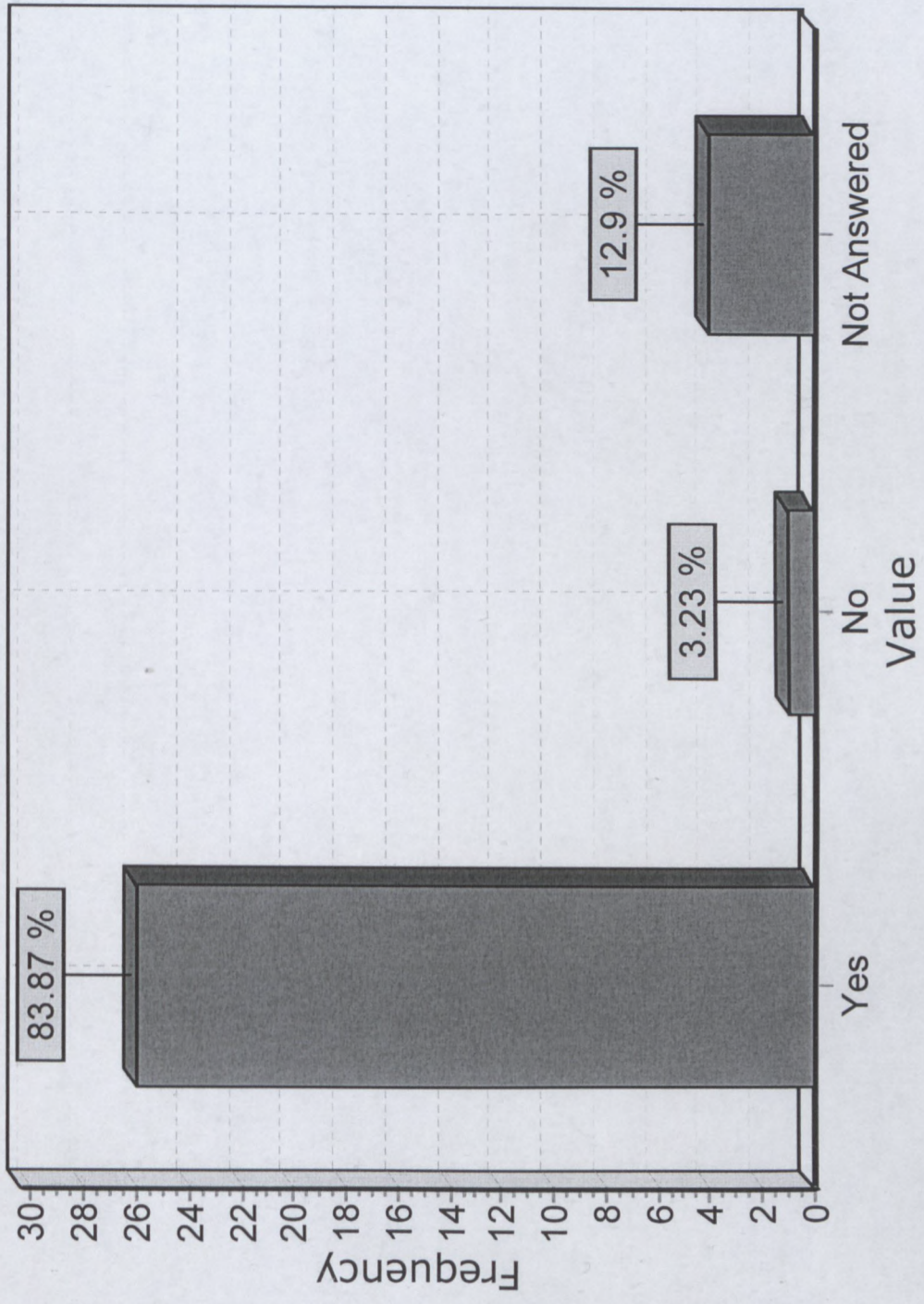
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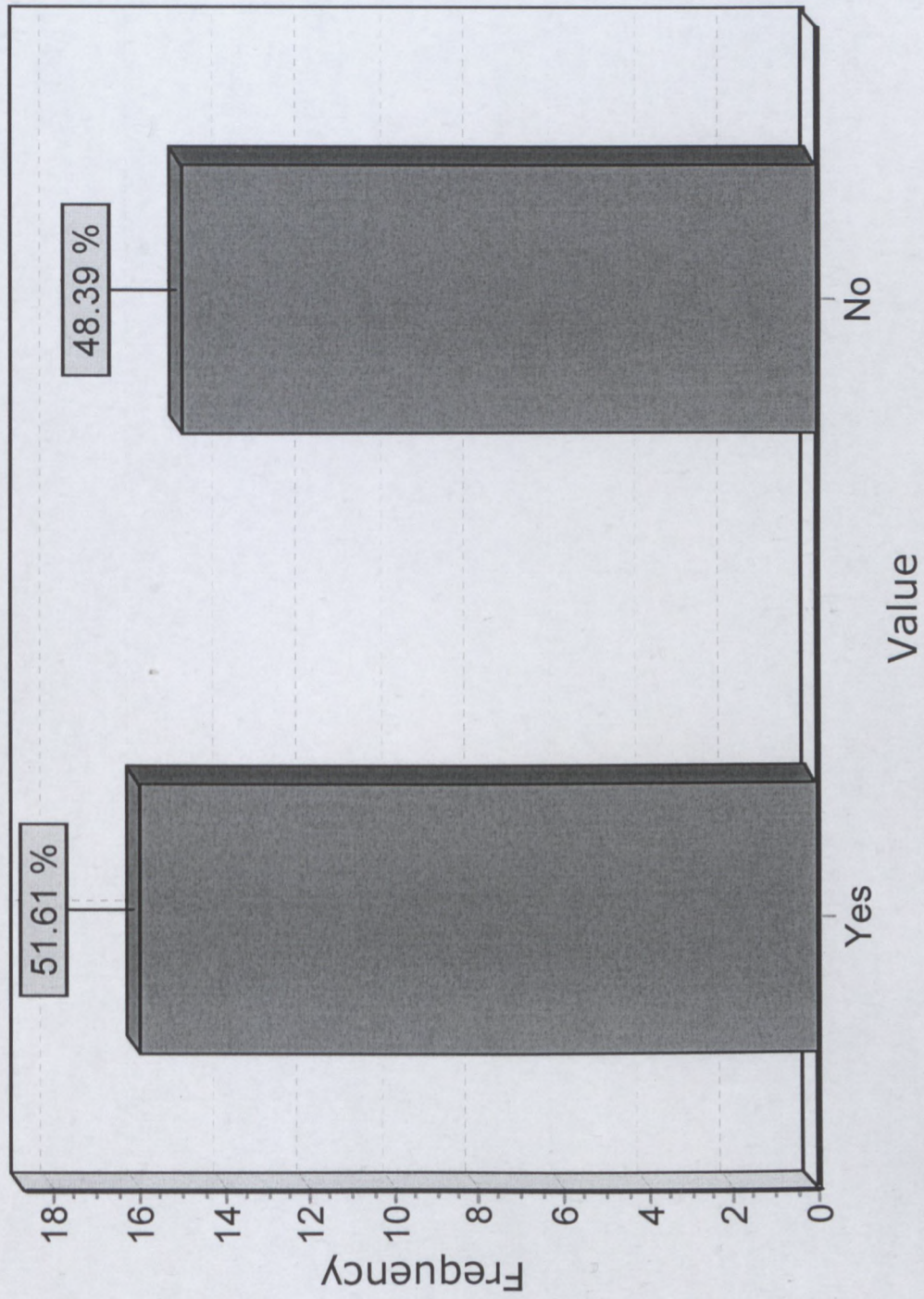
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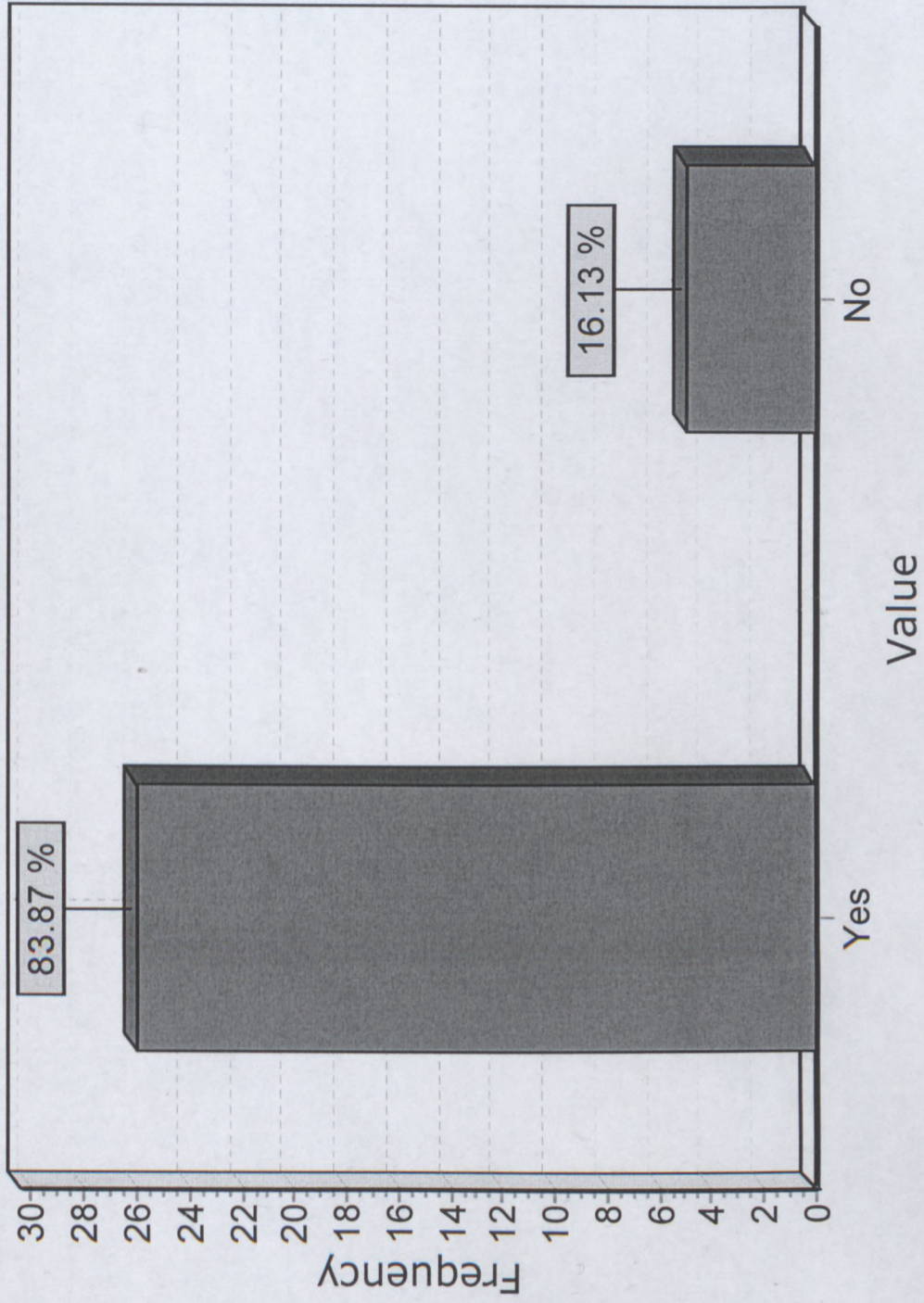
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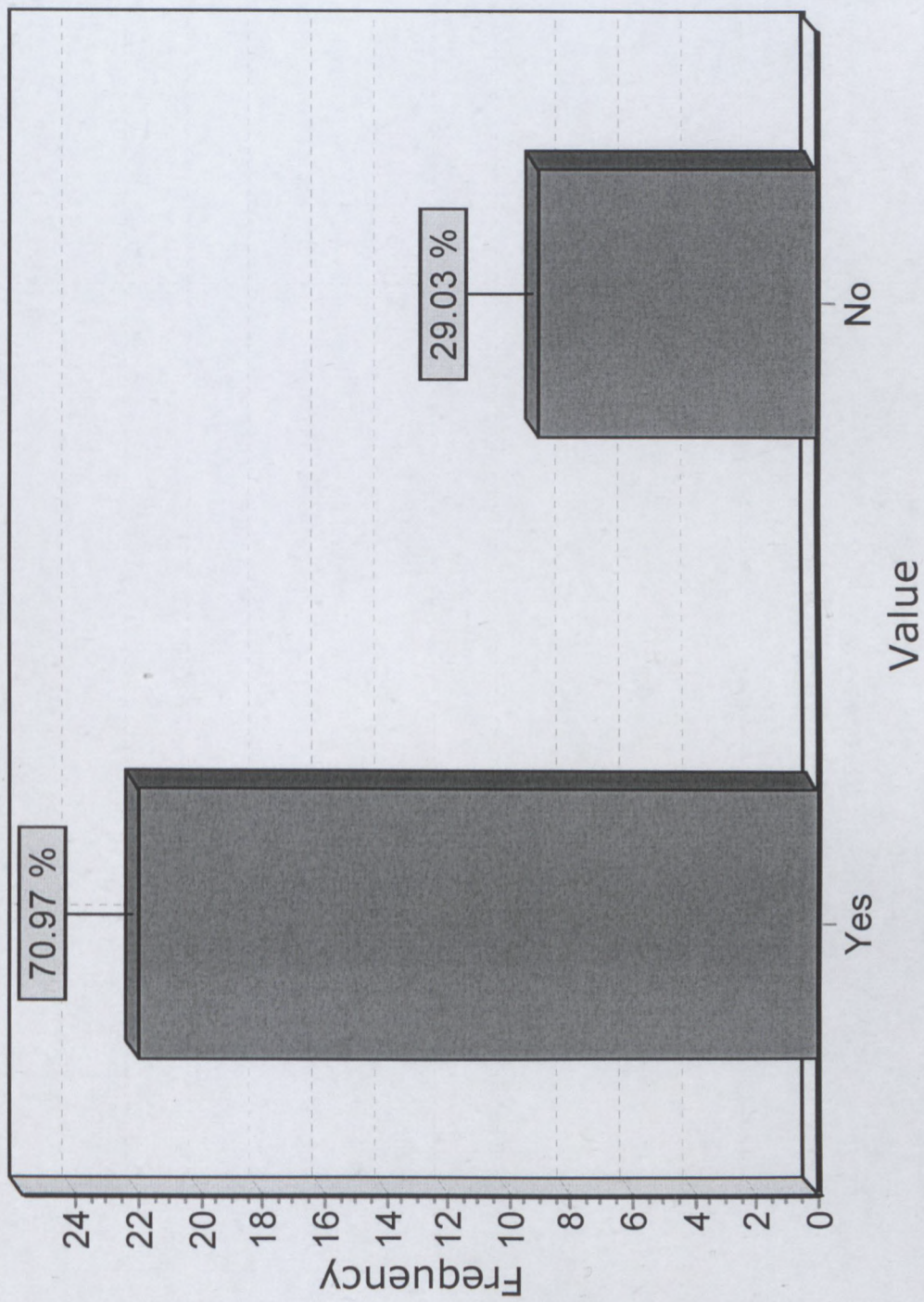
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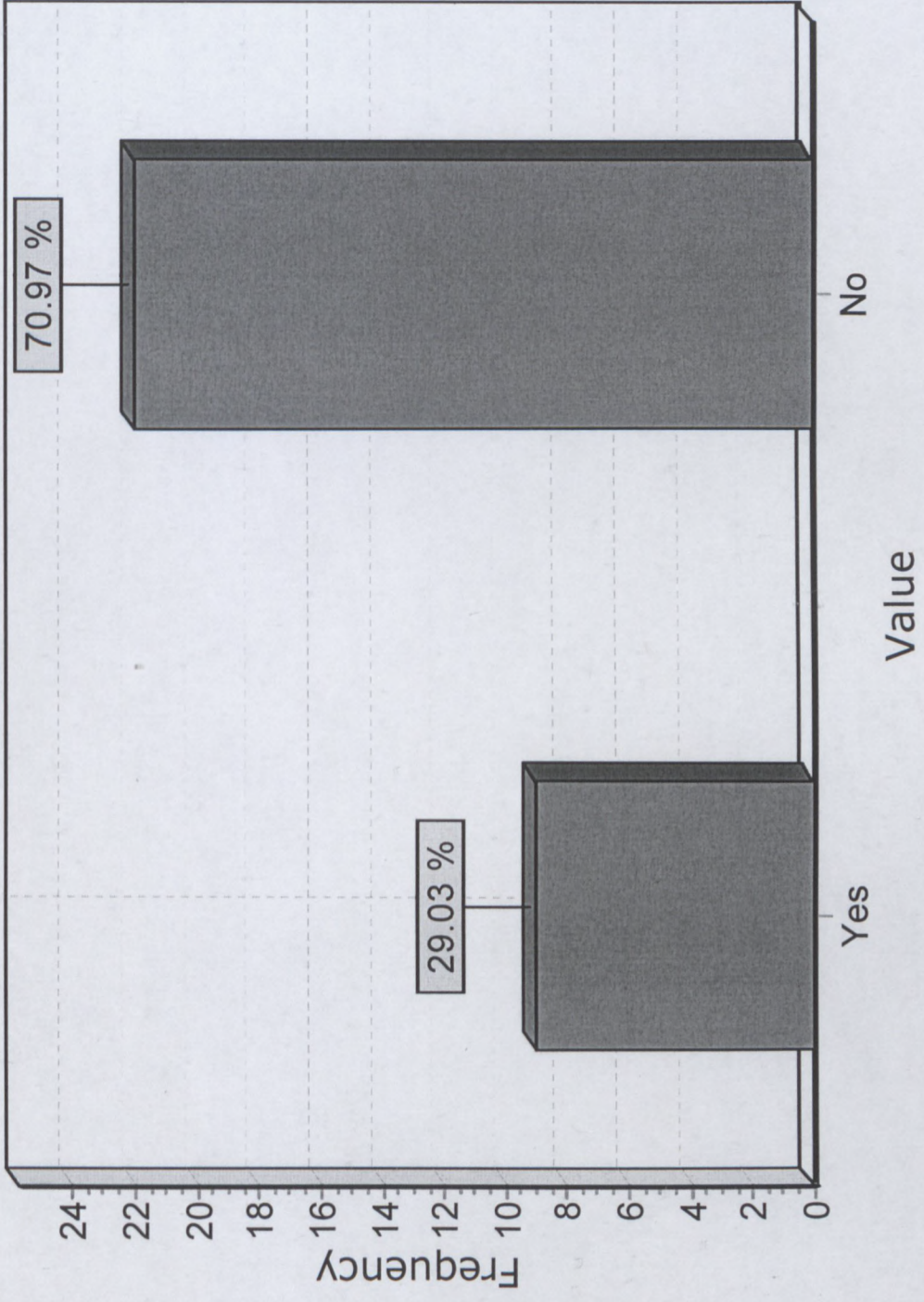
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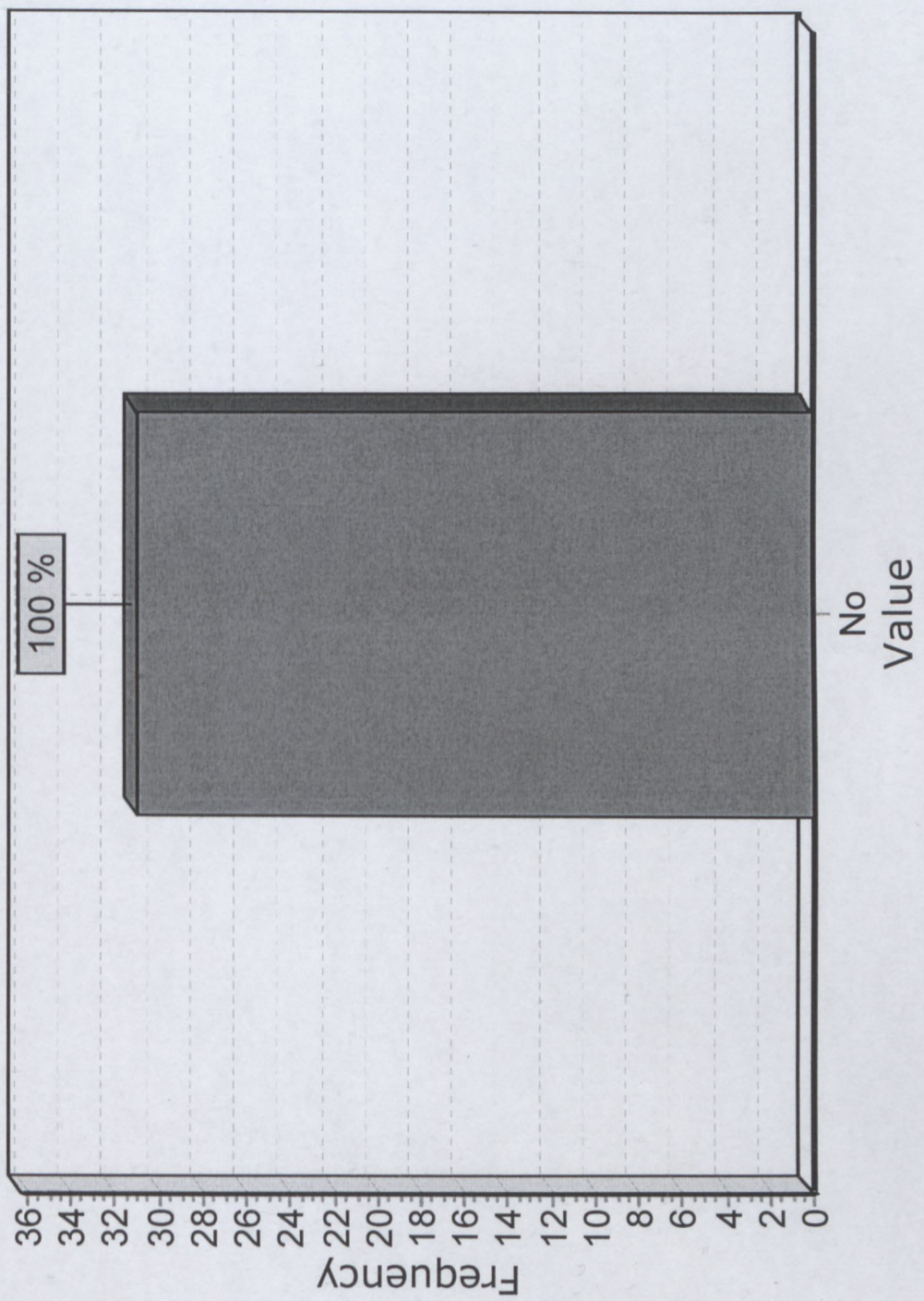
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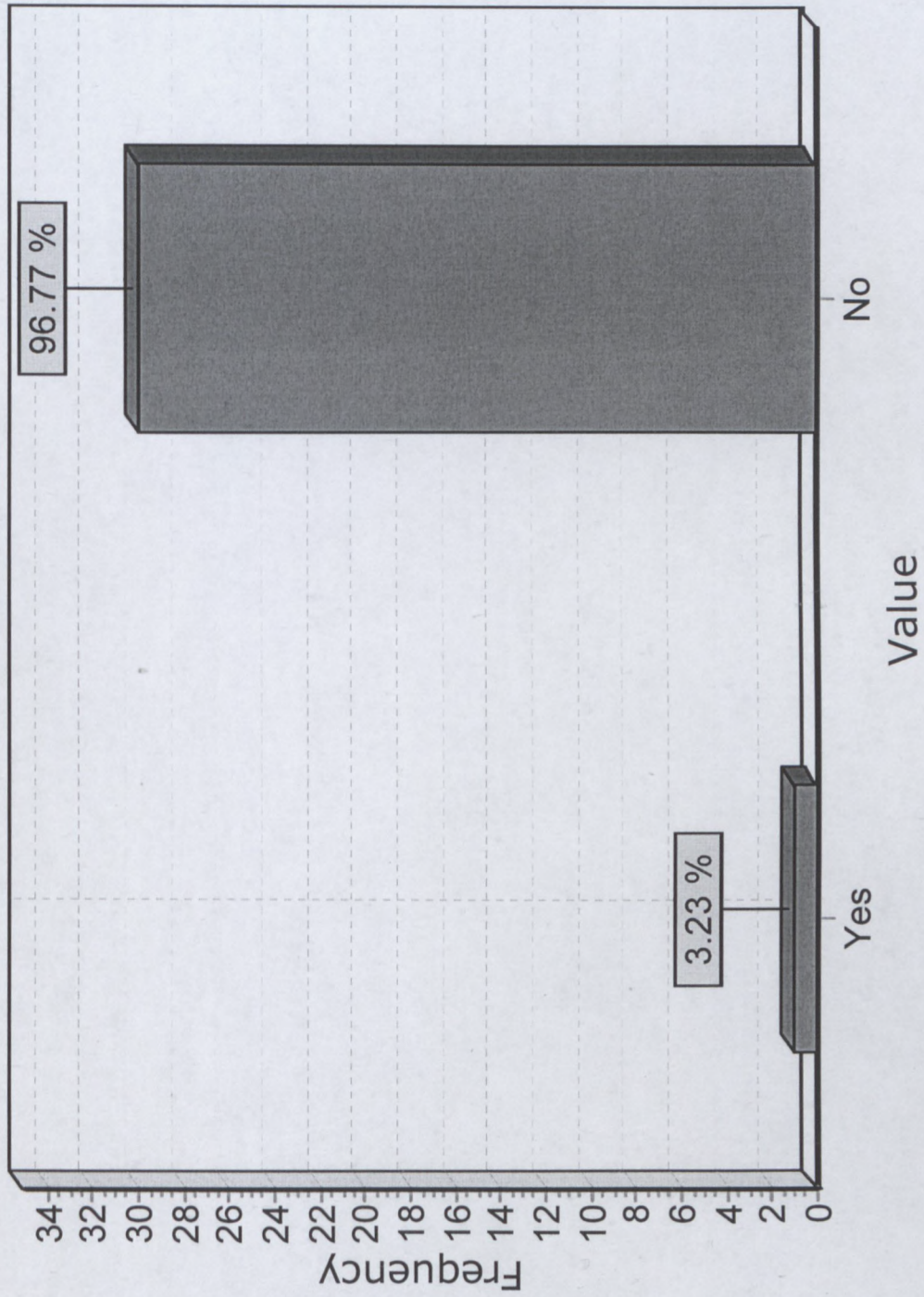
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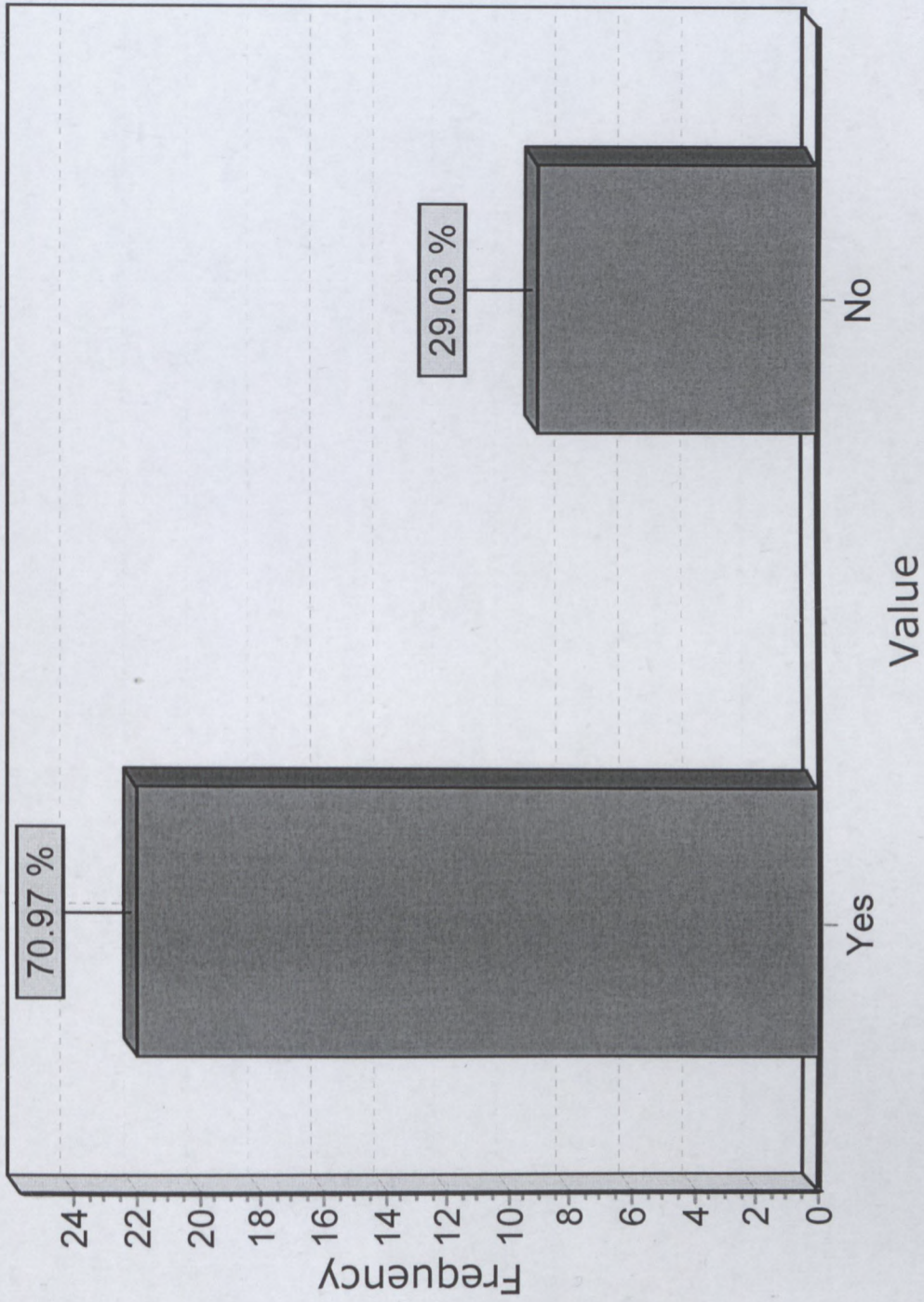
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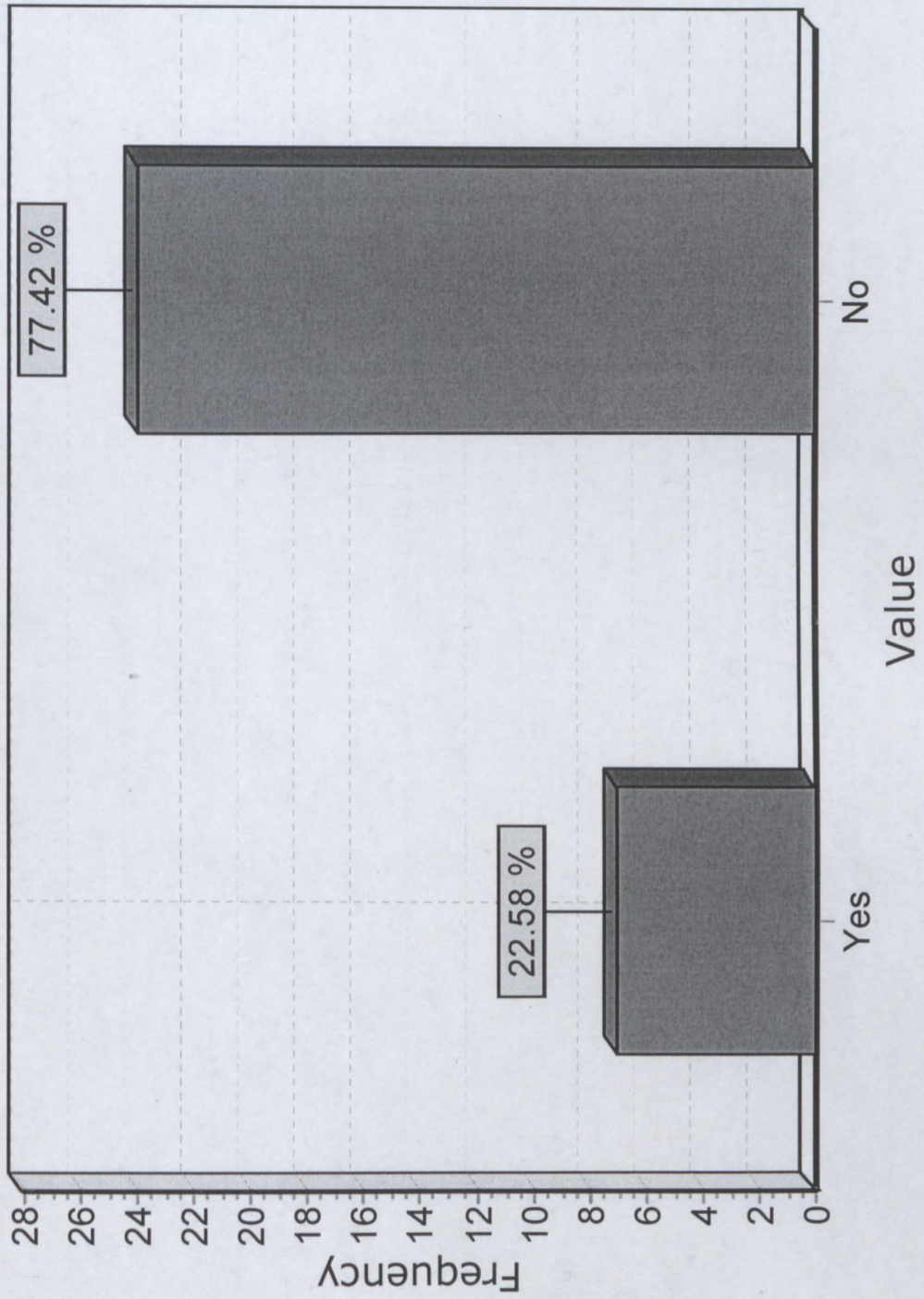
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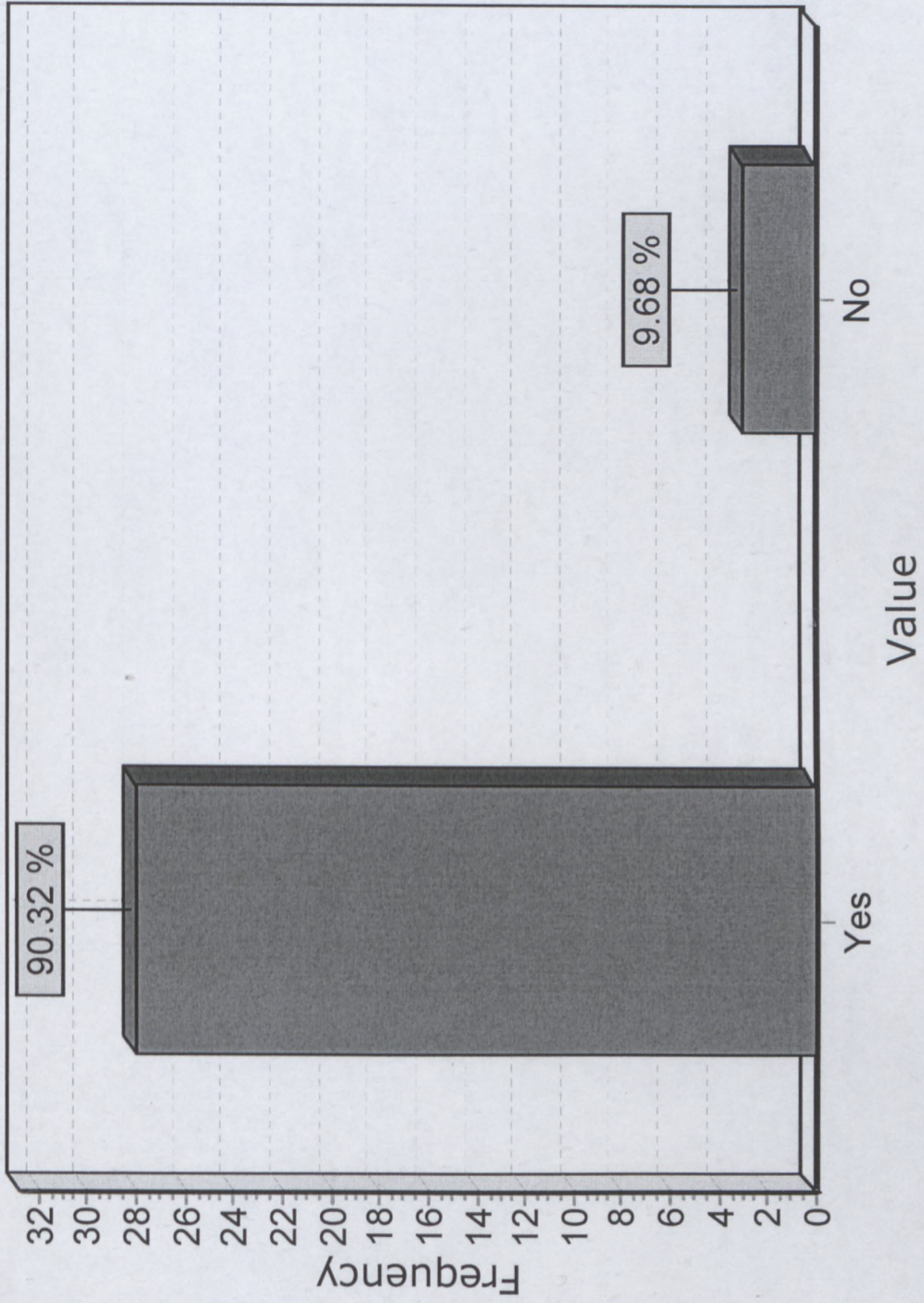
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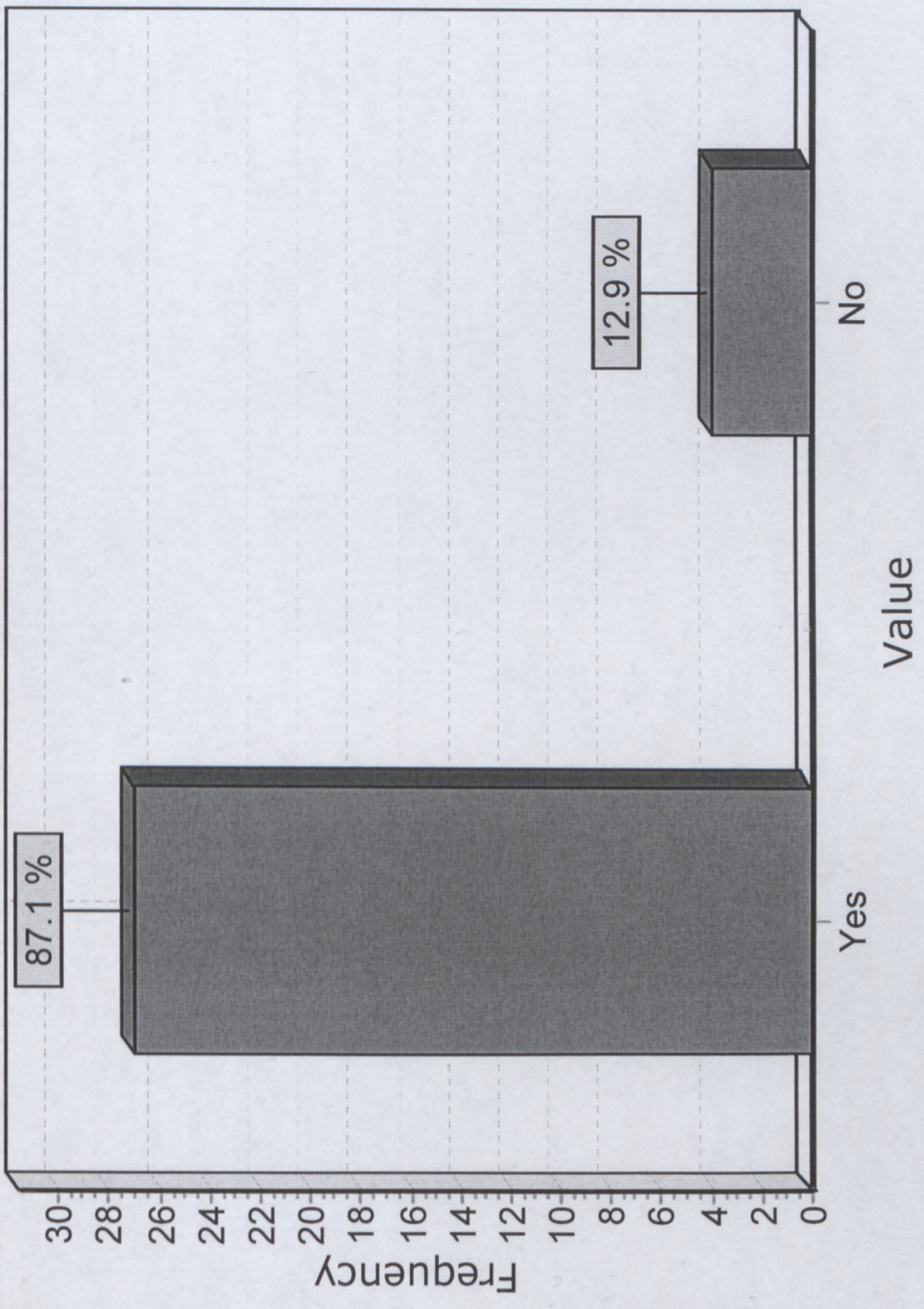
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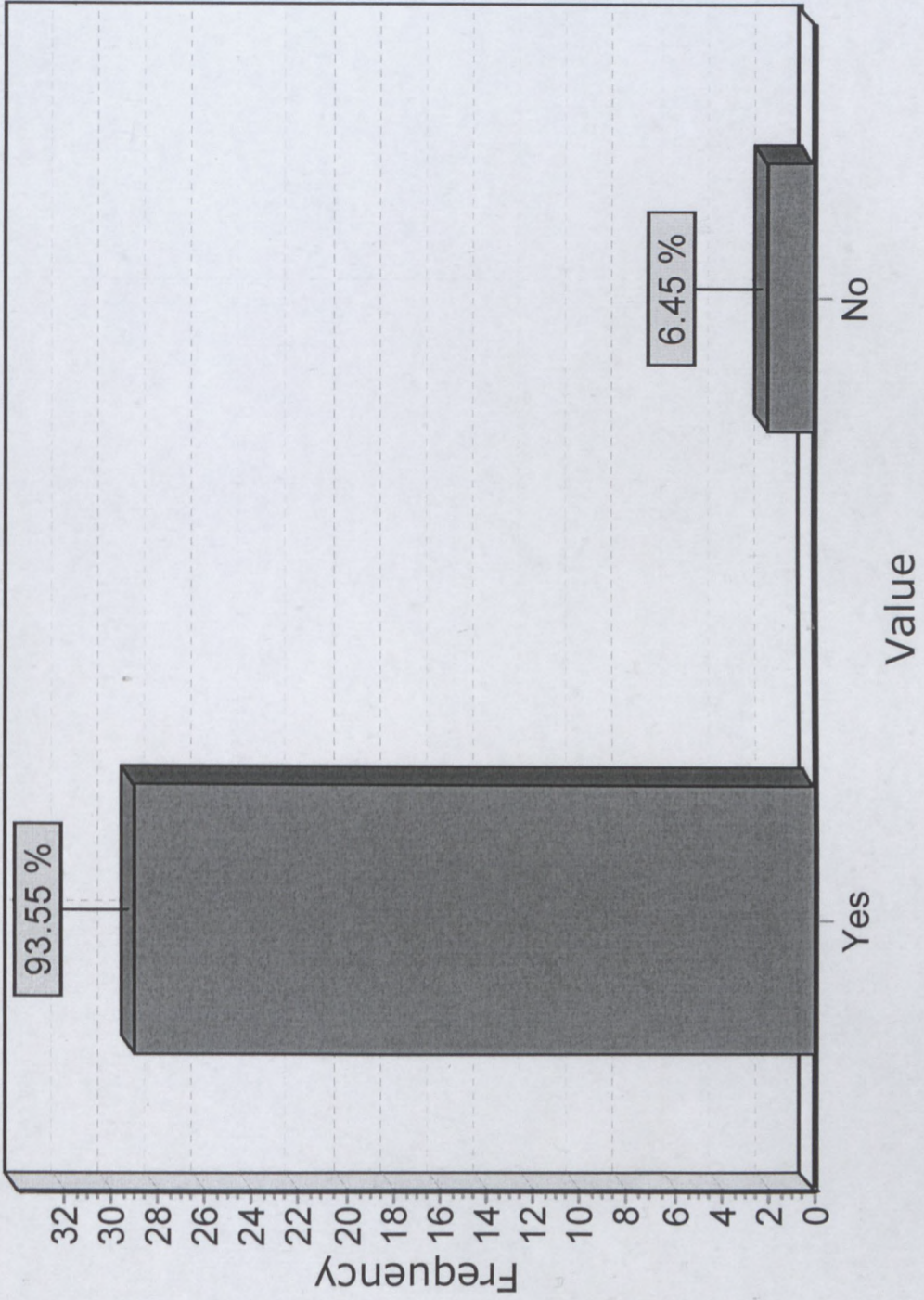
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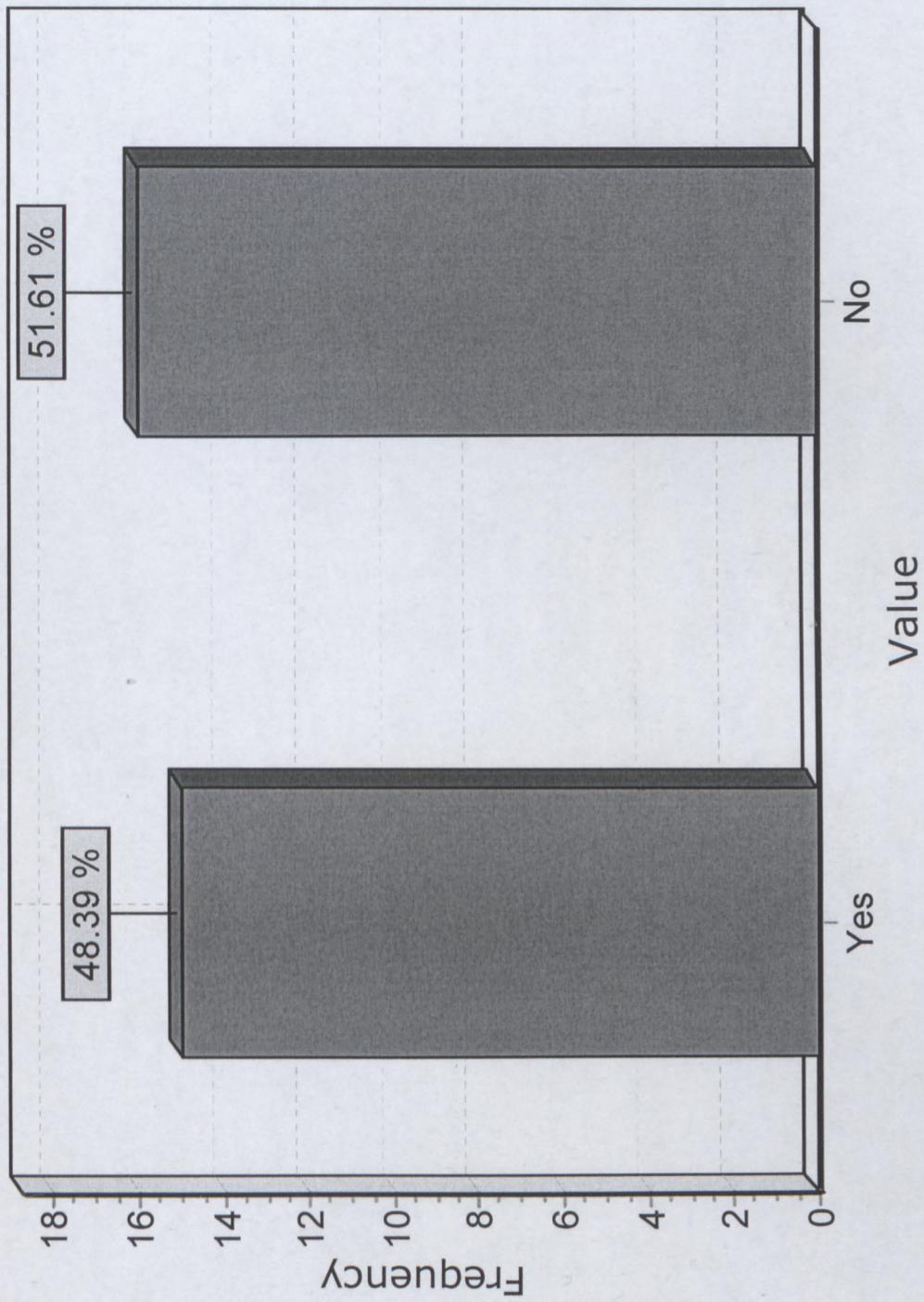
Barchart for Q3EMAIL



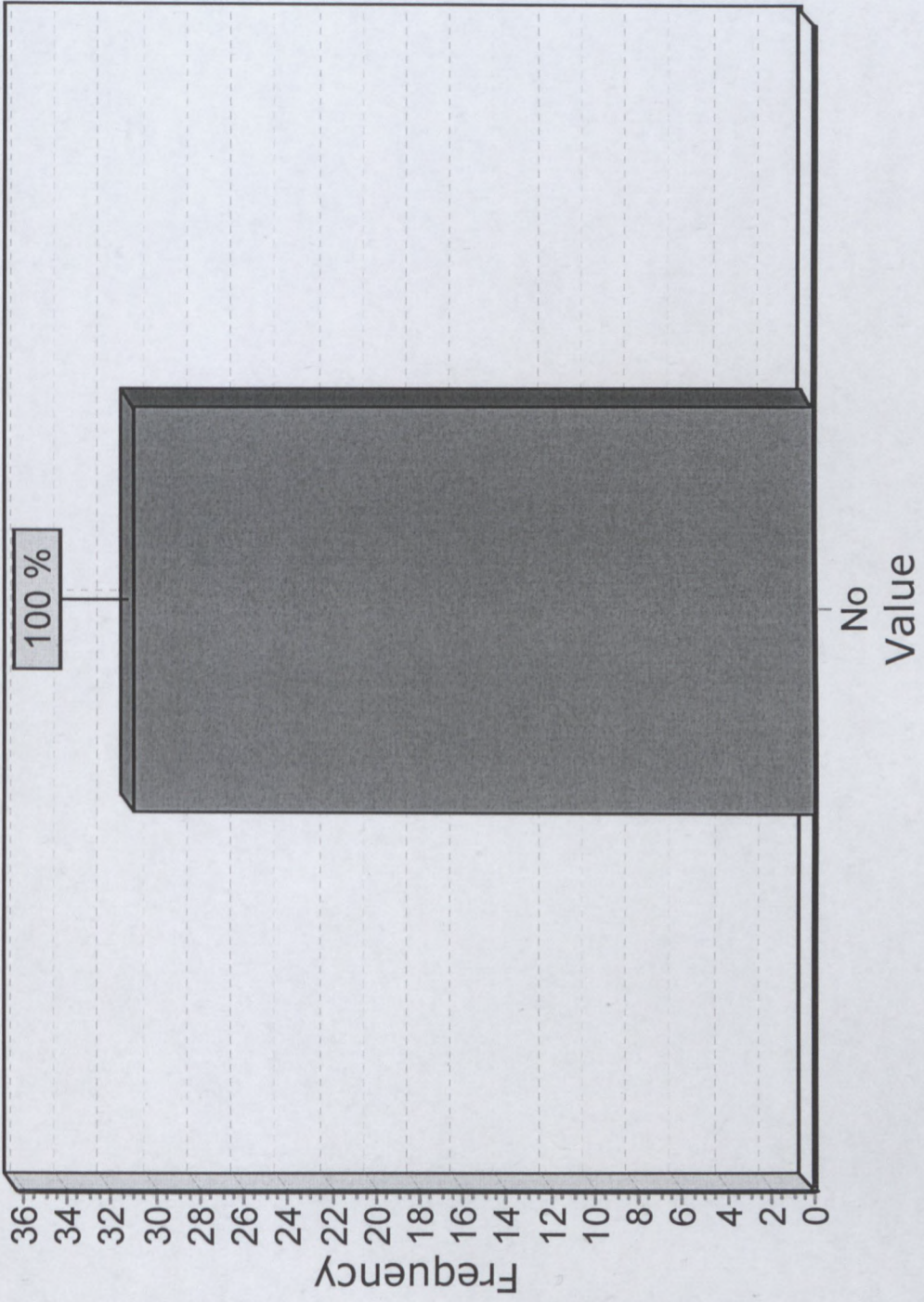
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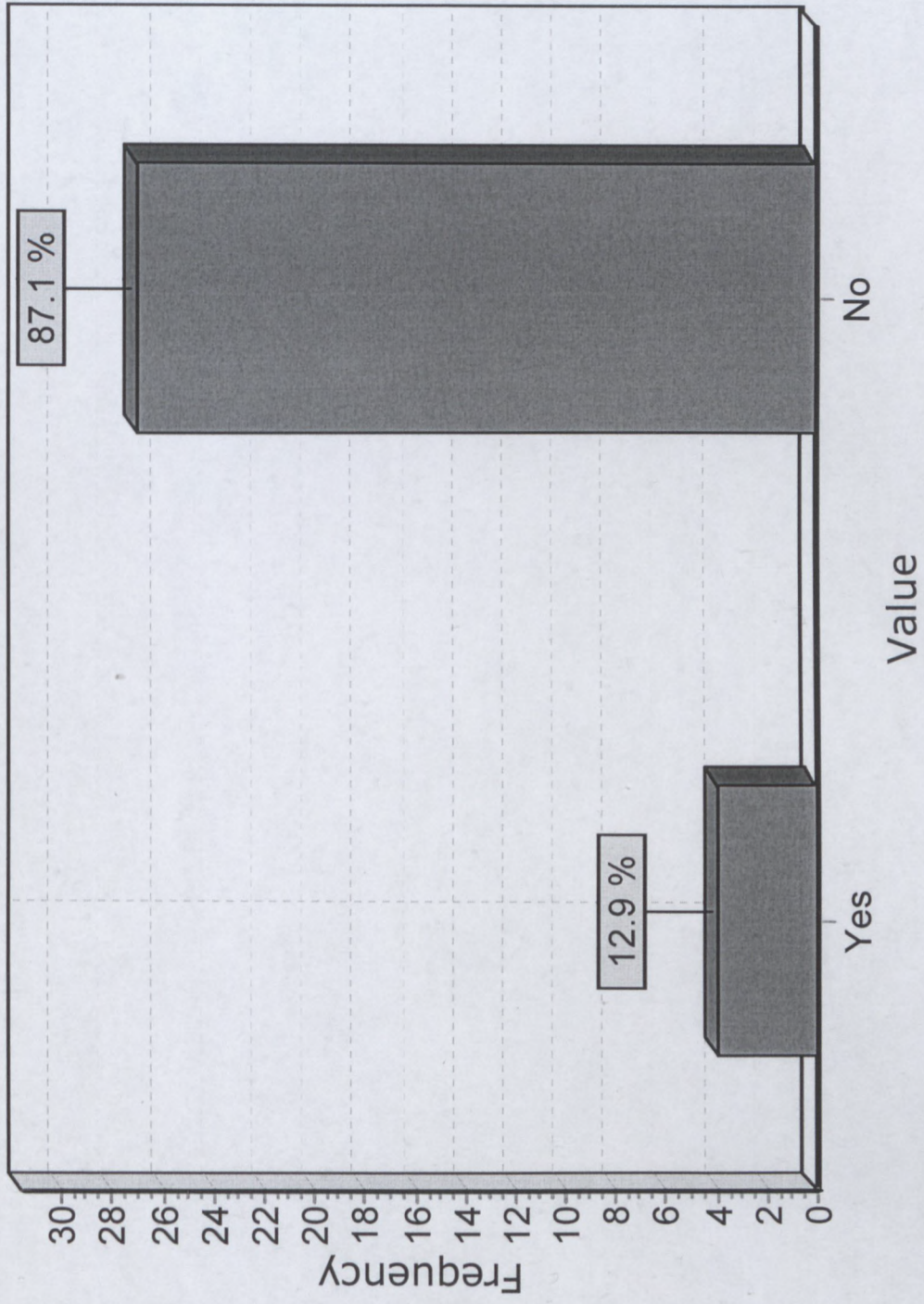
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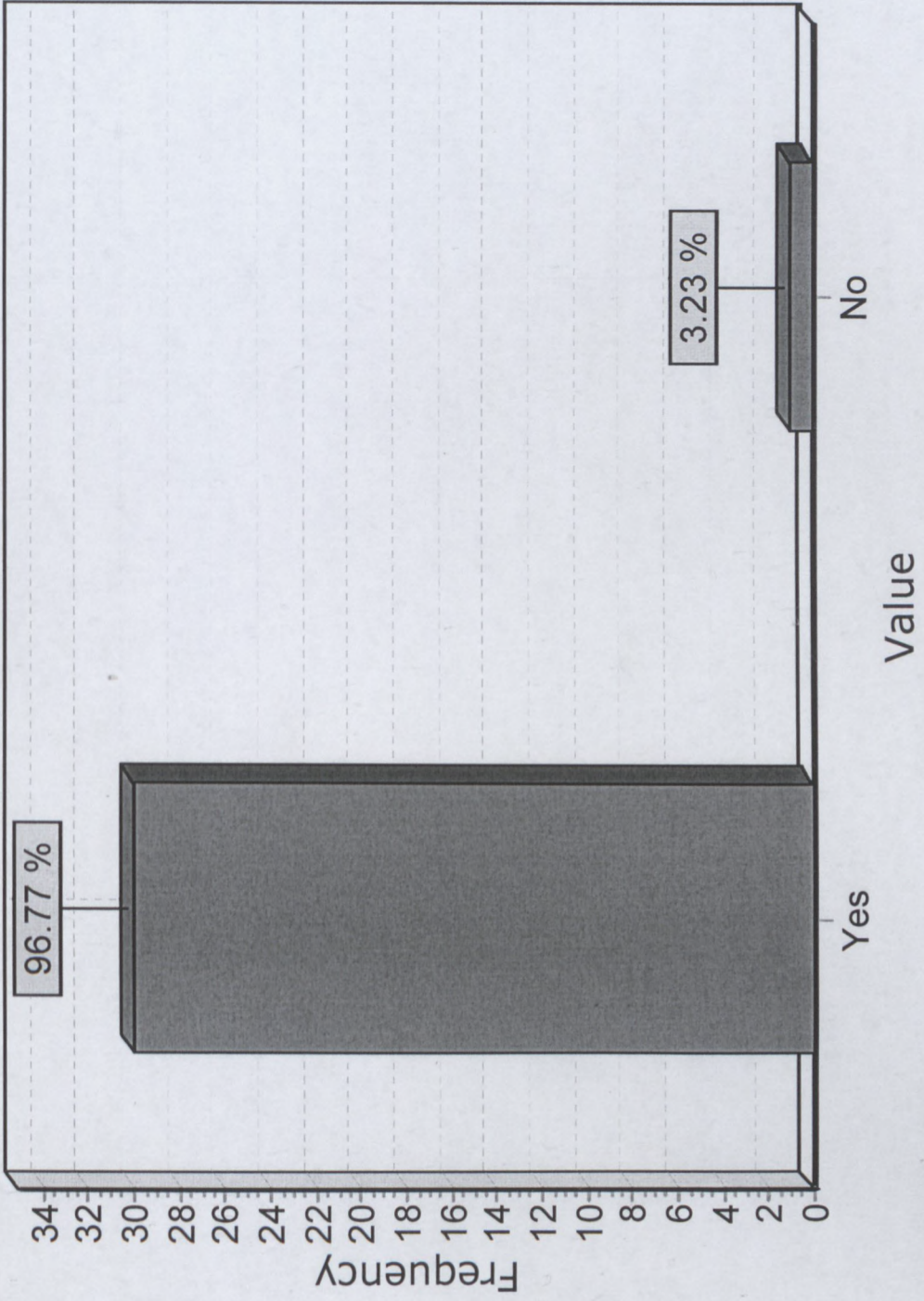
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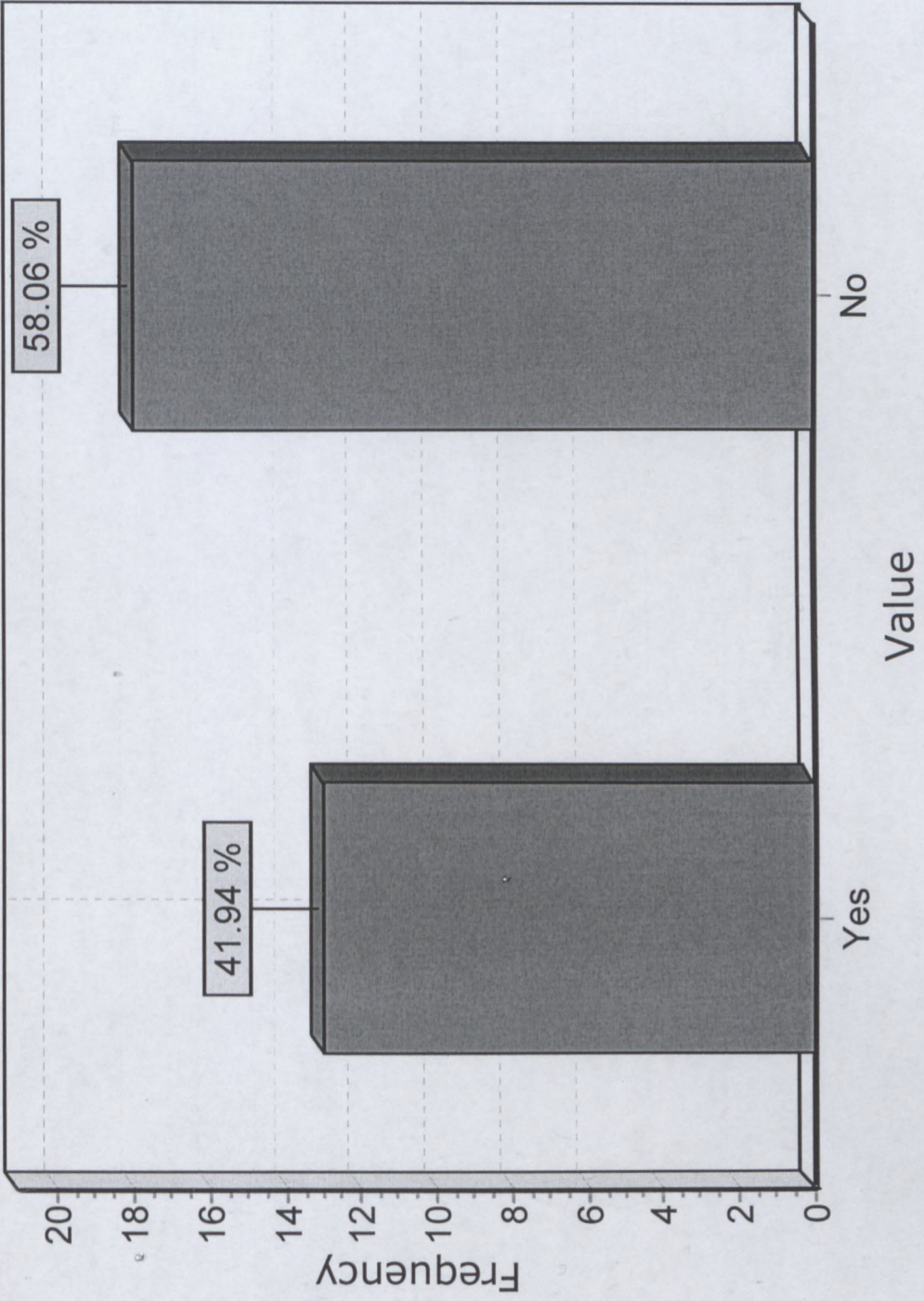
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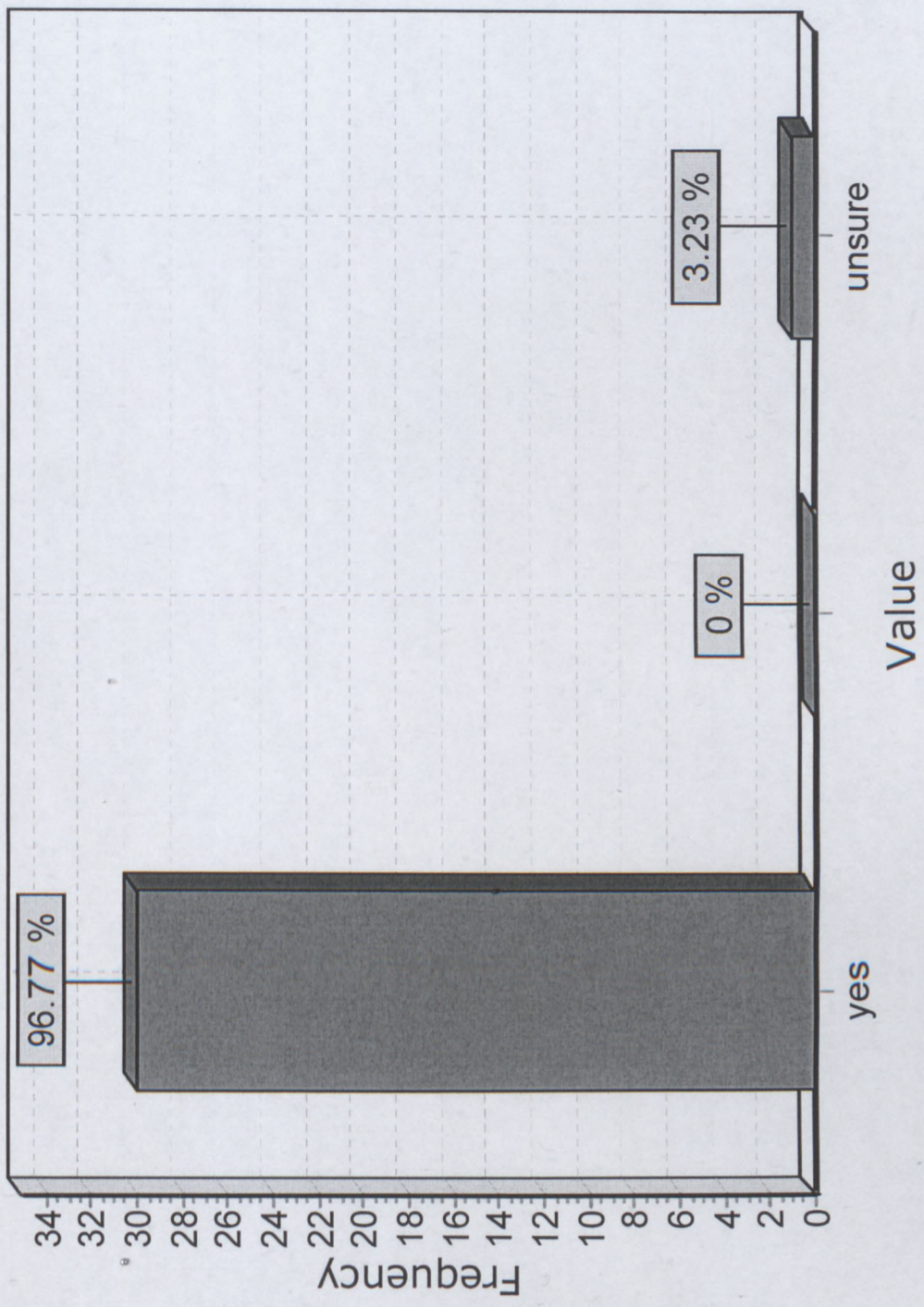
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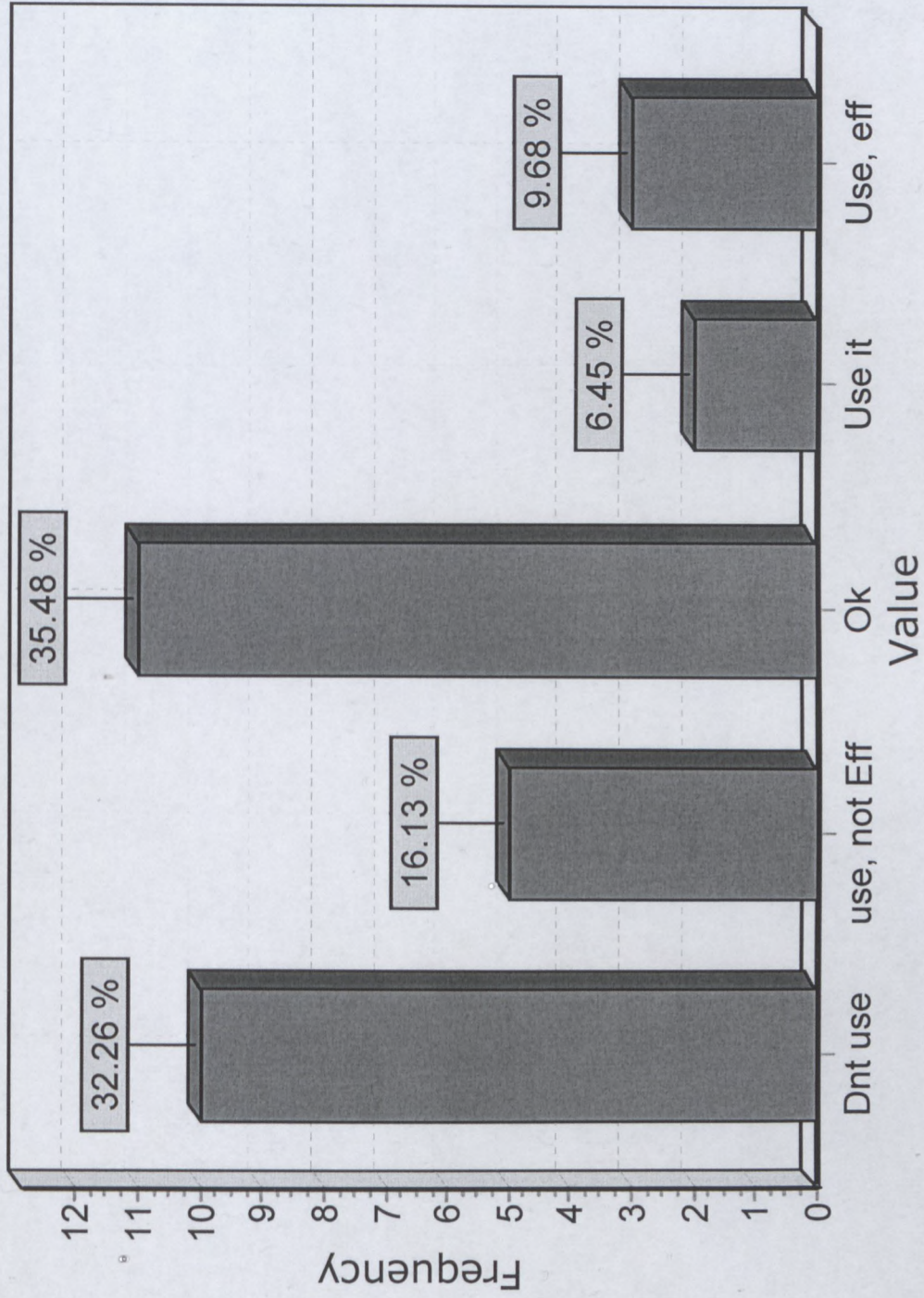
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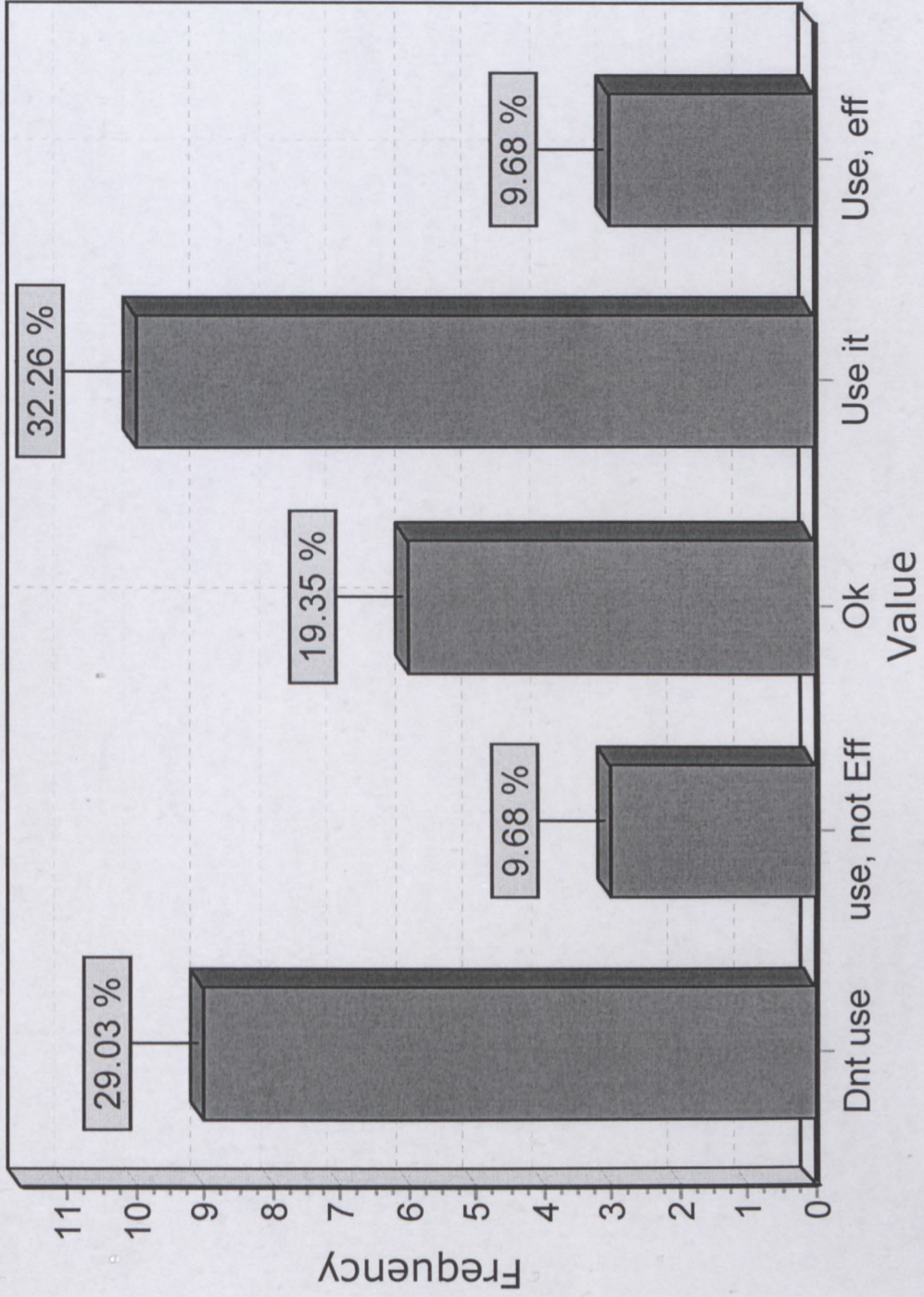
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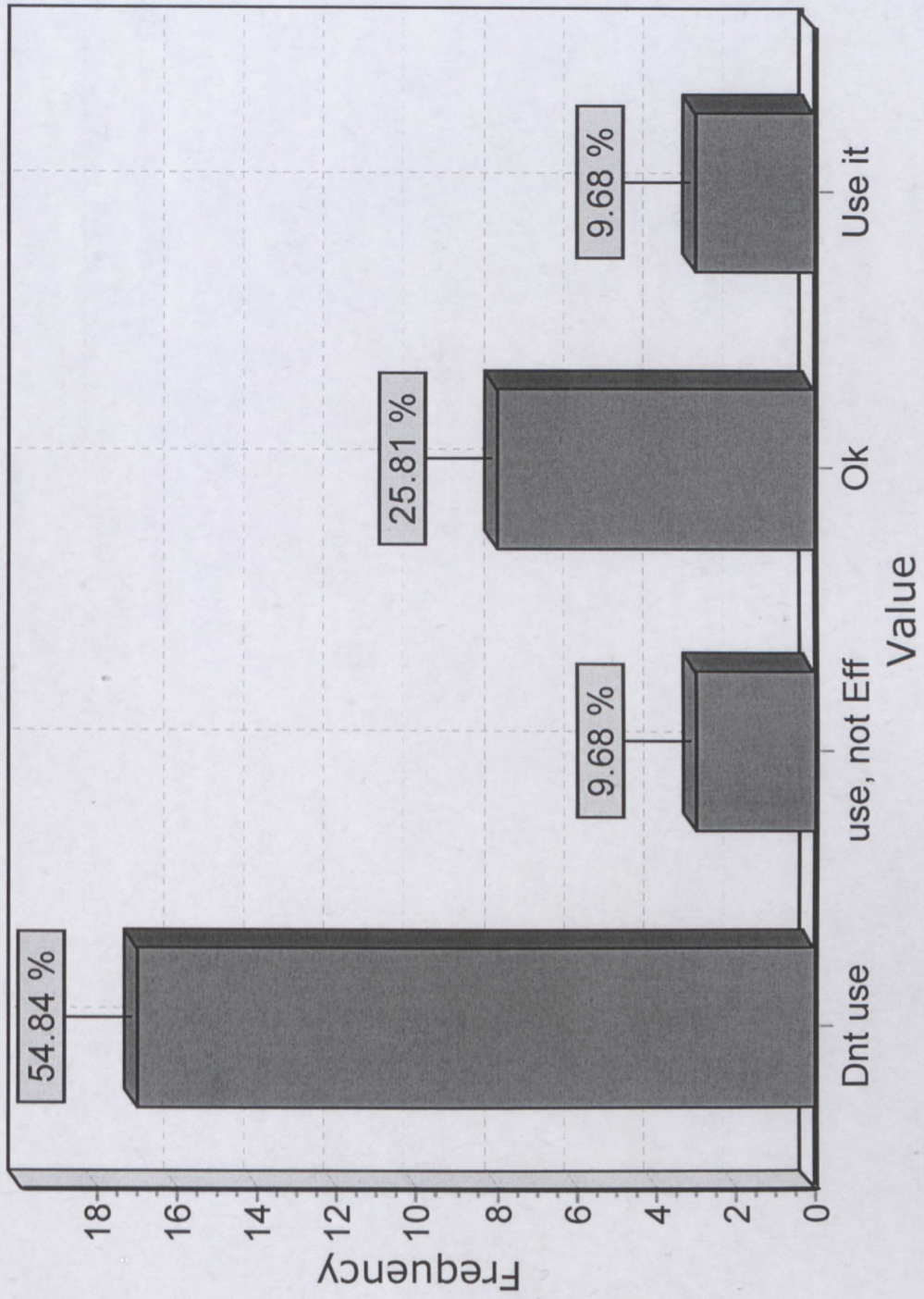
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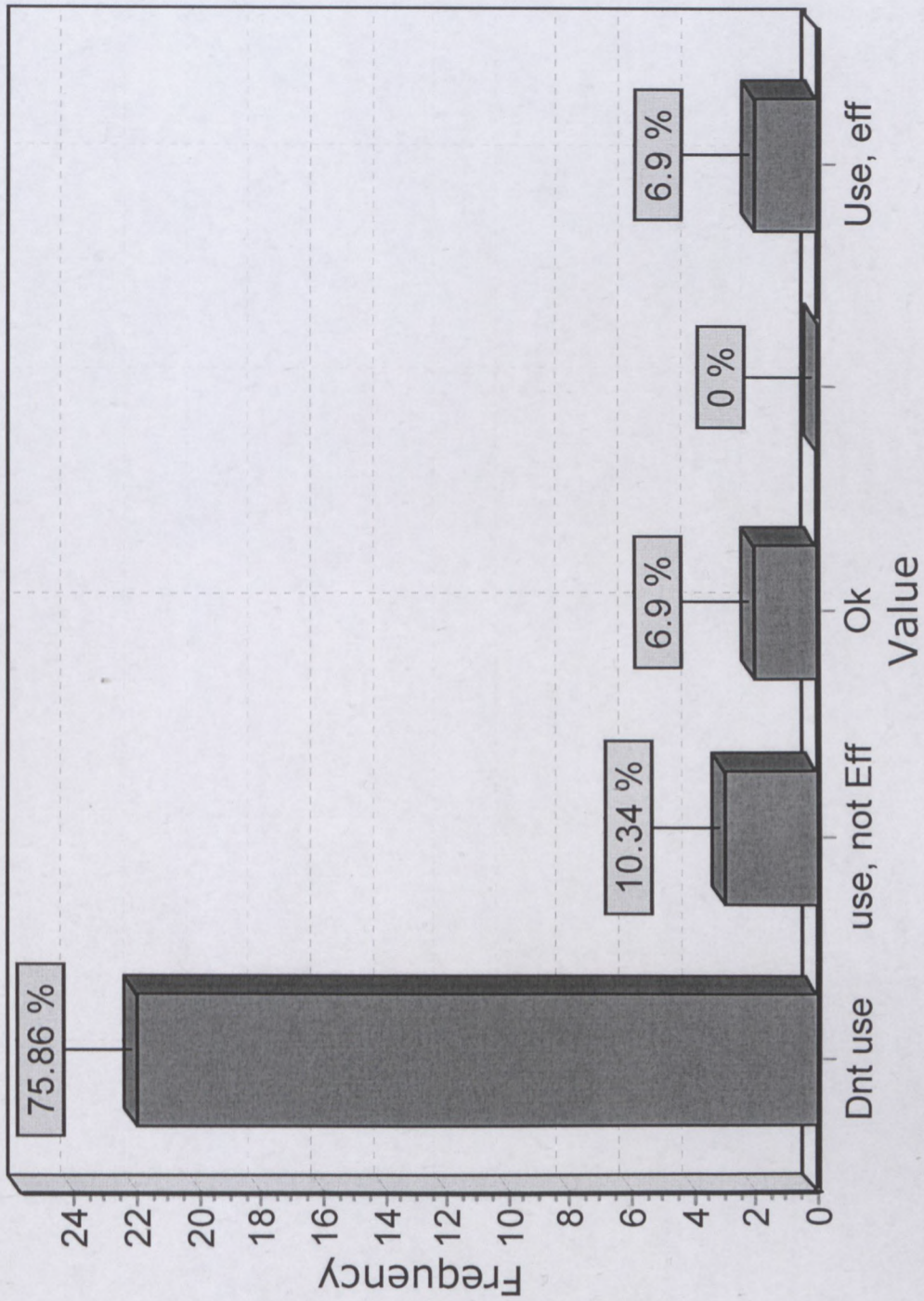
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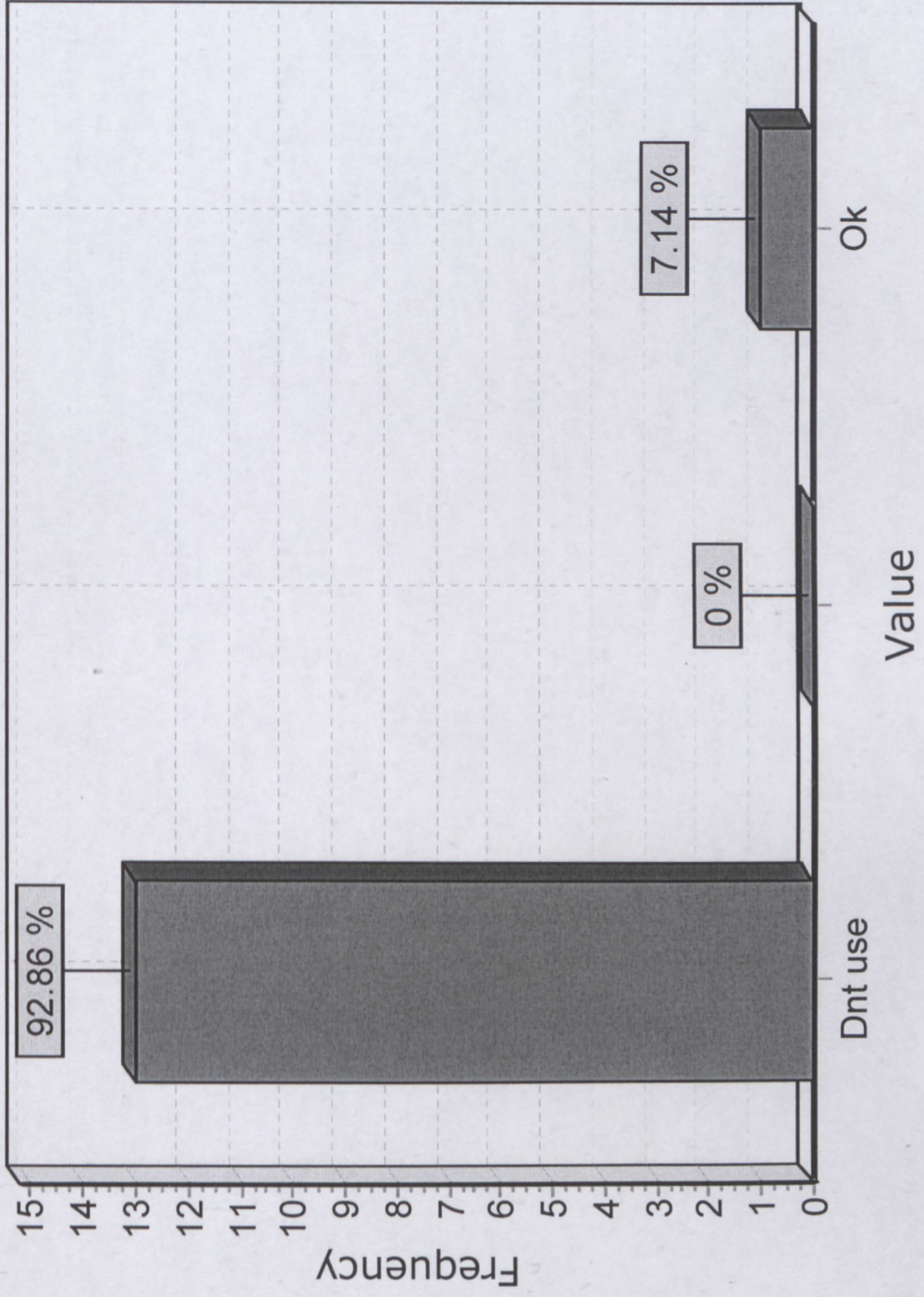
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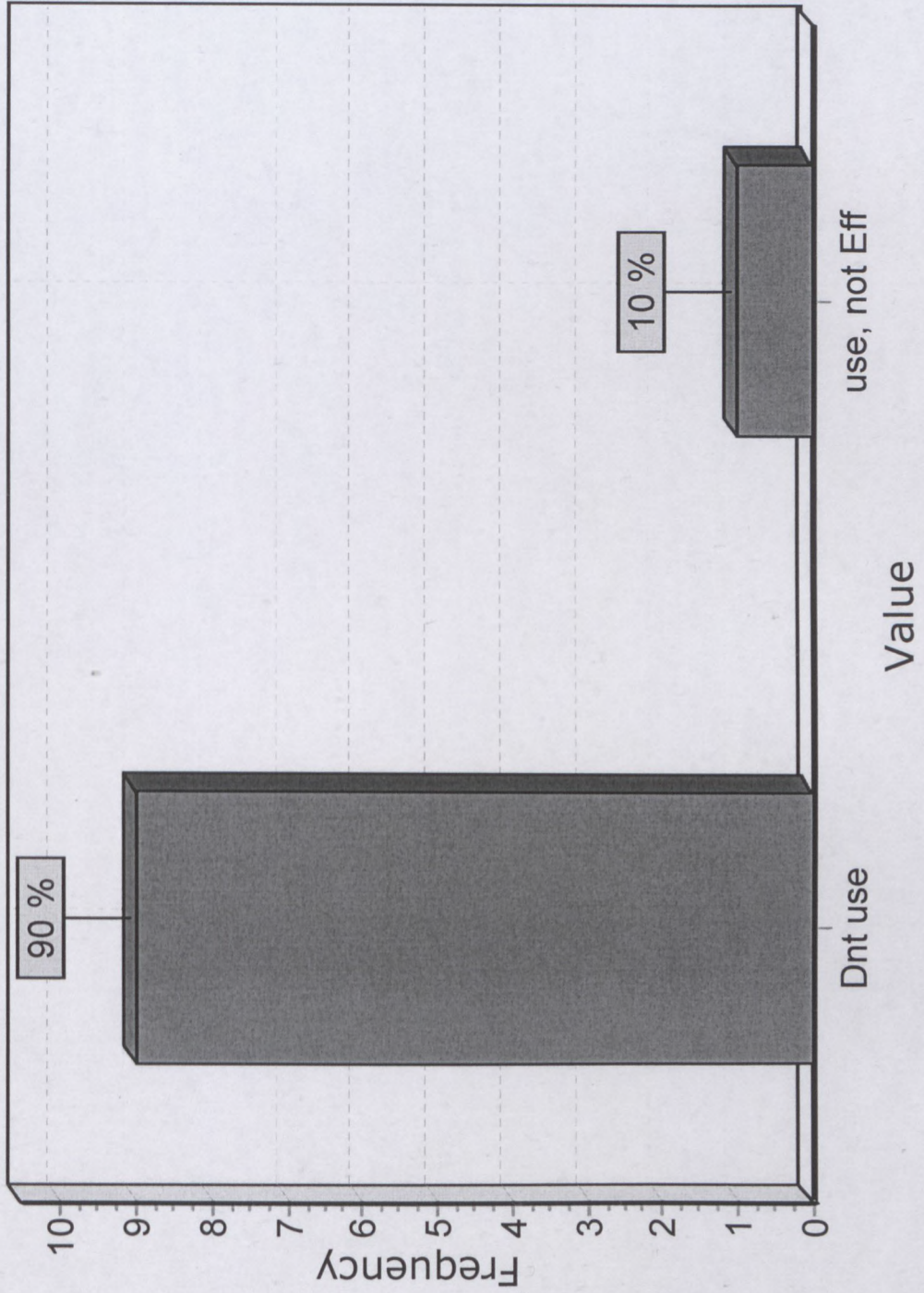
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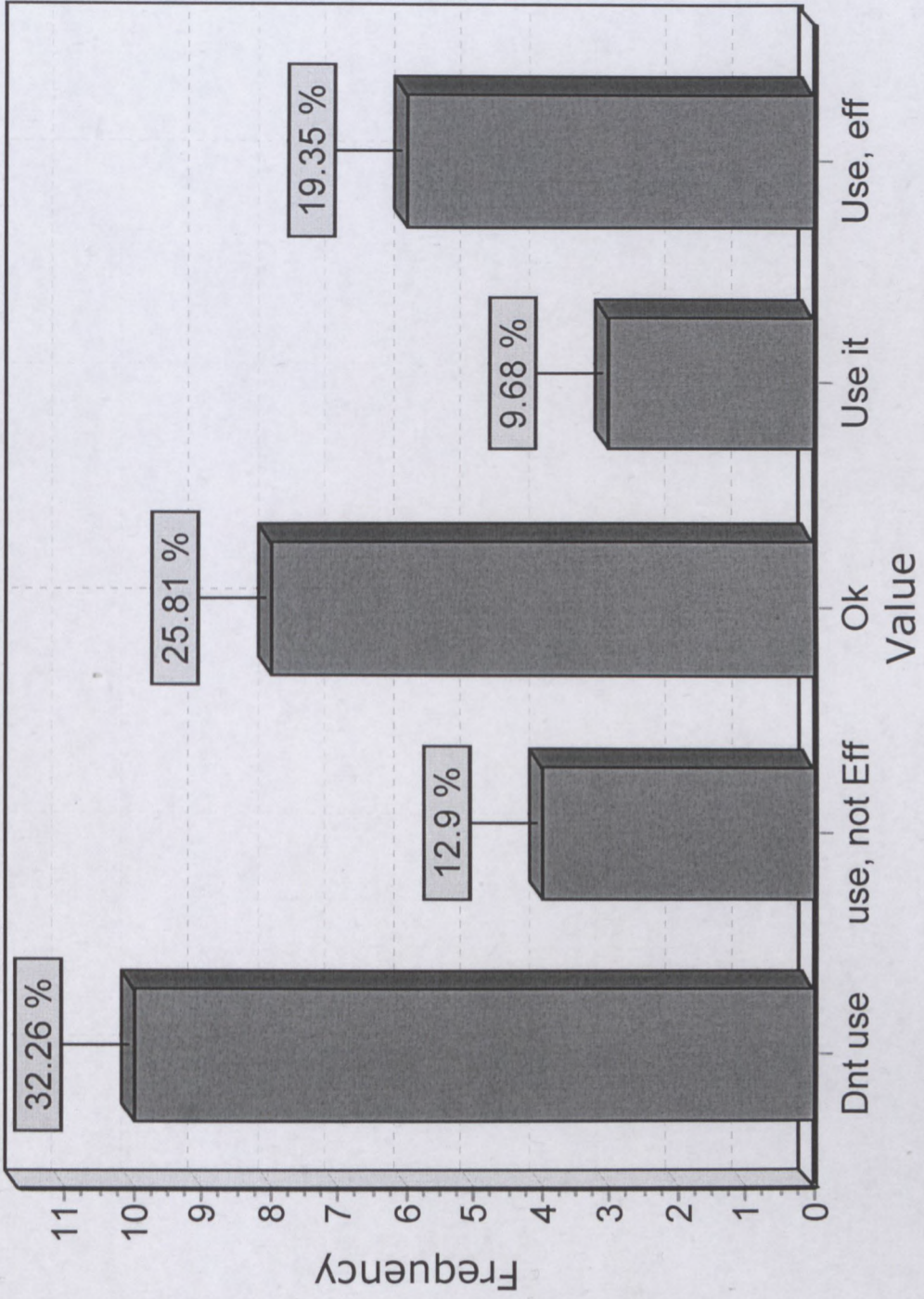
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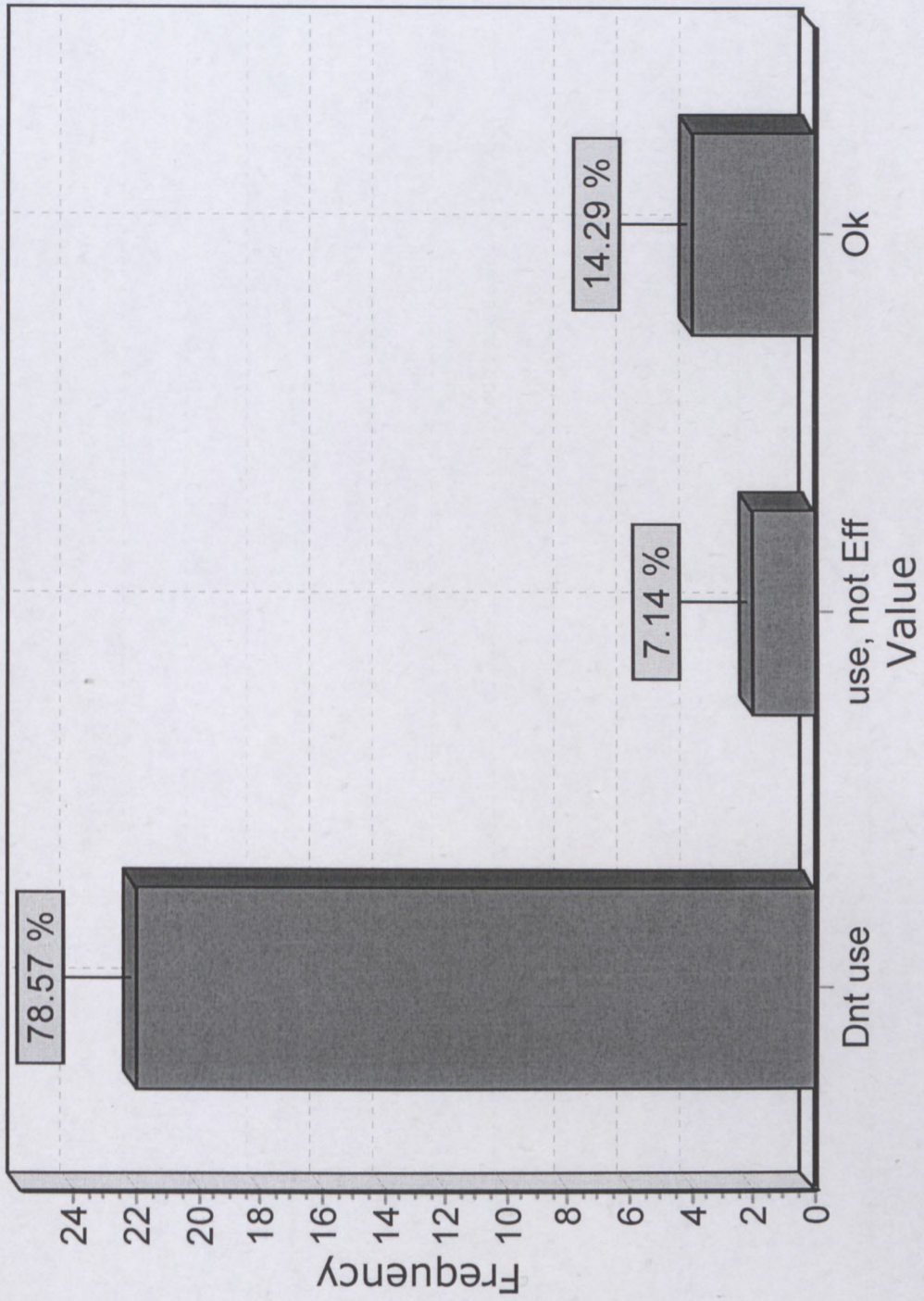
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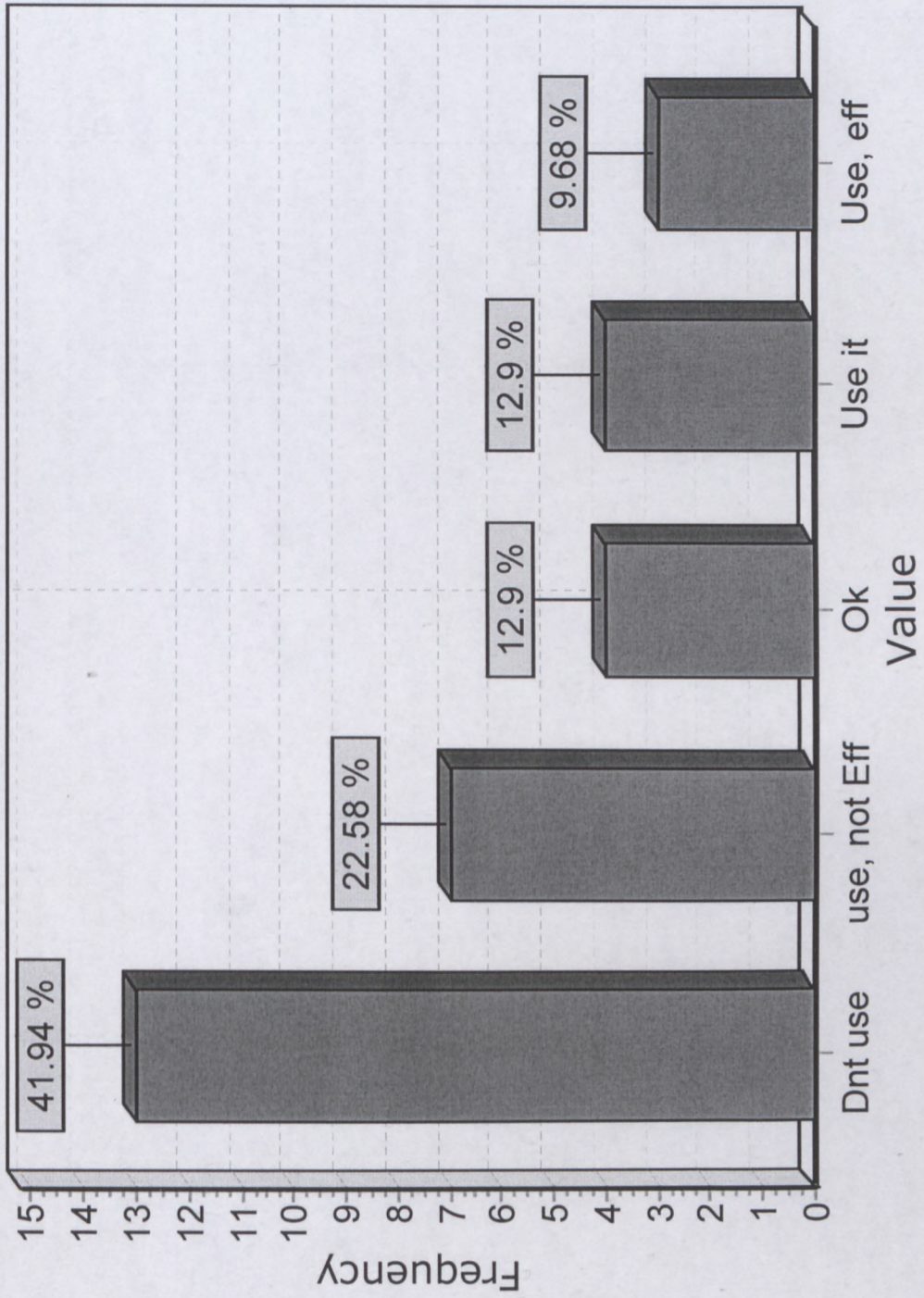
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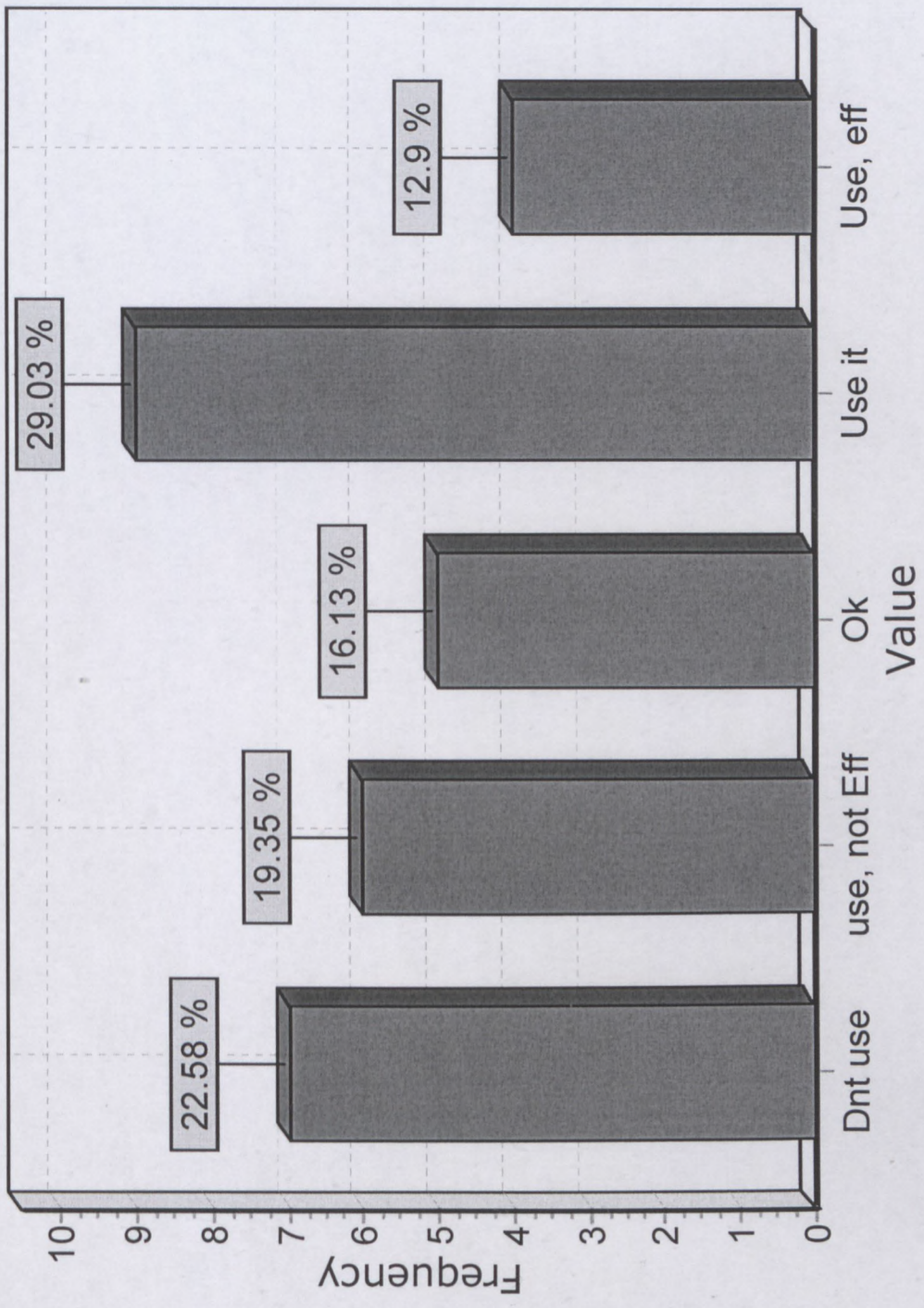
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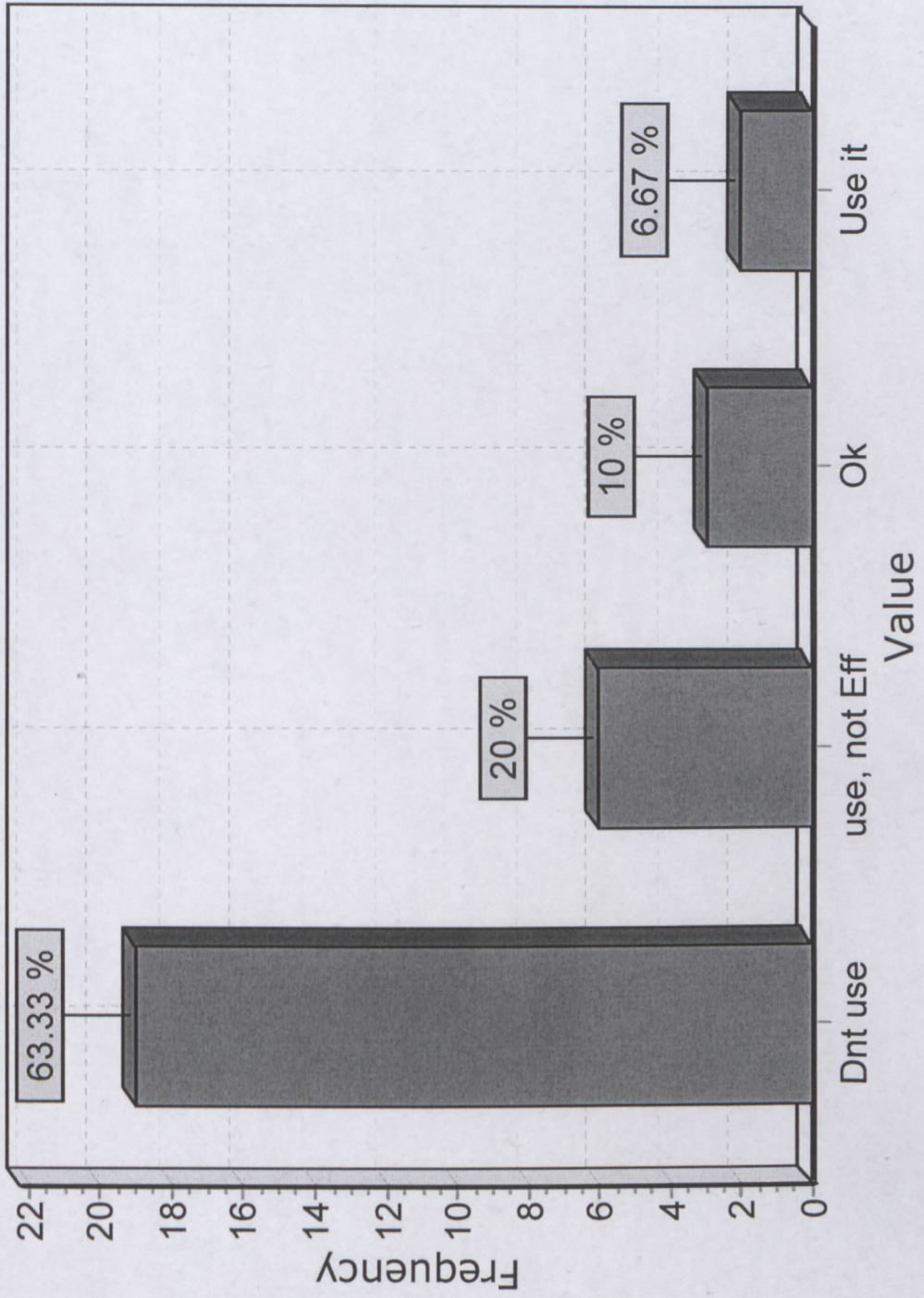
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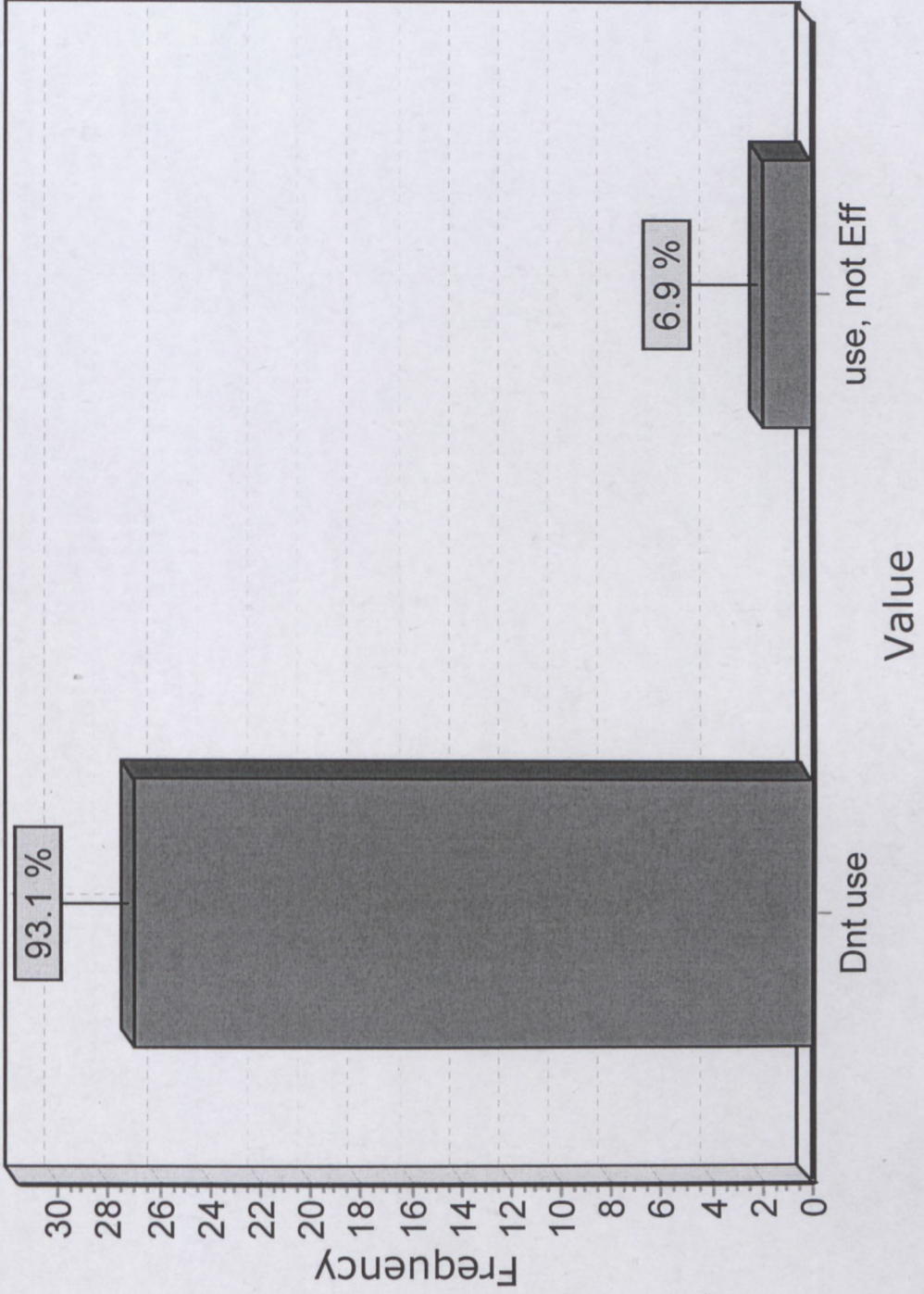
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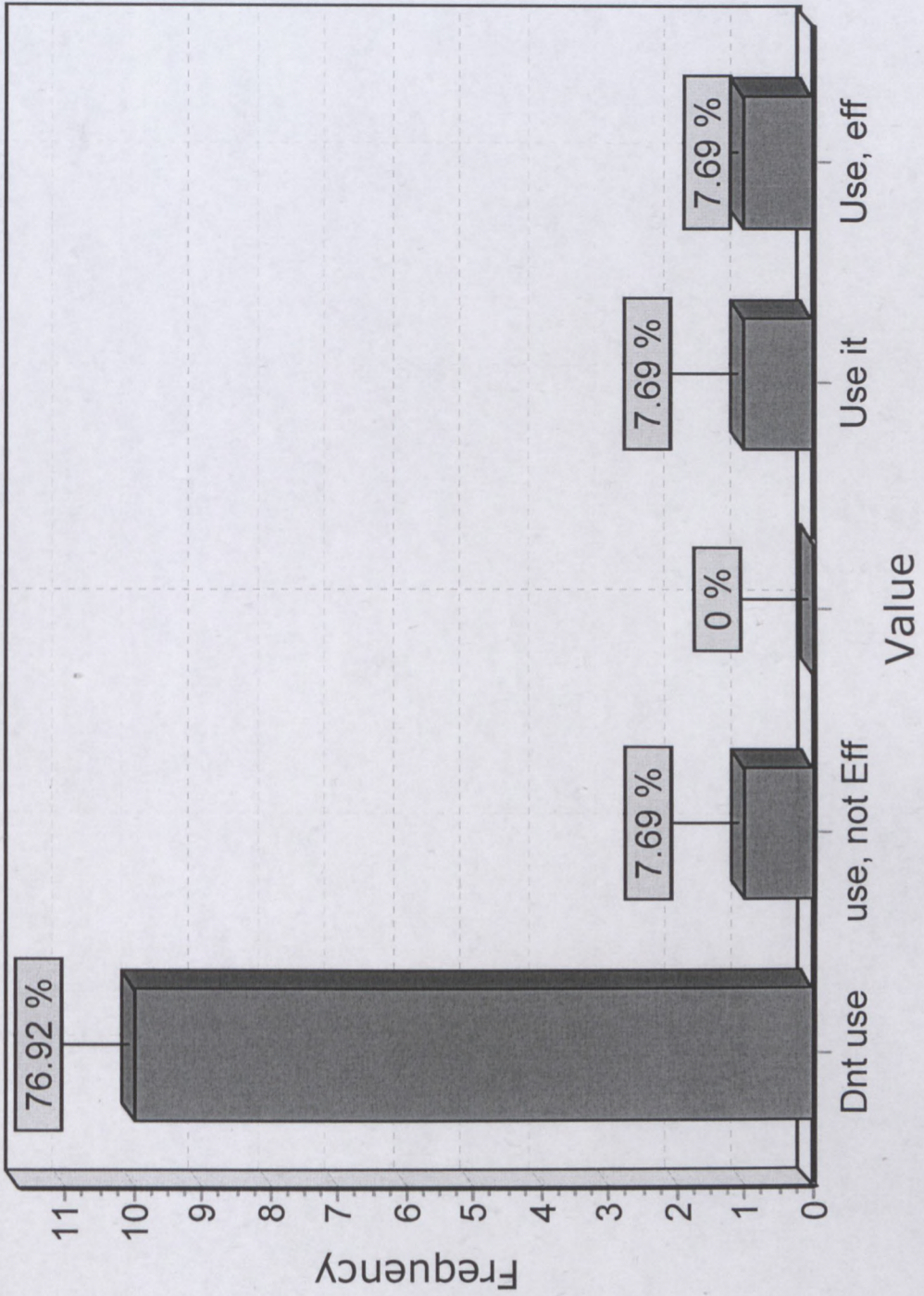
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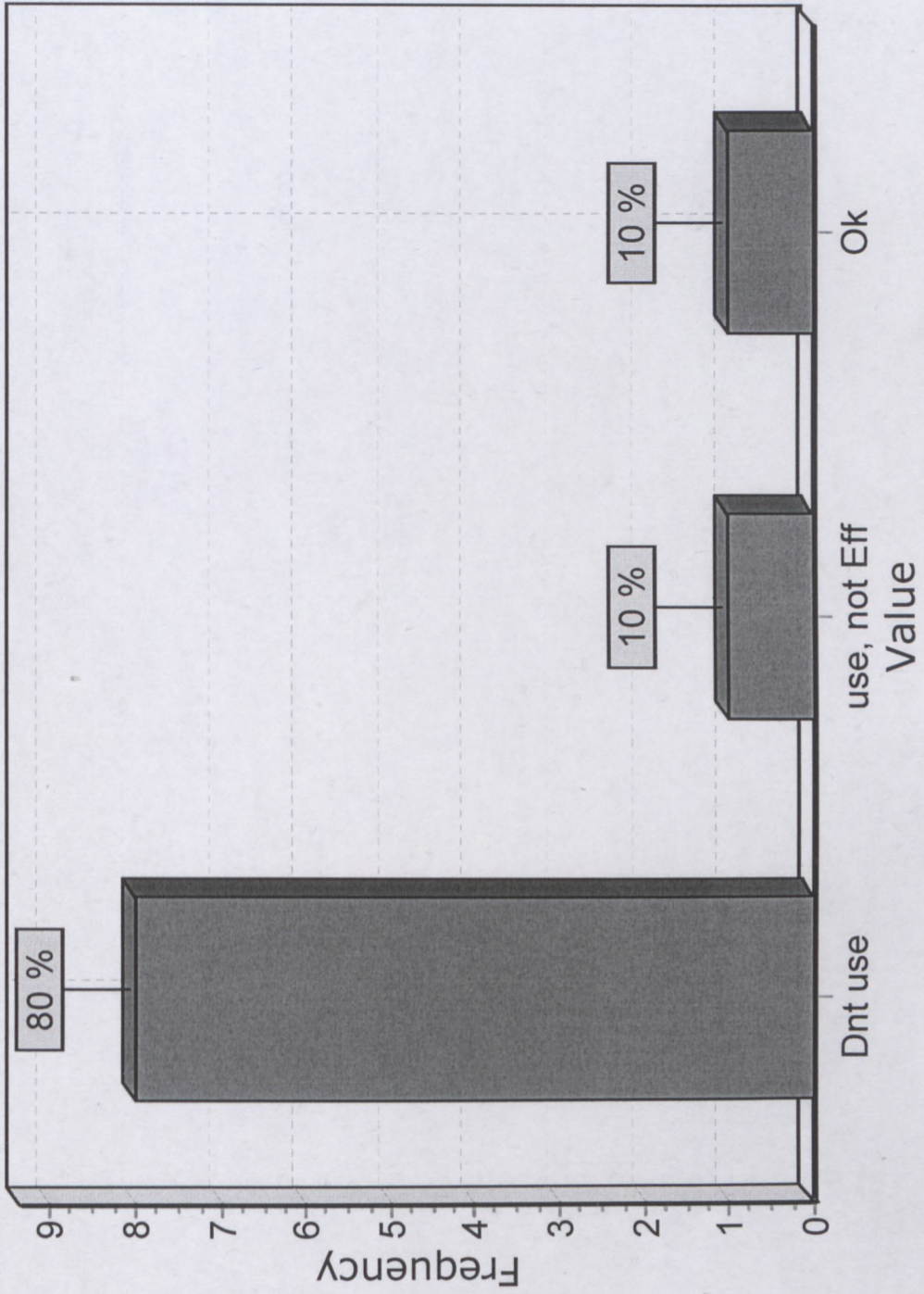
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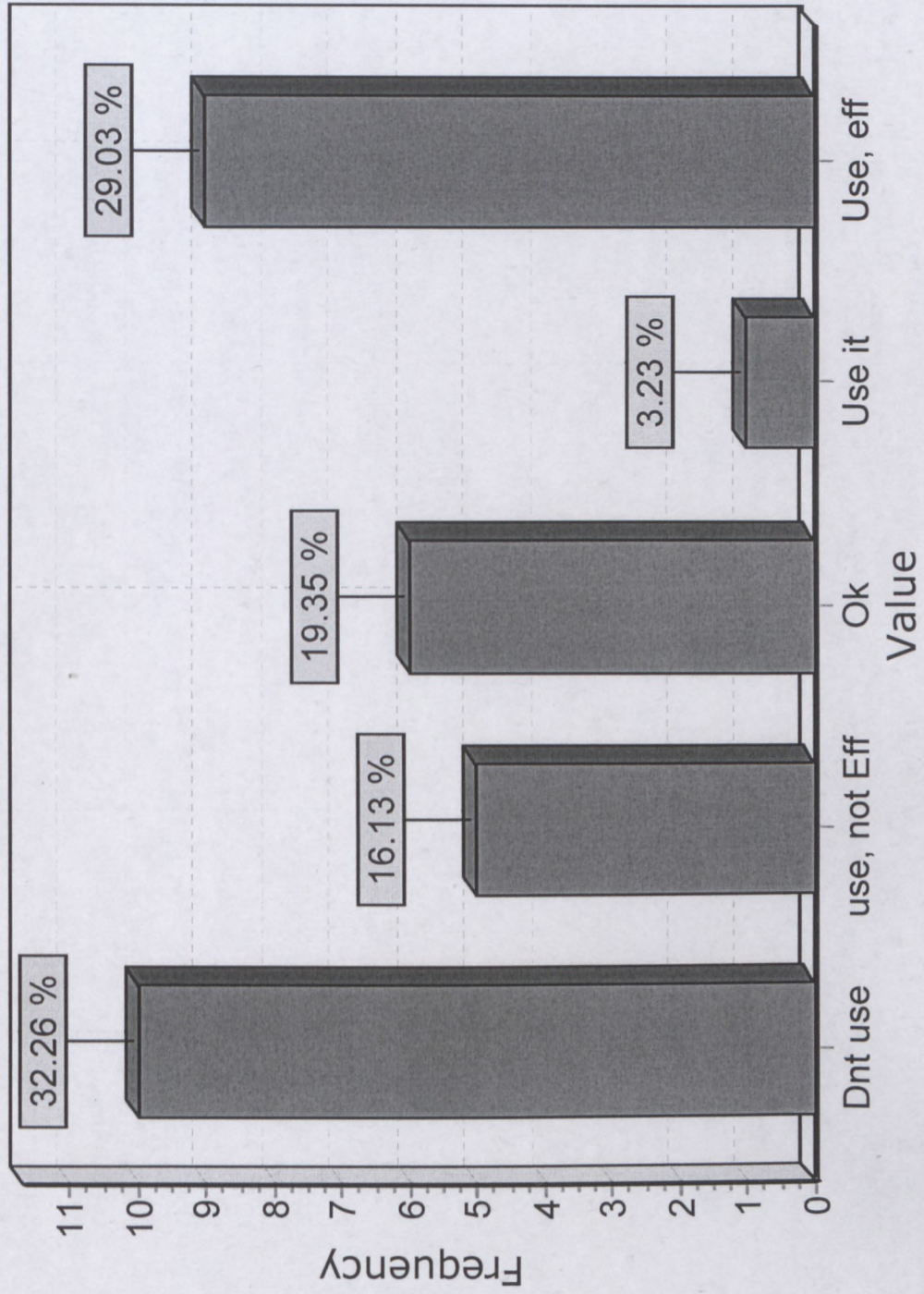
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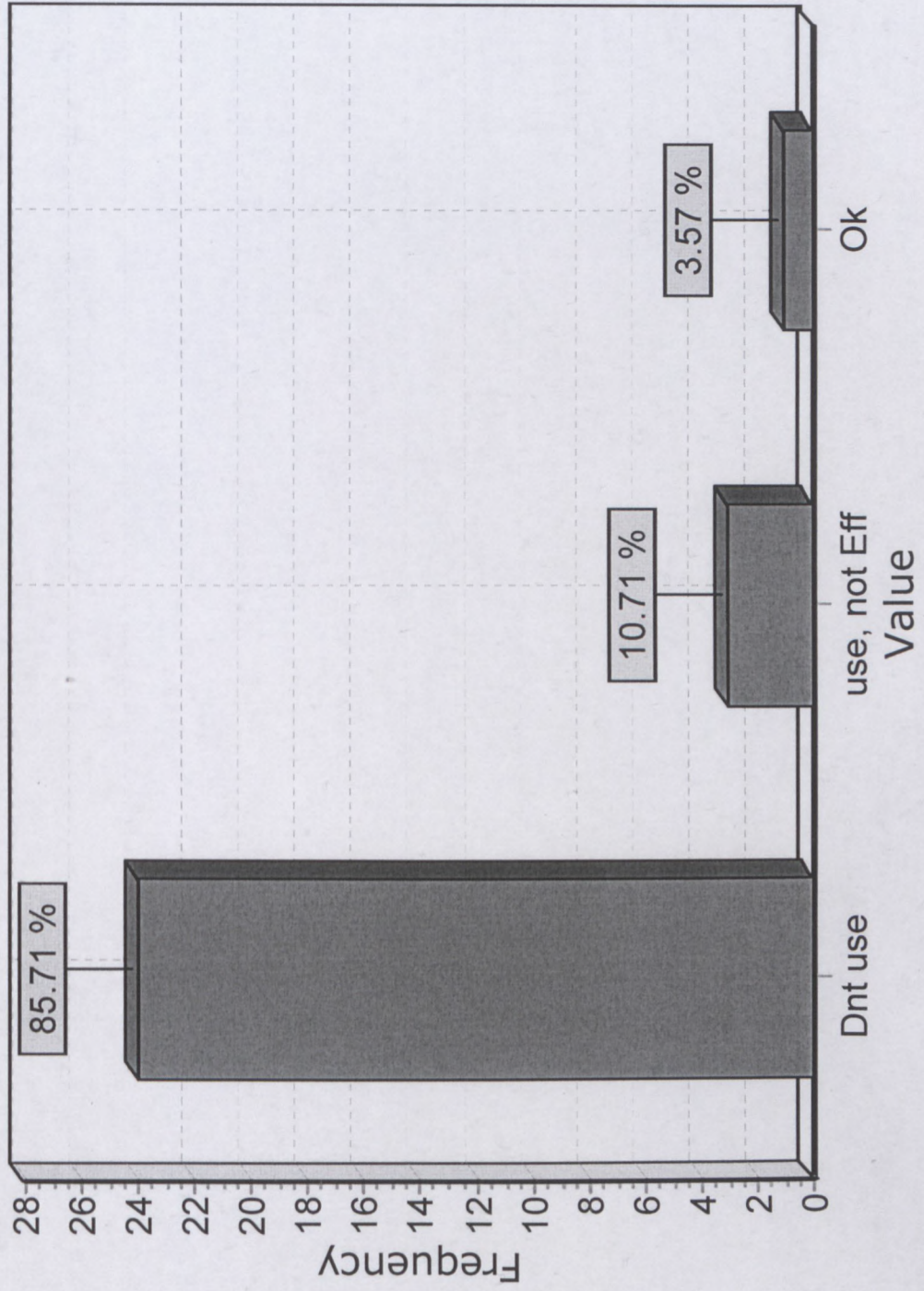
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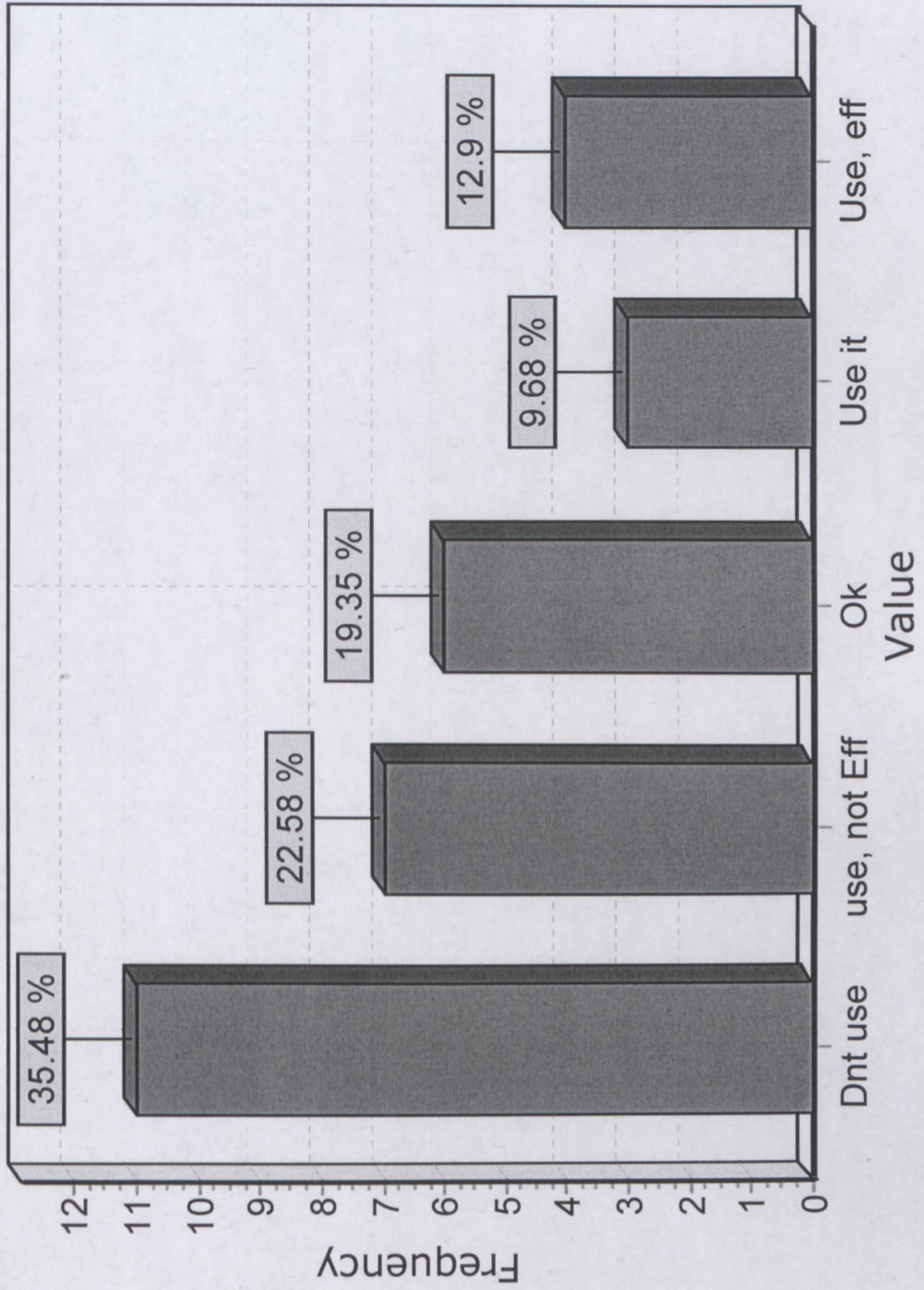
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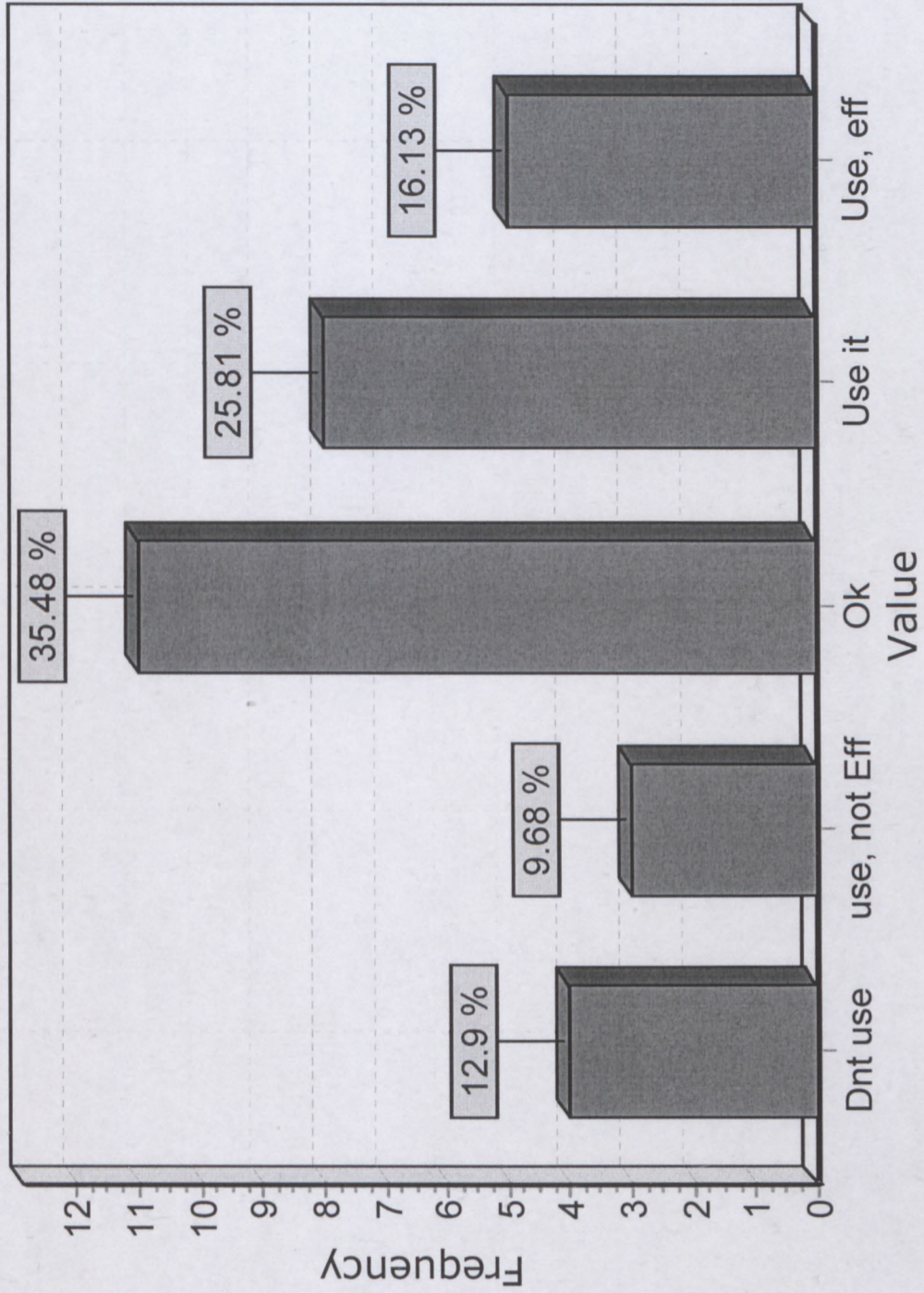
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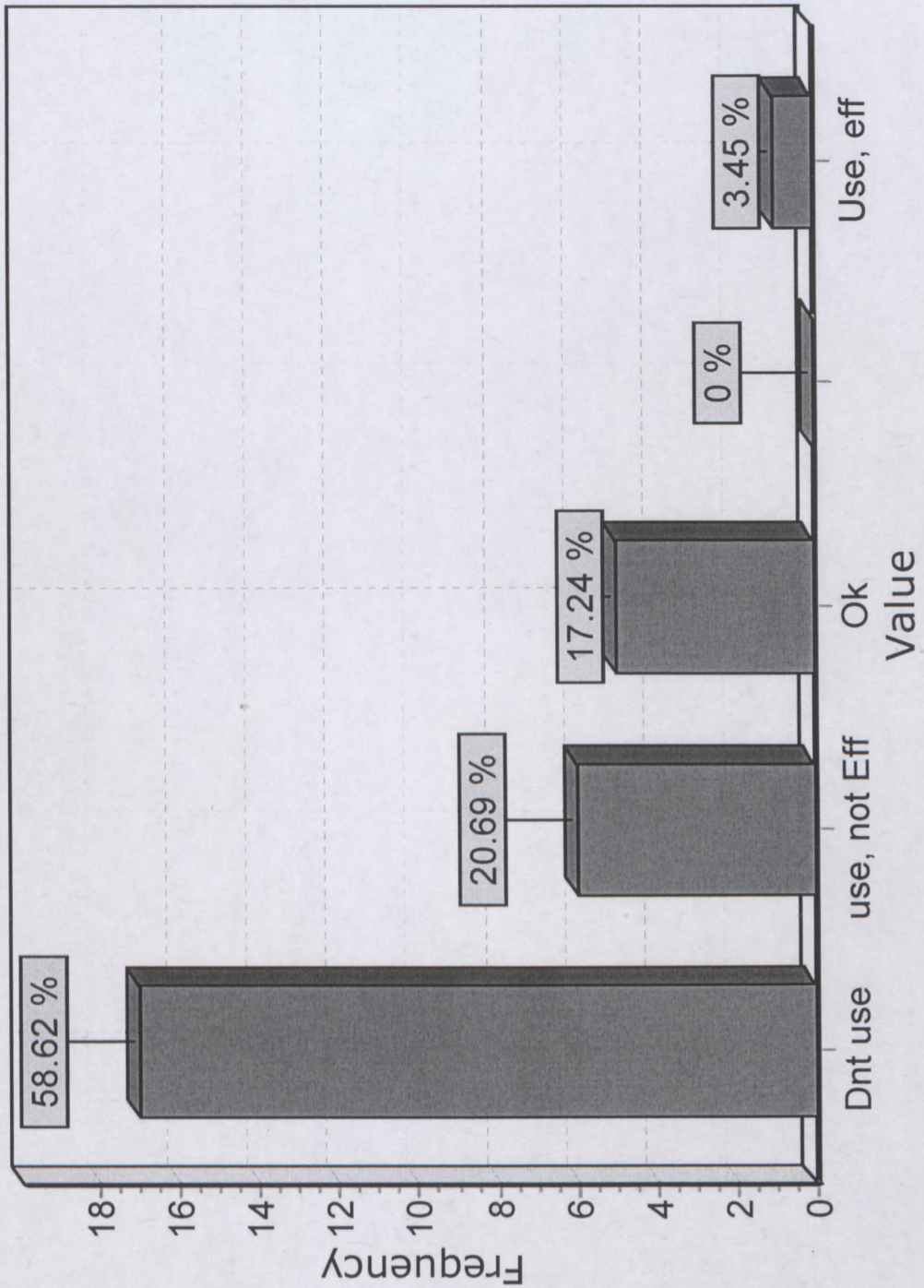
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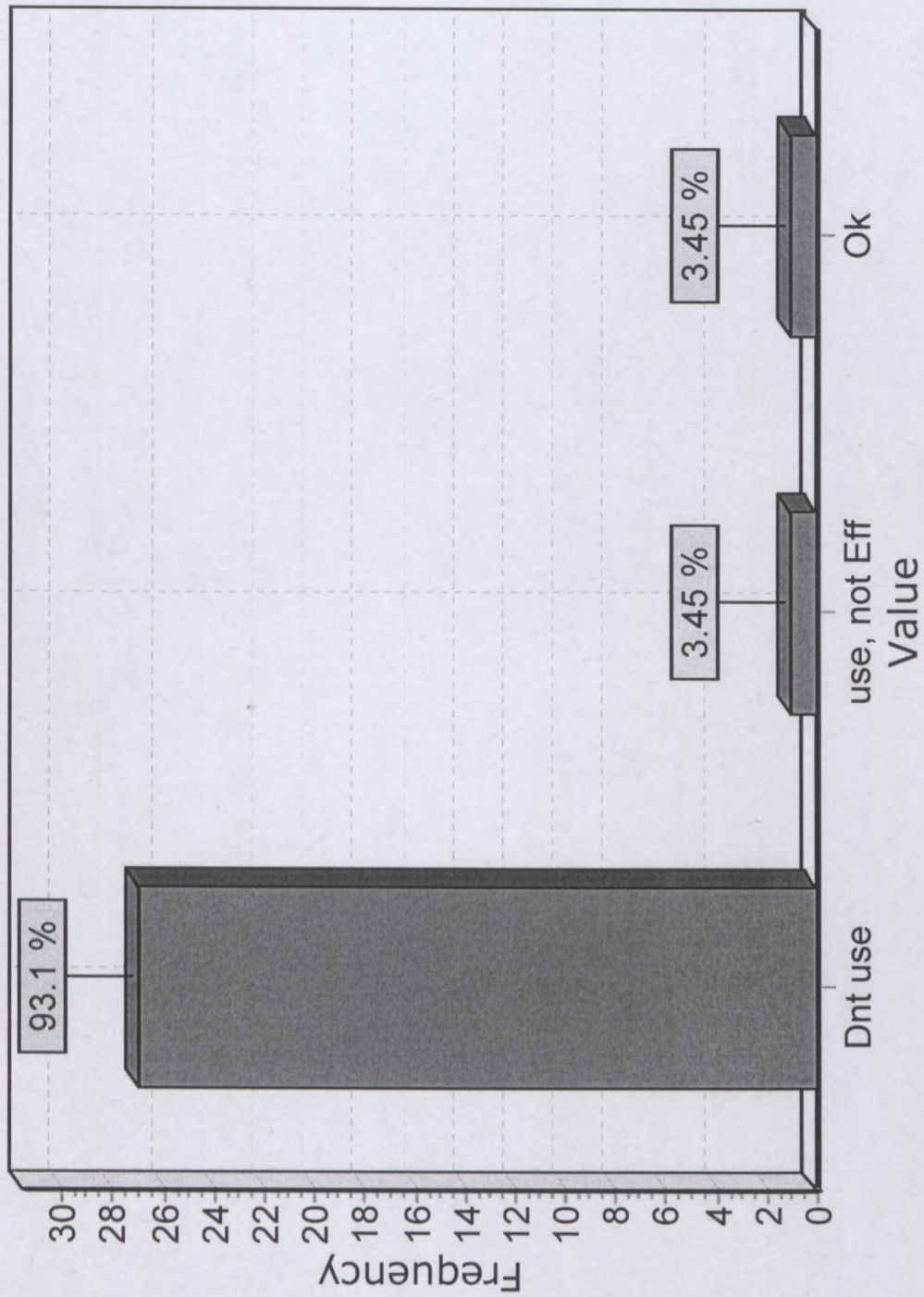
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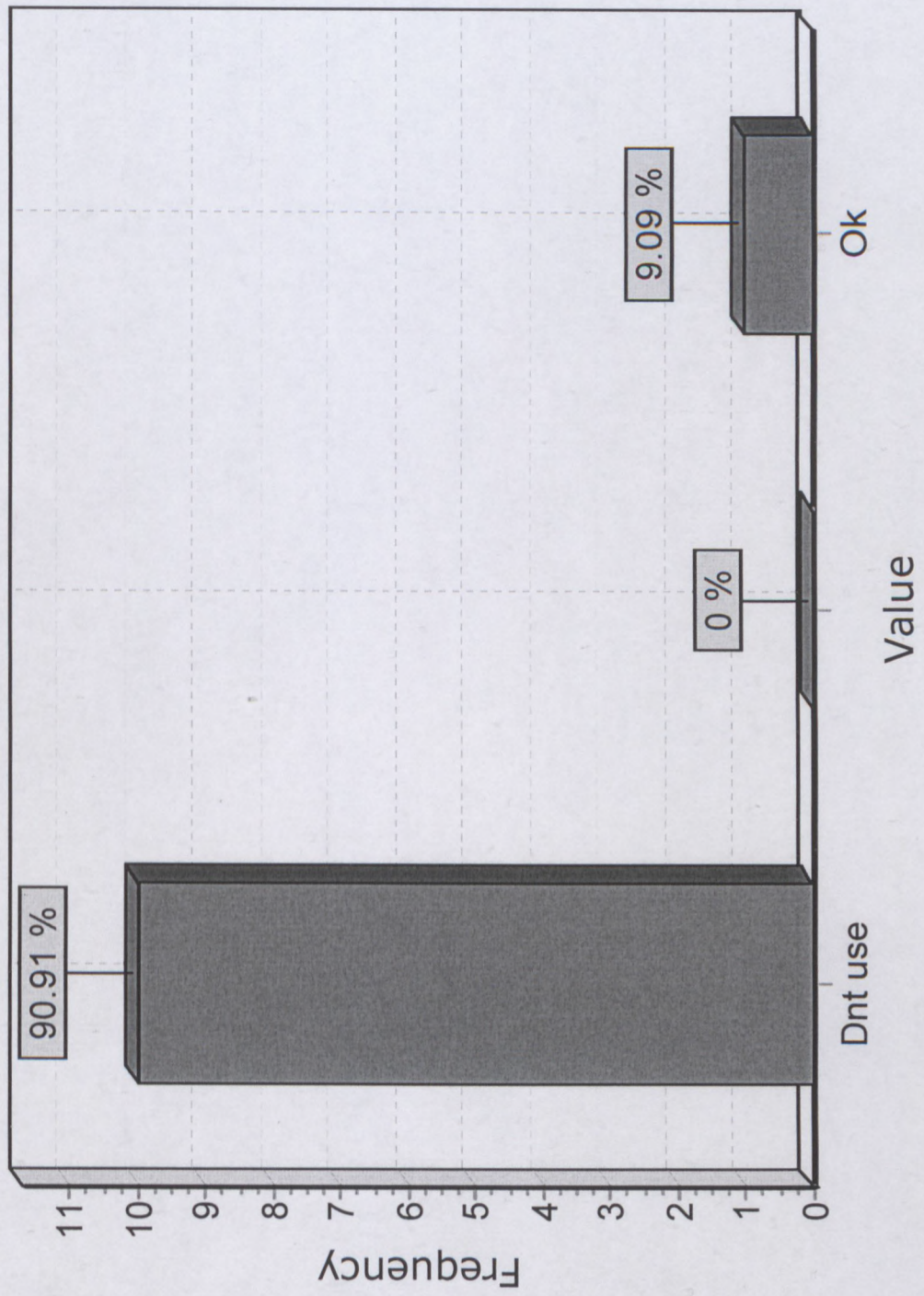
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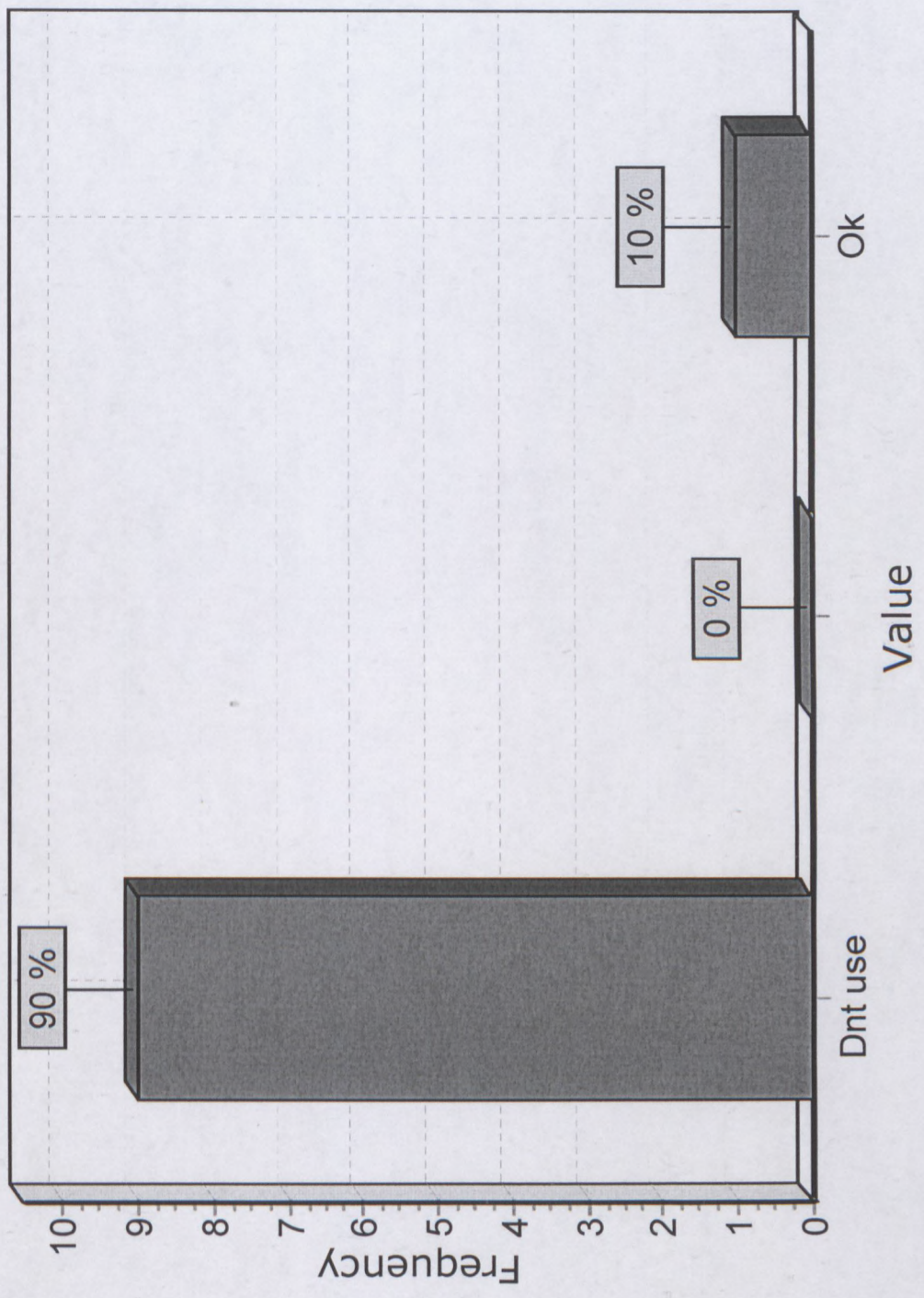
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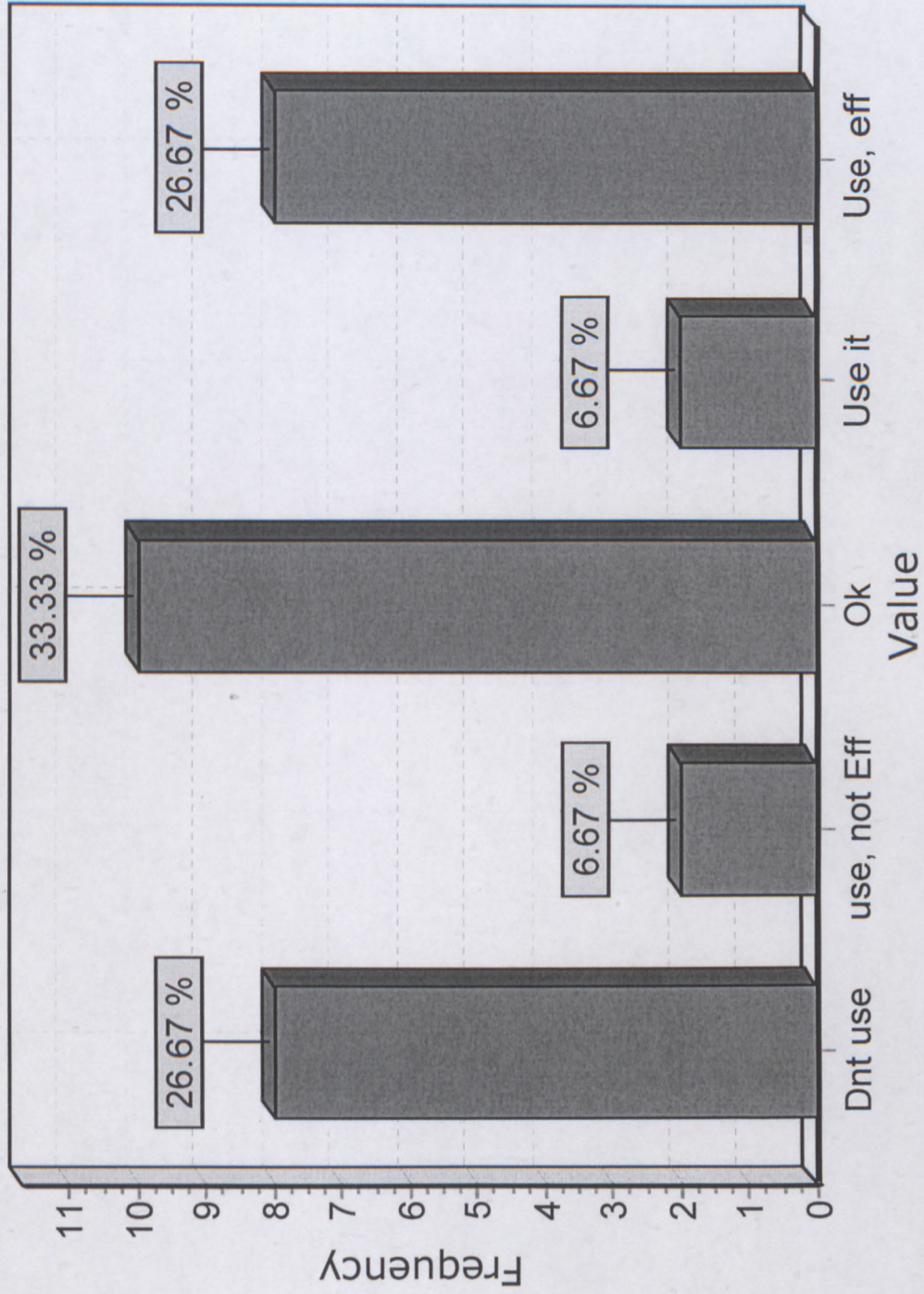
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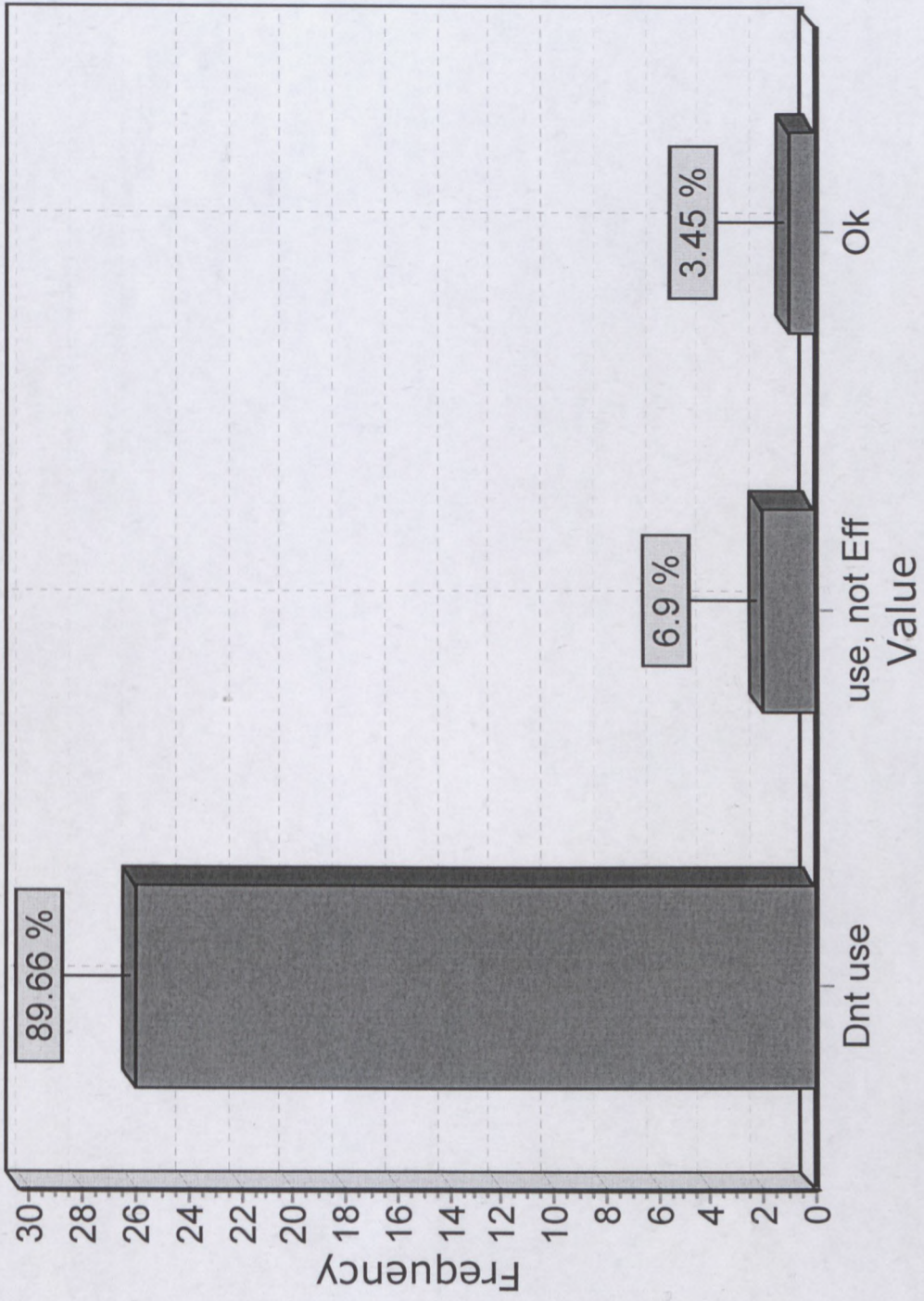
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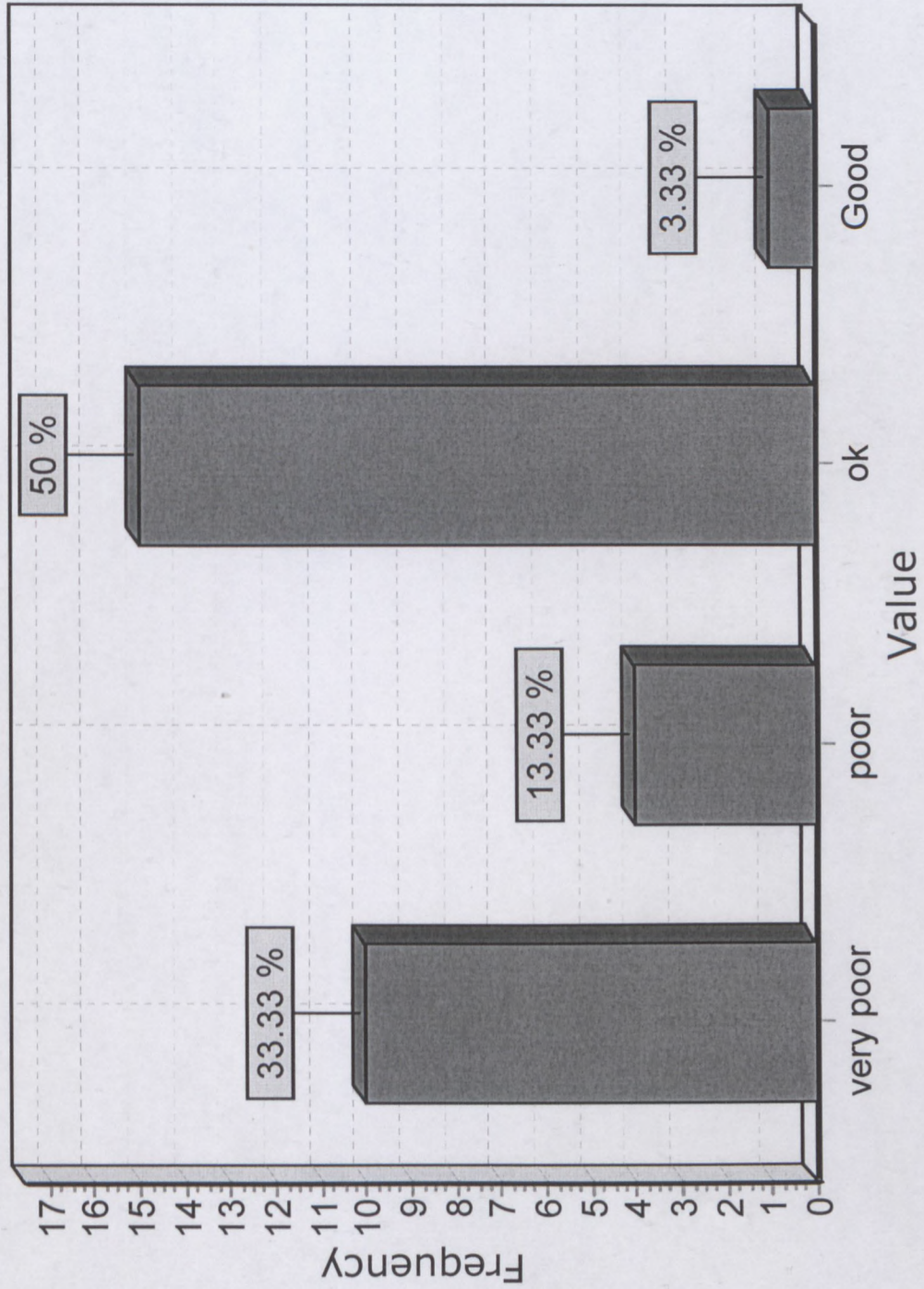
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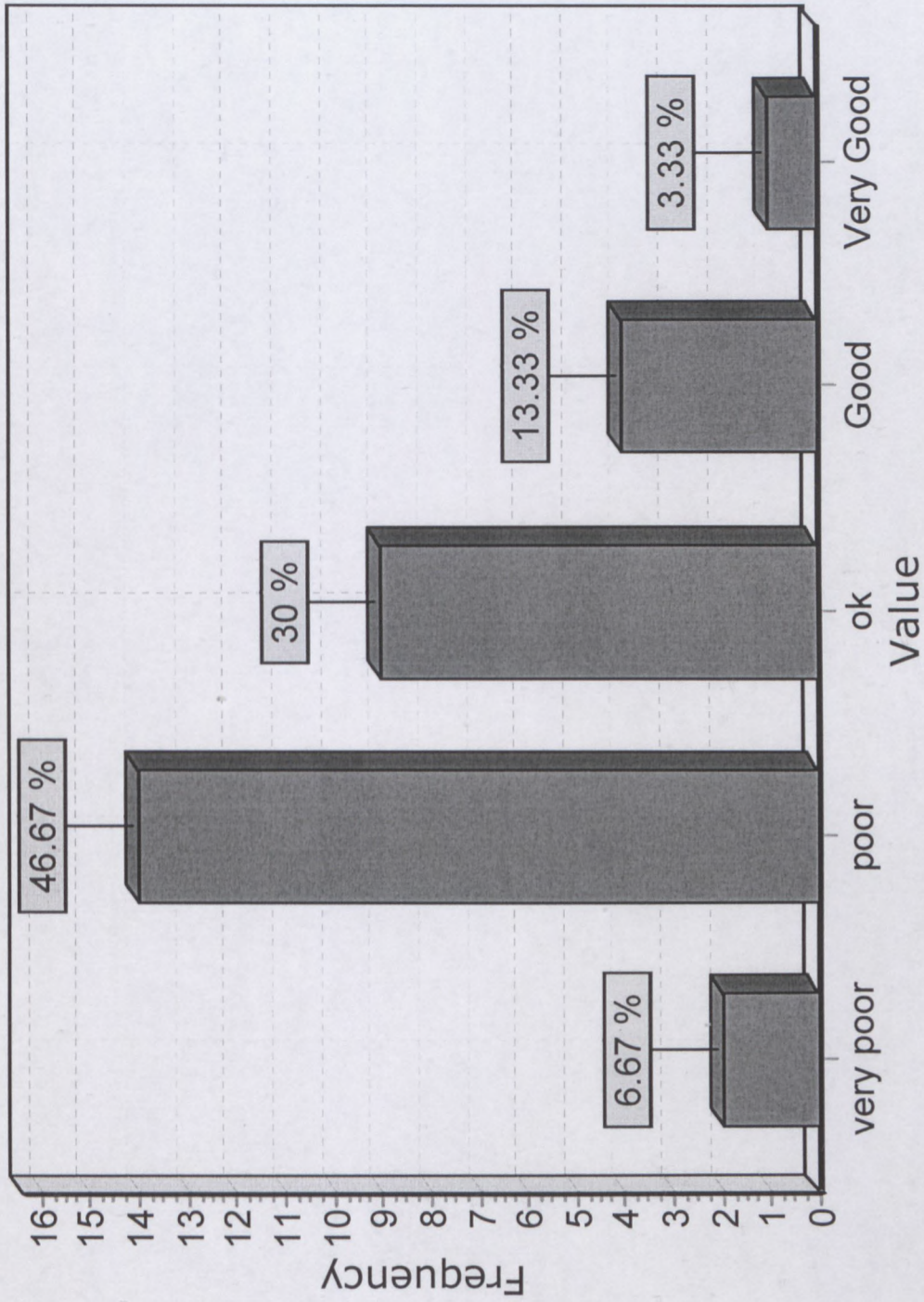
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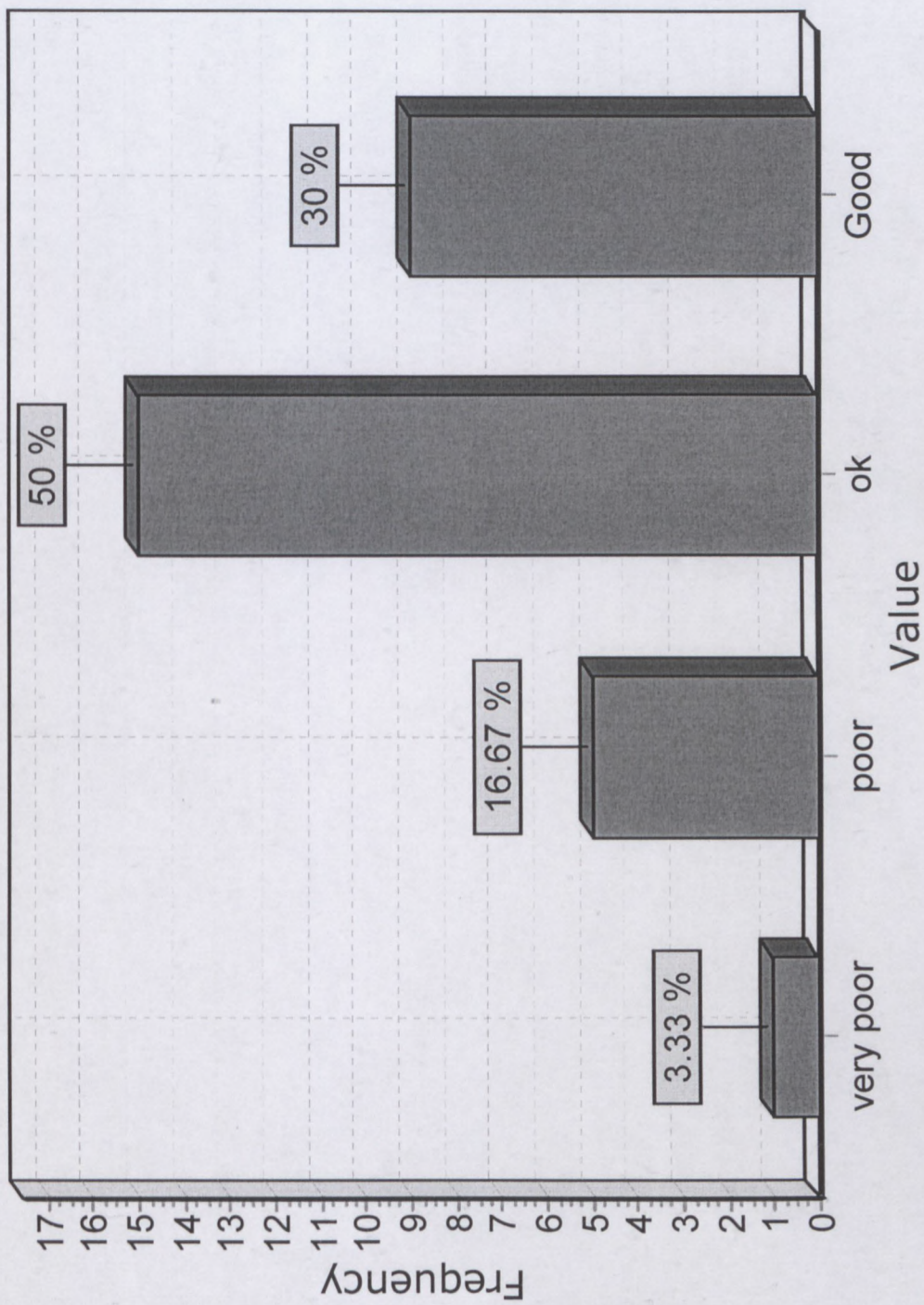
Barchart for Q9



Barchart for Q10

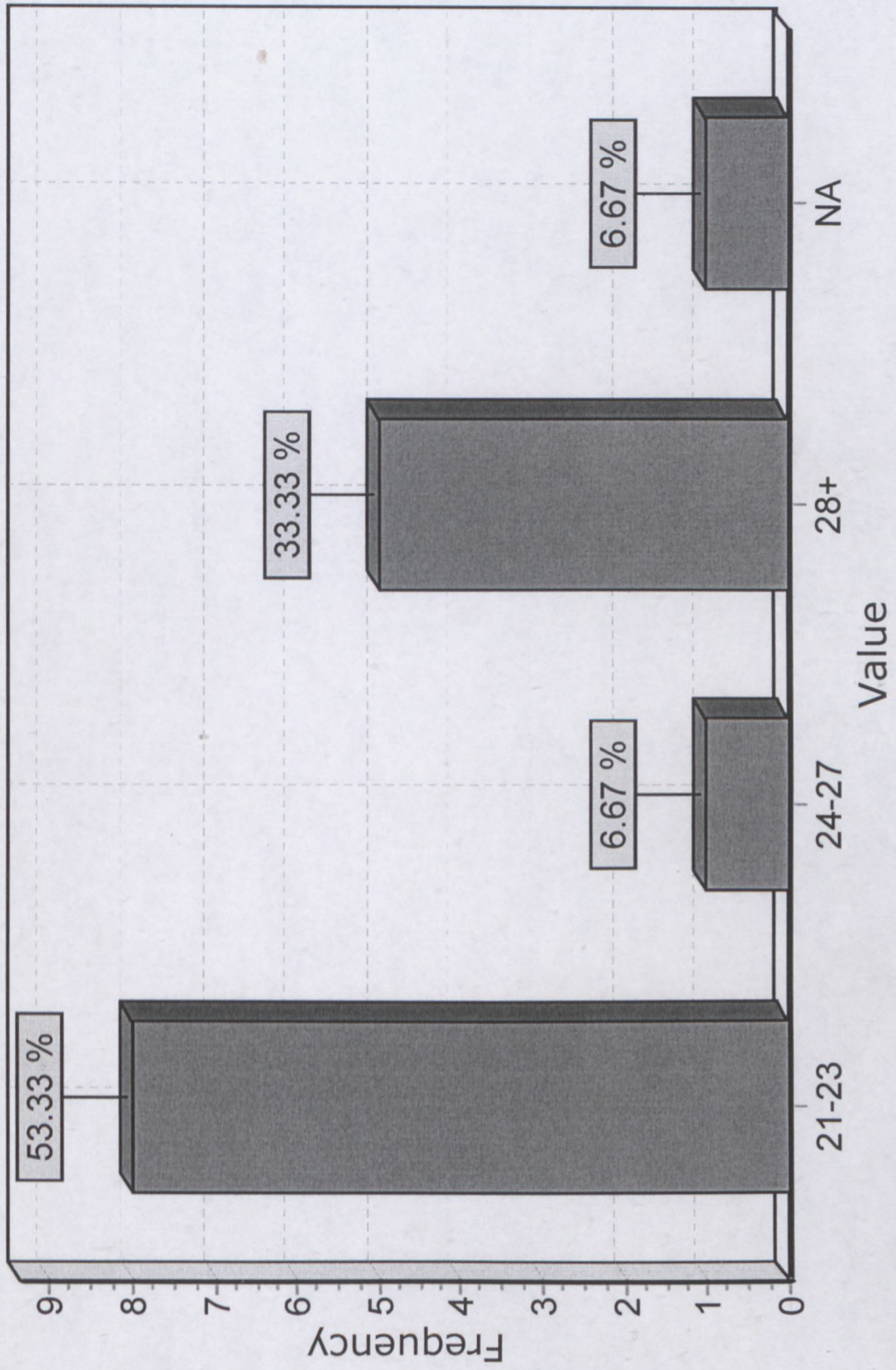


Barchart for Q11

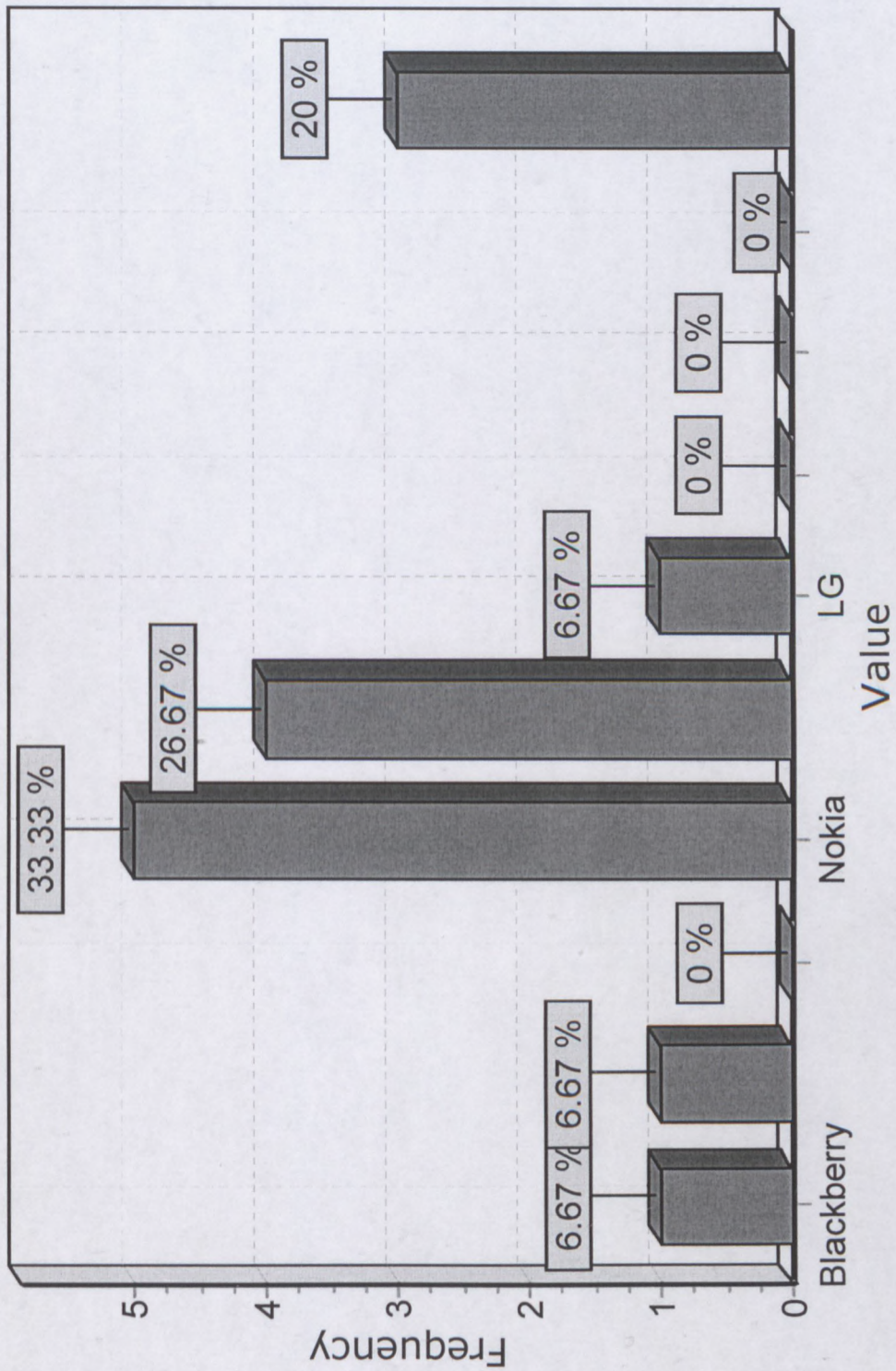


7.3.3 Marketing Results

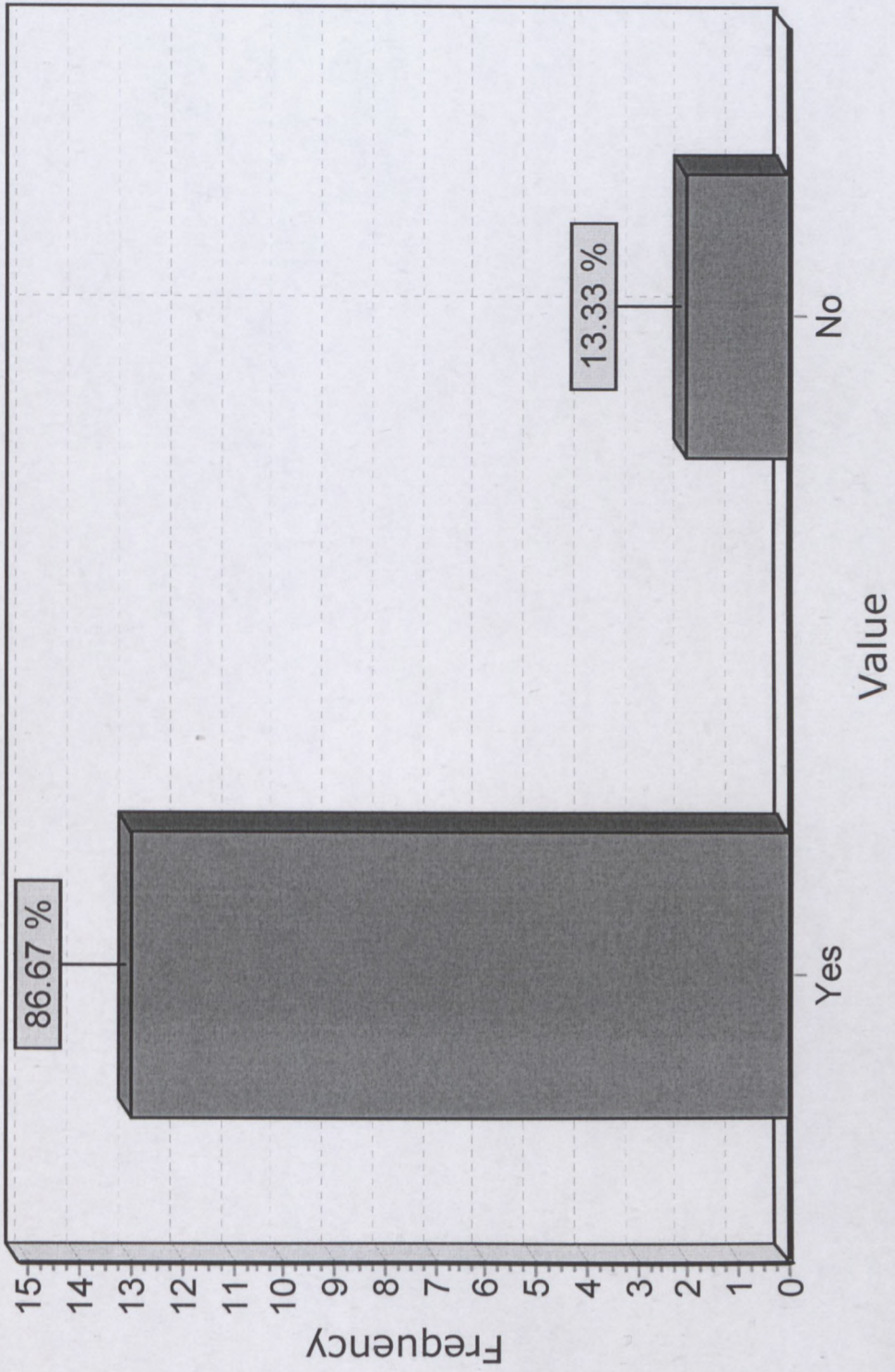
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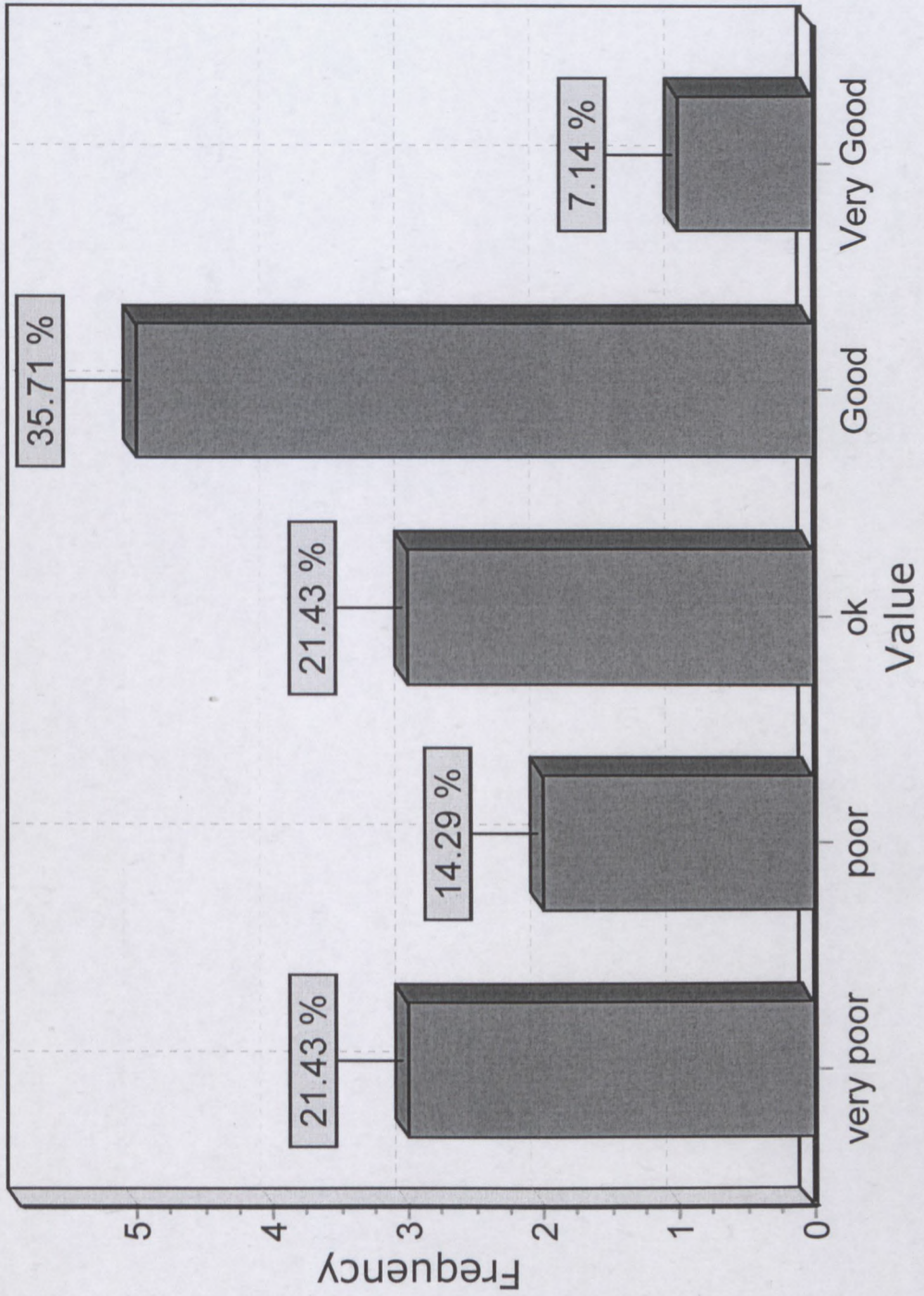
Barchart for CELLPHONE



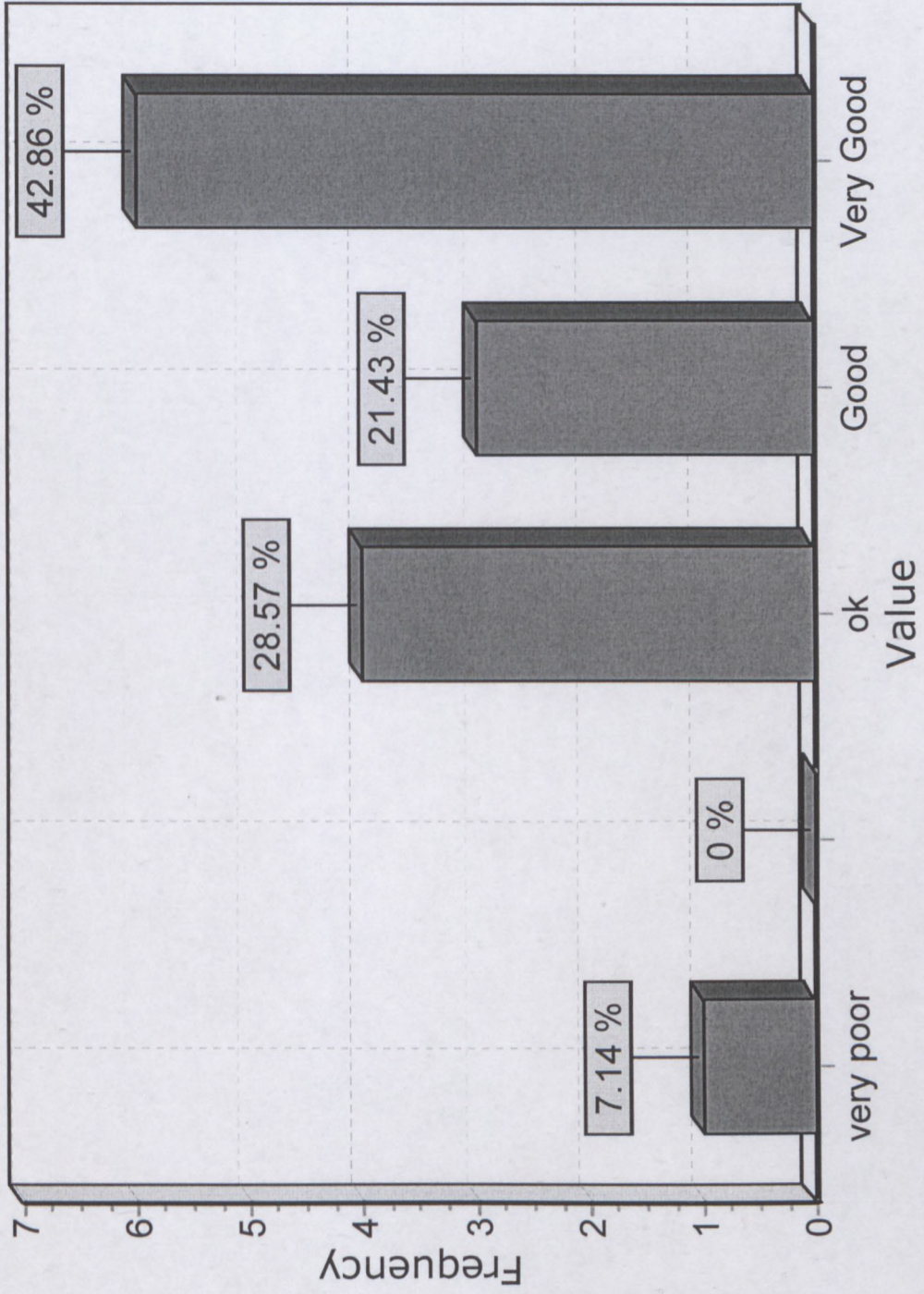
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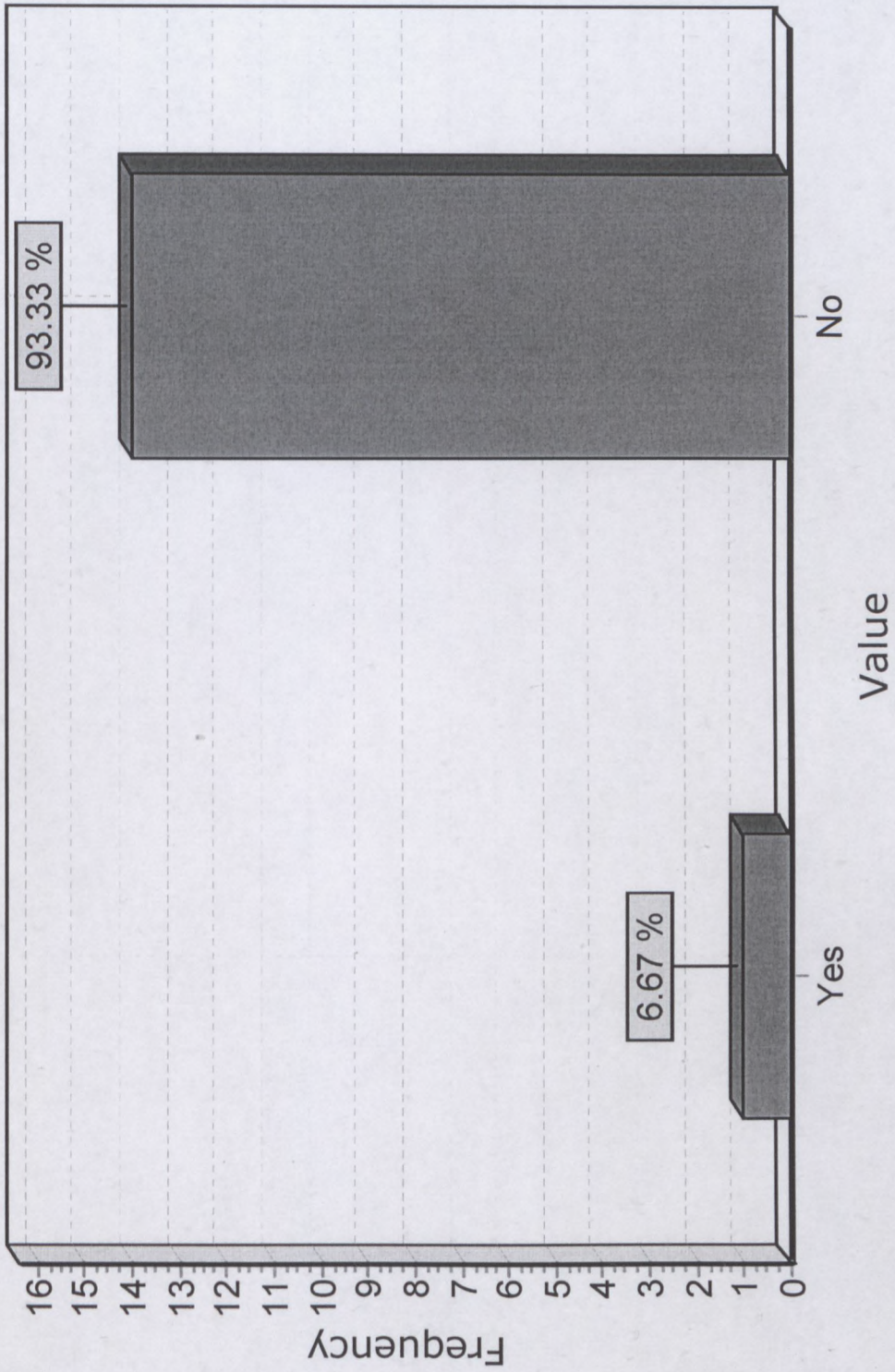
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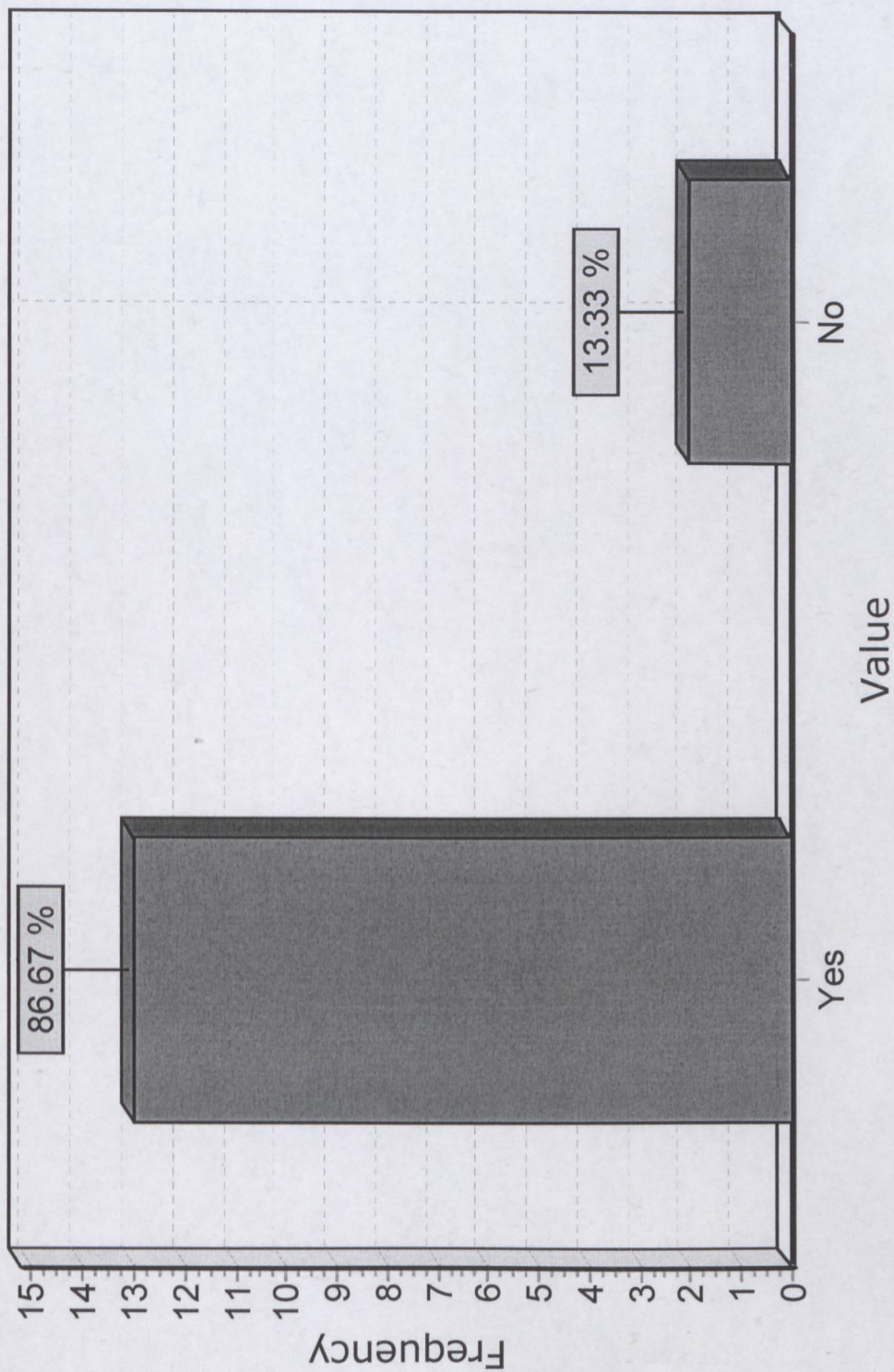
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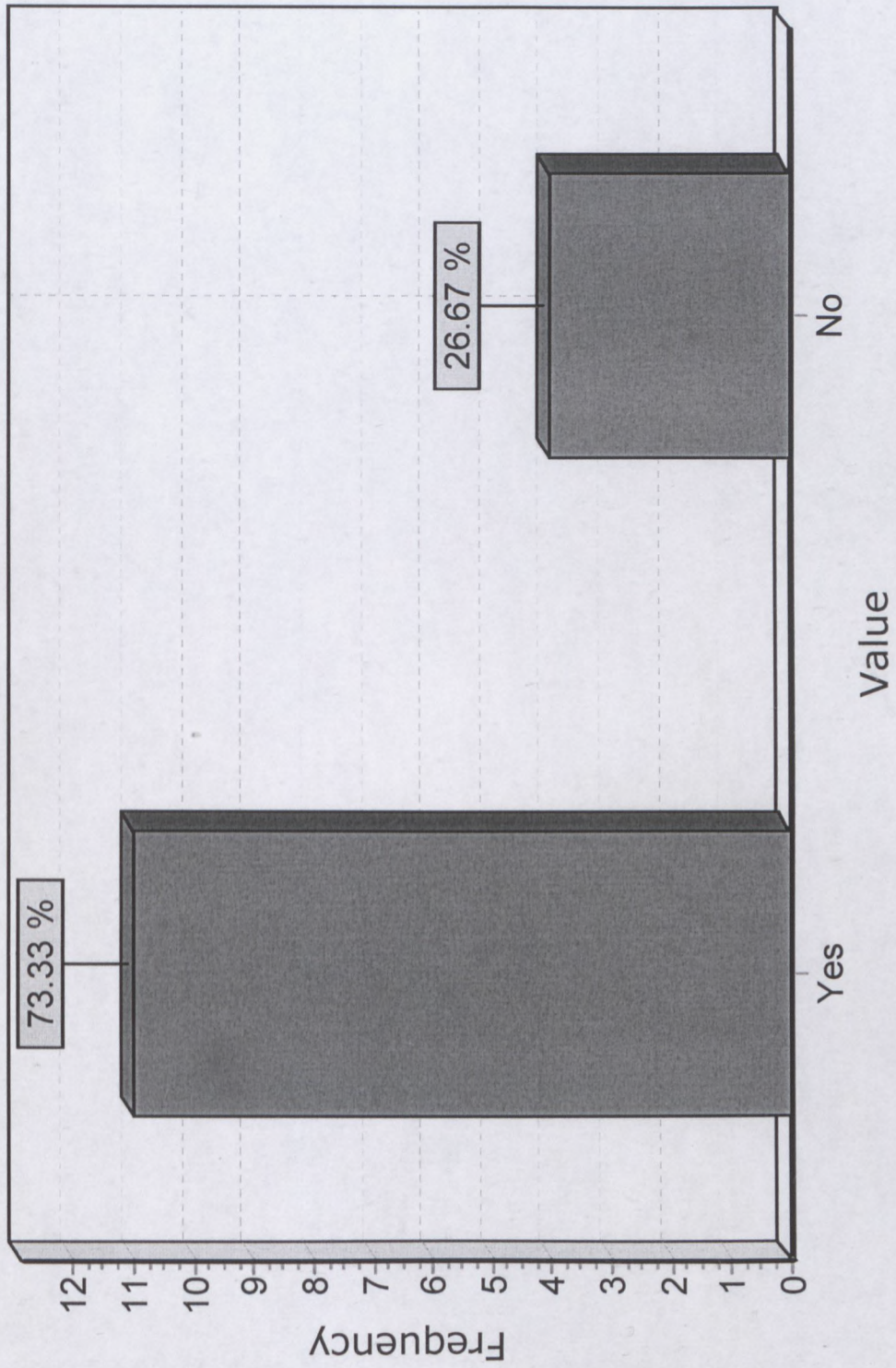
Barchart for Q2BLOGGIN



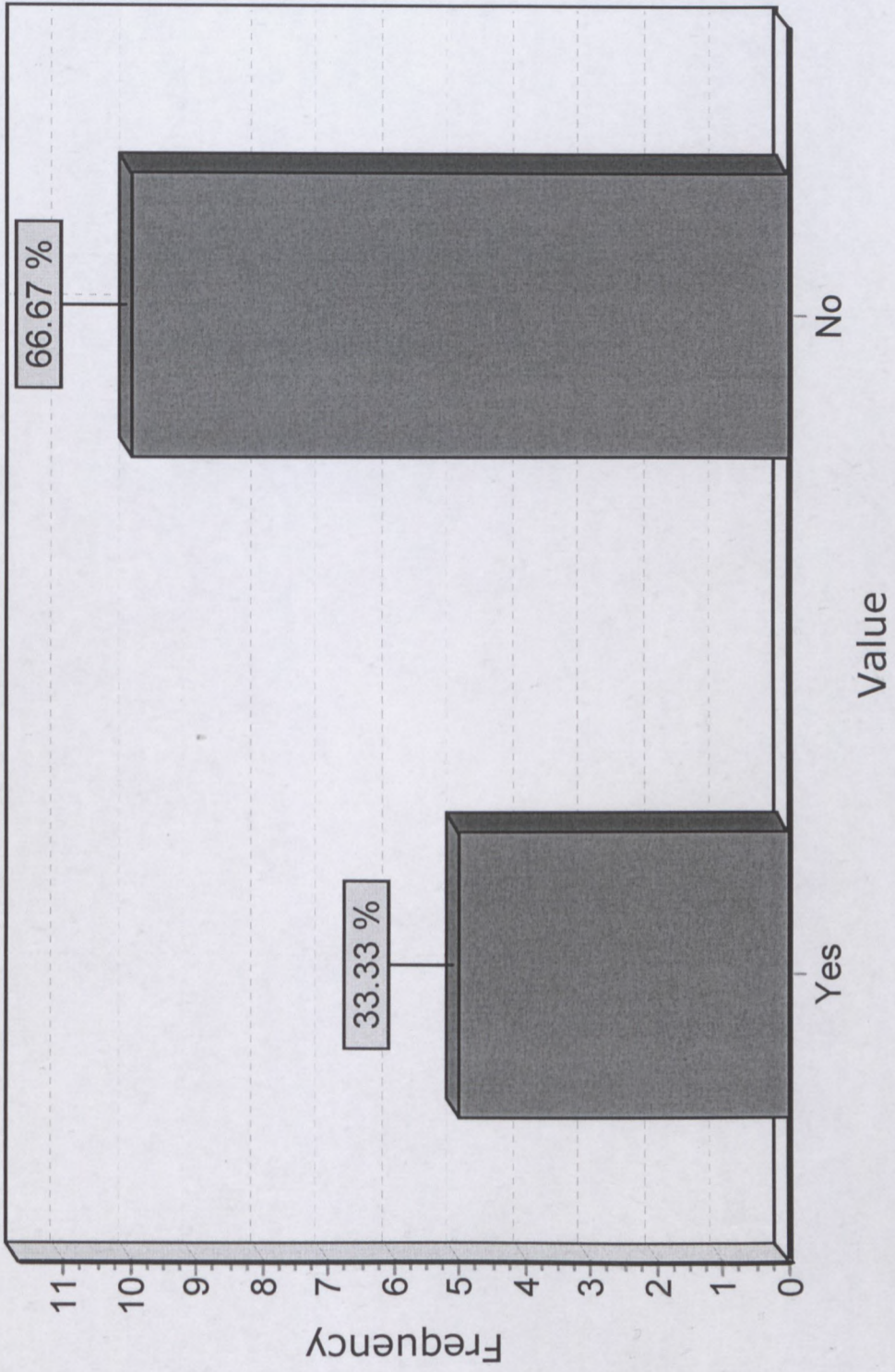
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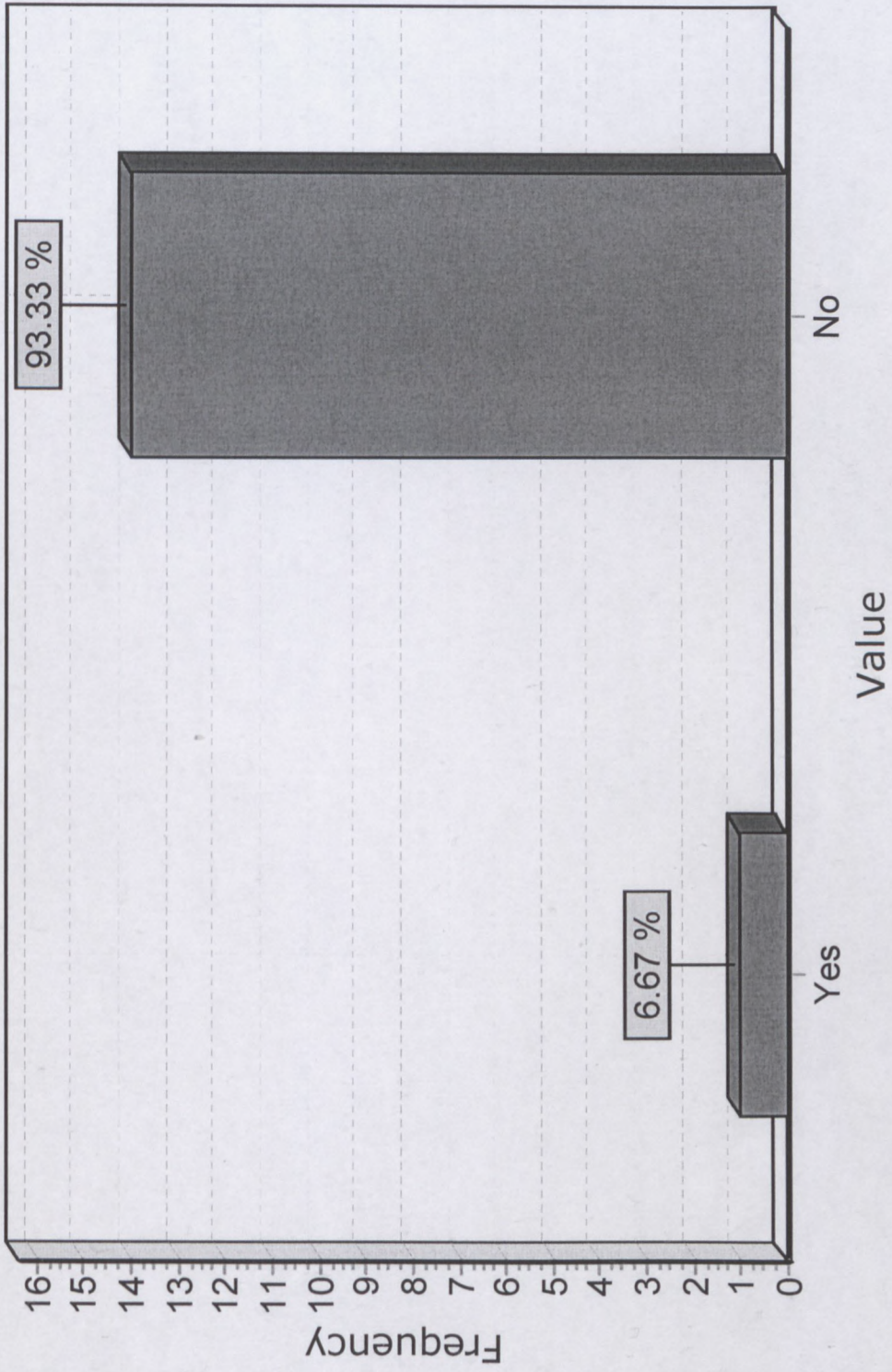
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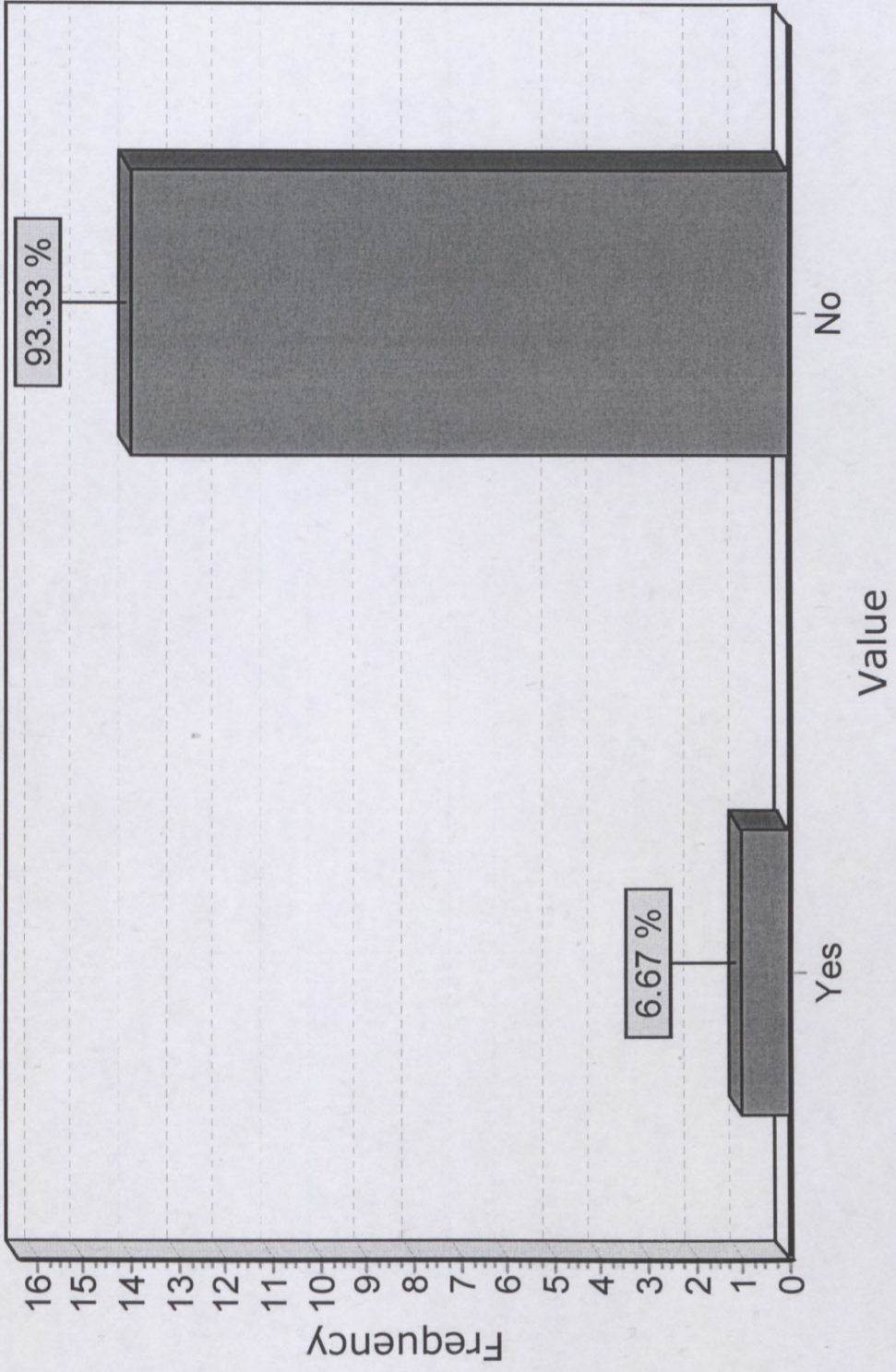
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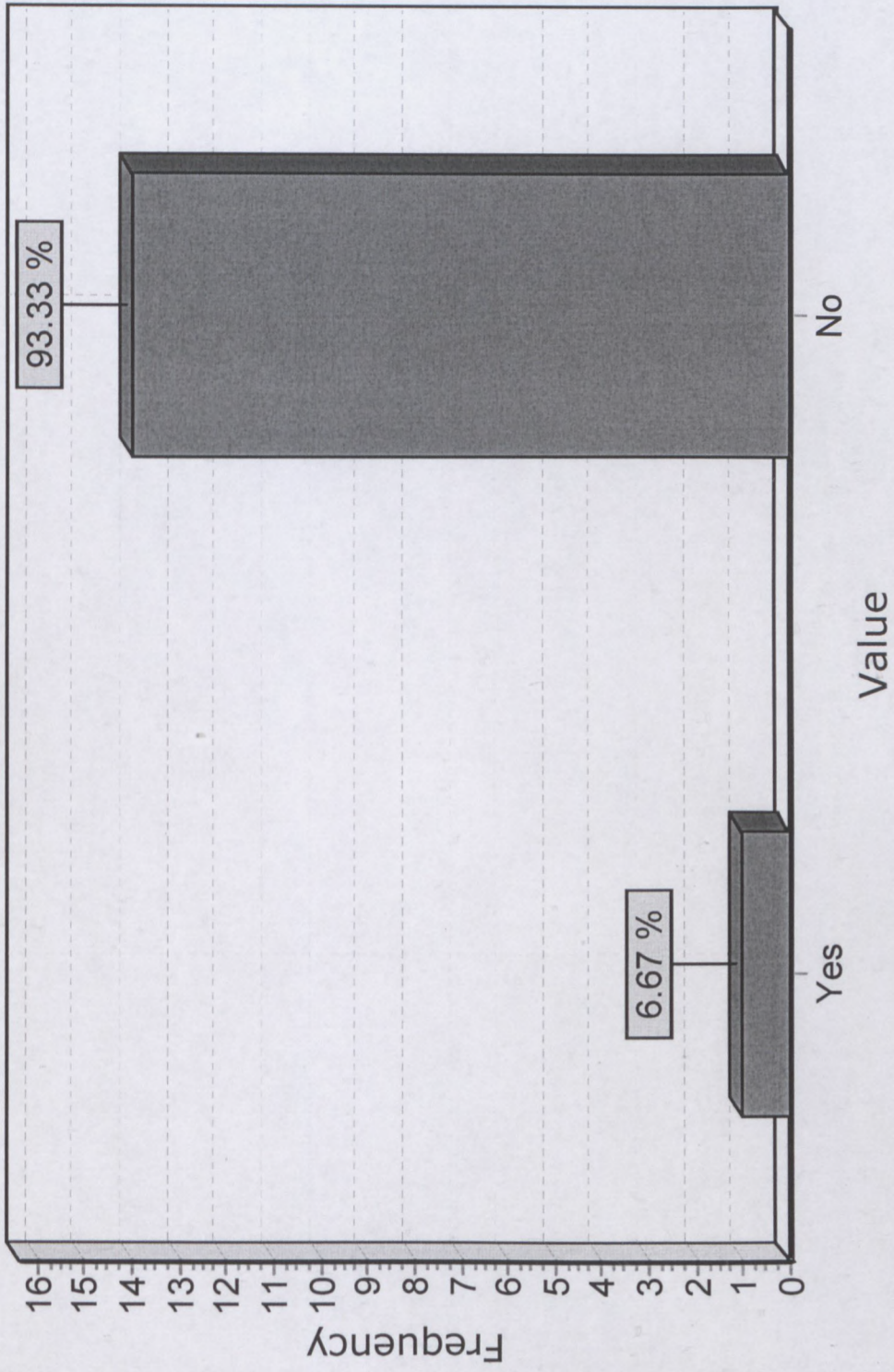
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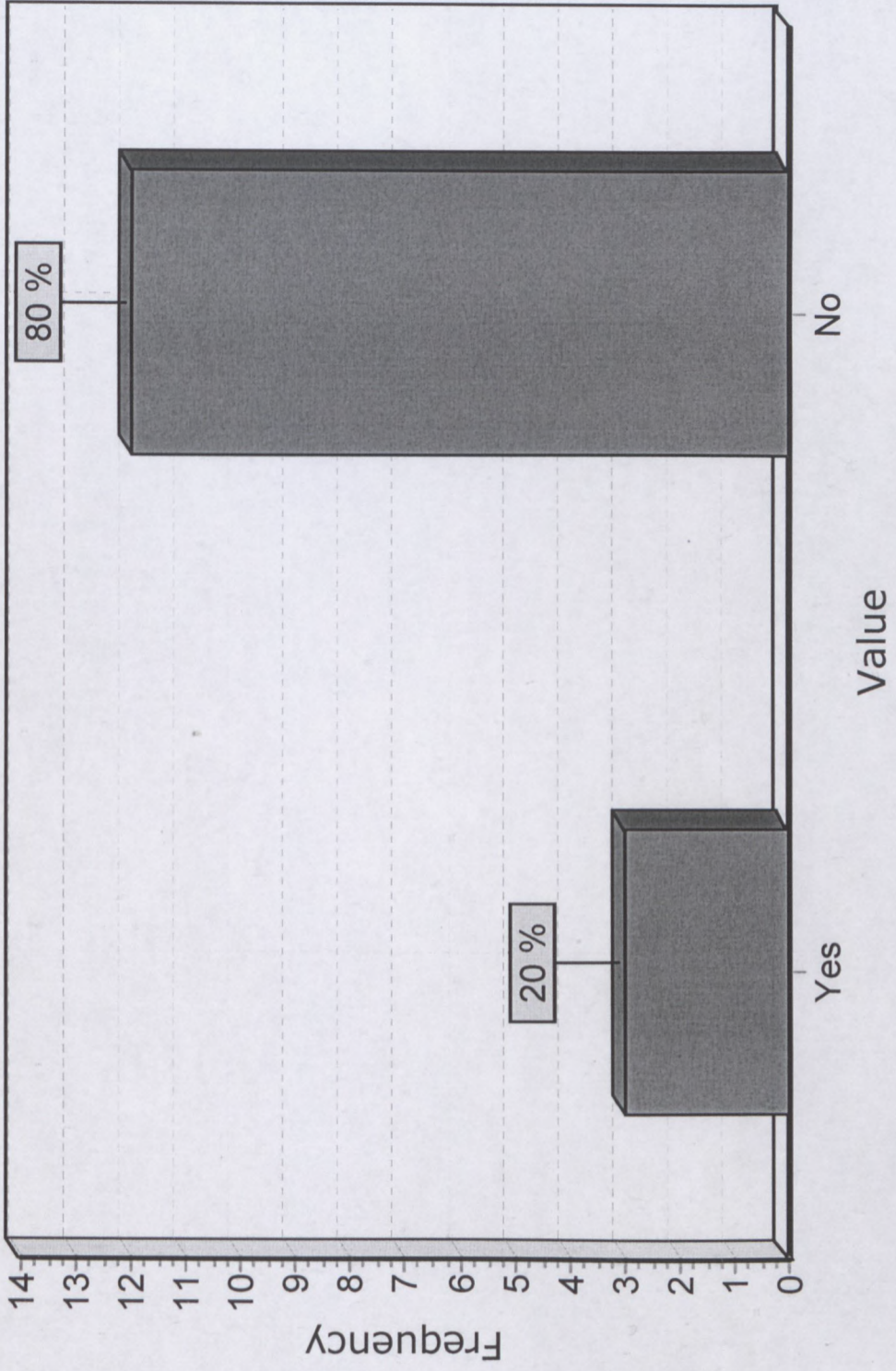
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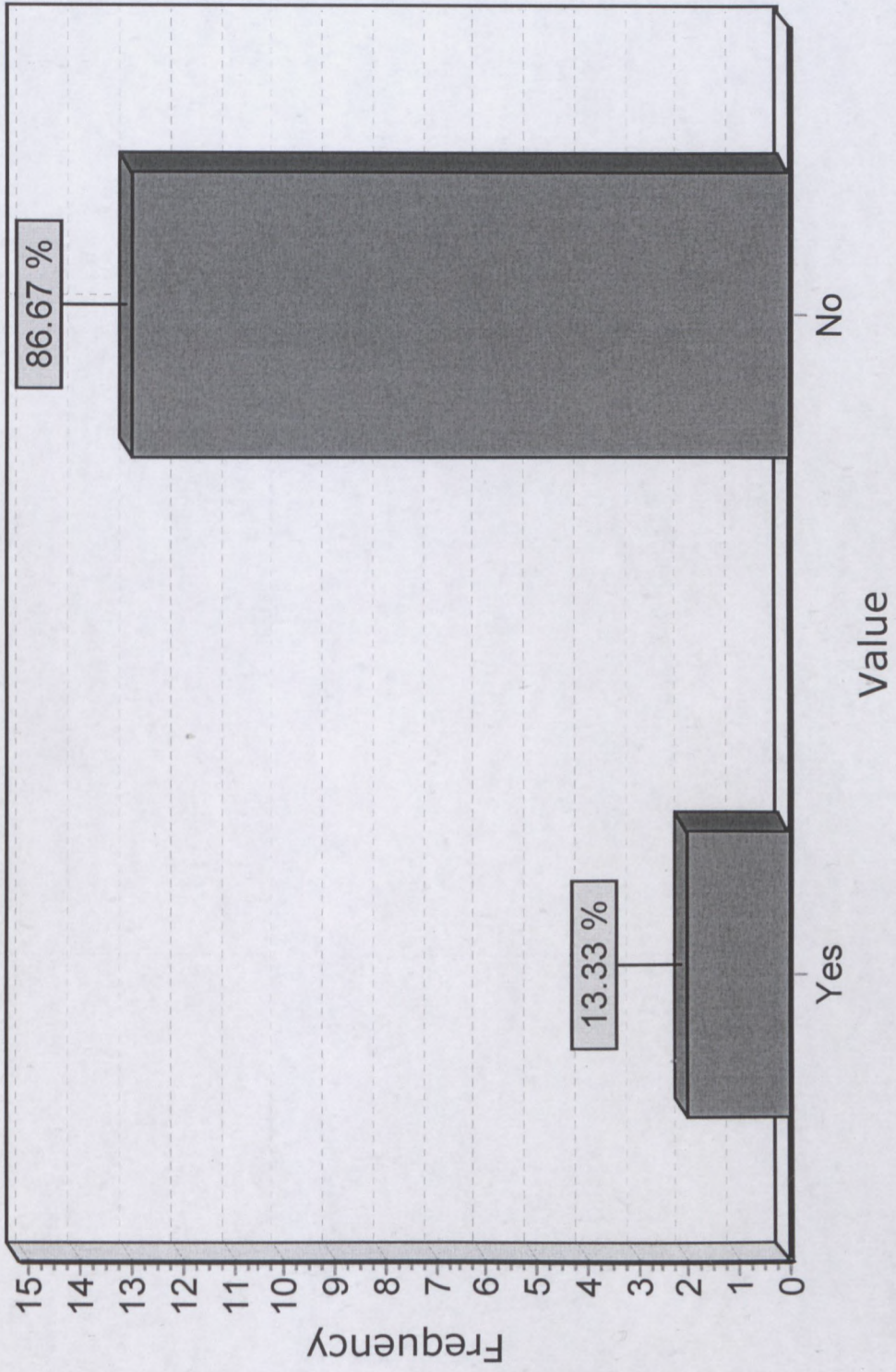
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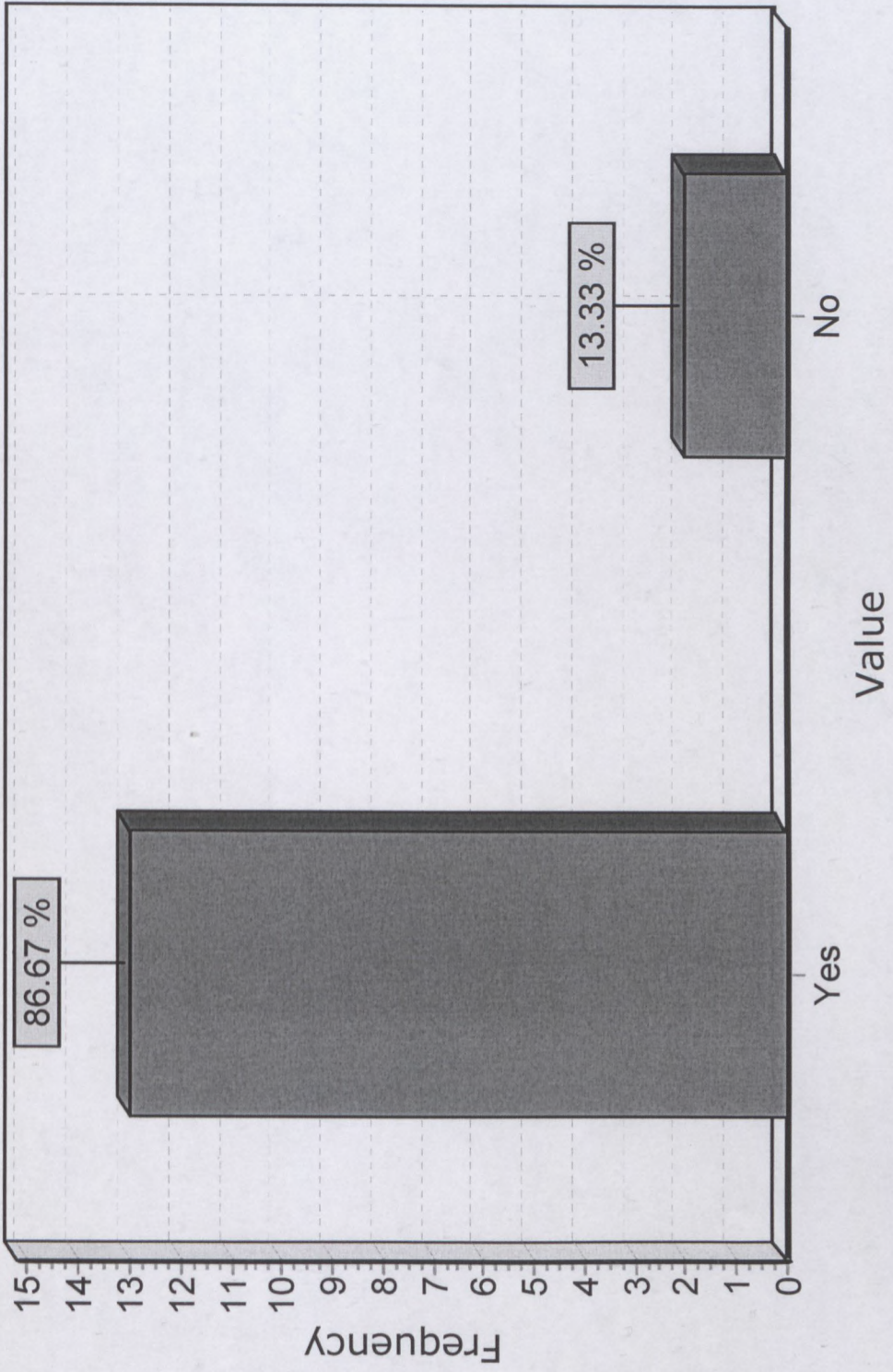
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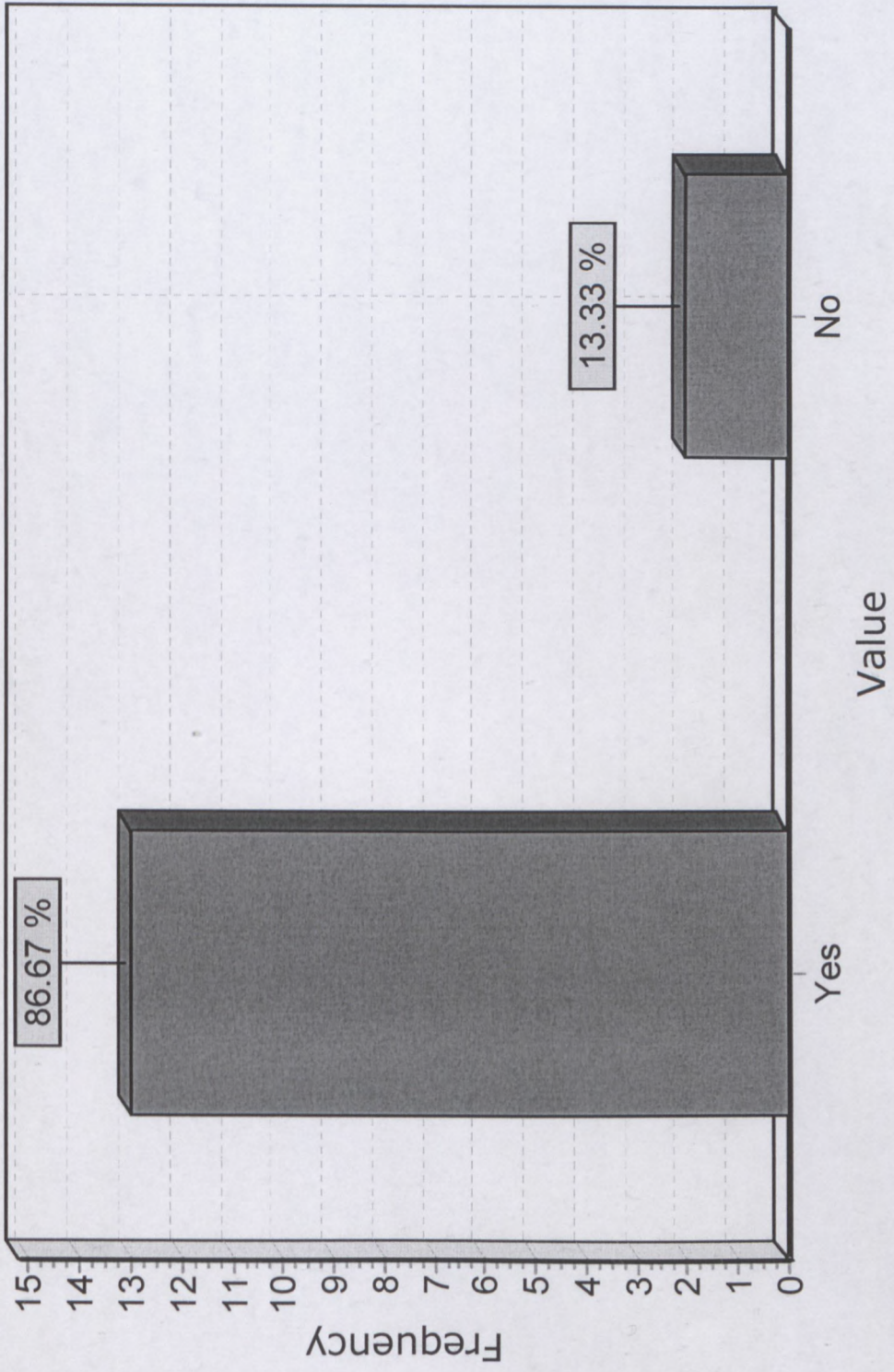
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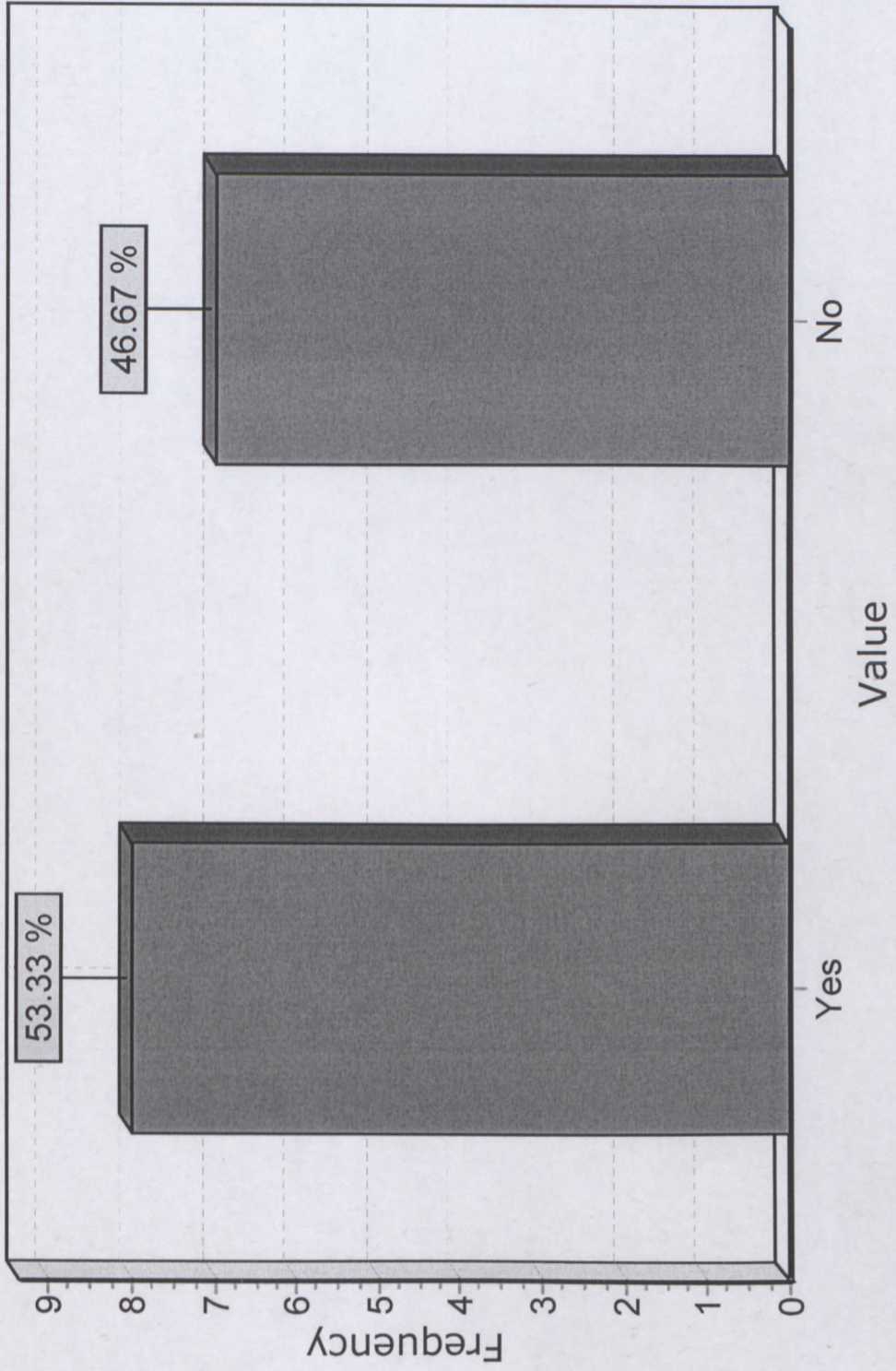
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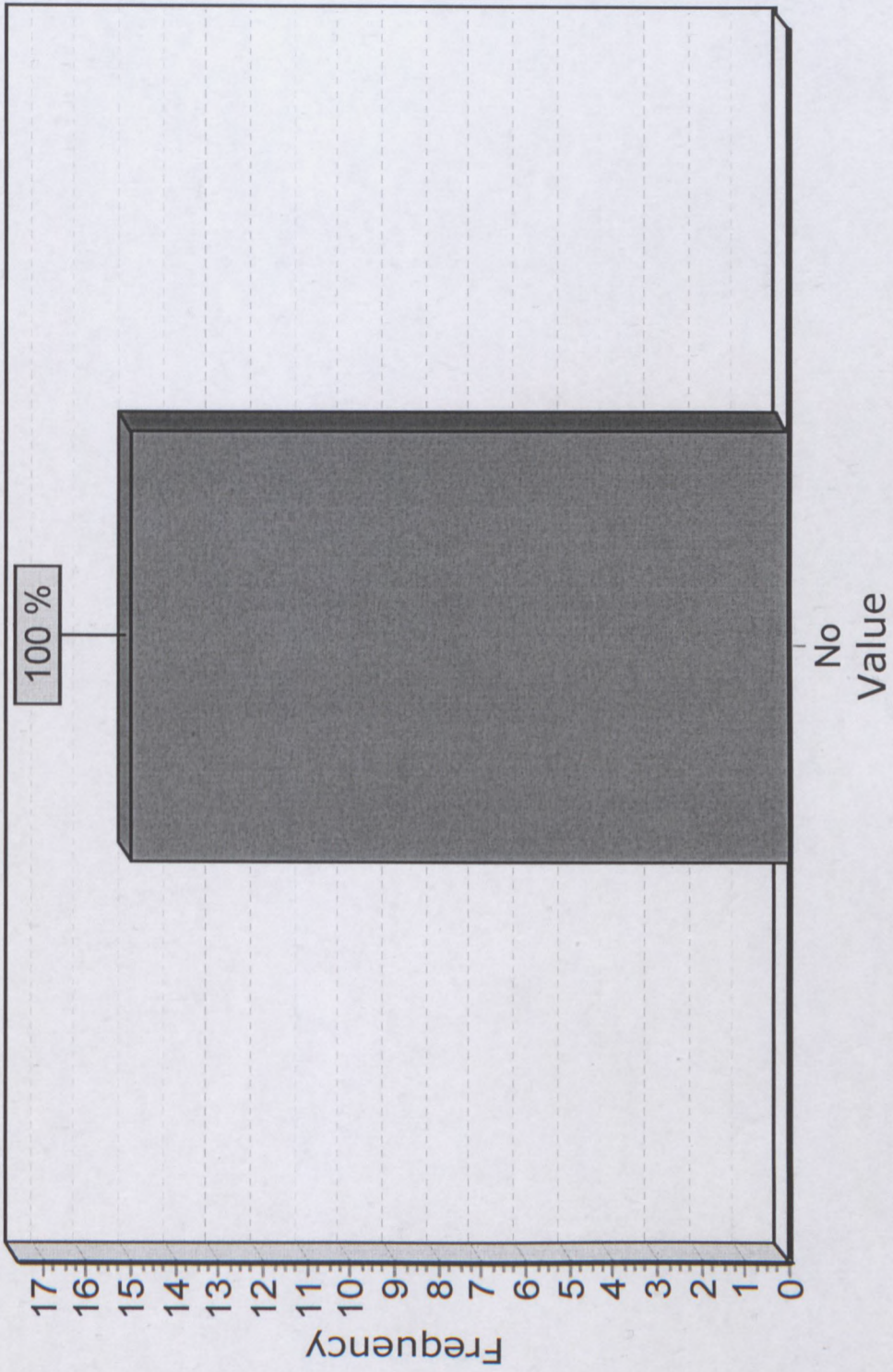
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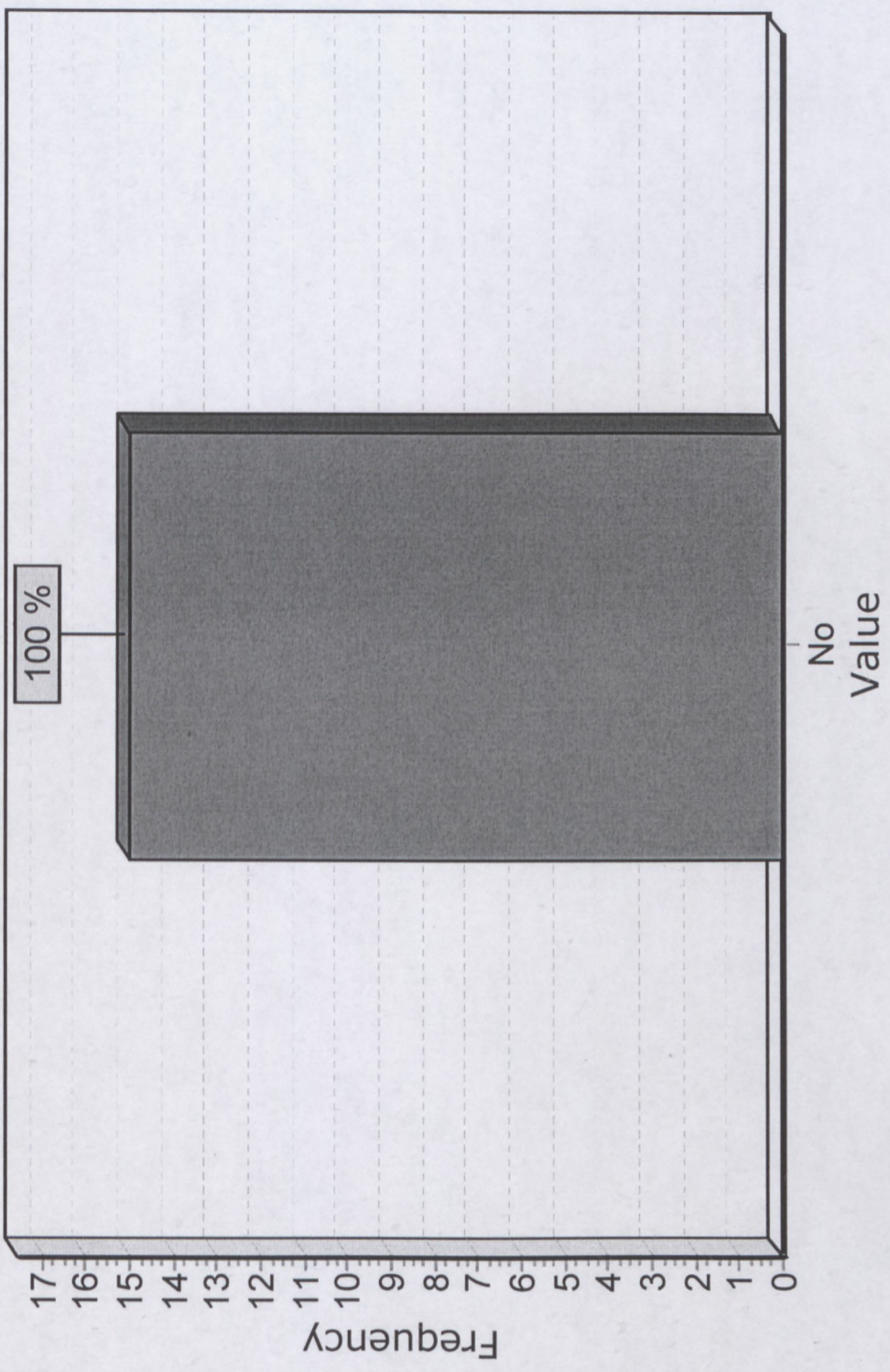
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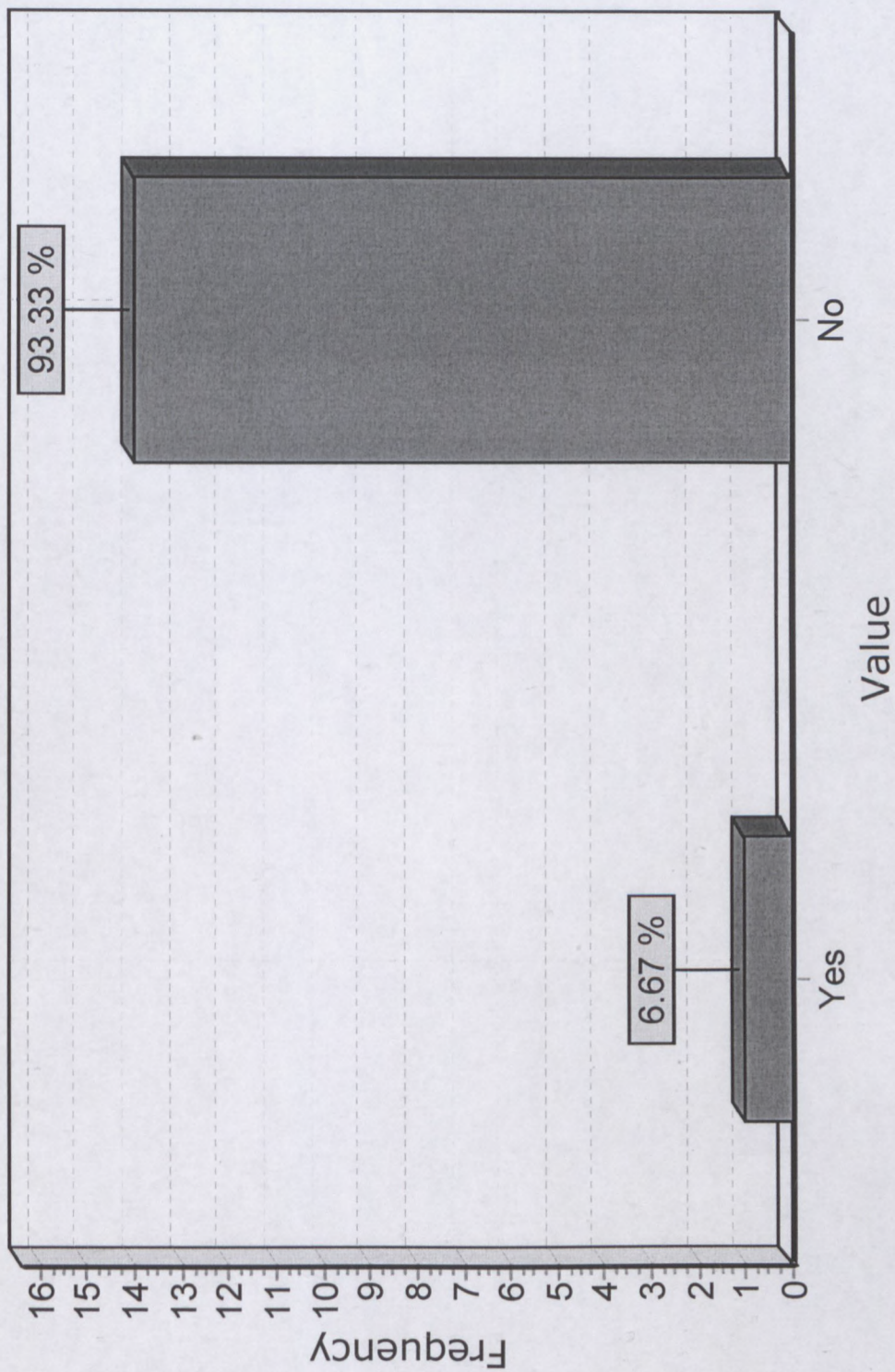
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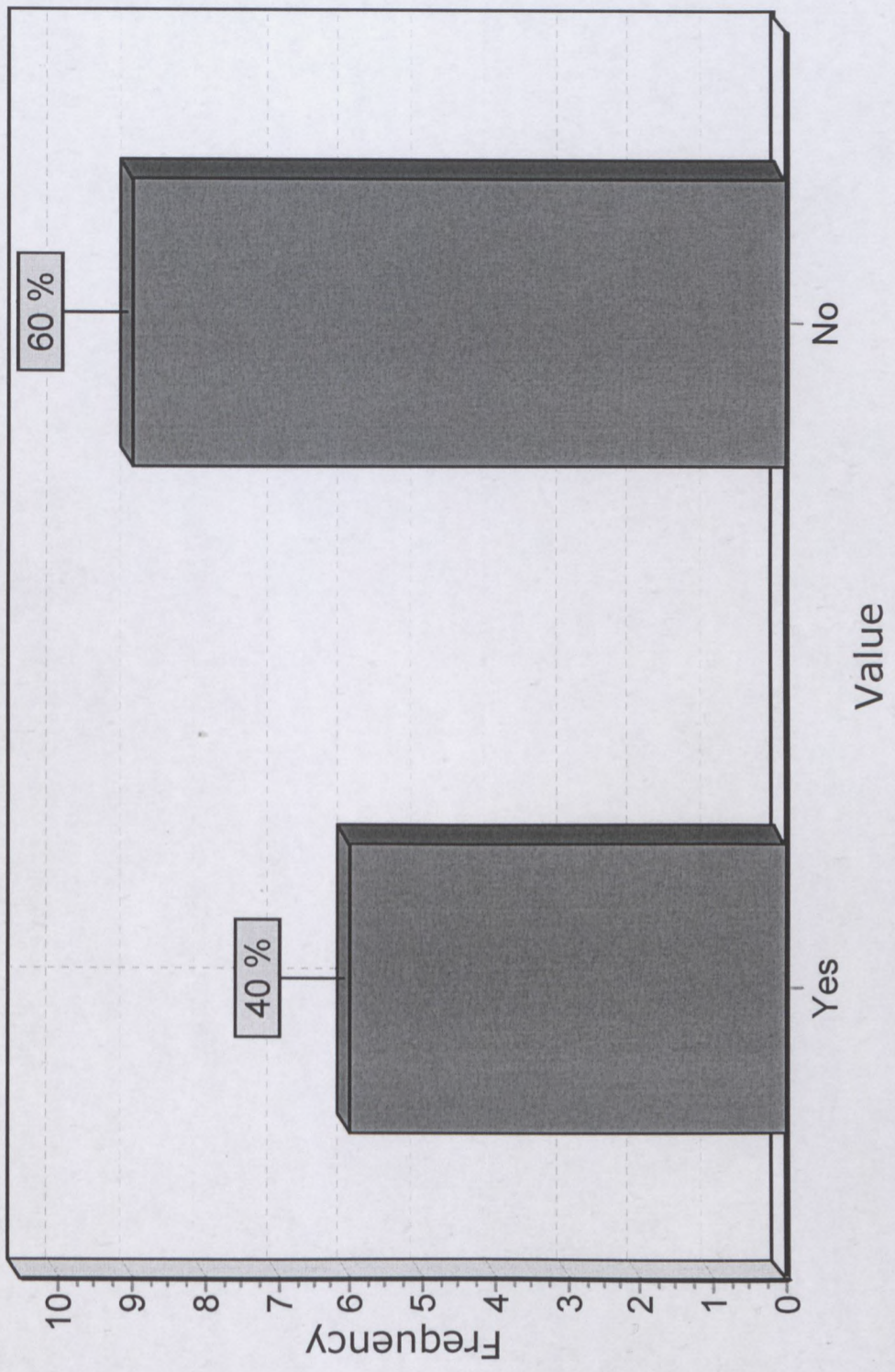
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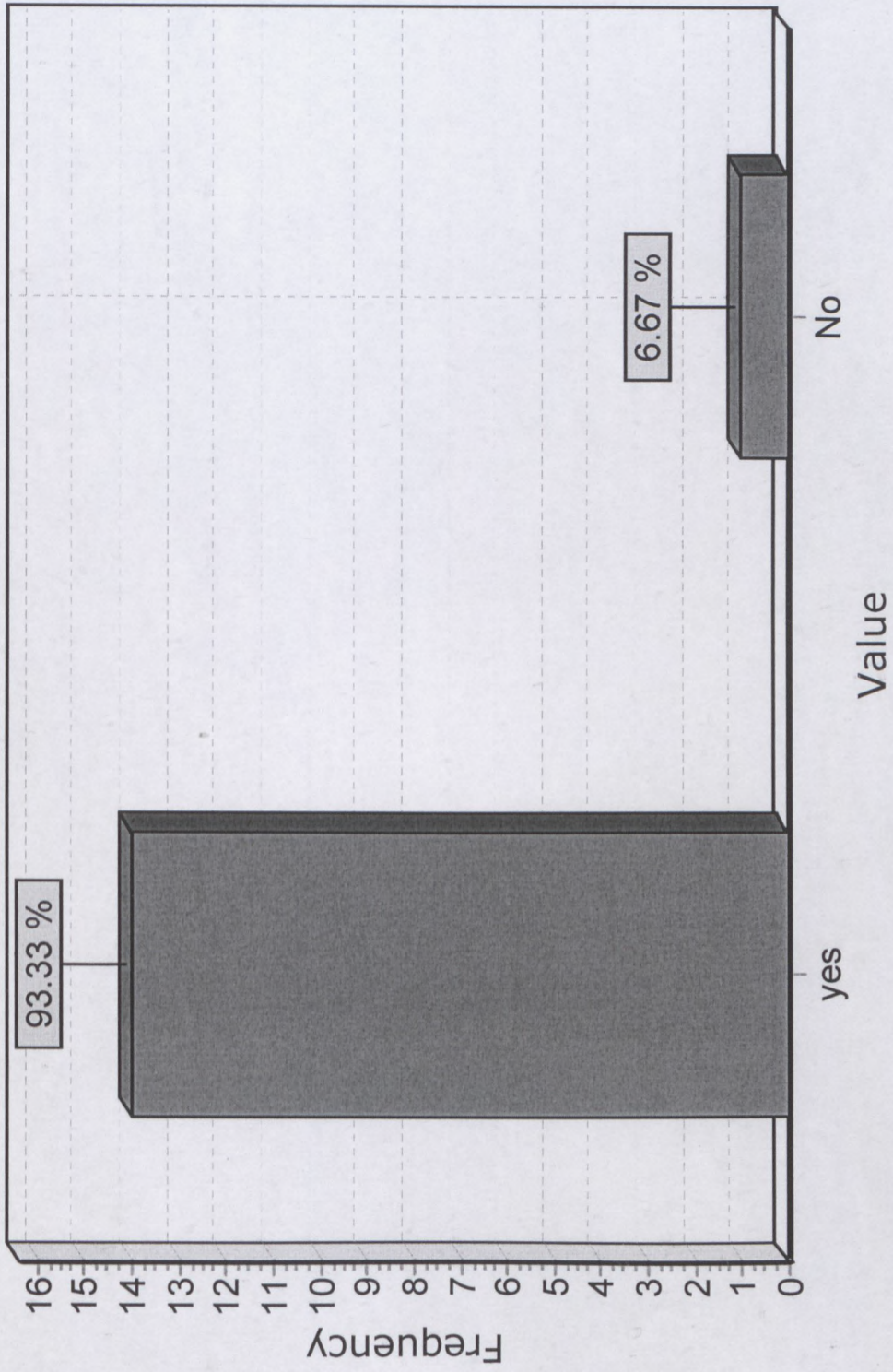
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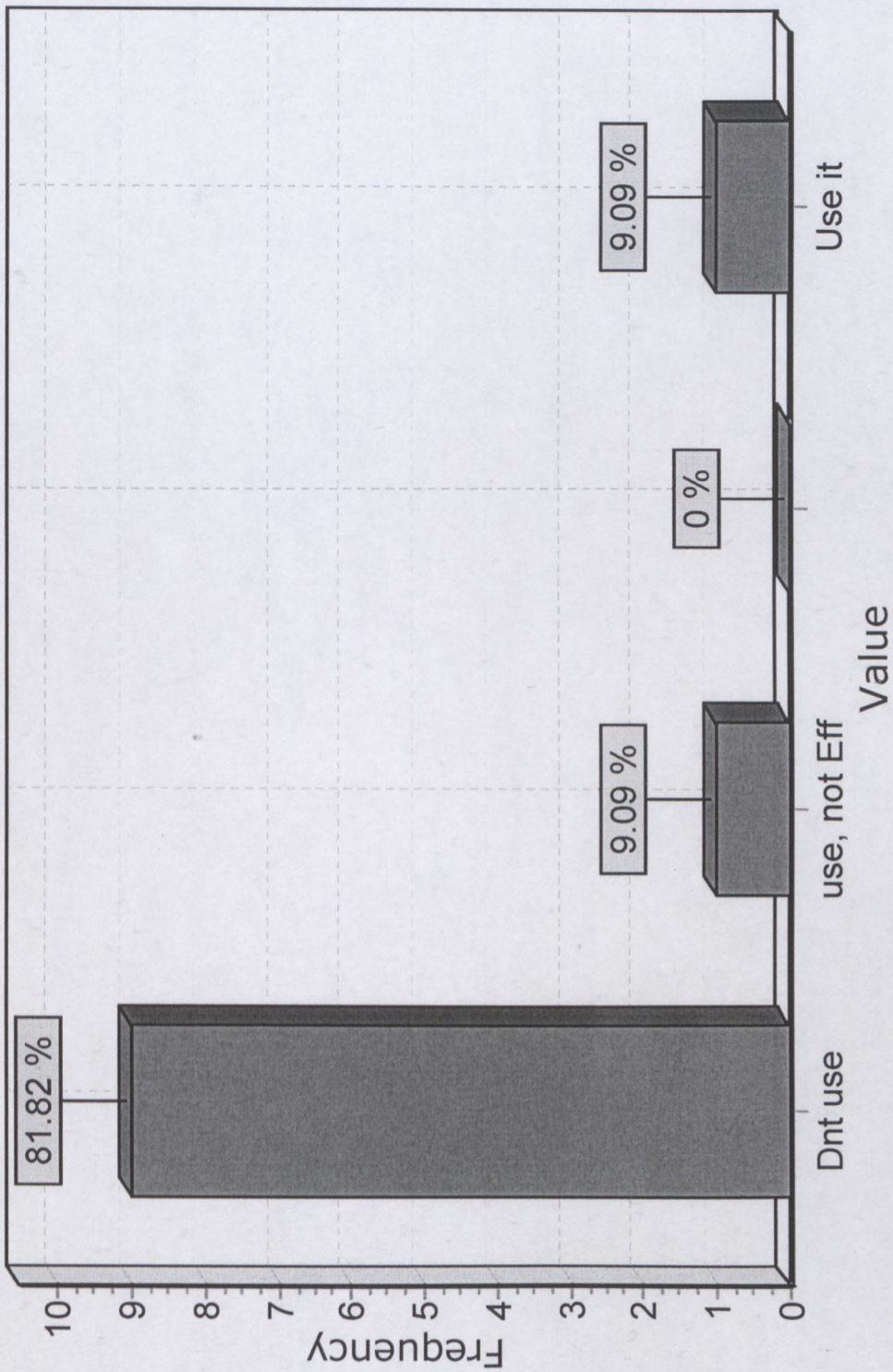
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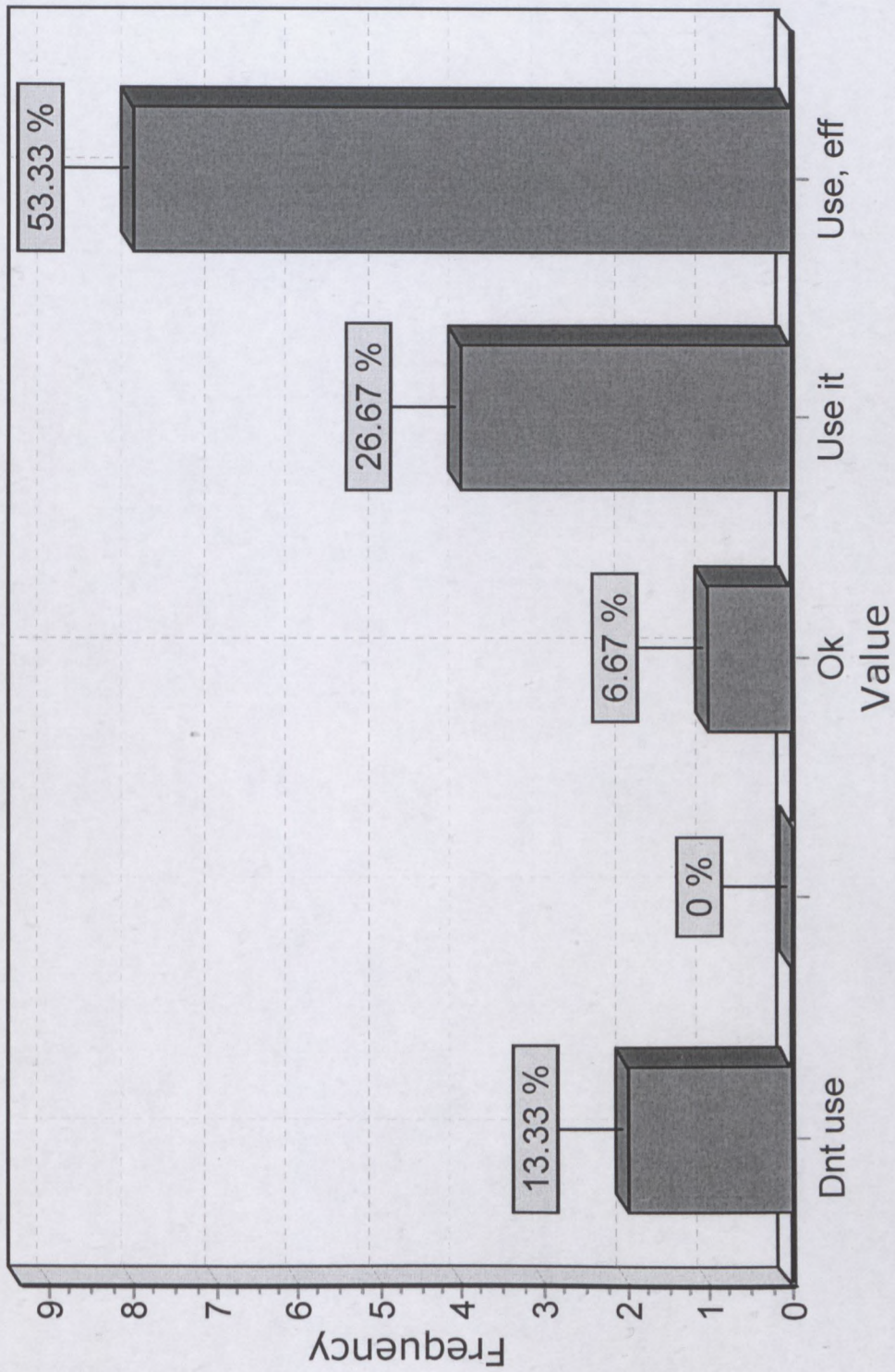
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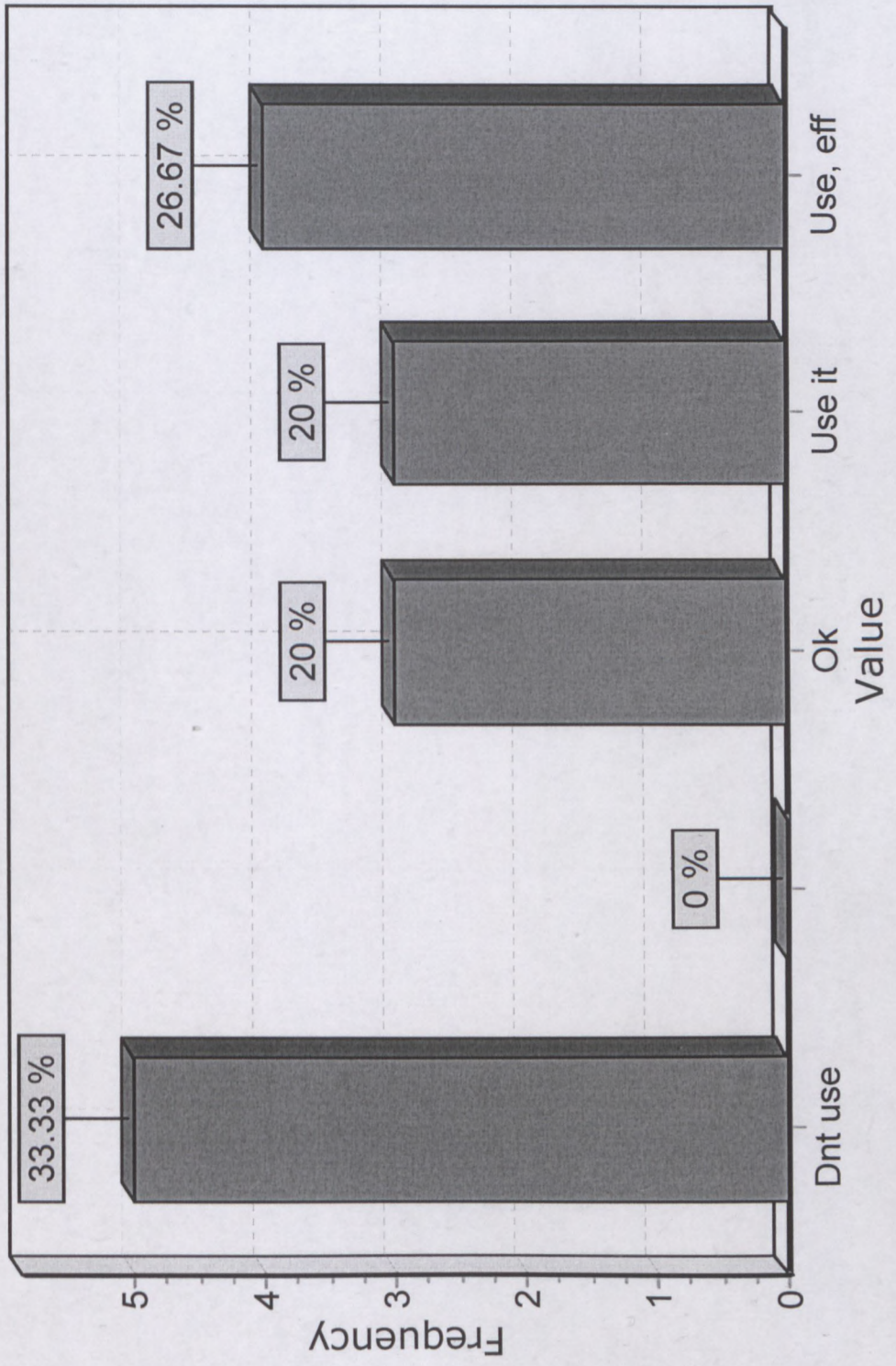
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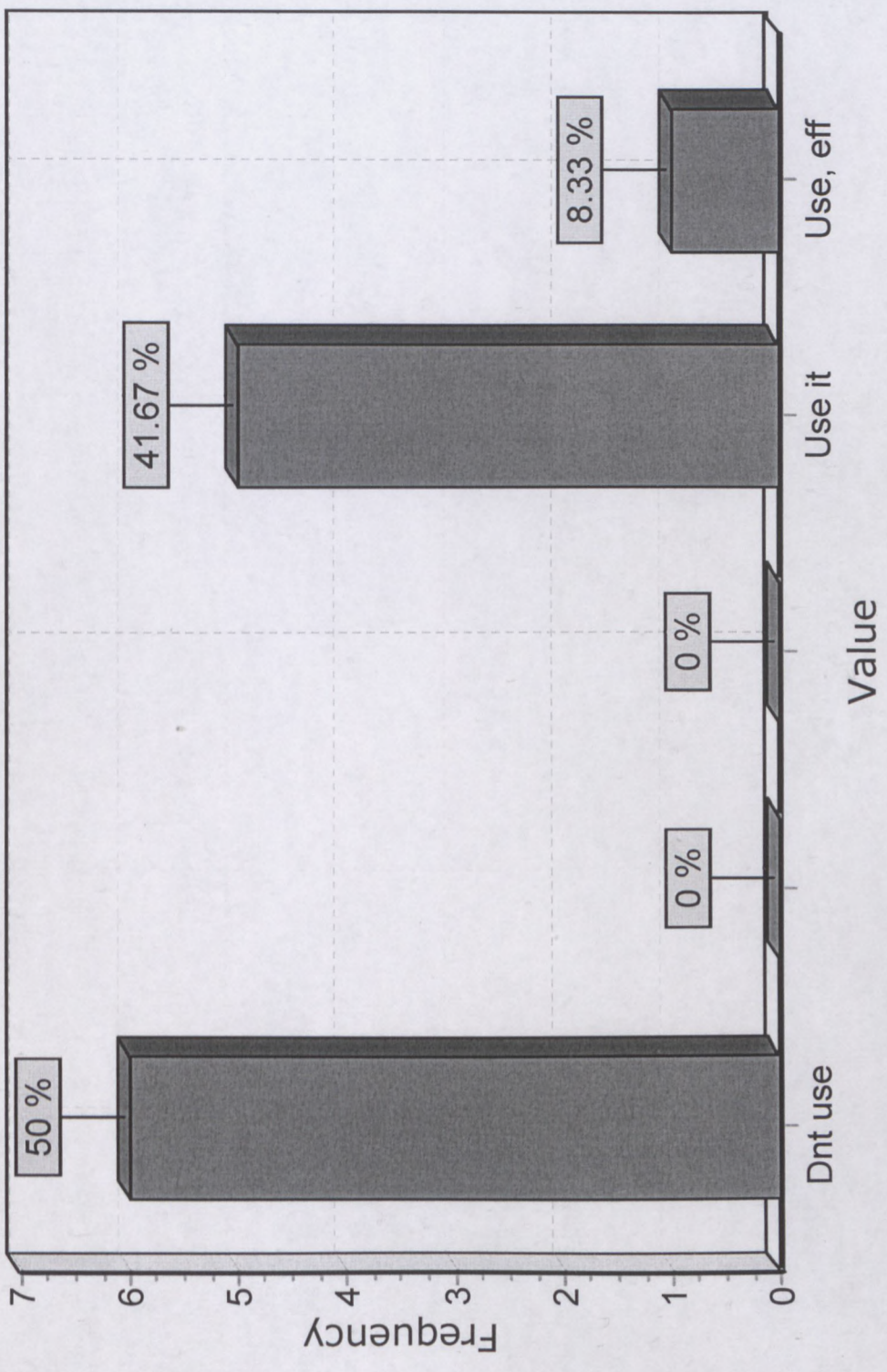
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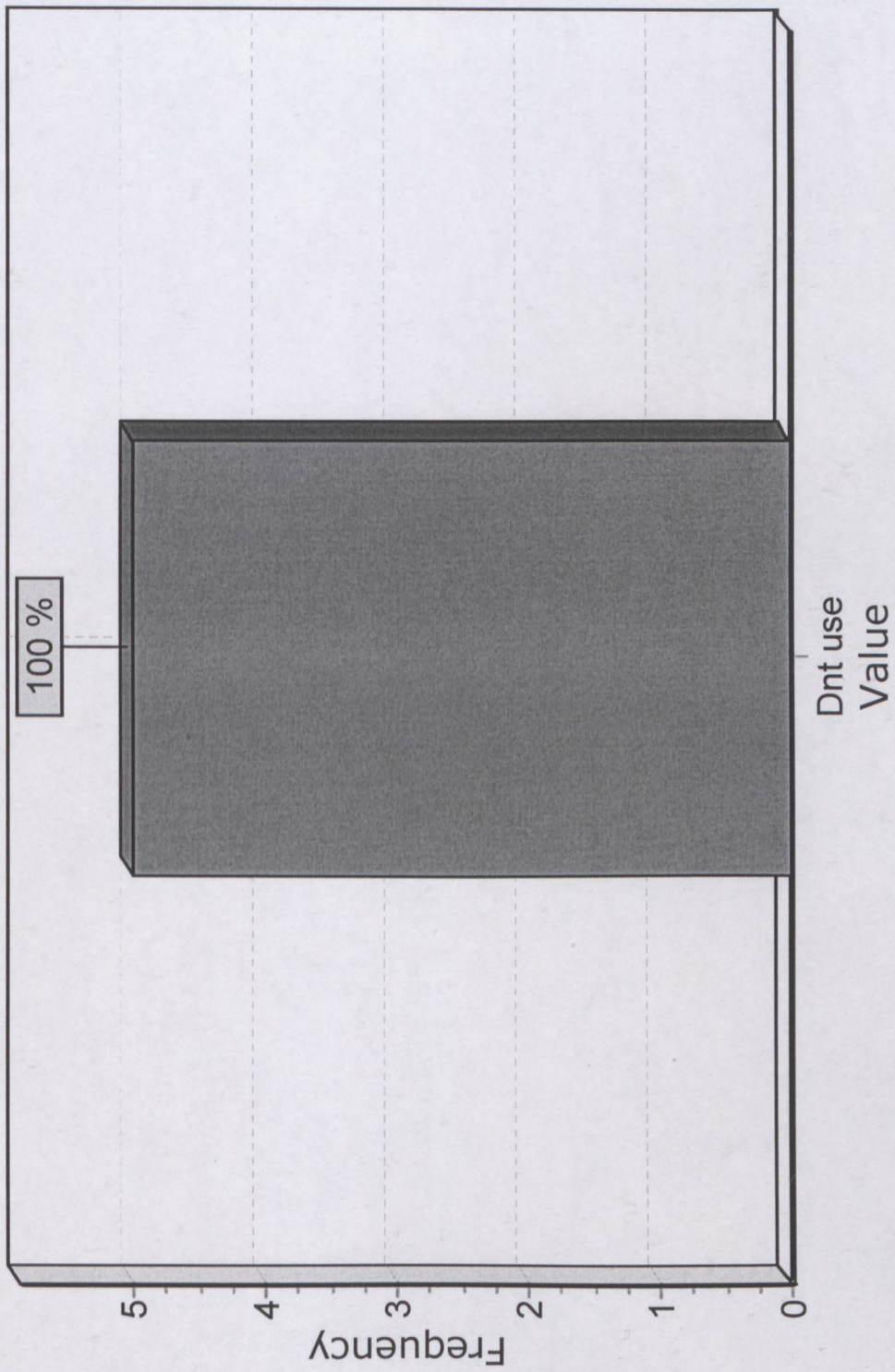
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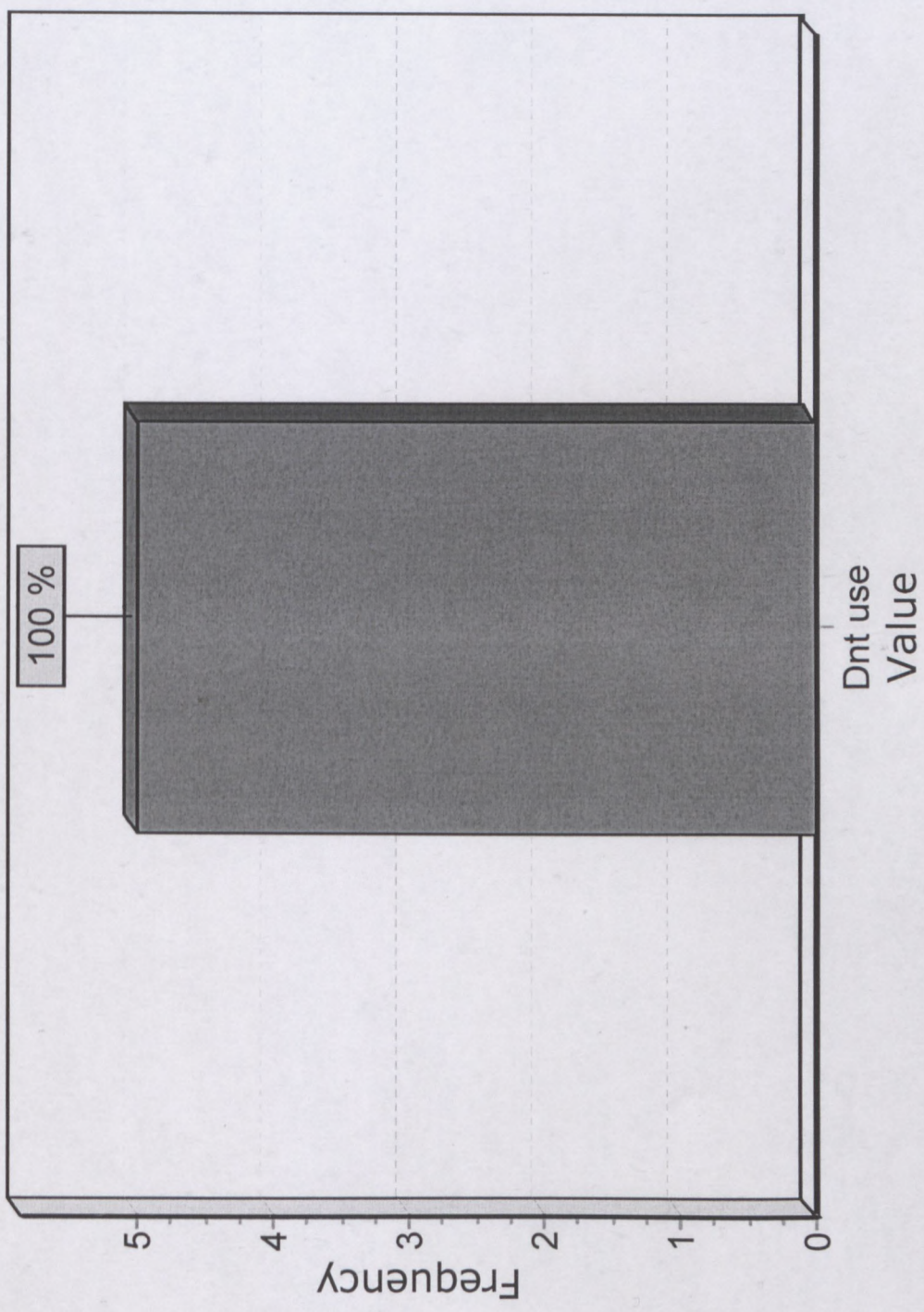
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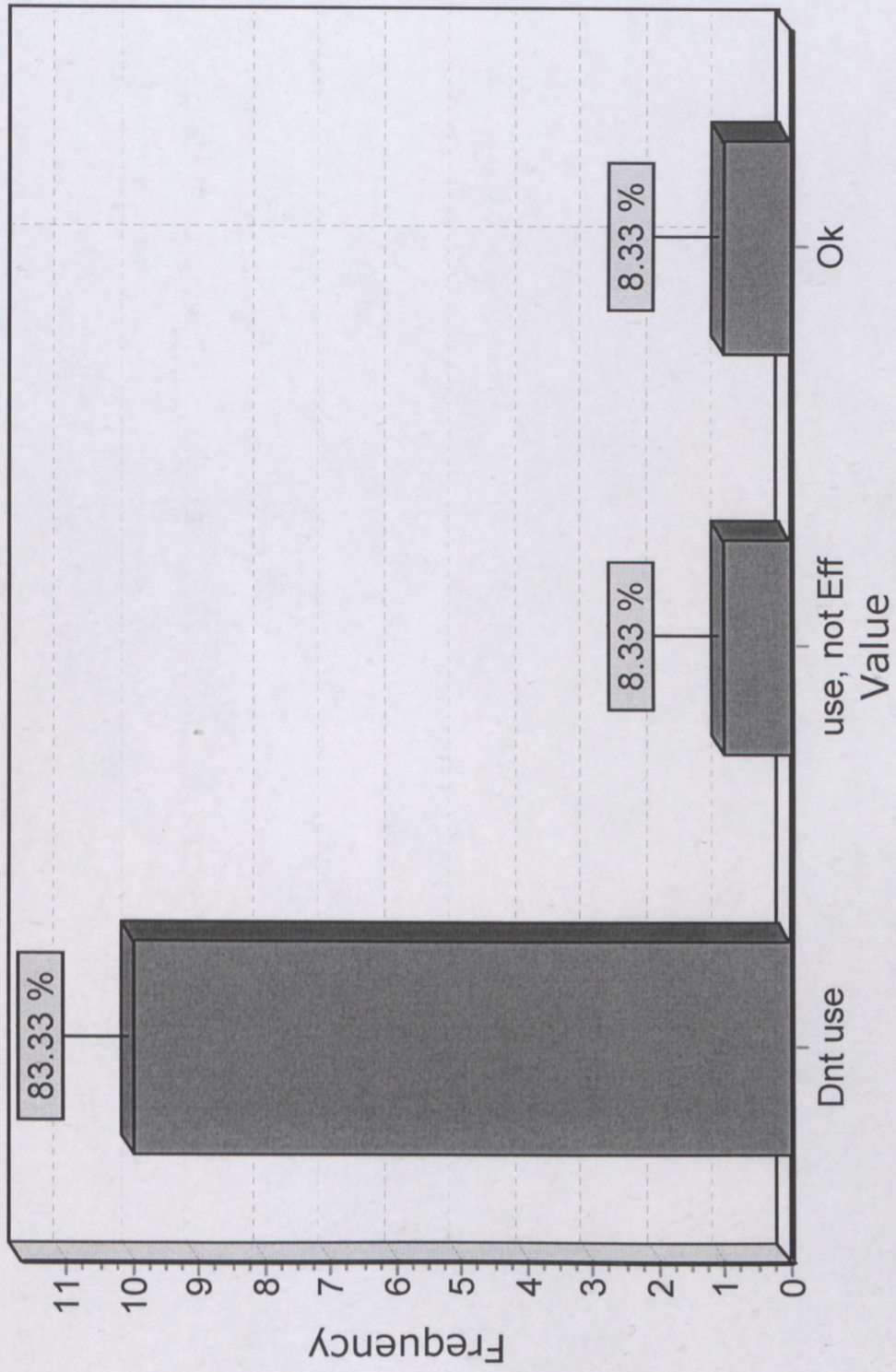
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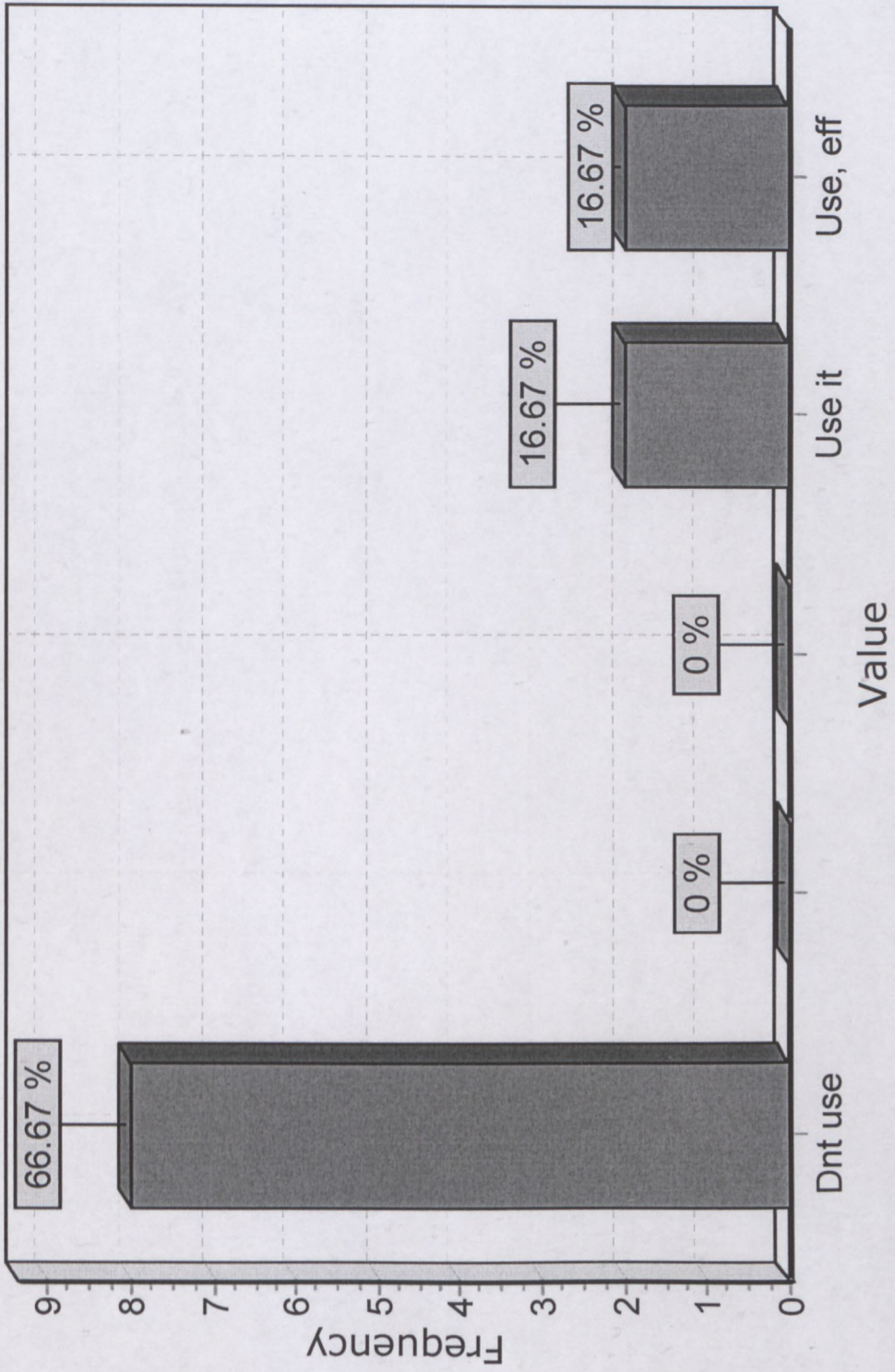
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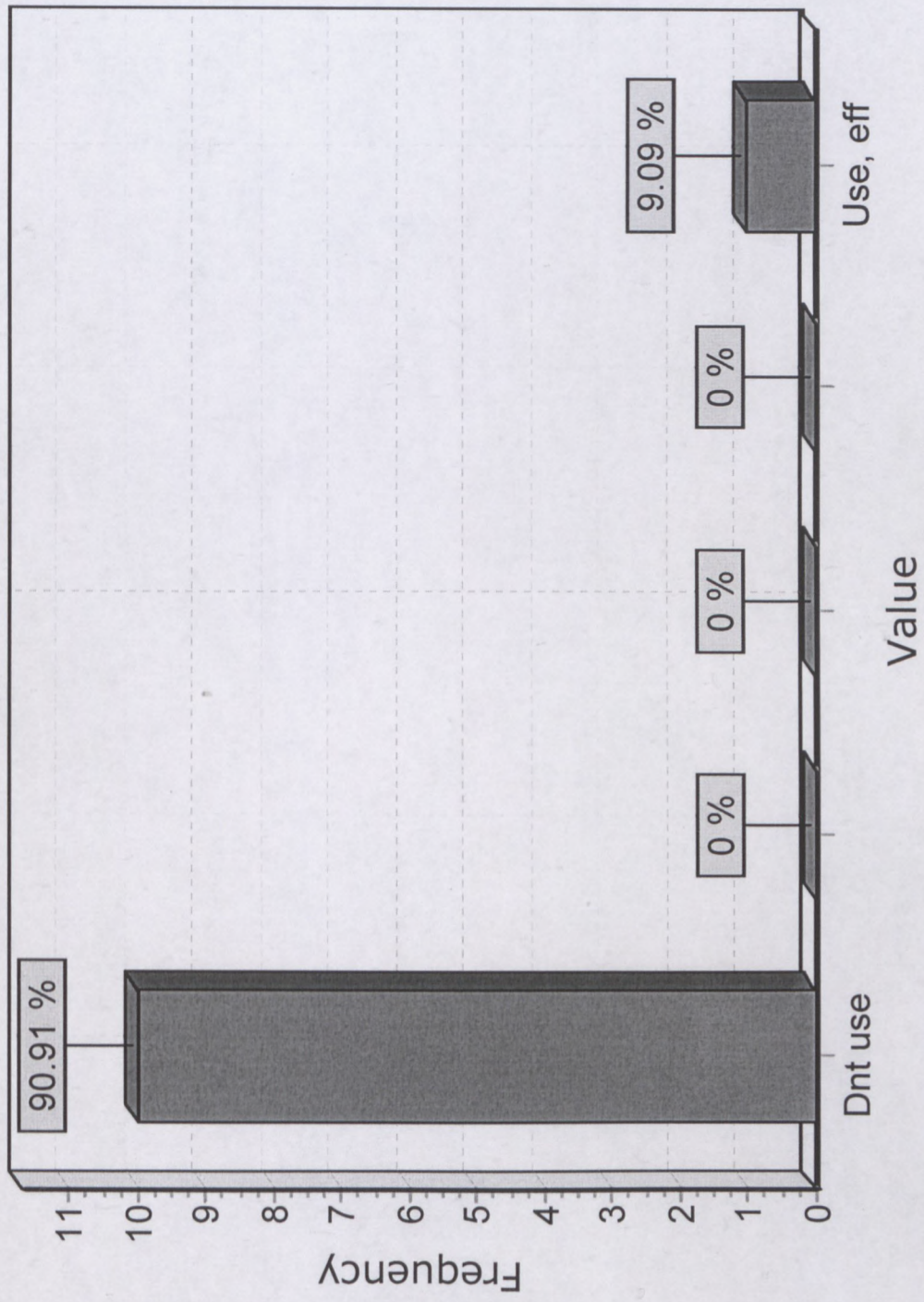
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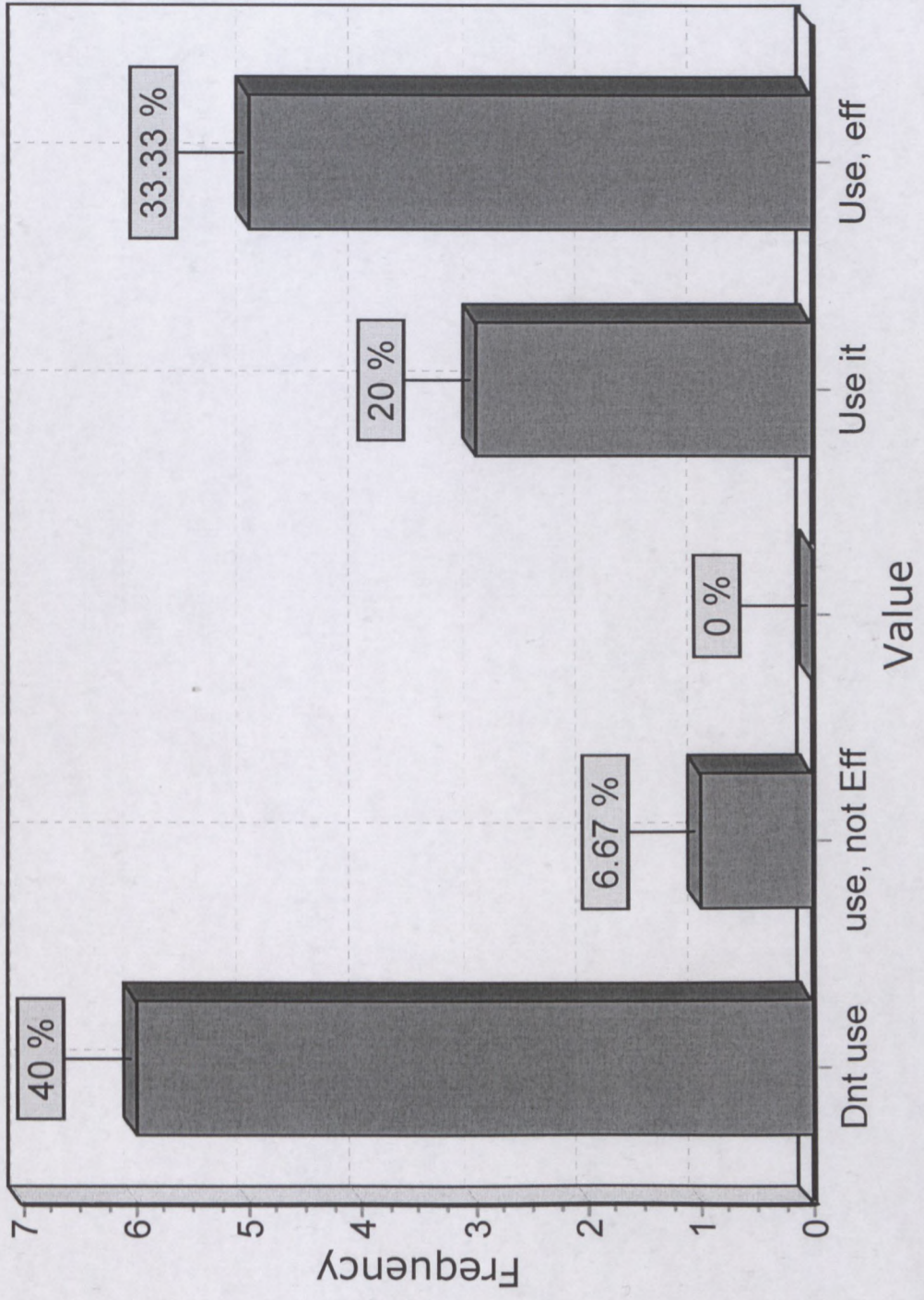
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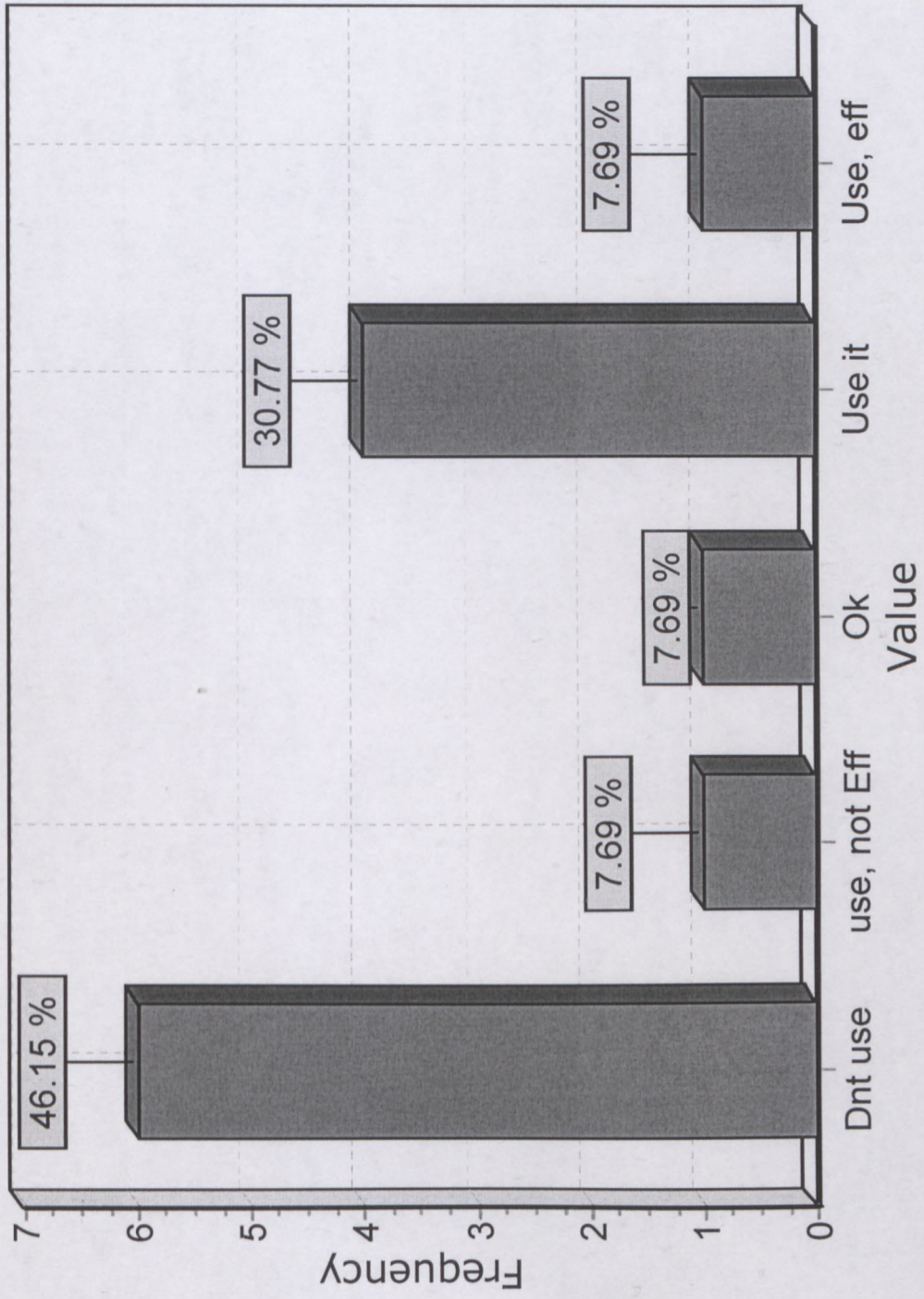
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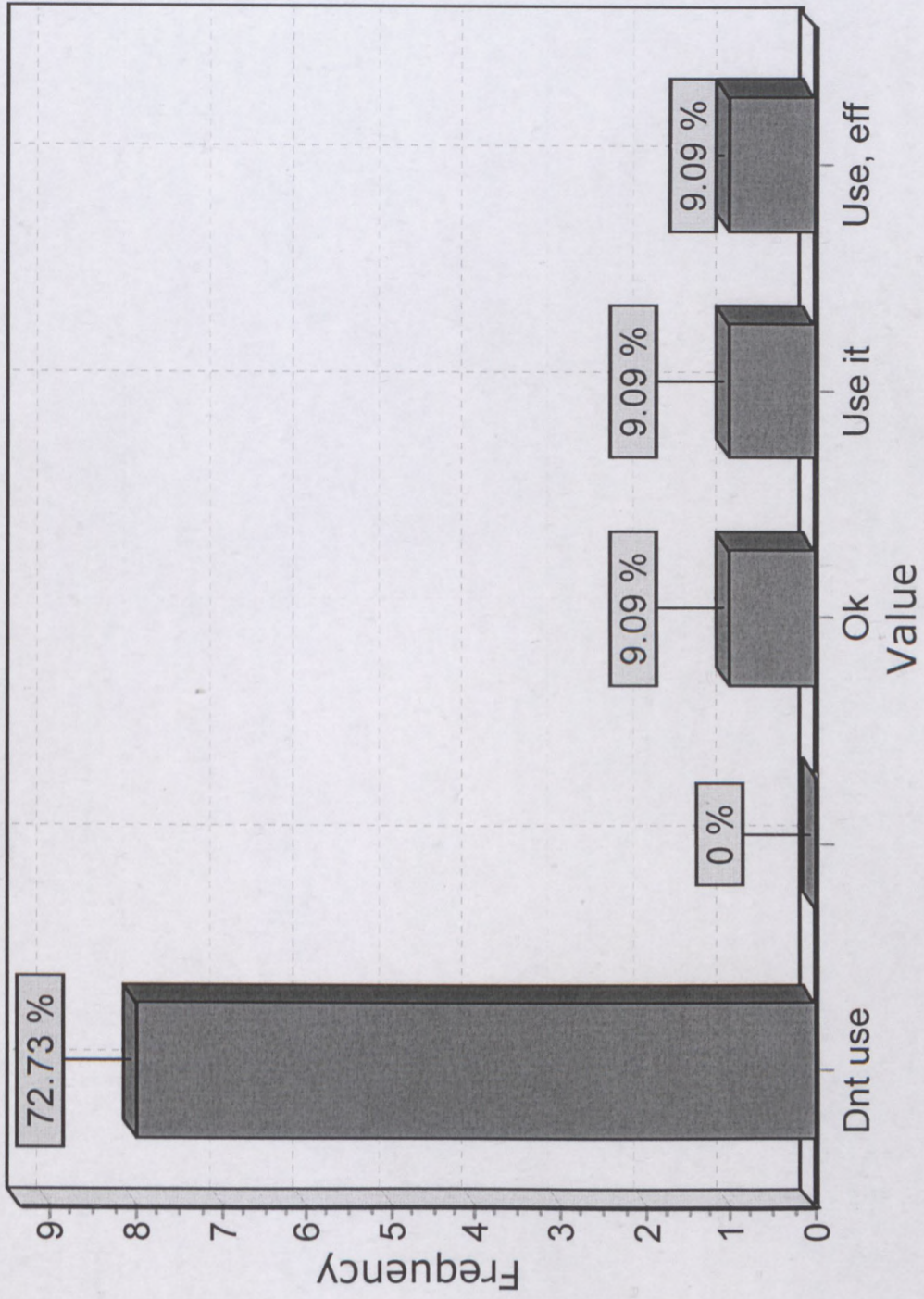
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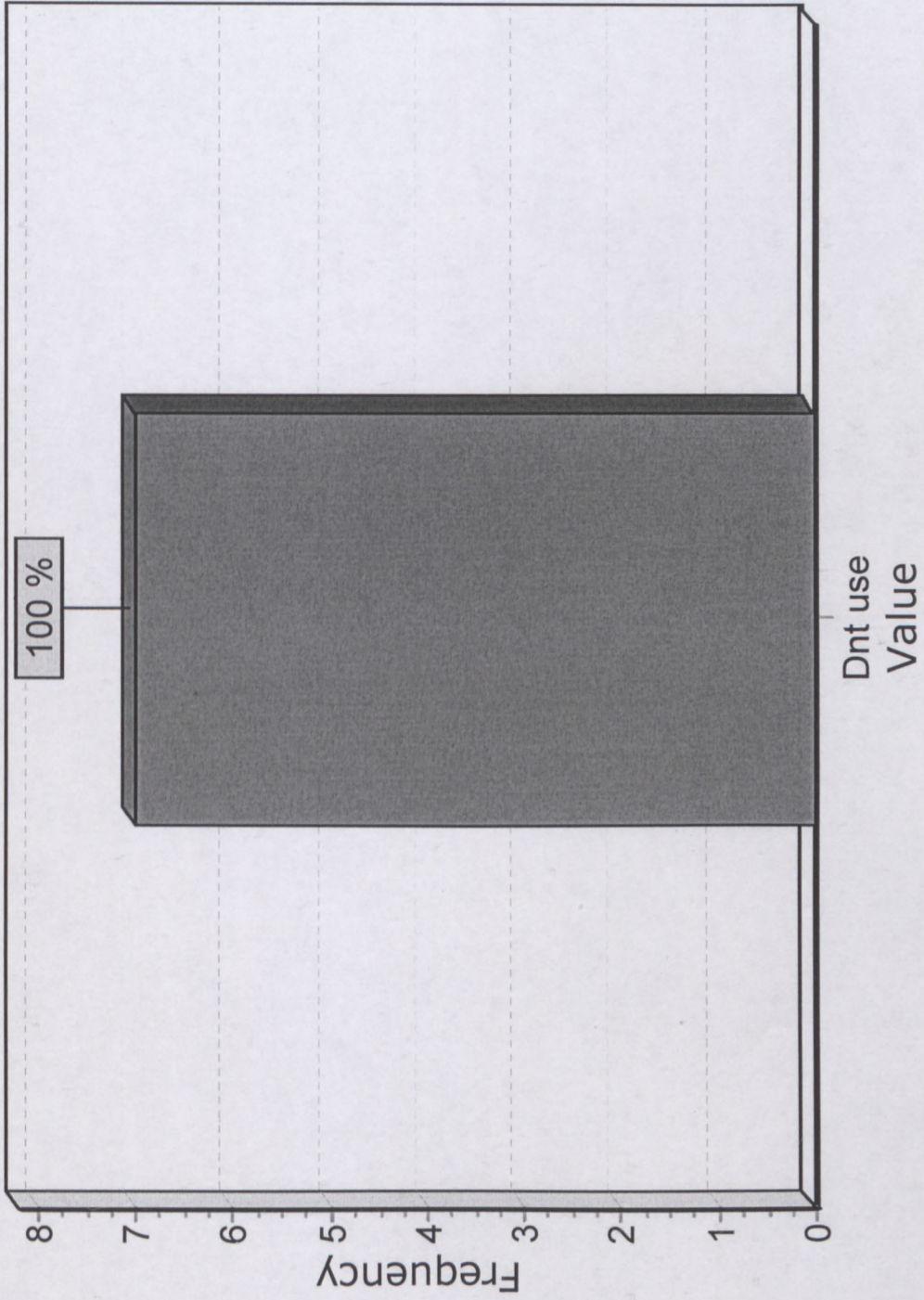
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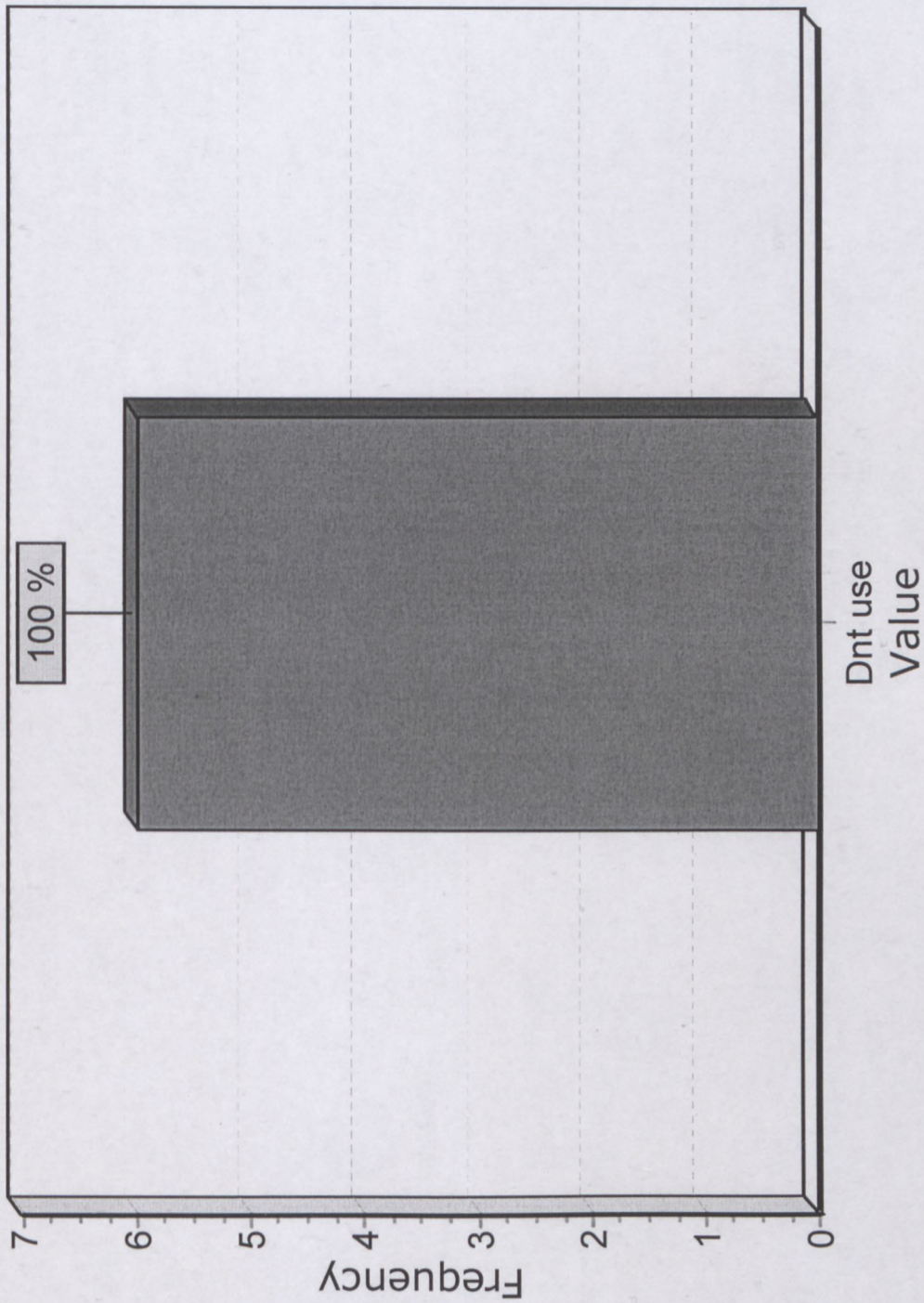
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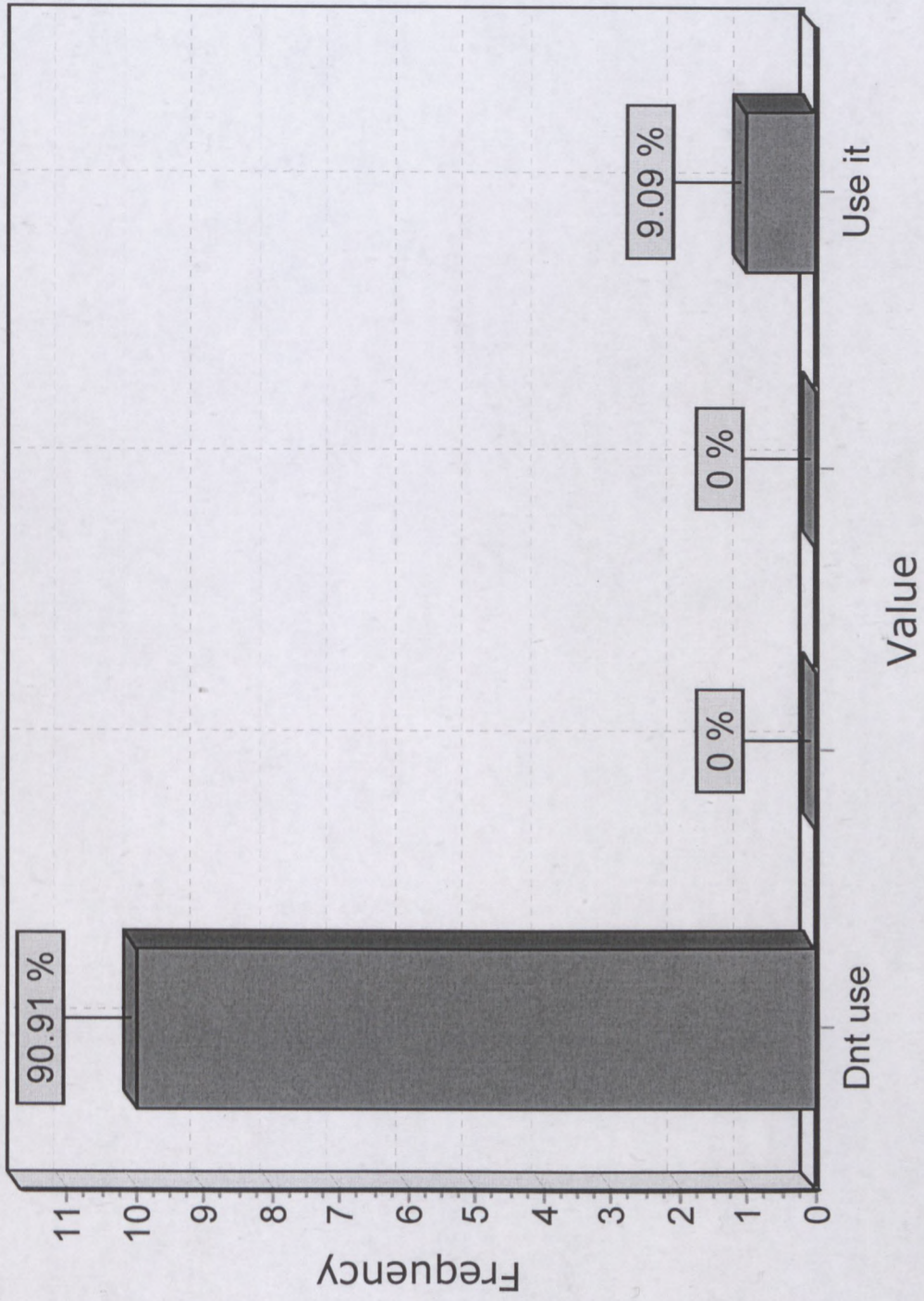
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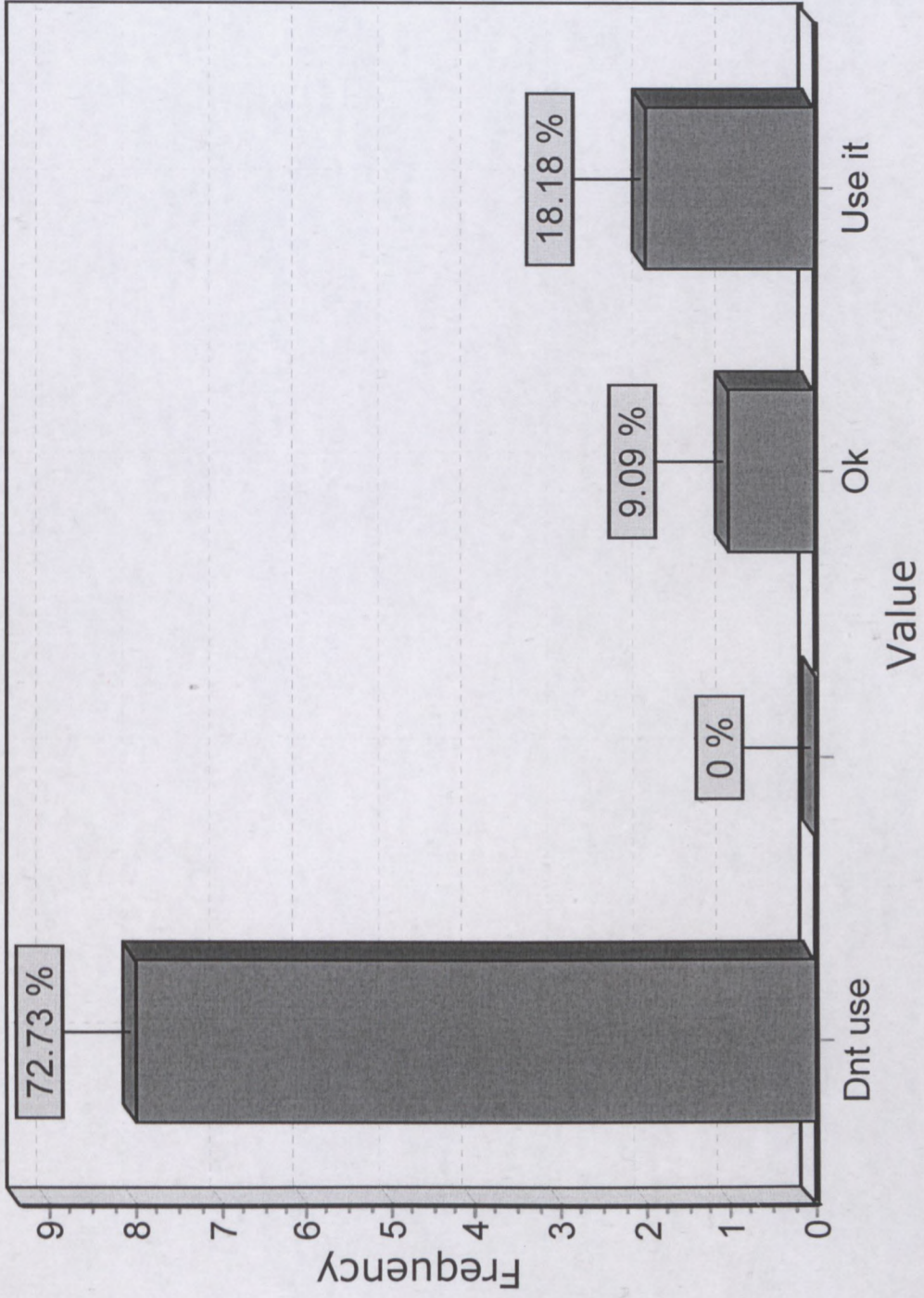
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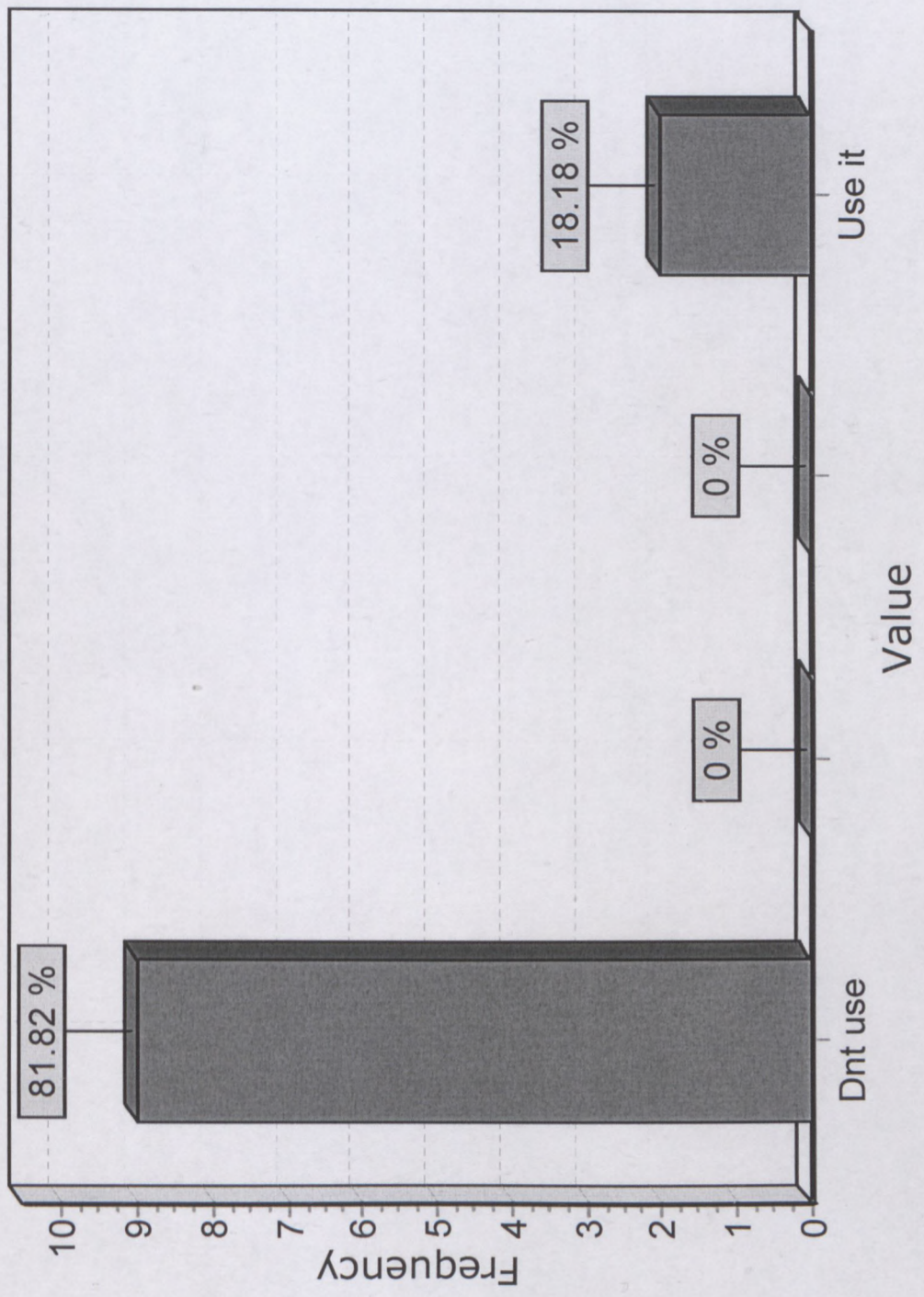
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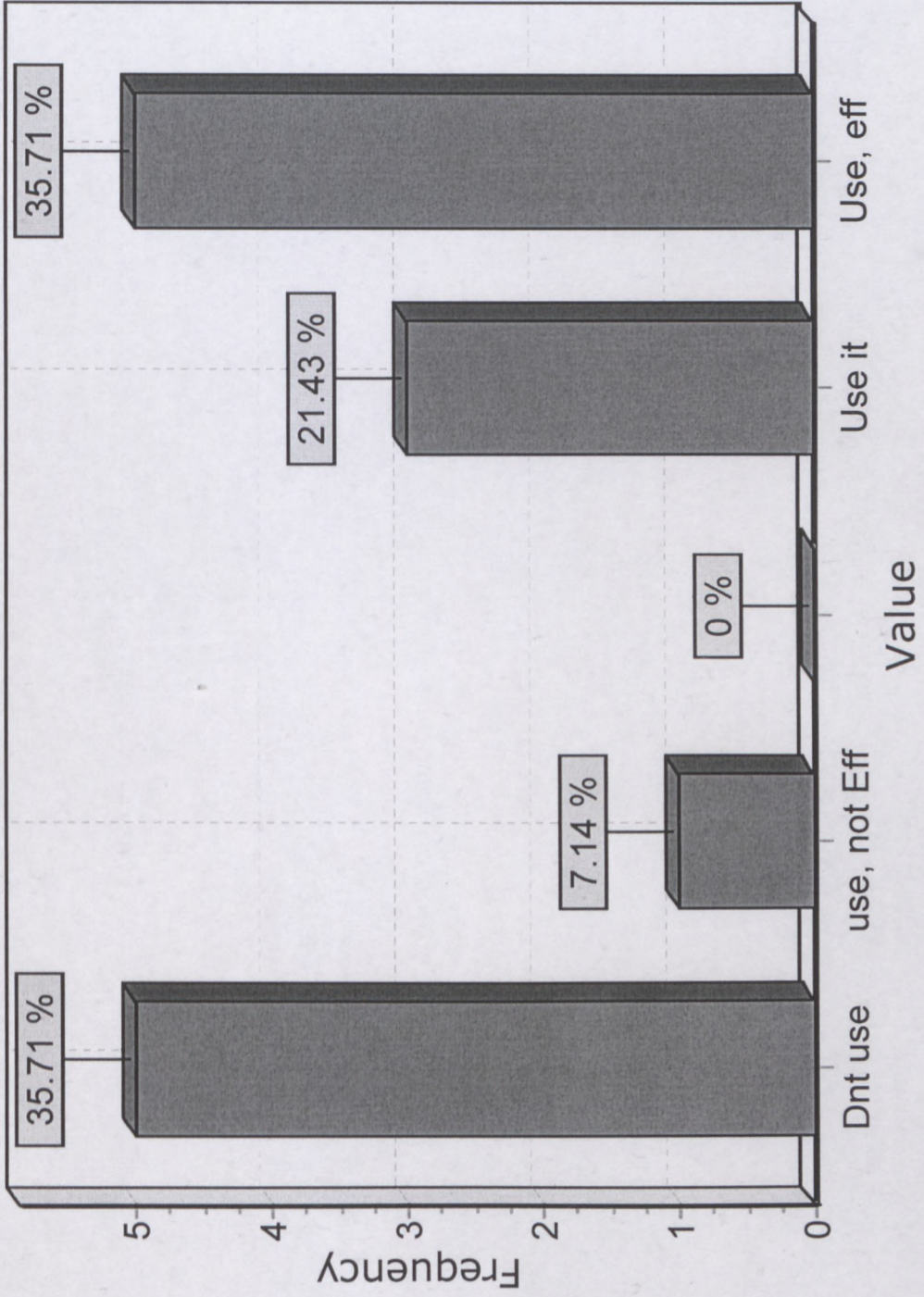
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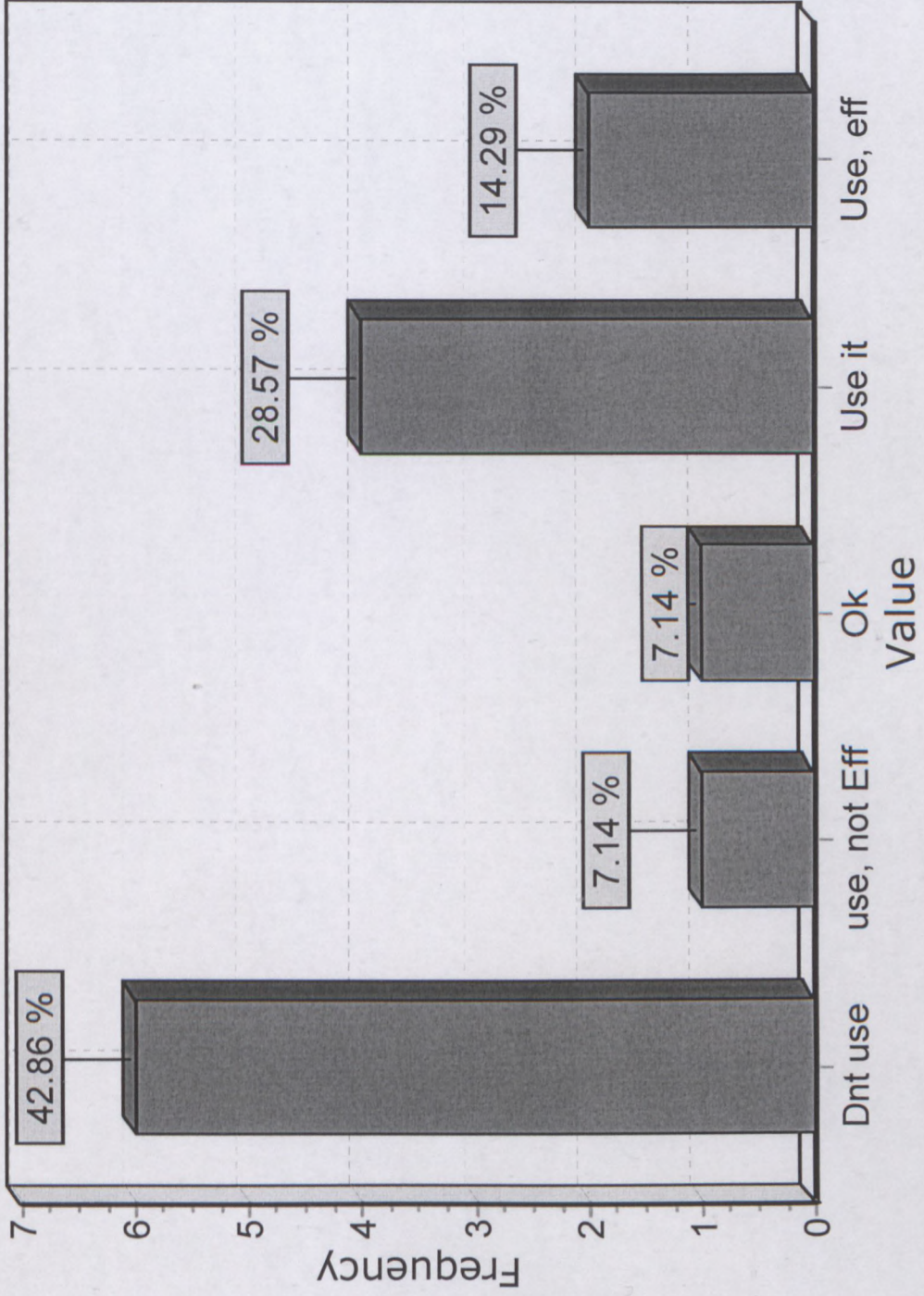
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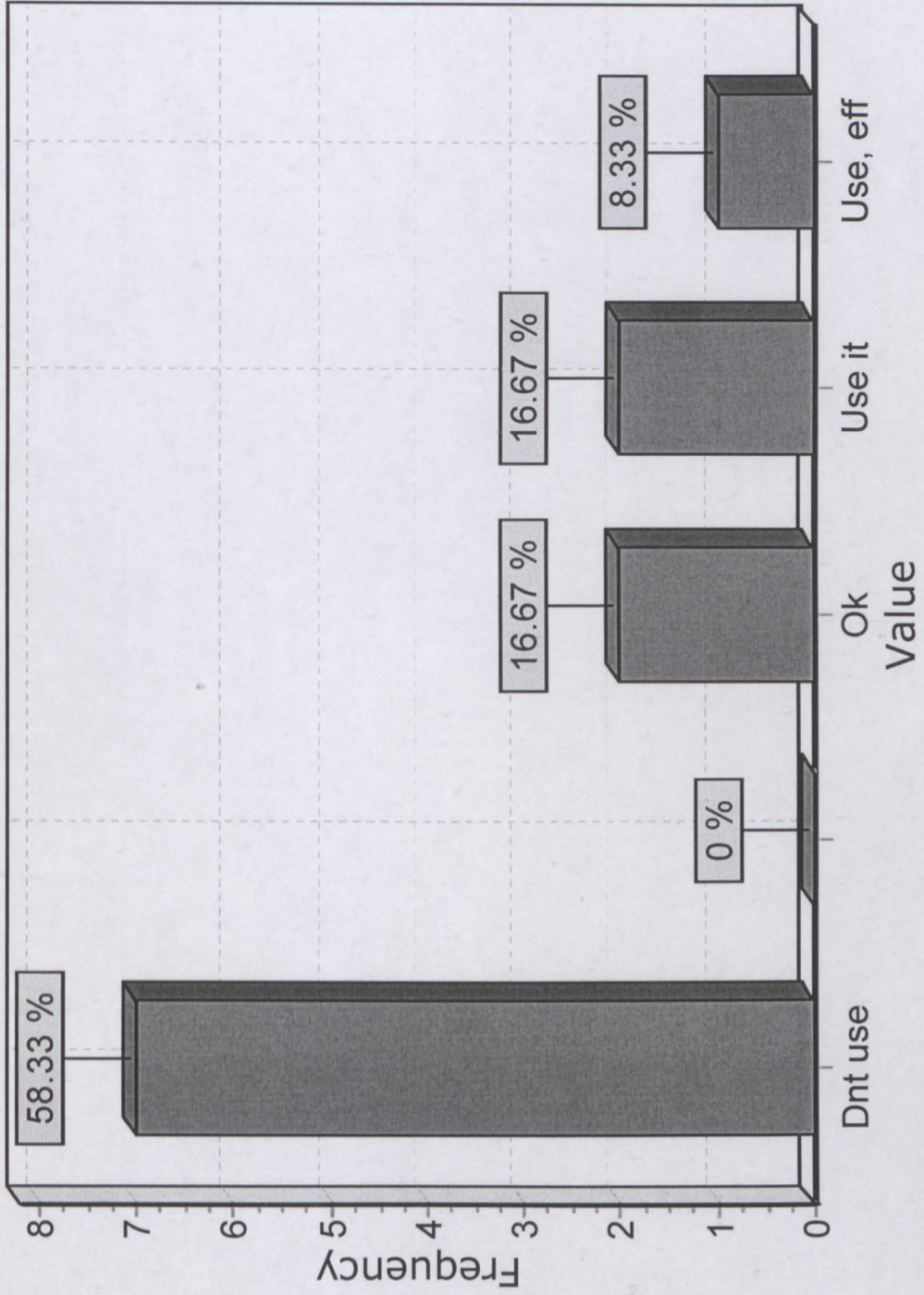
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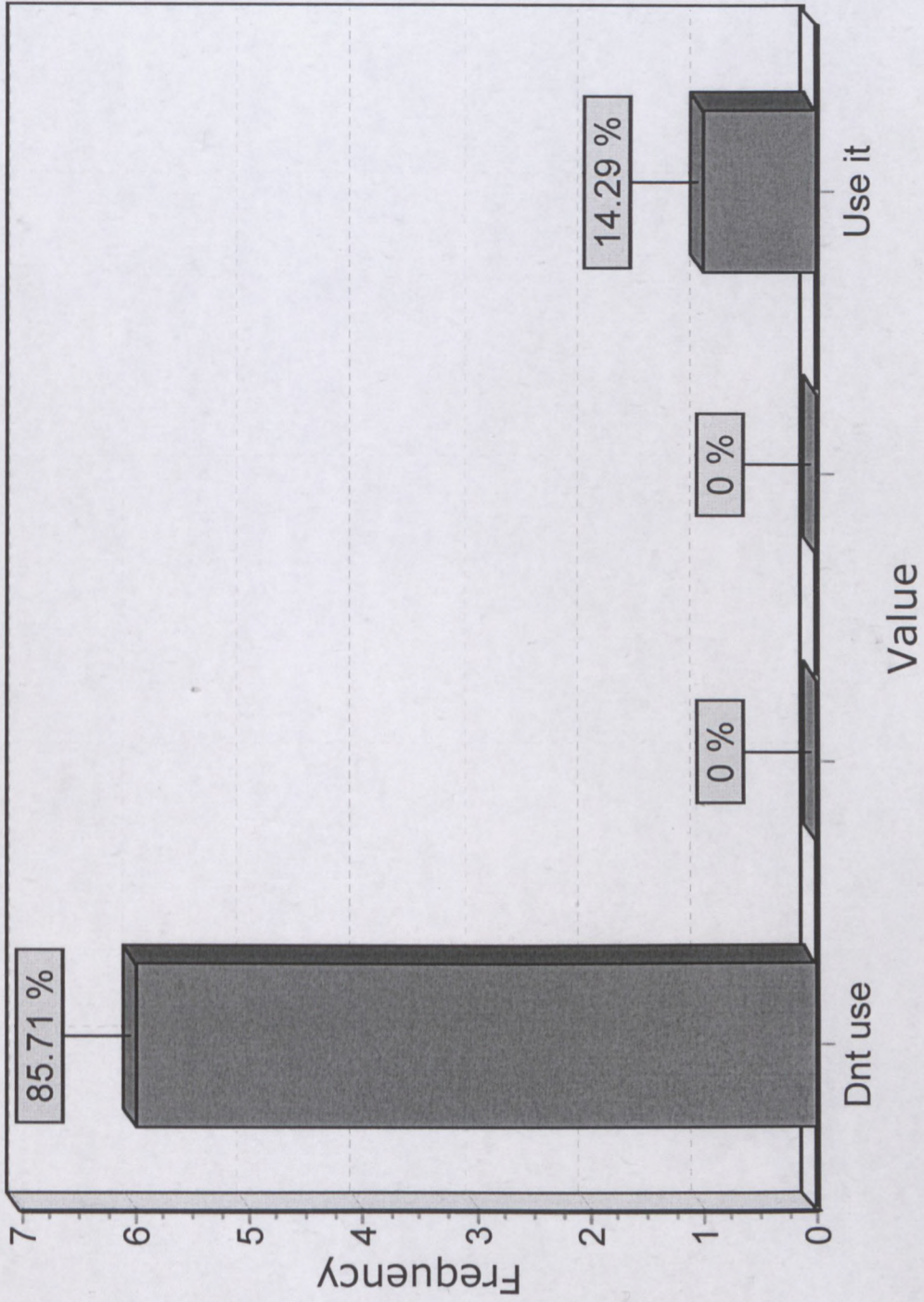
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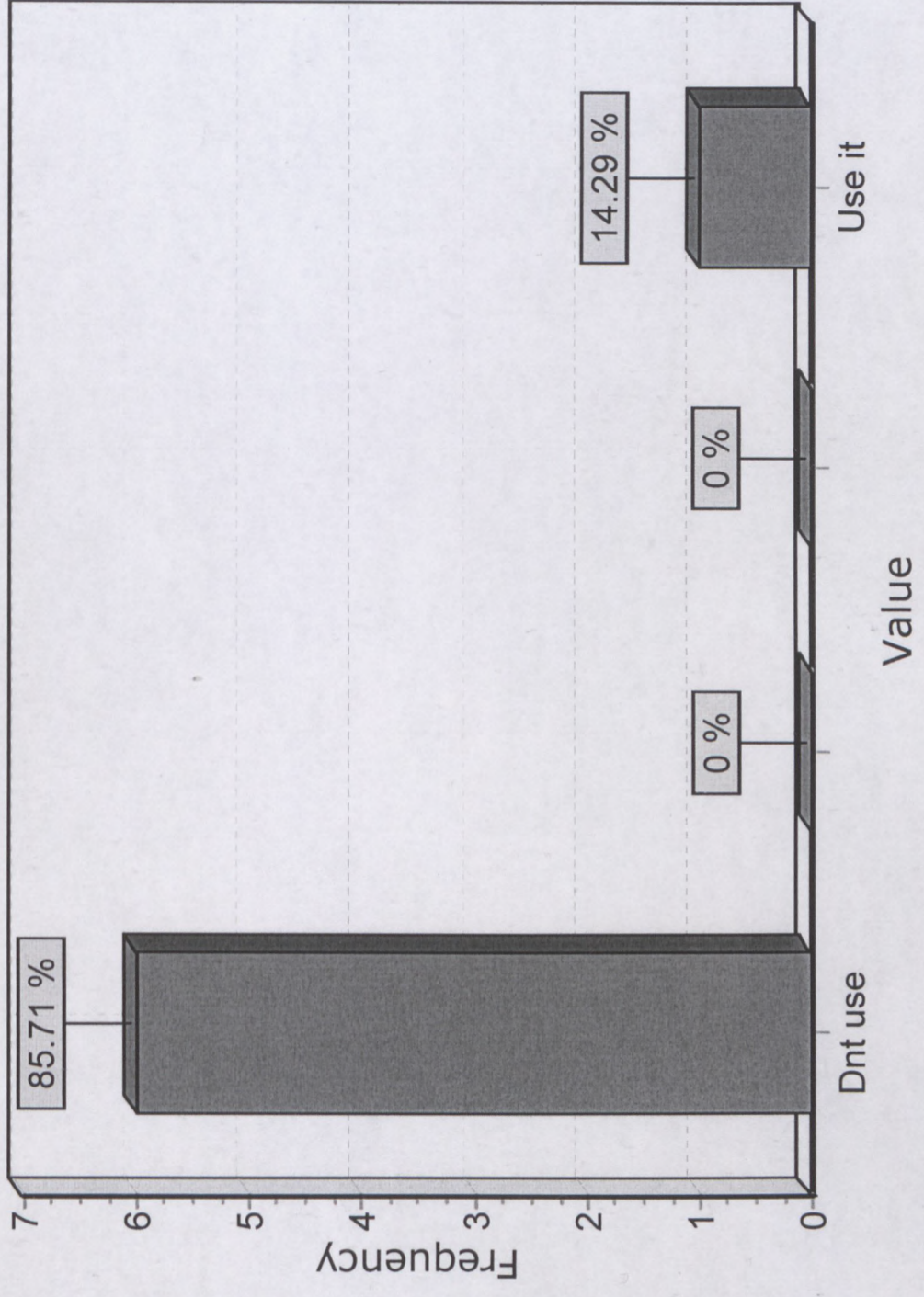
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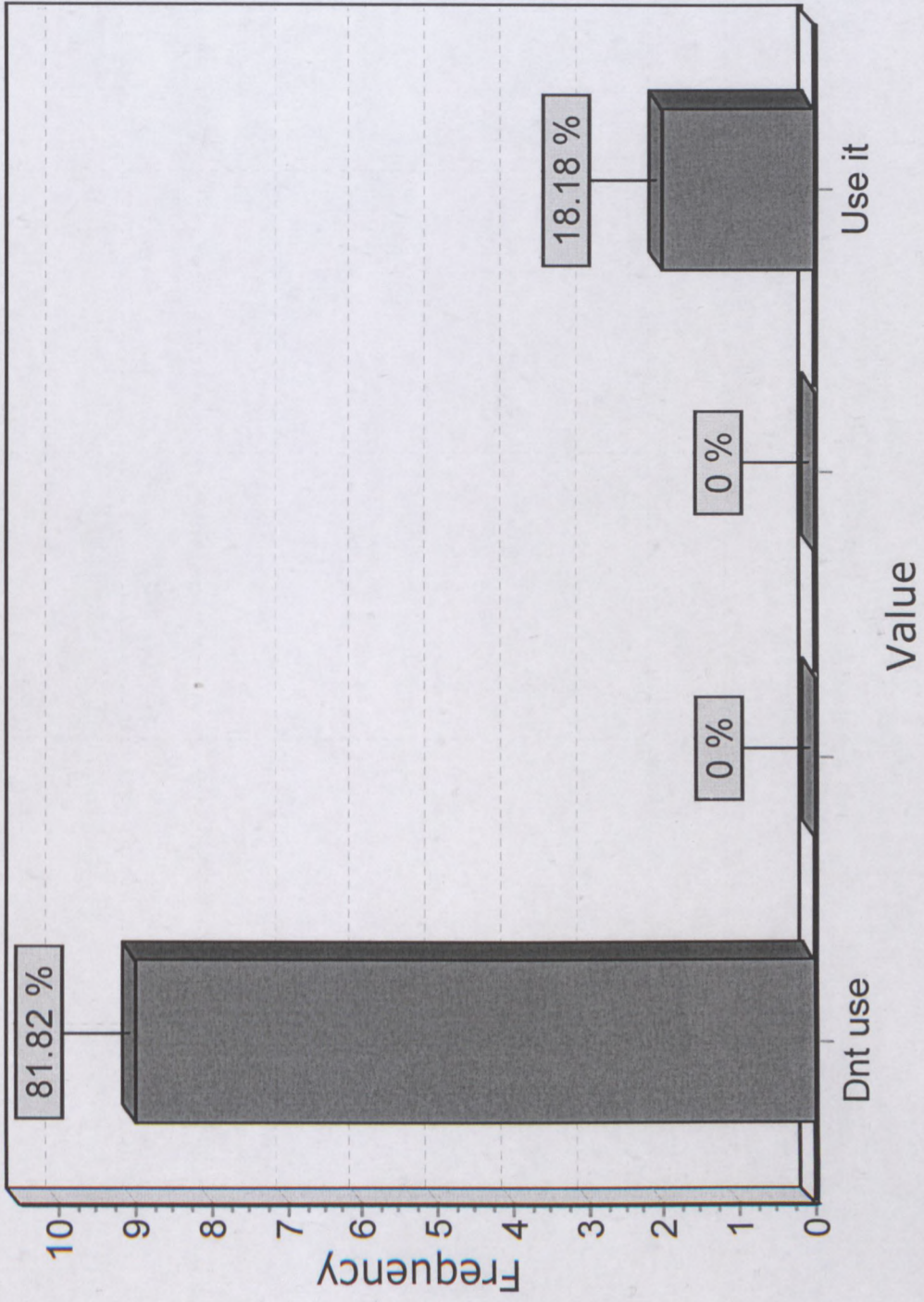
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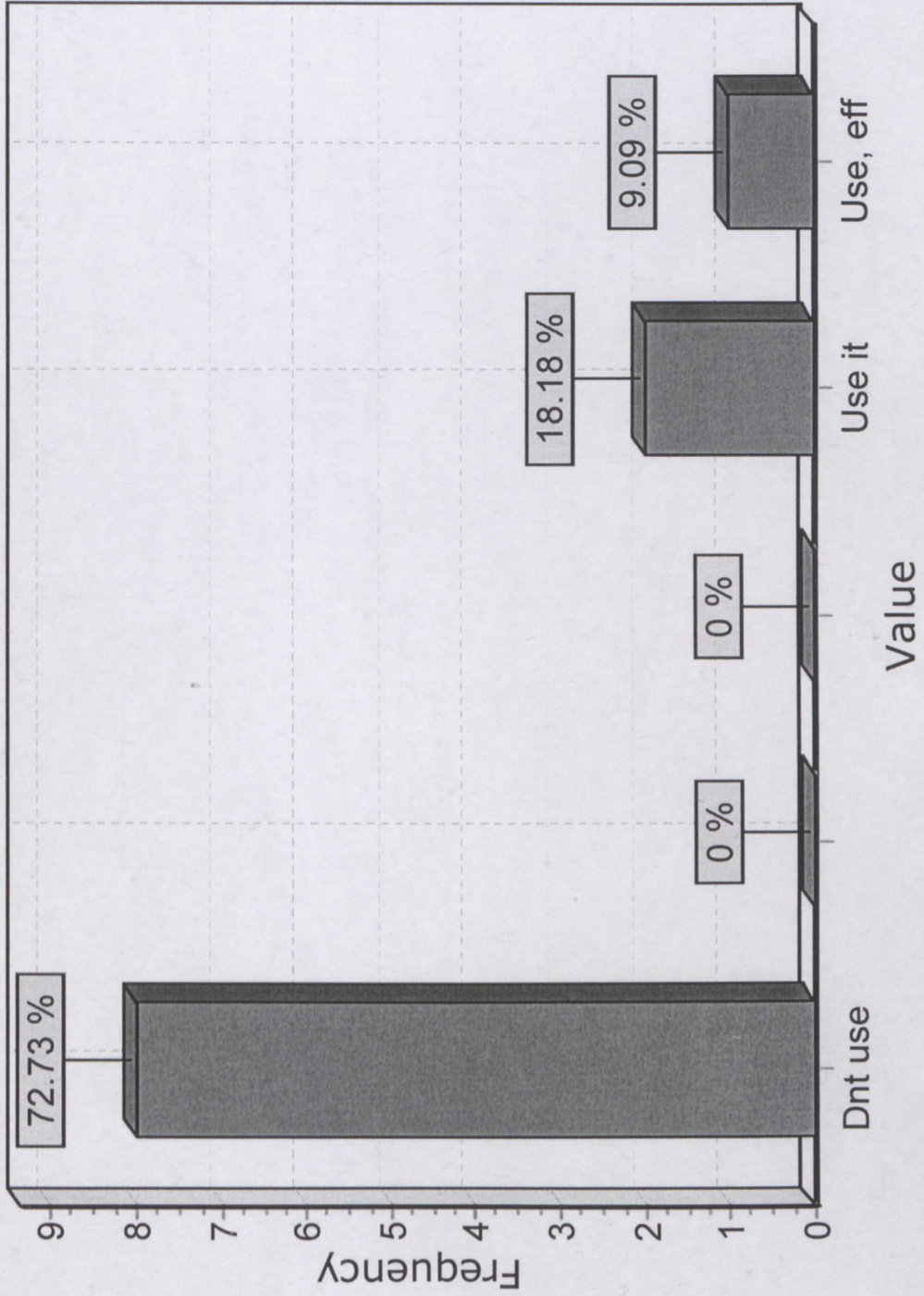
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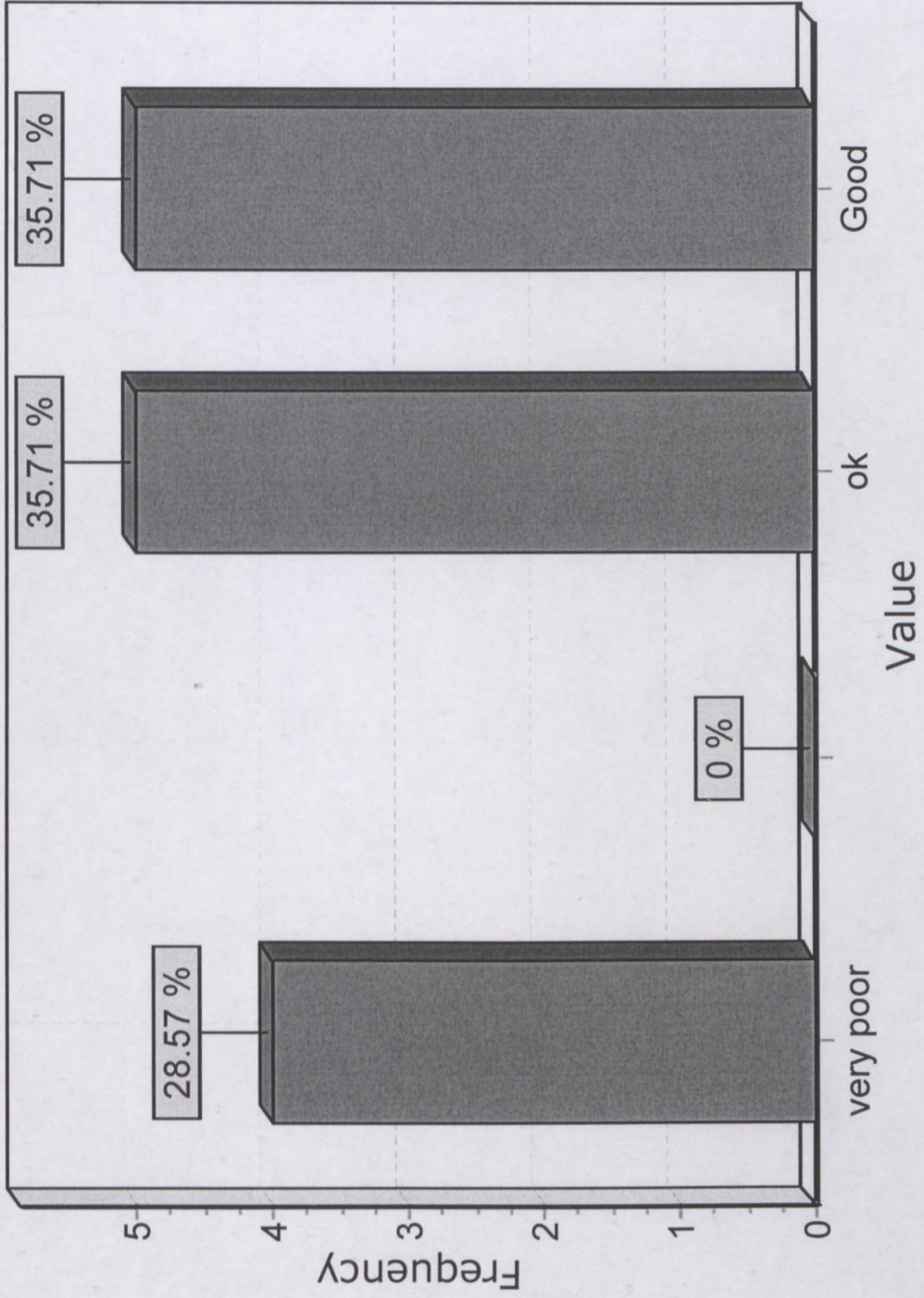
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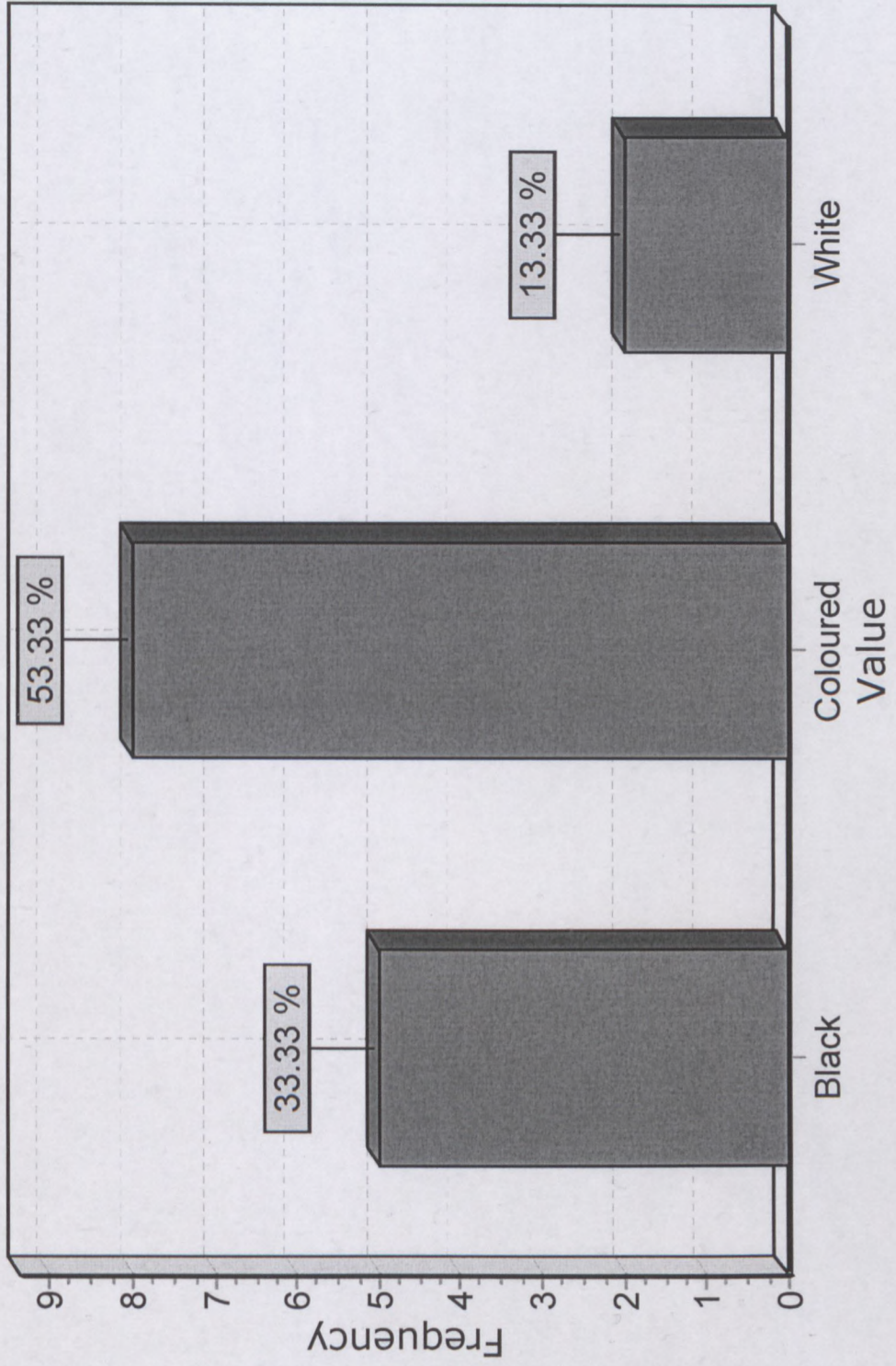
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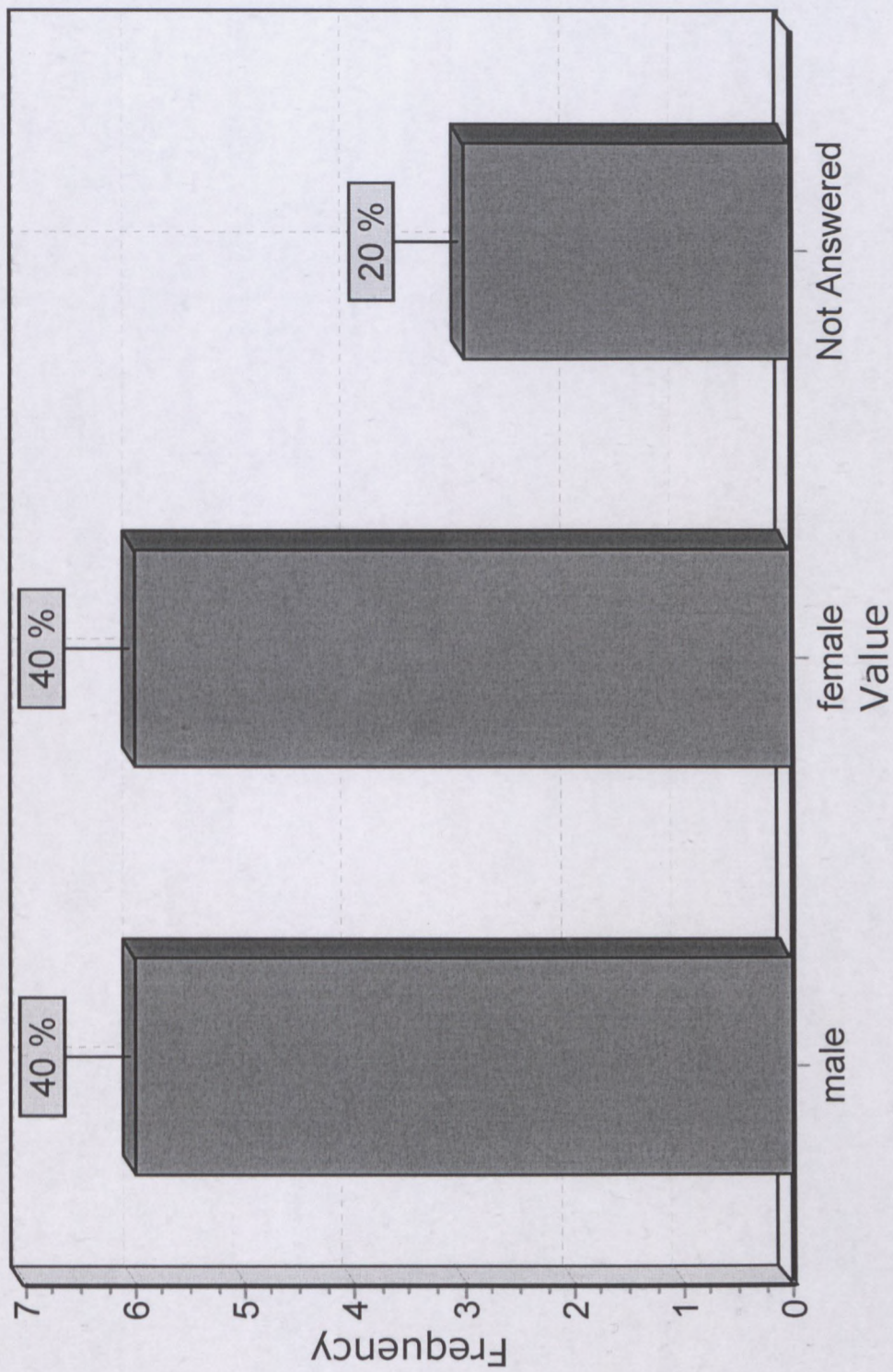
Barchart for Q9



Barchart for RACE

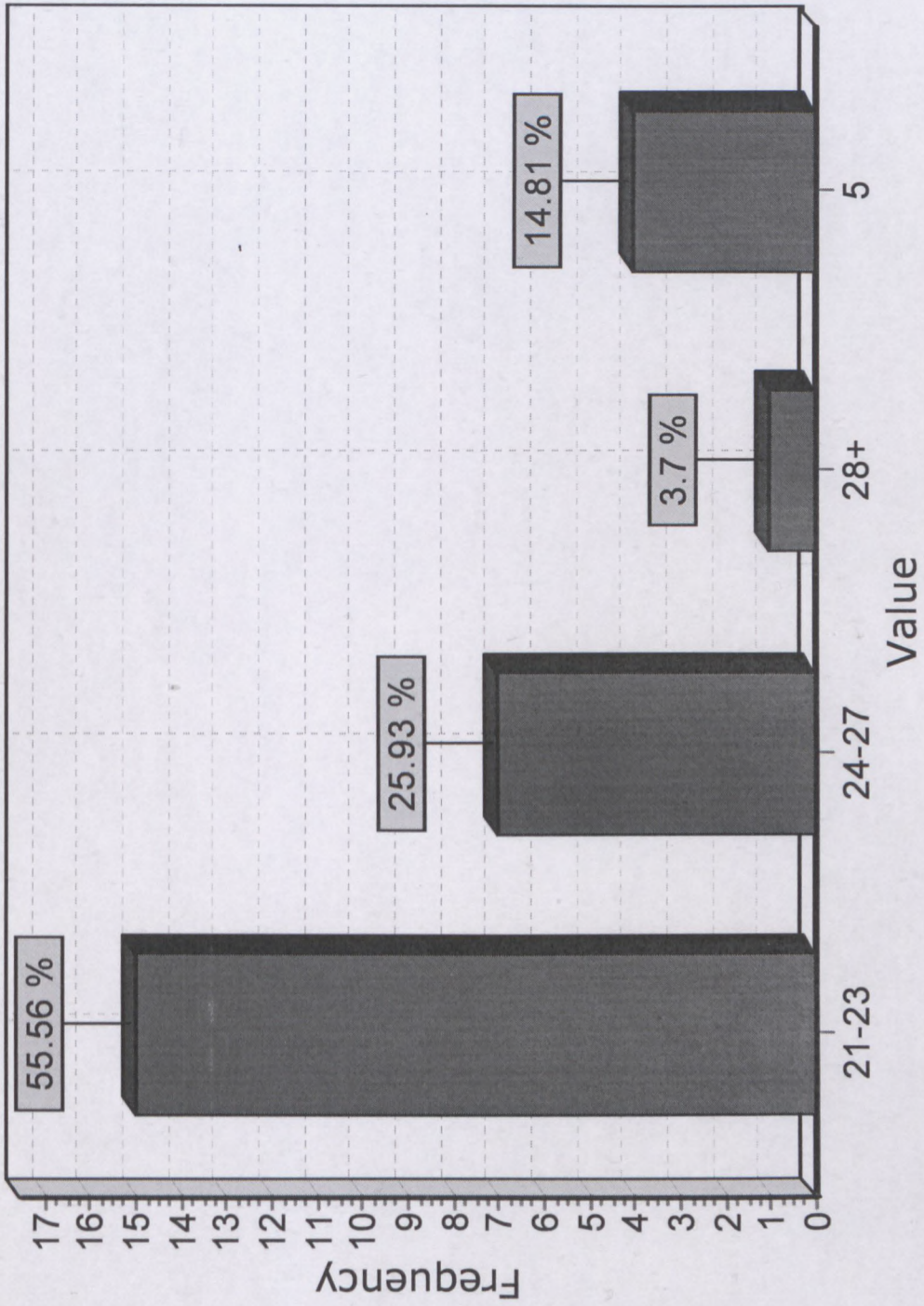


Barchart for SEX

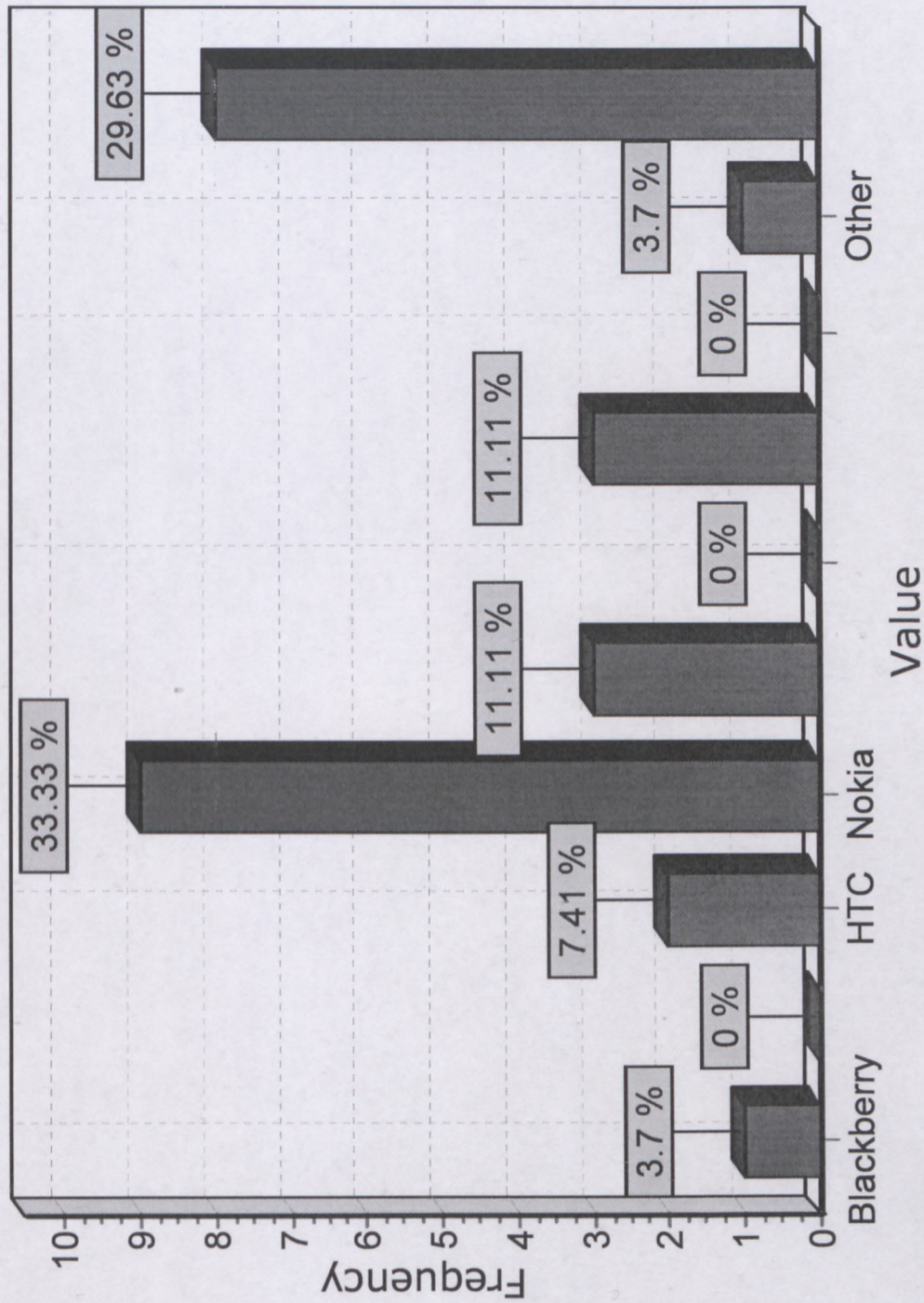


7.3.4 Information Technology Results

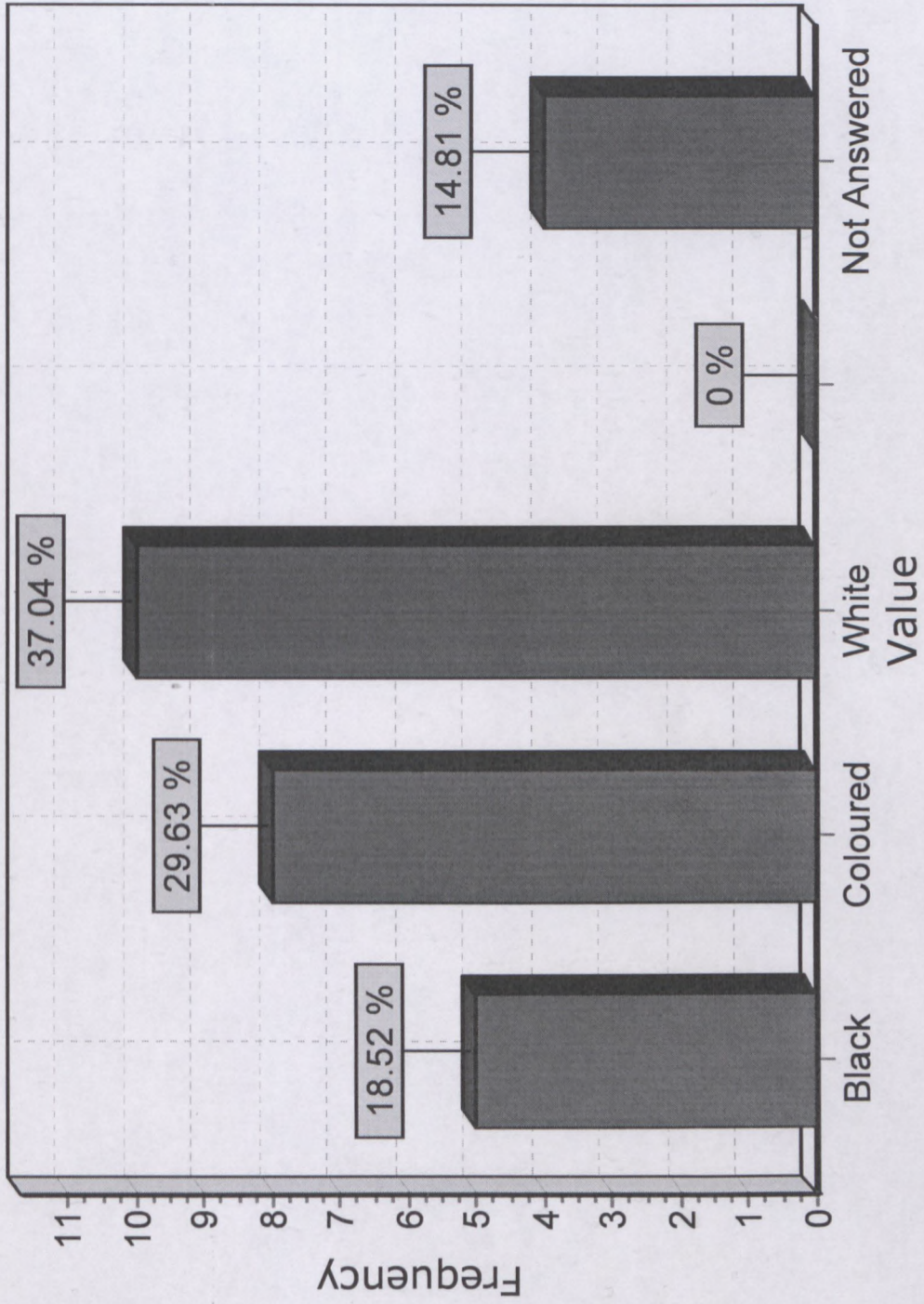
Barchart for AGE



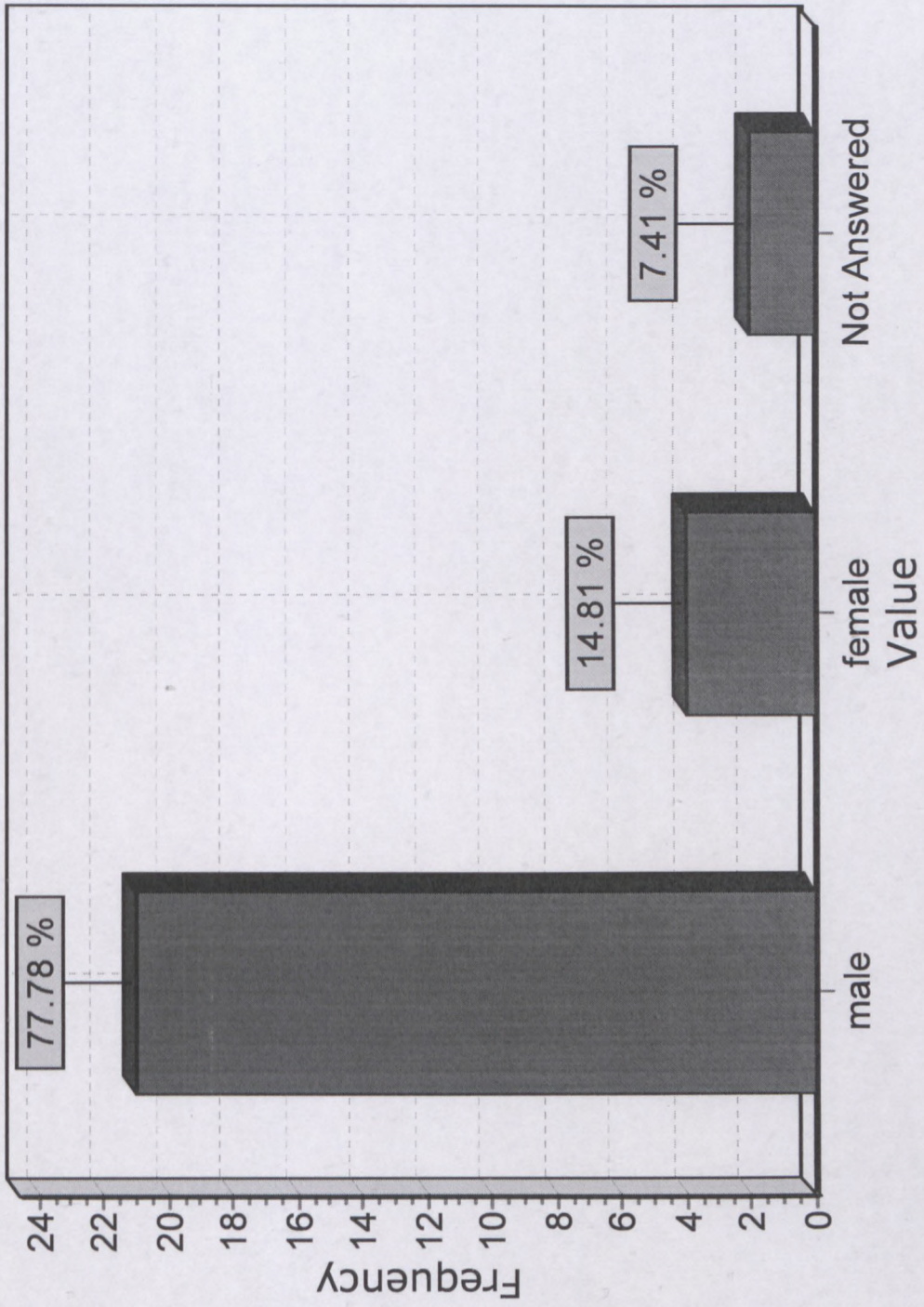
Barchart for CELLPHONE



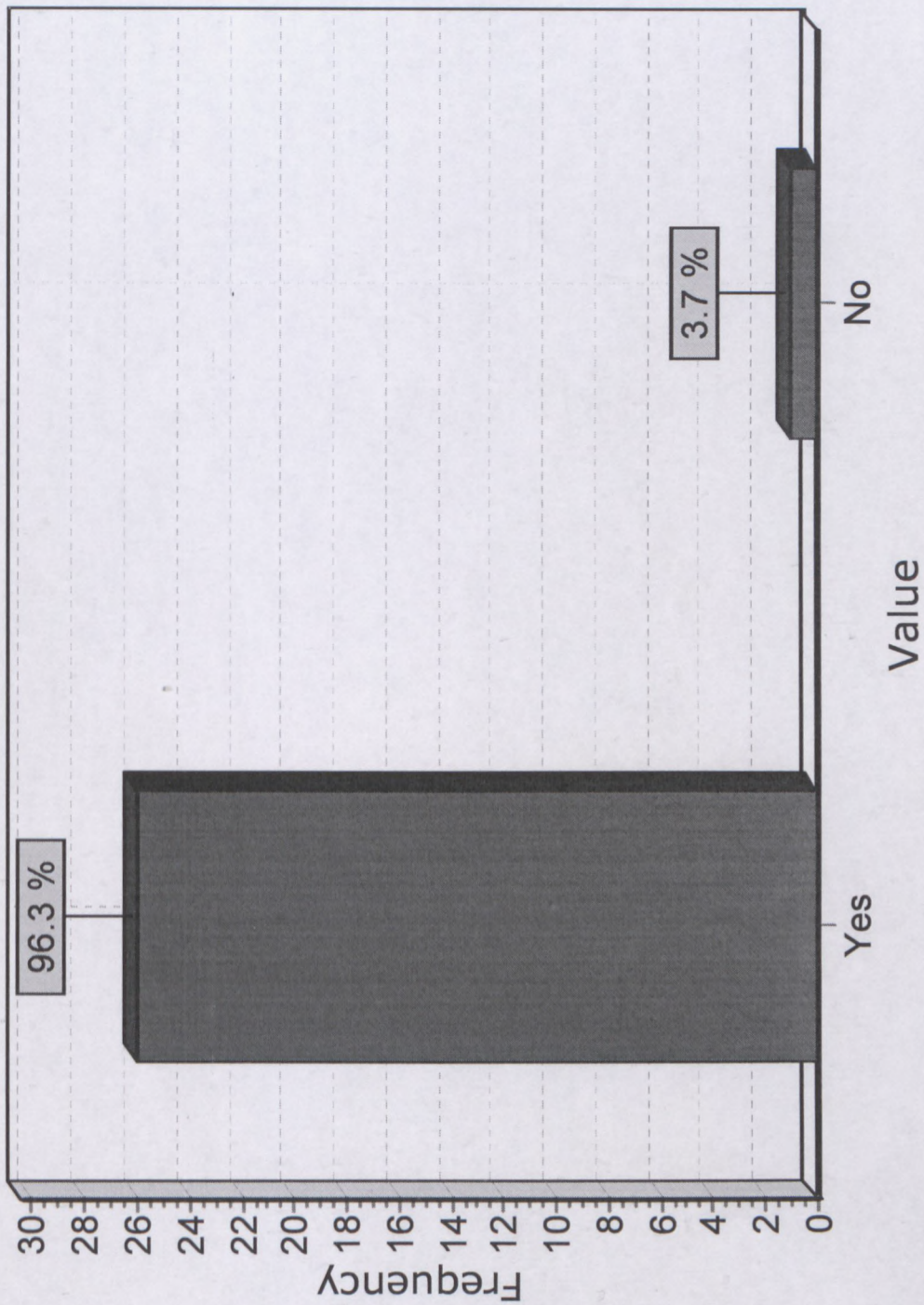
Barchart for RACE



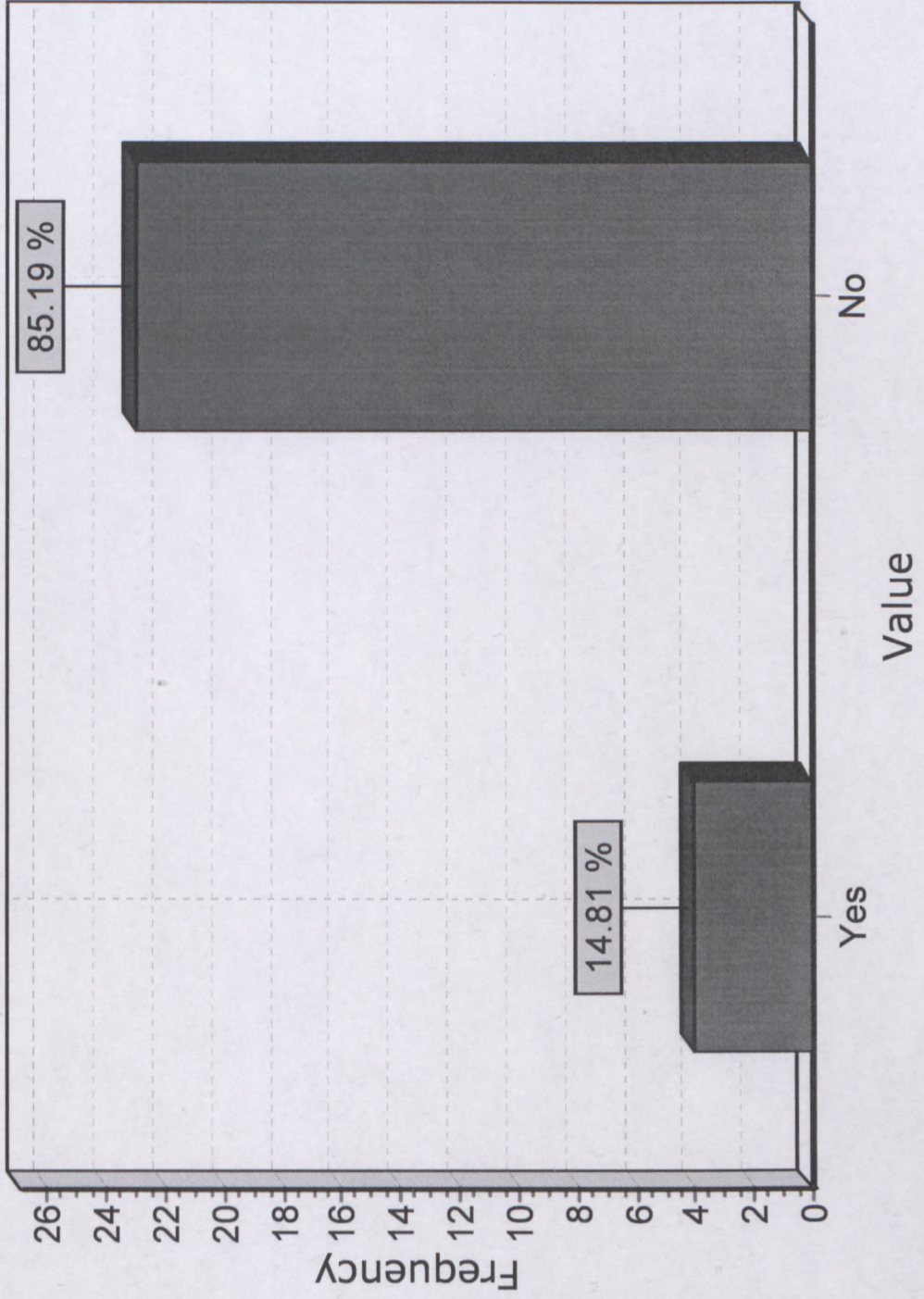
Barchart for SEX



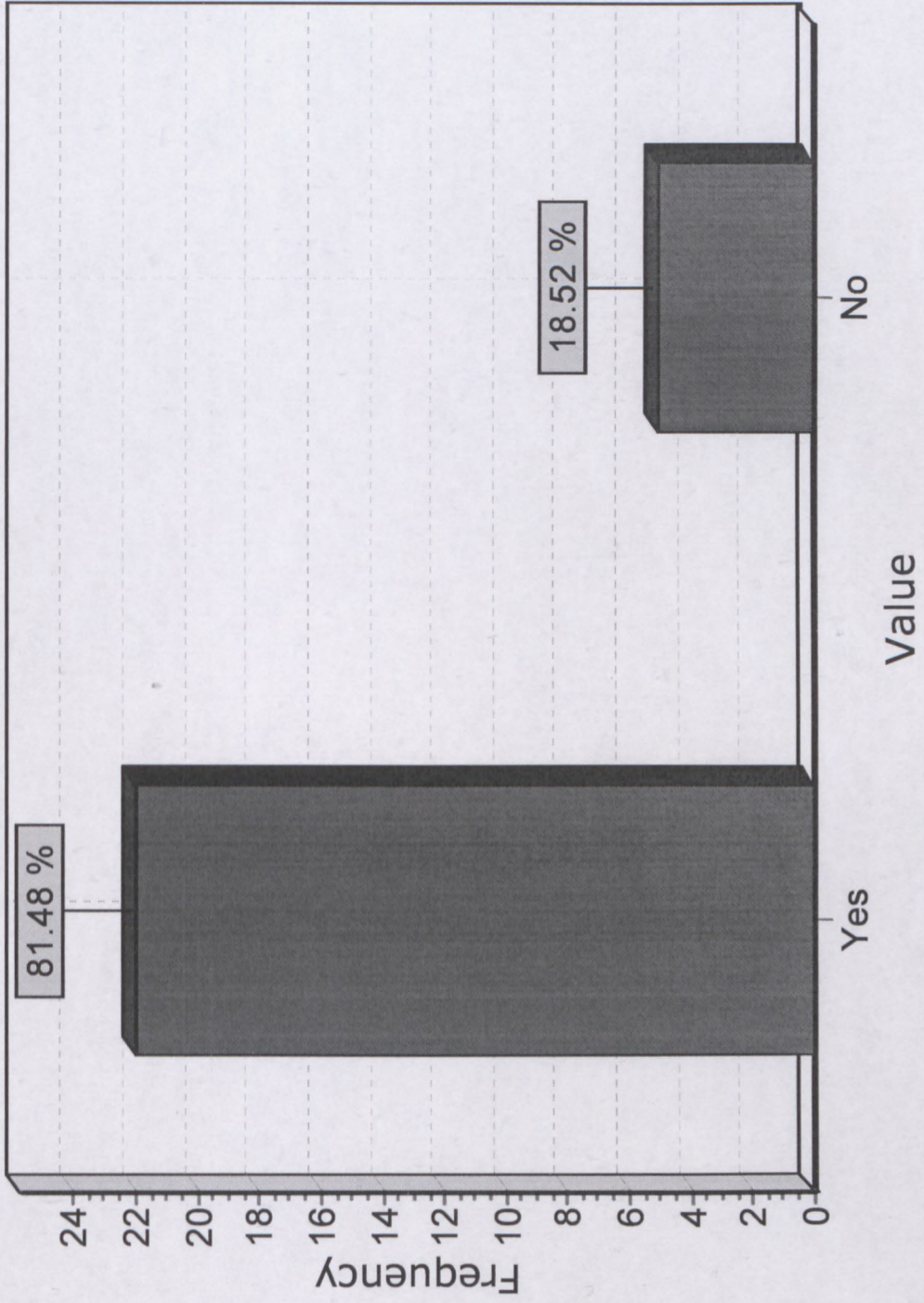
Barchart for Q1



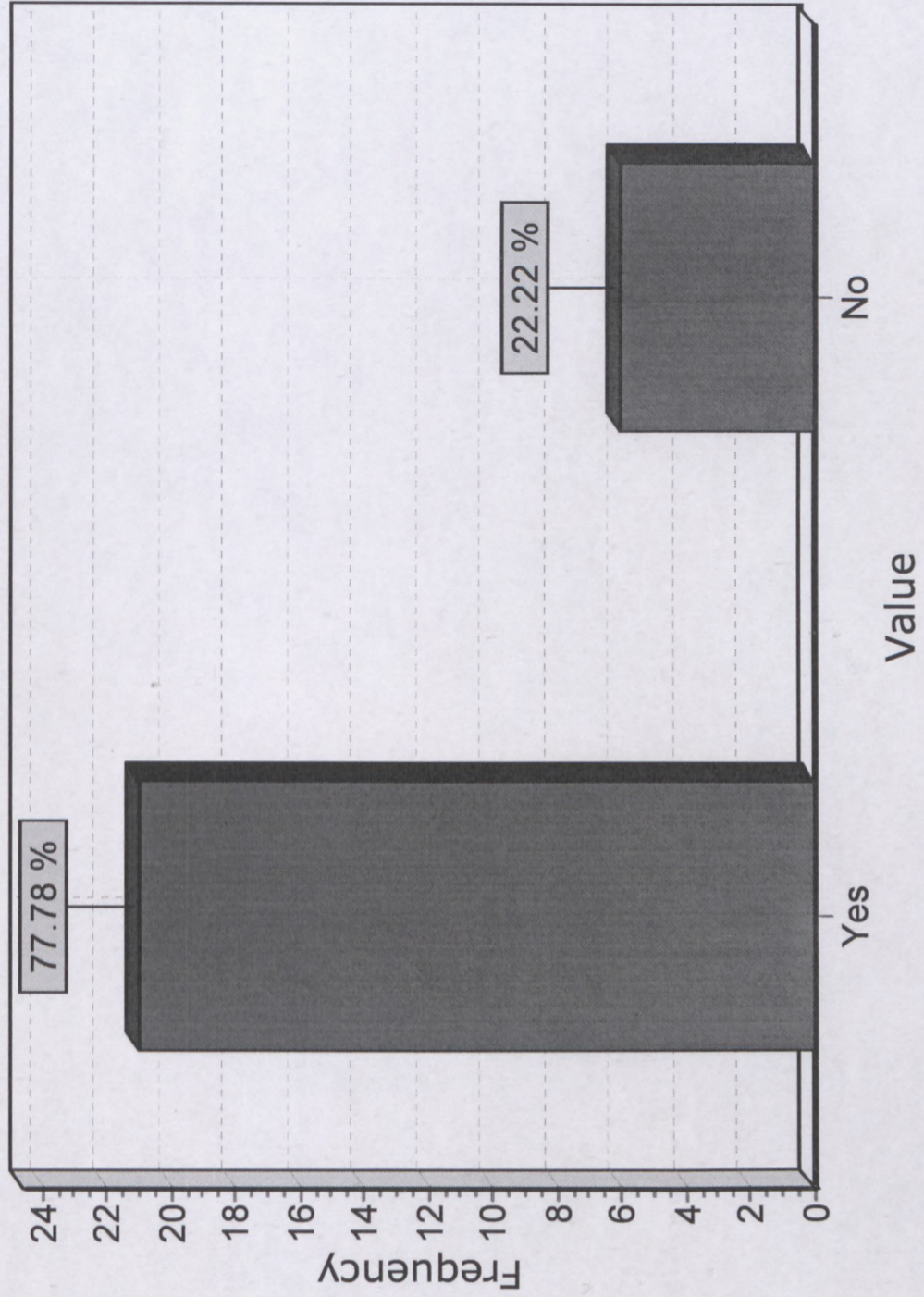
Barchart for Q2BLOGGIN



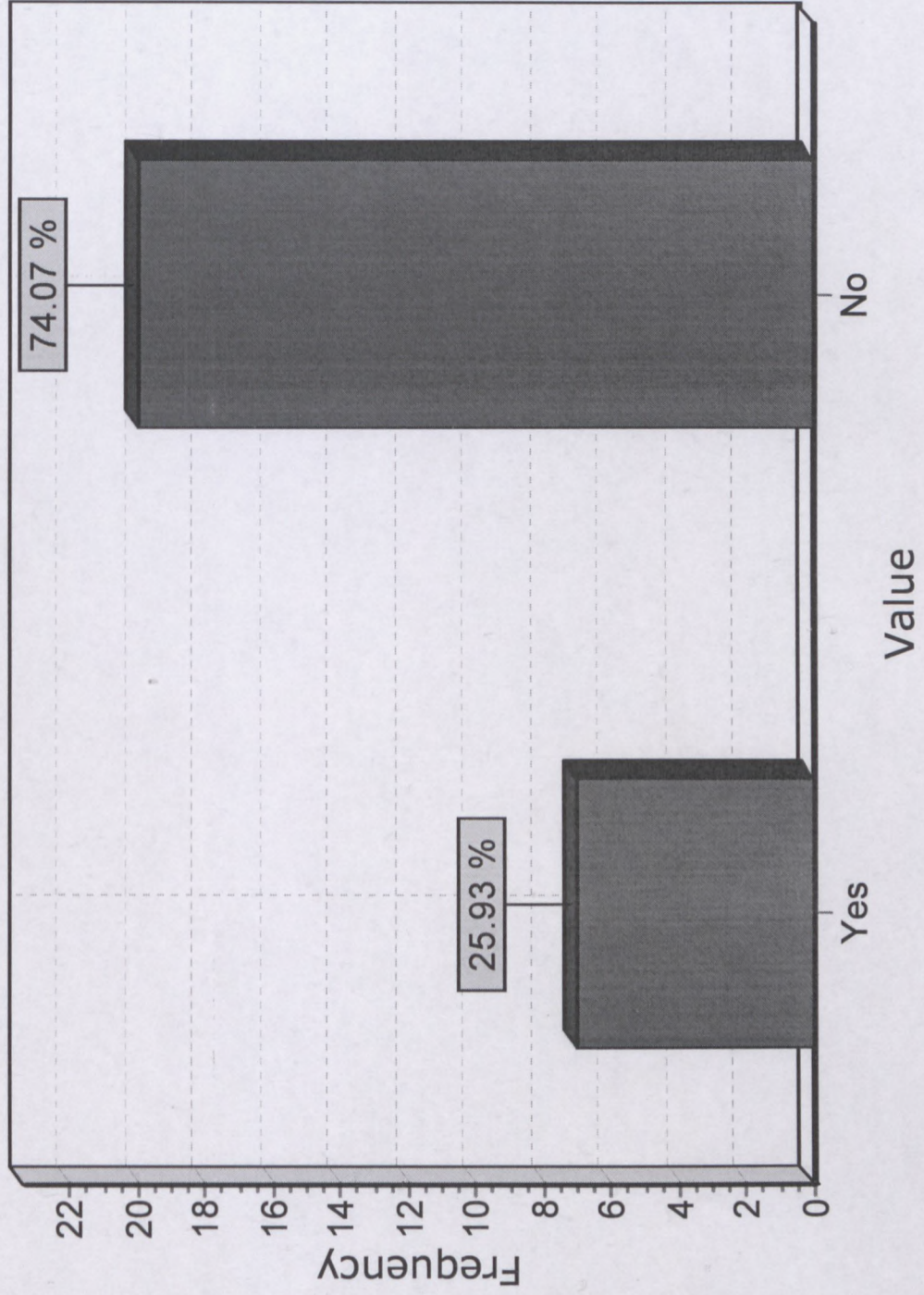
Barchart for Q2EMAIL



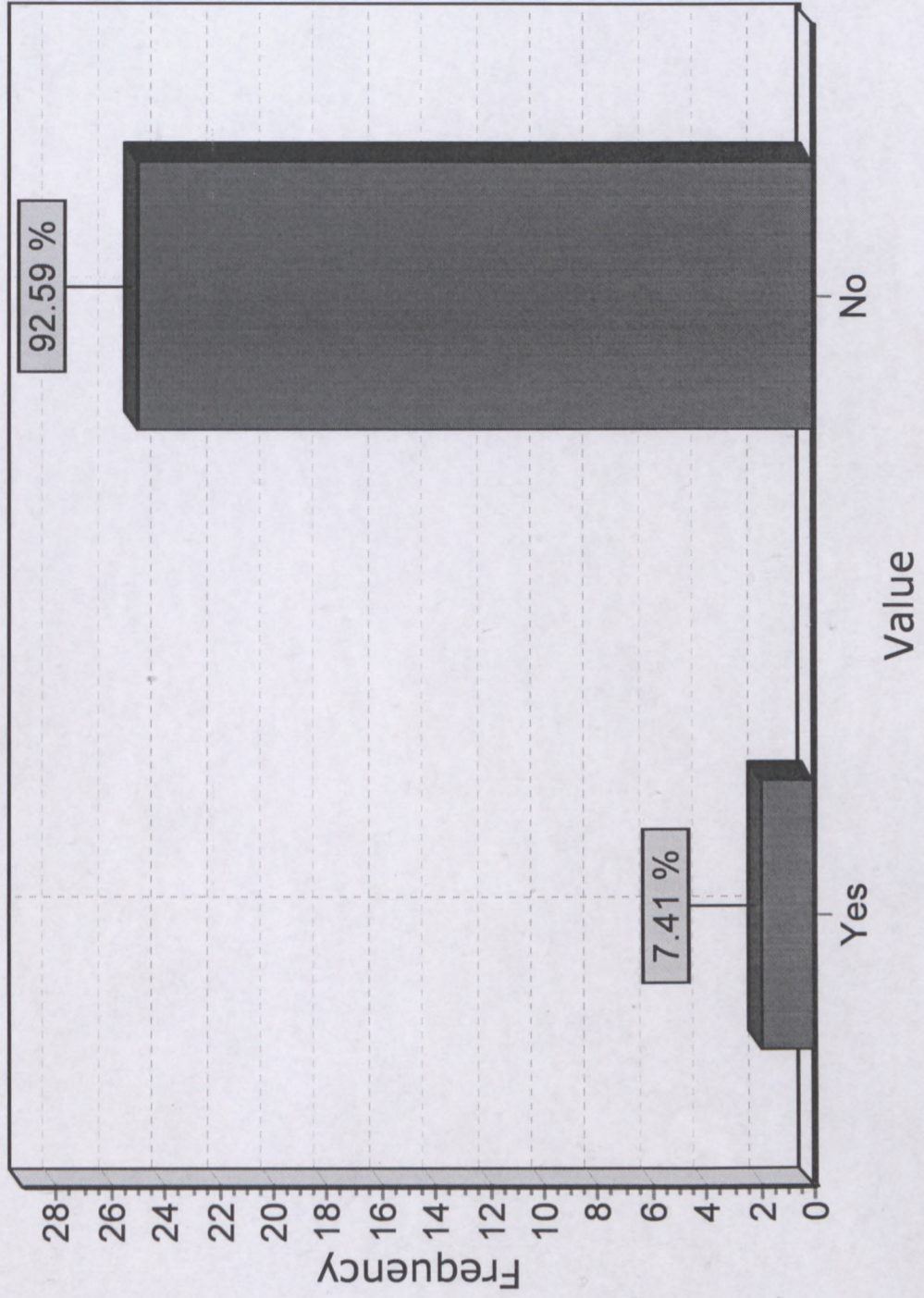
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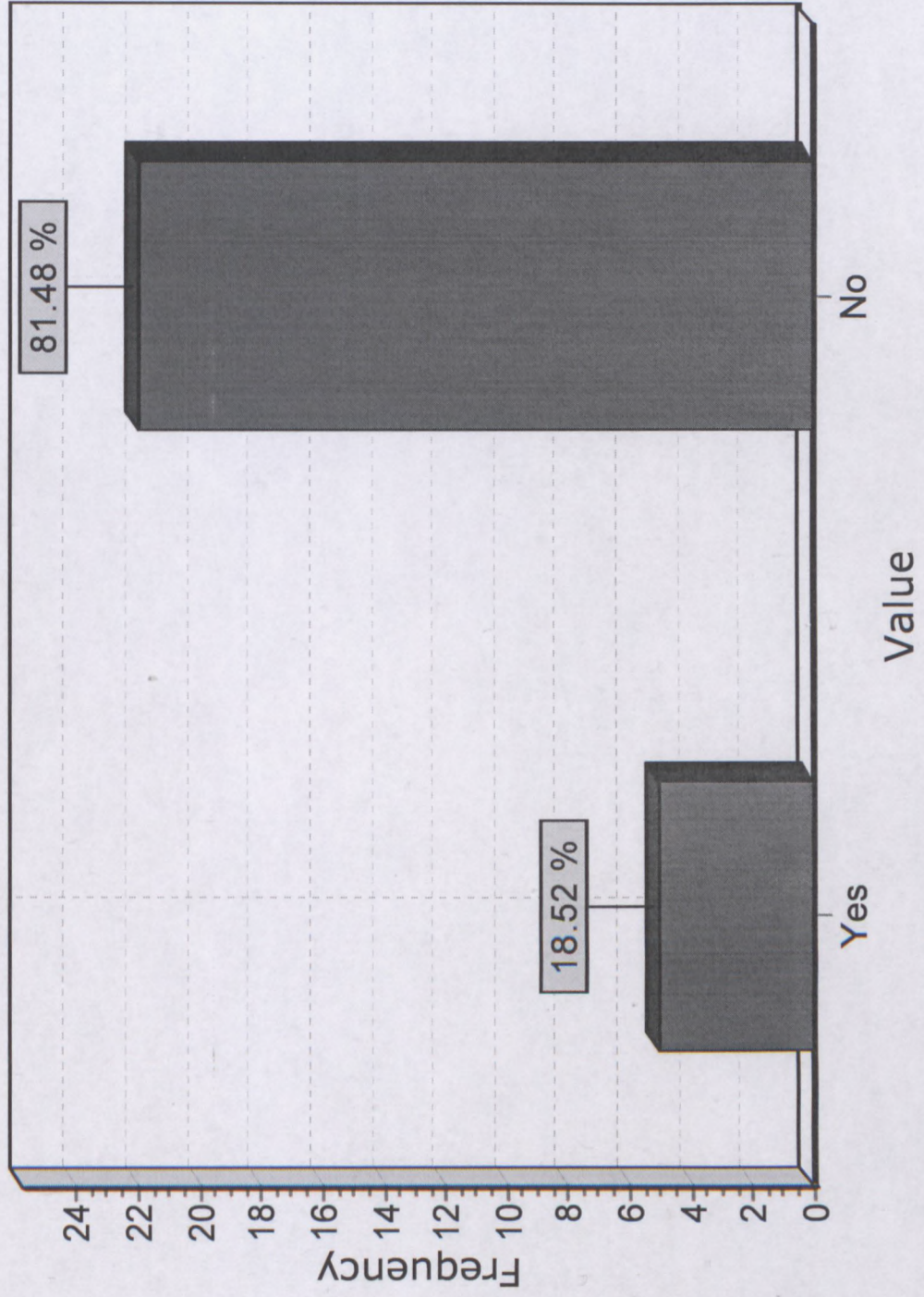
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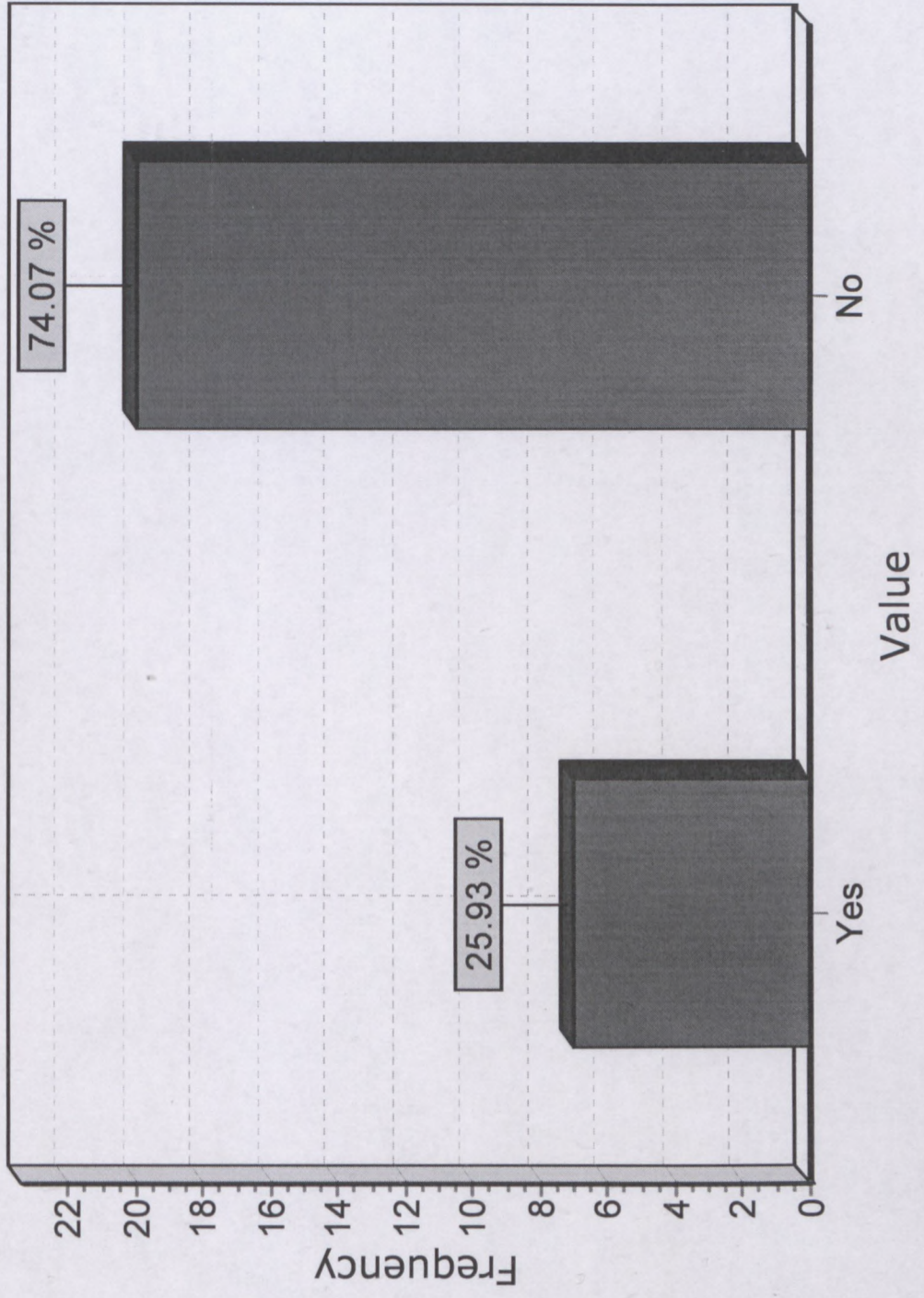
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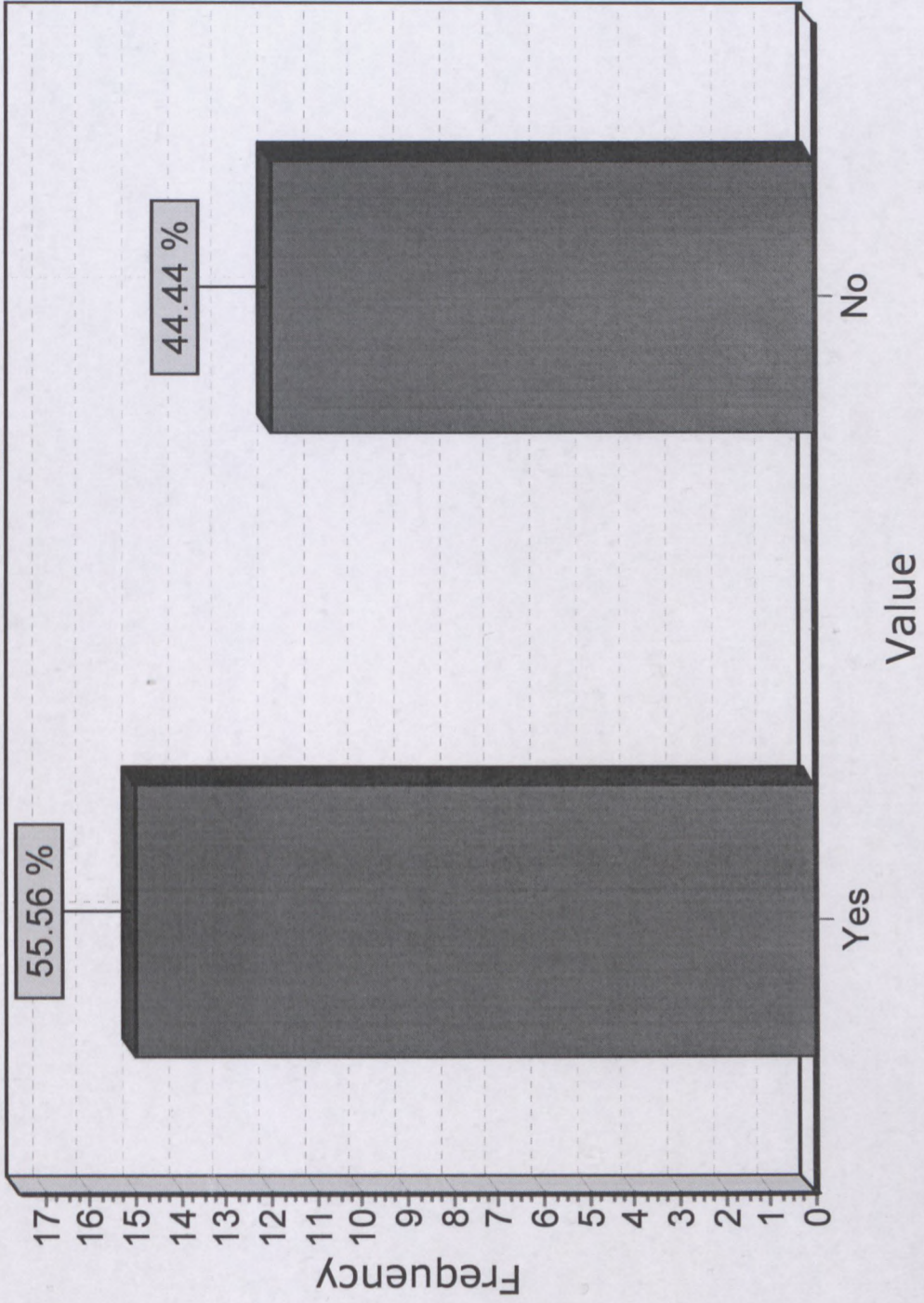
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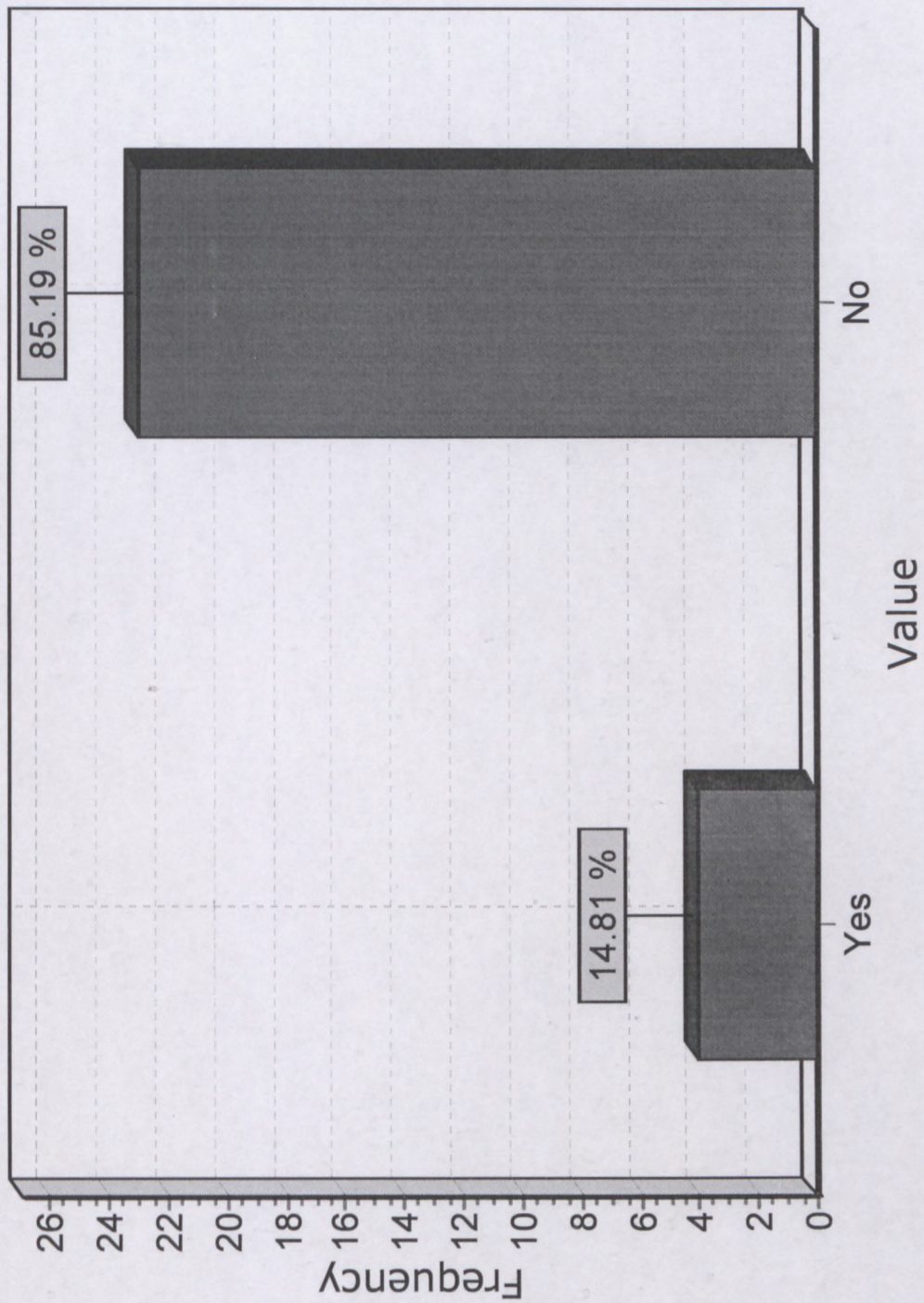
Barchart for Q2TWITTER



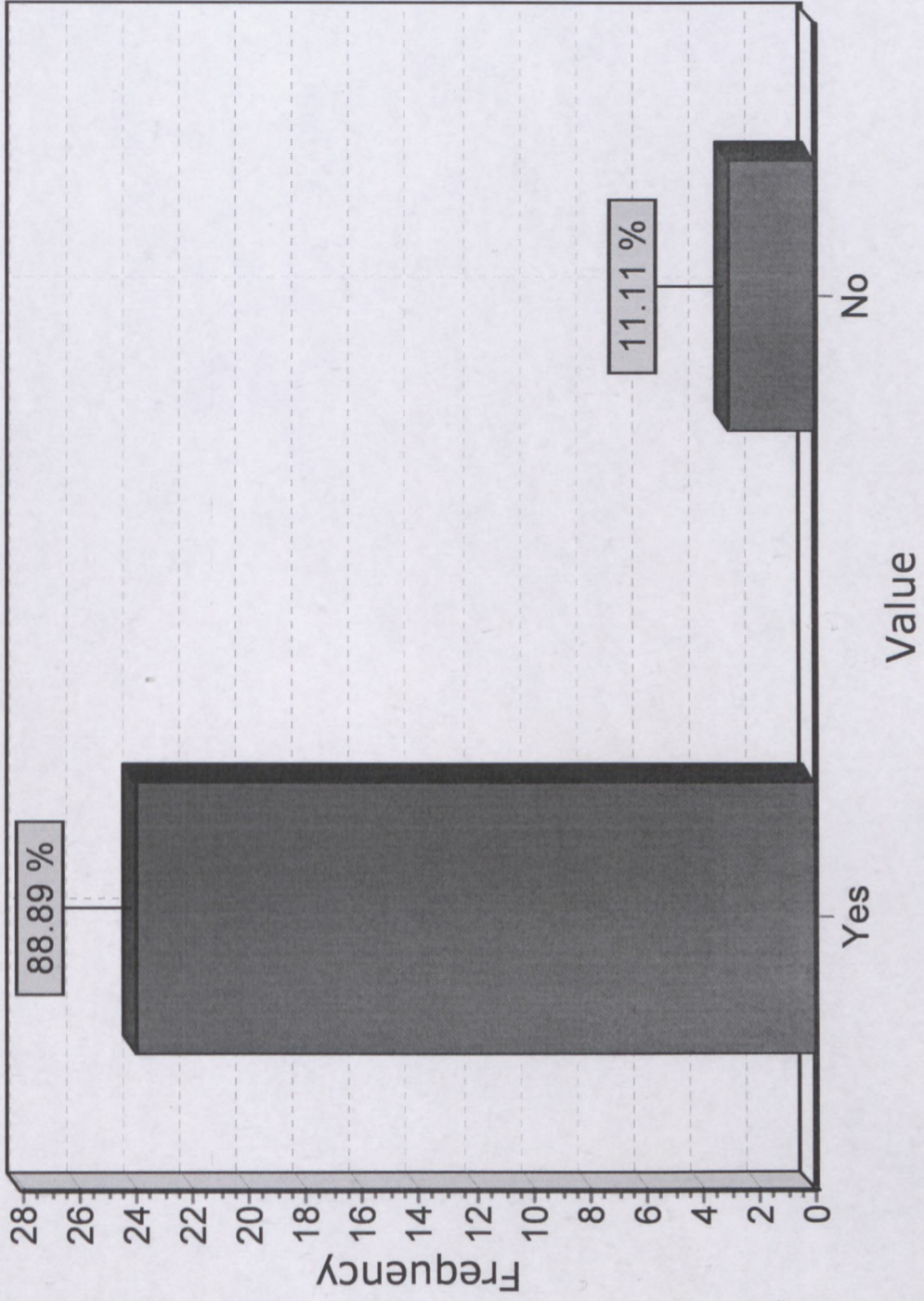
Barchart for Q2YOUTUBE



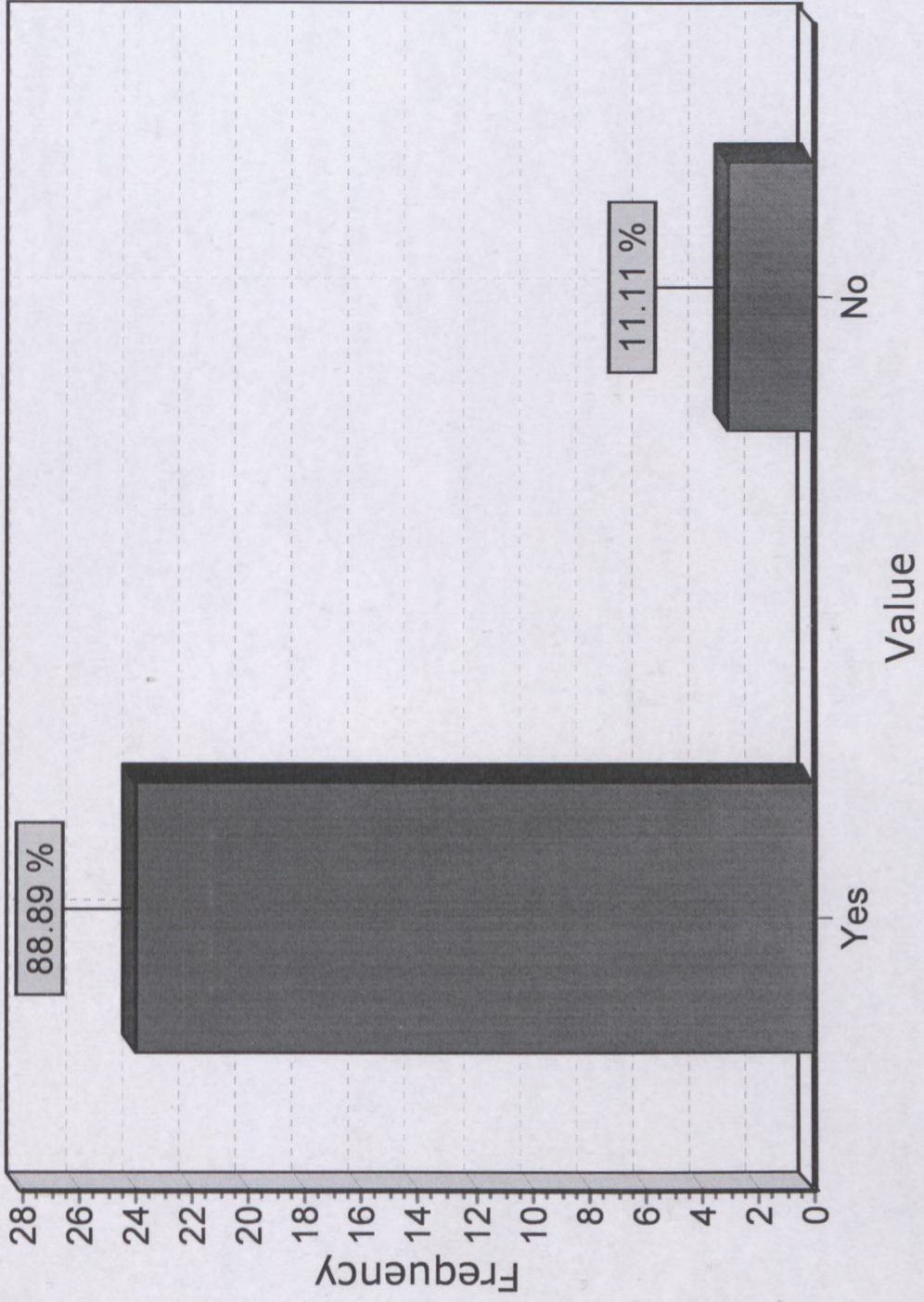
Barchart for Q3BLOGGIN



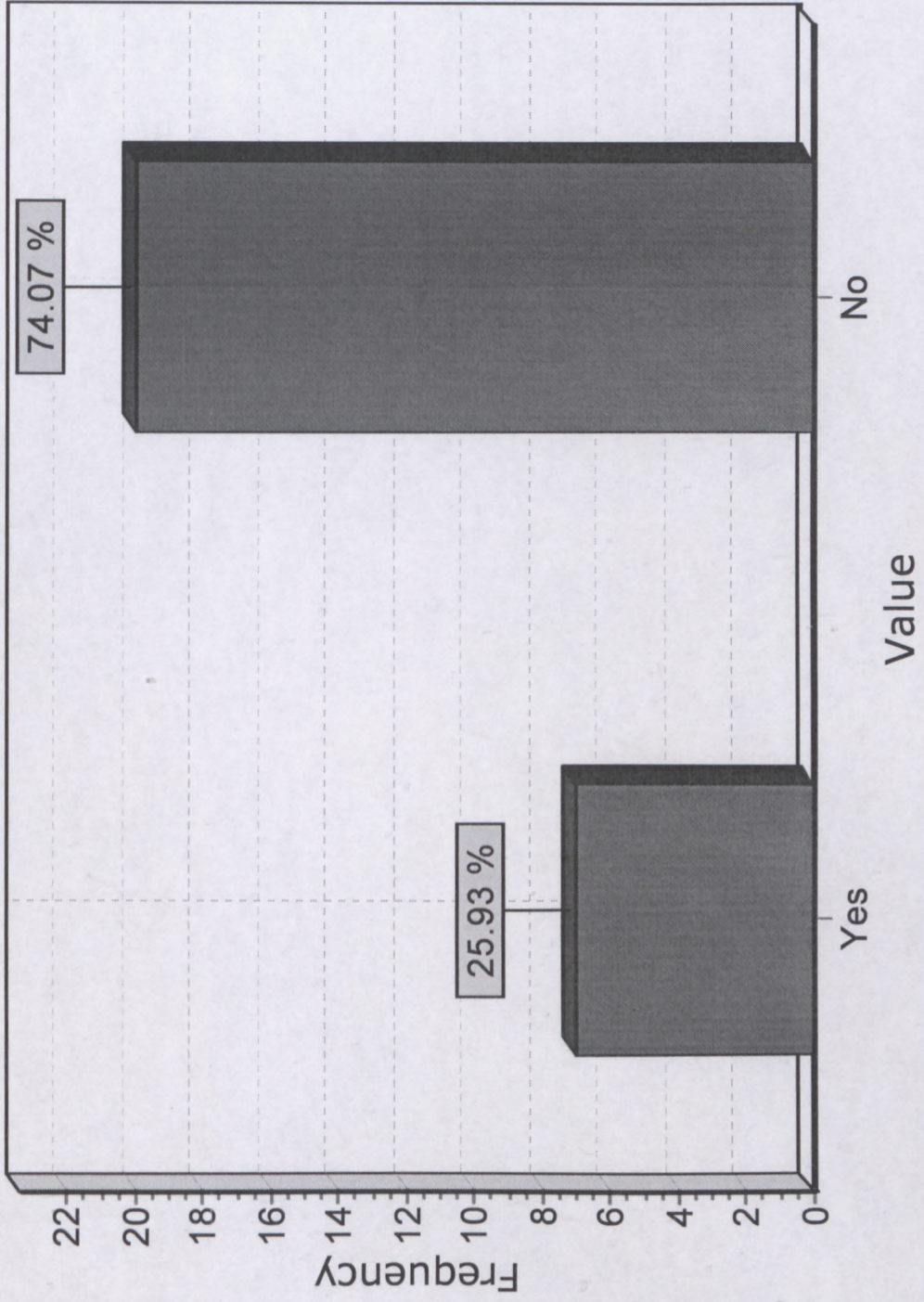
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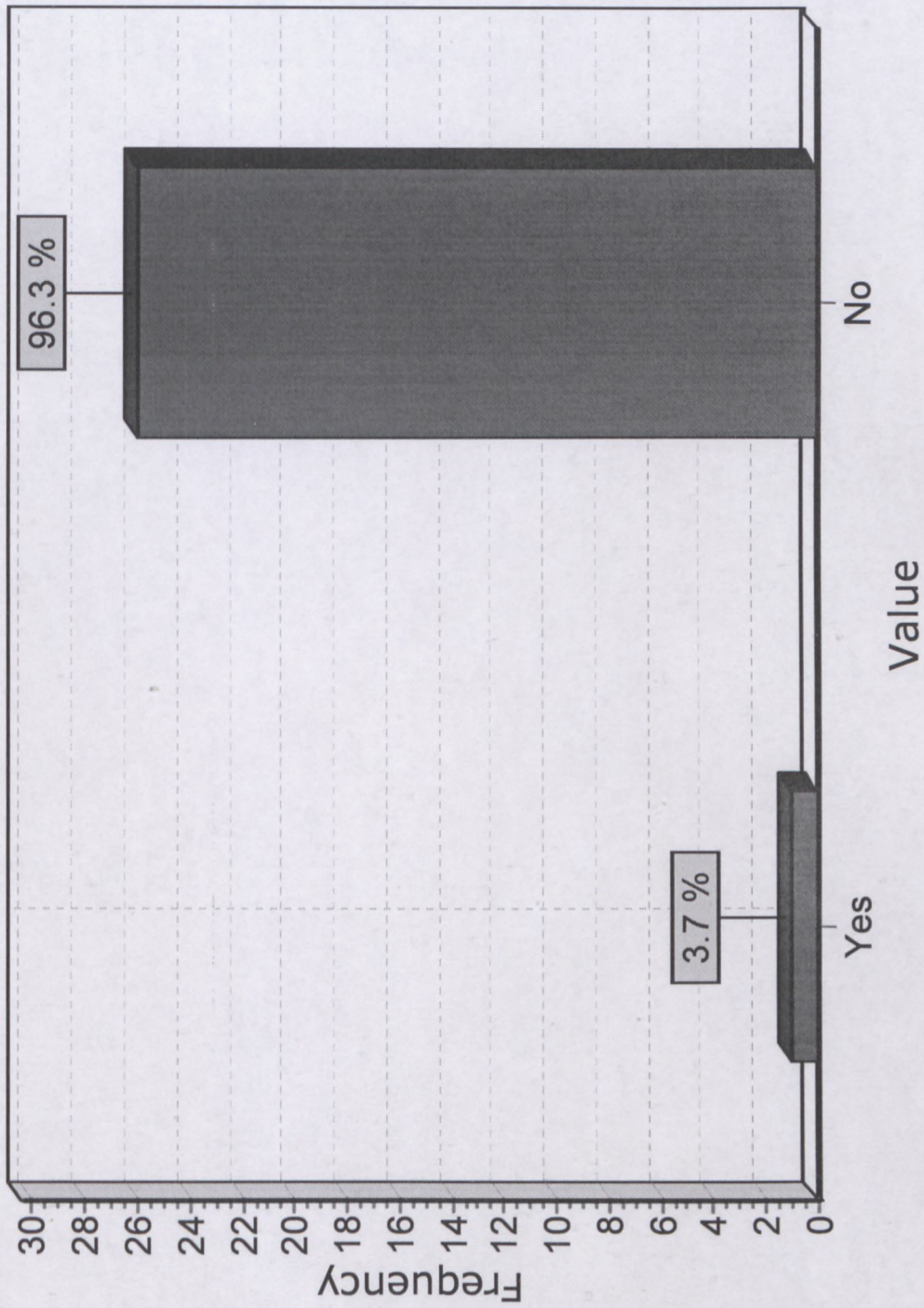
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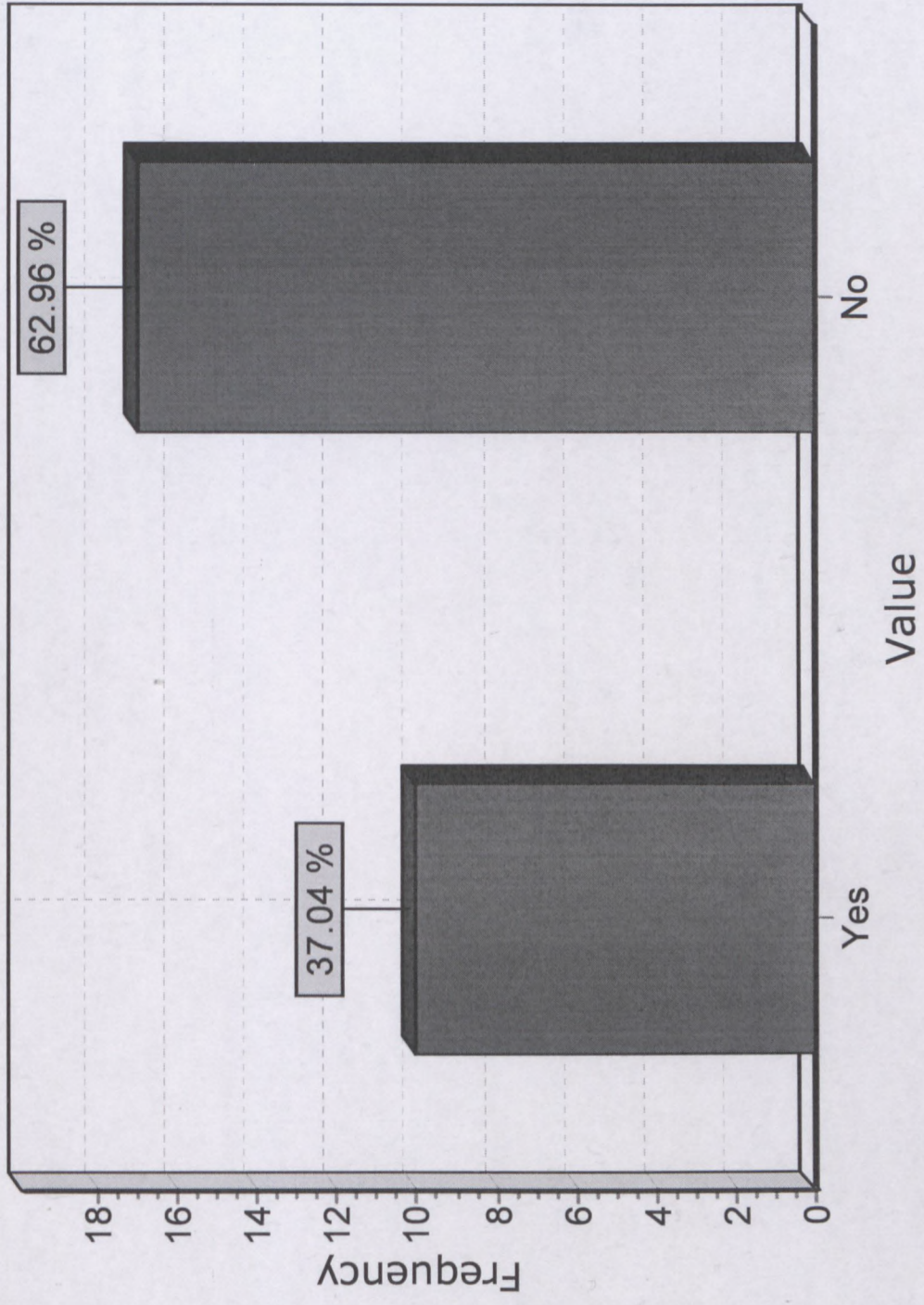
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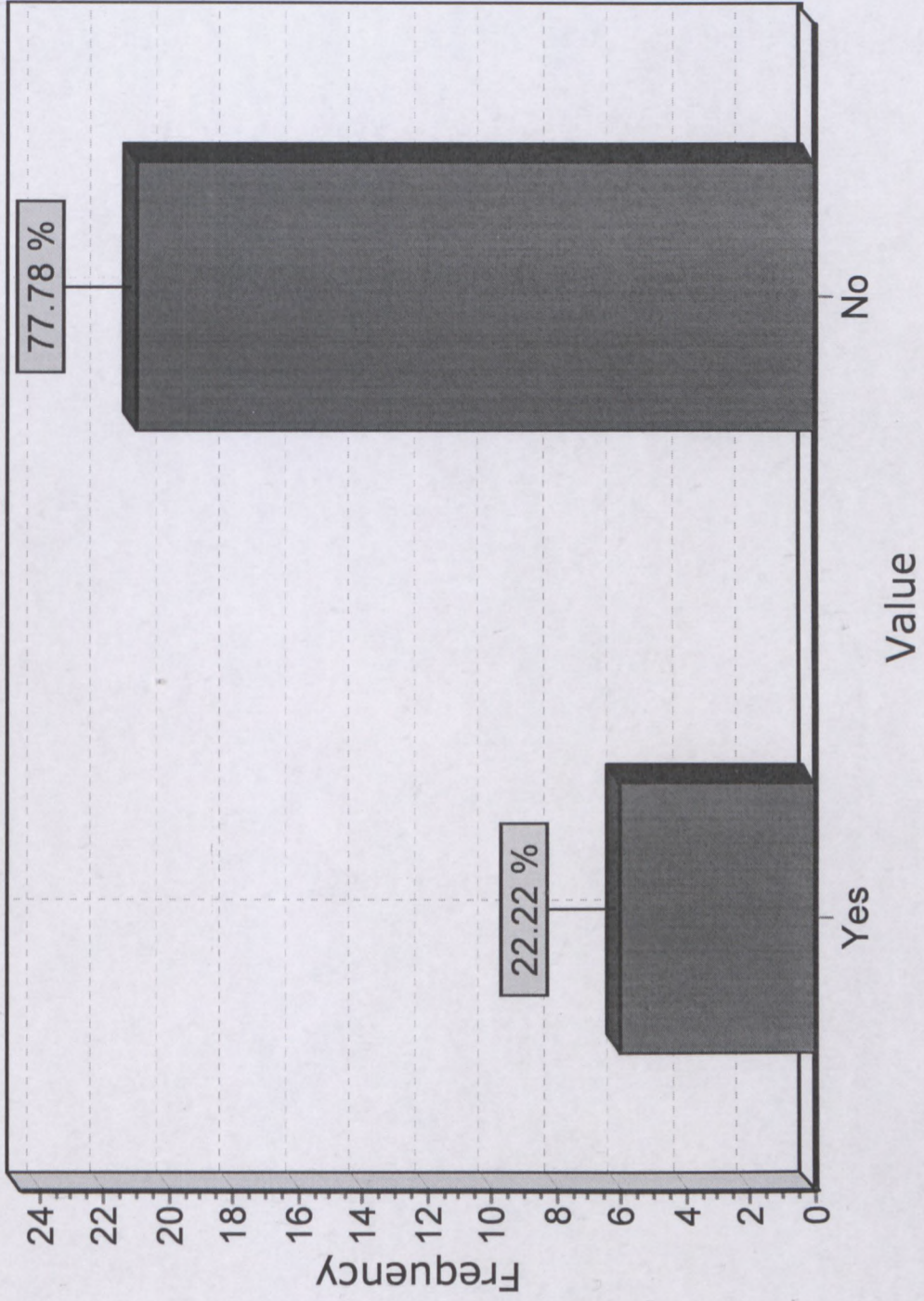
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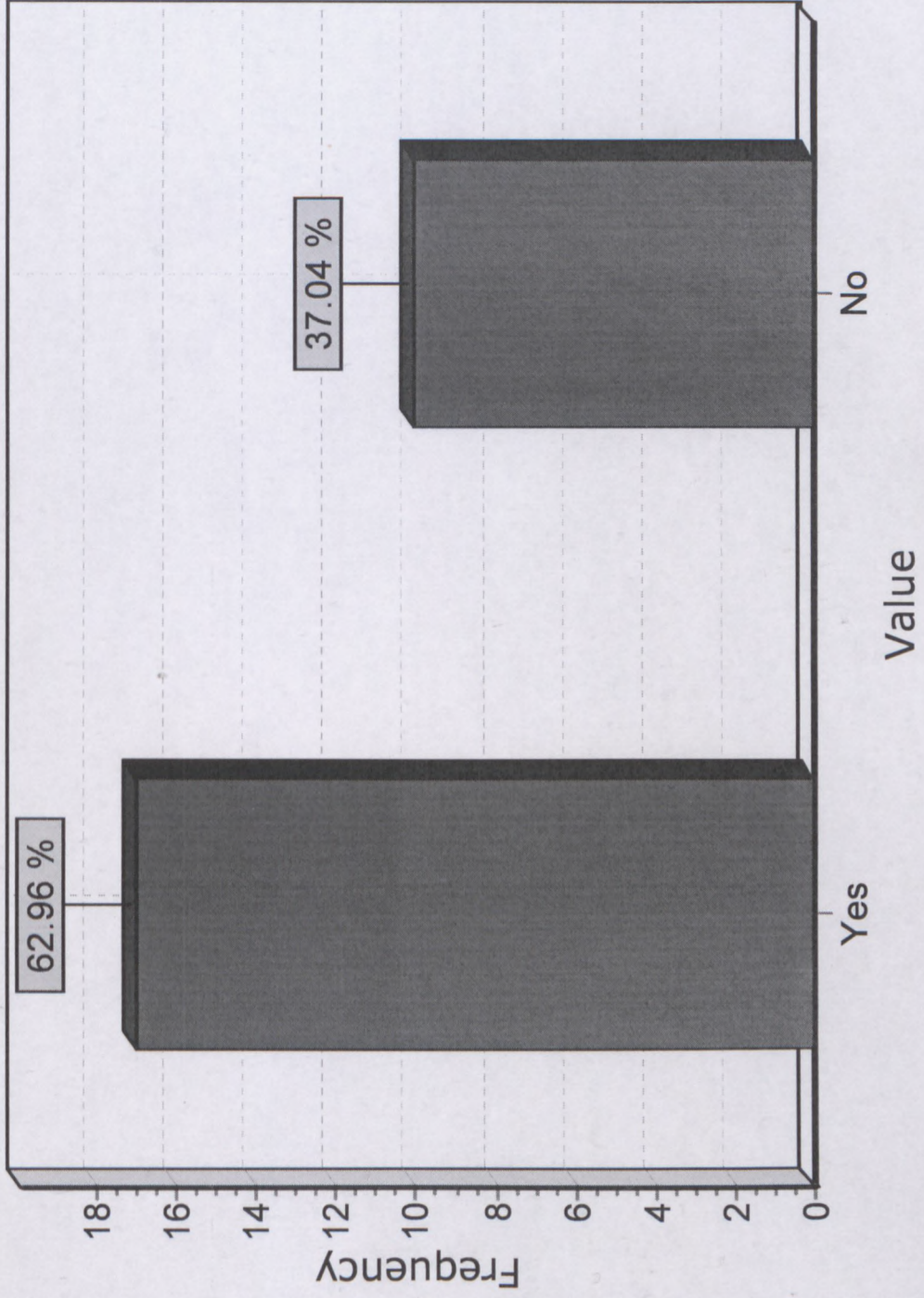
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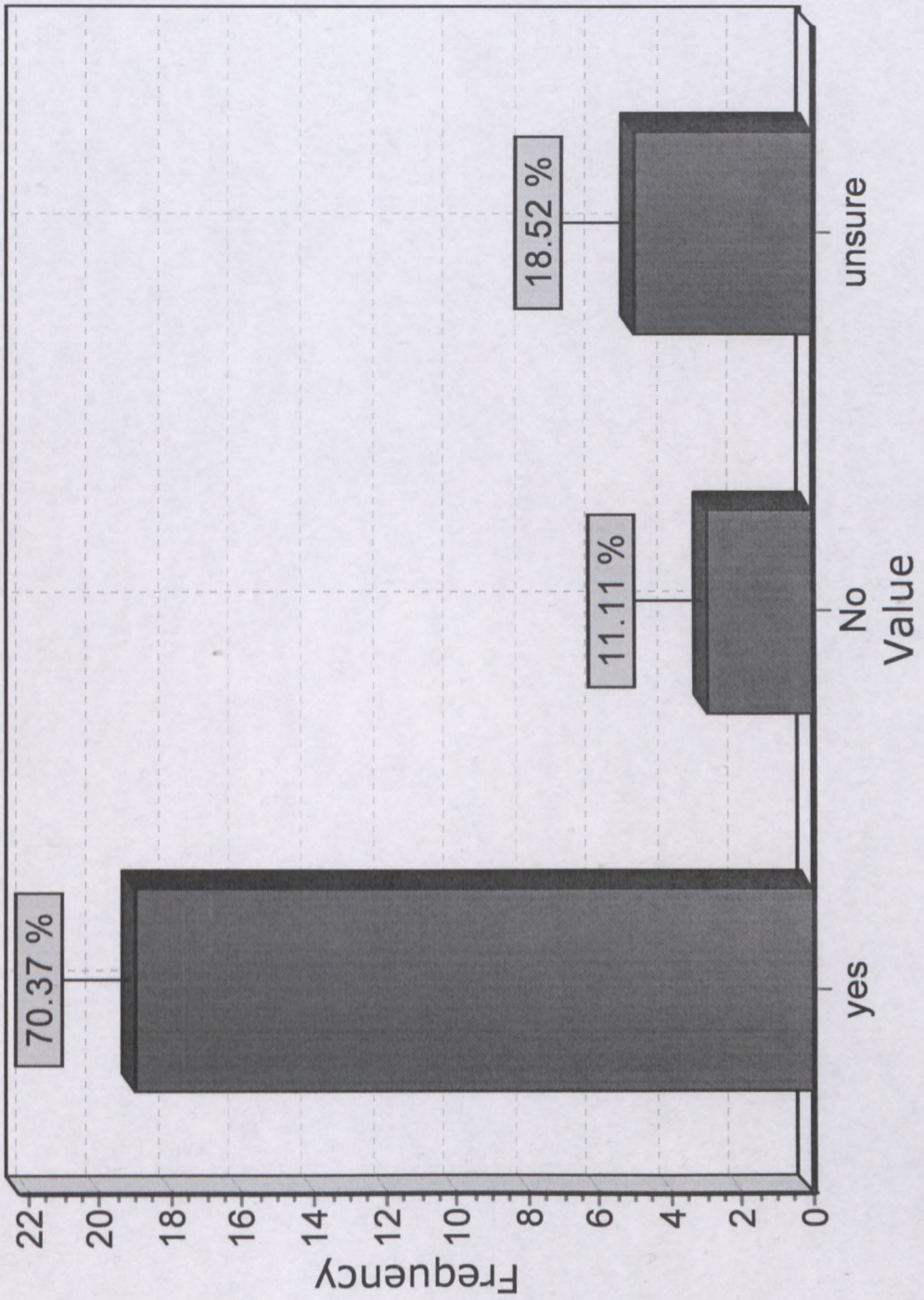
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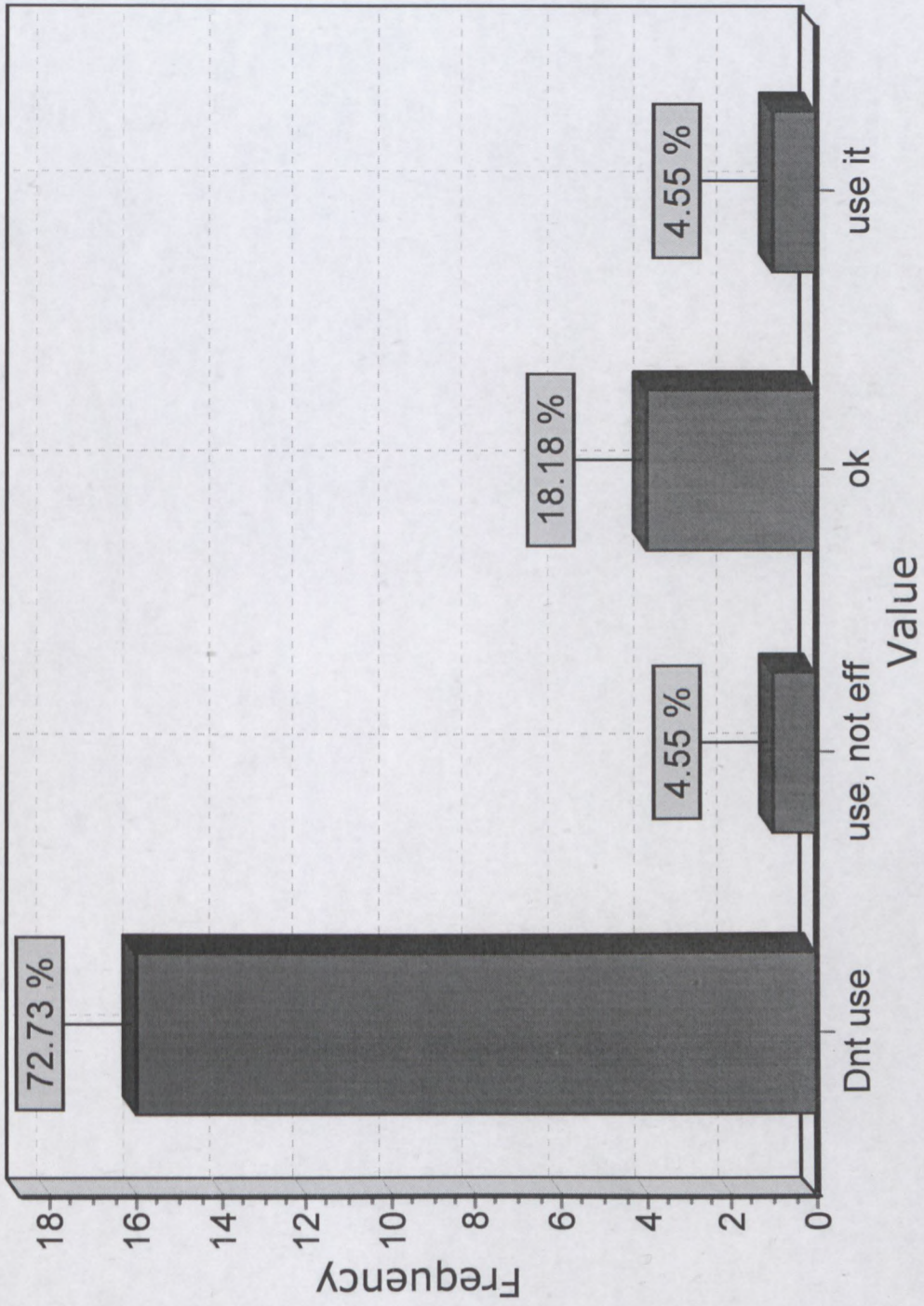
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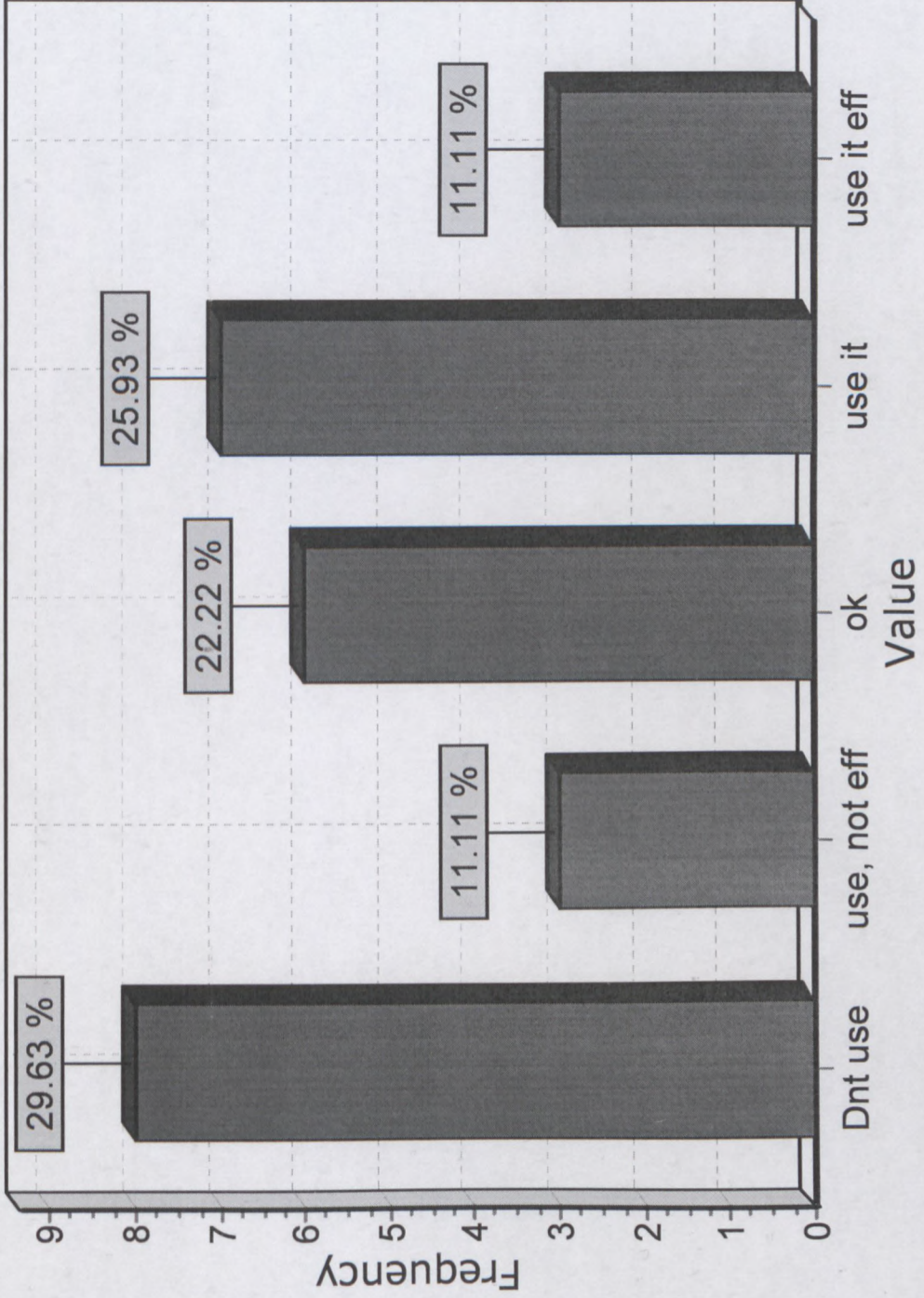
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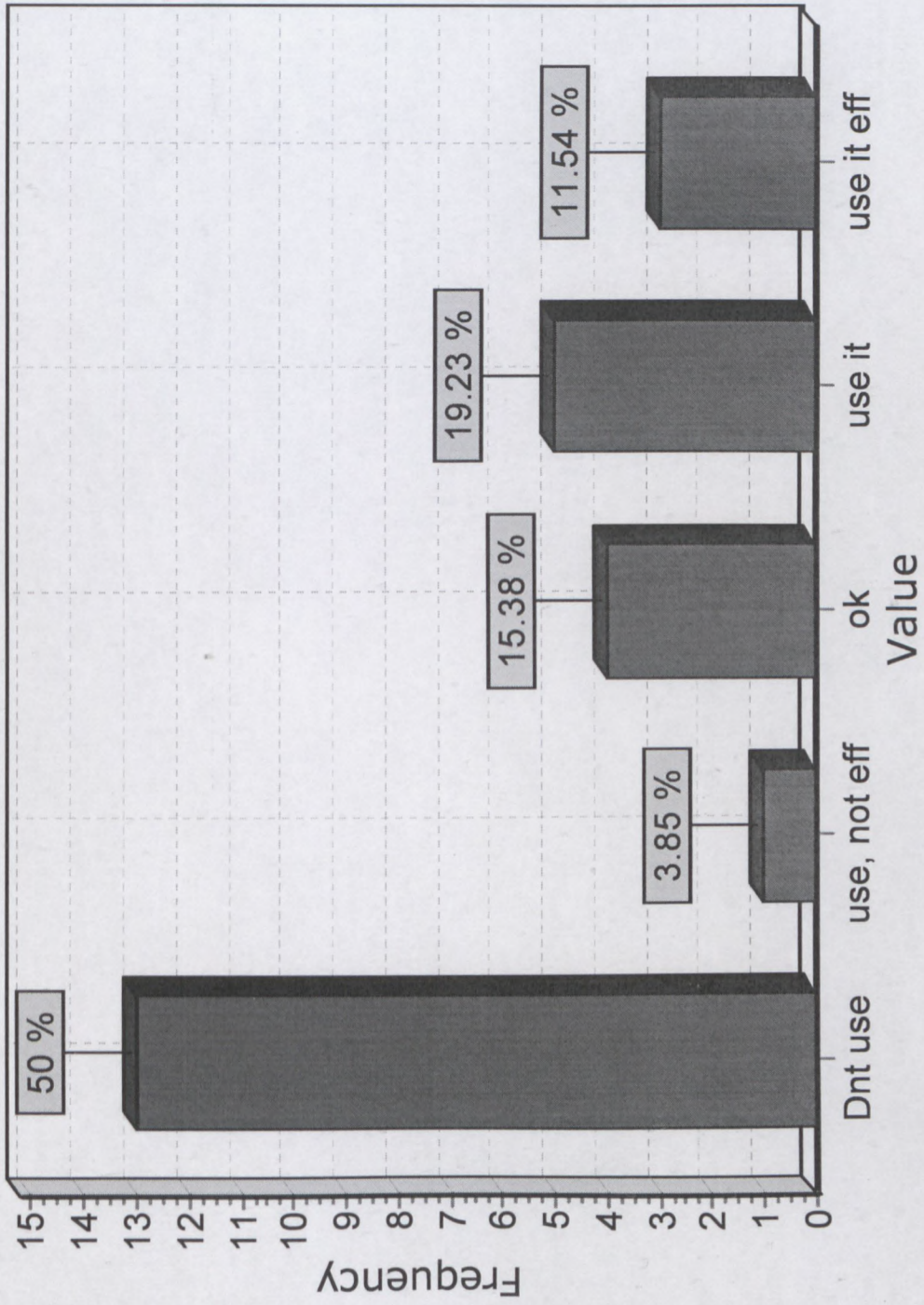
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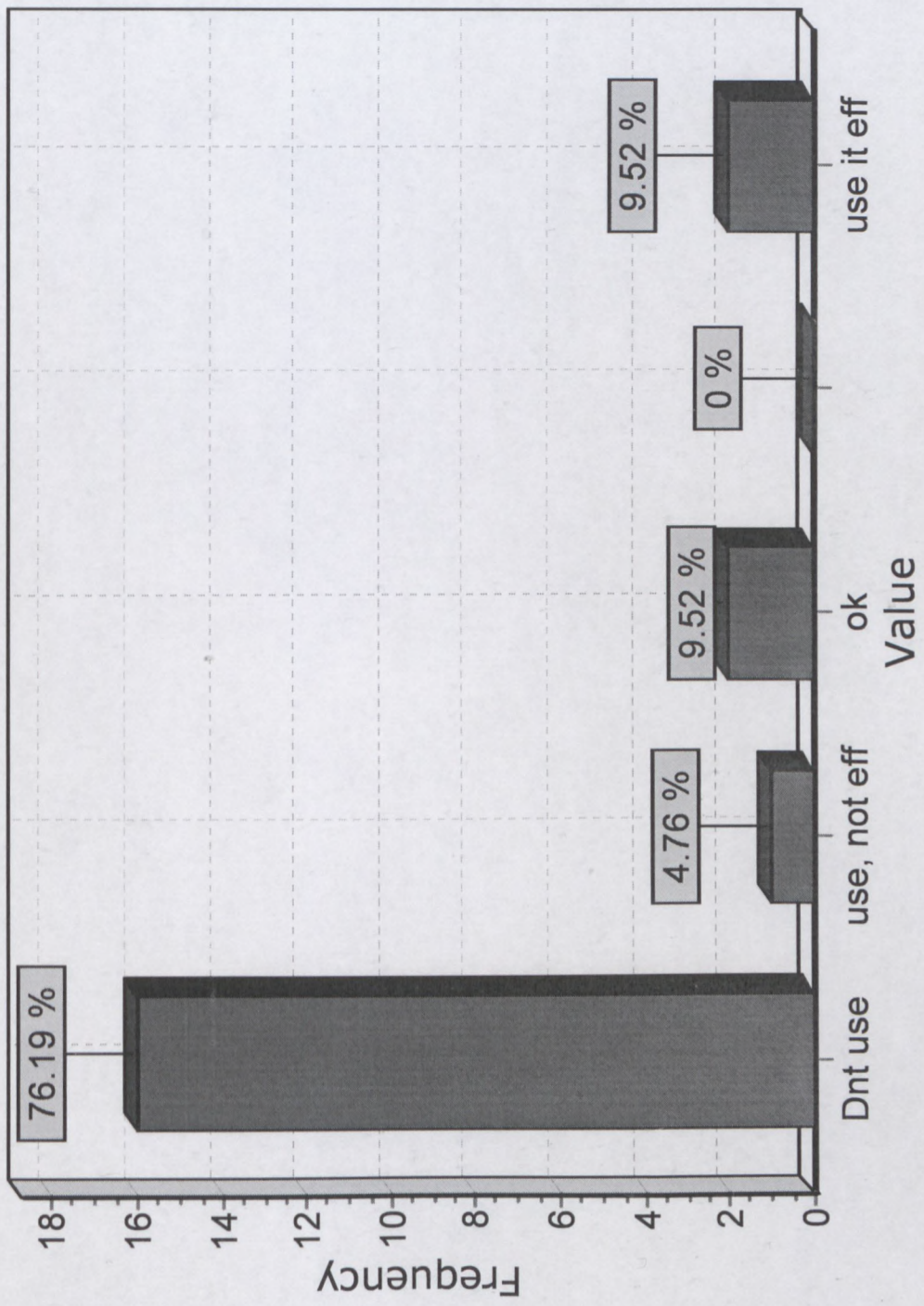
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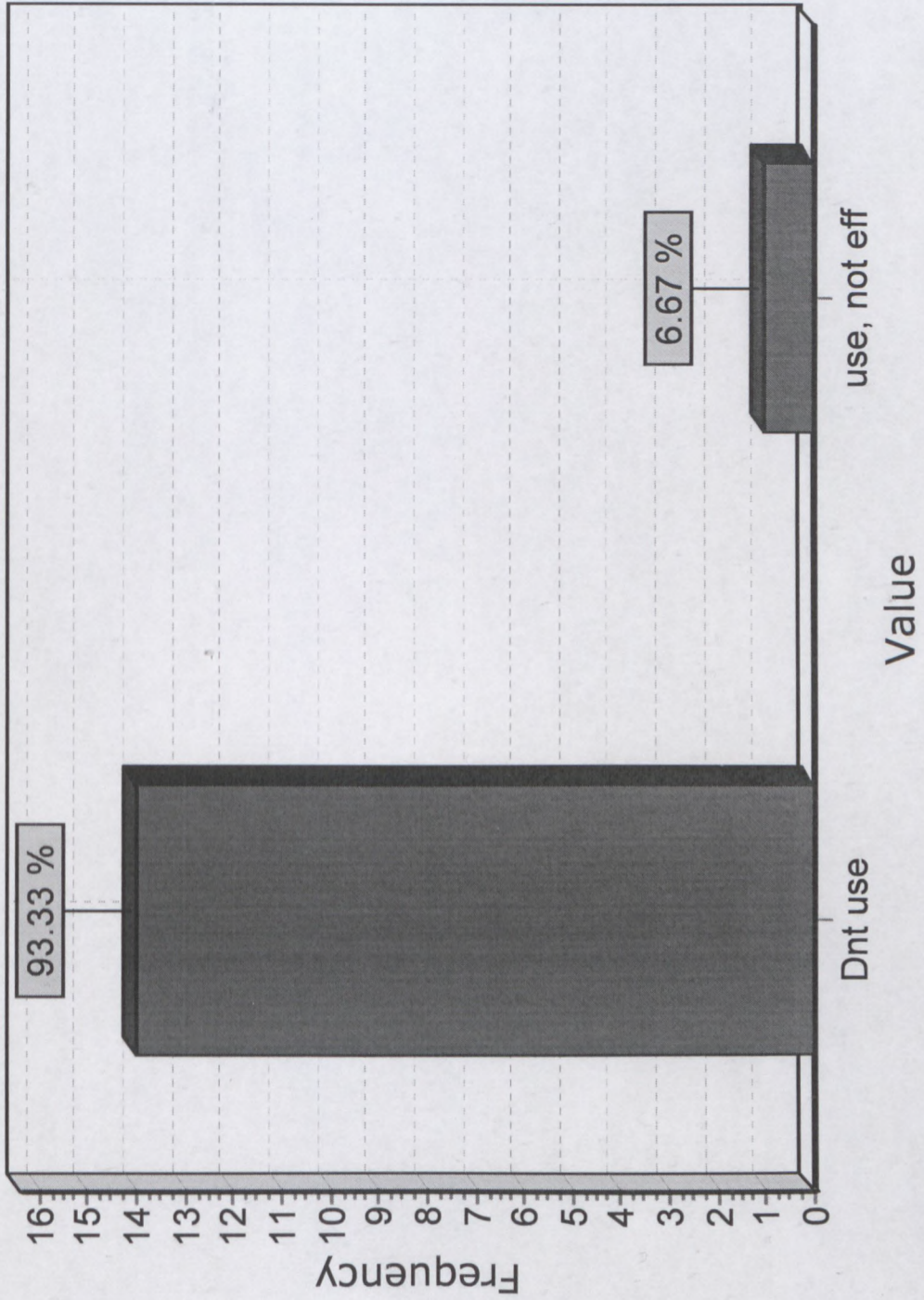
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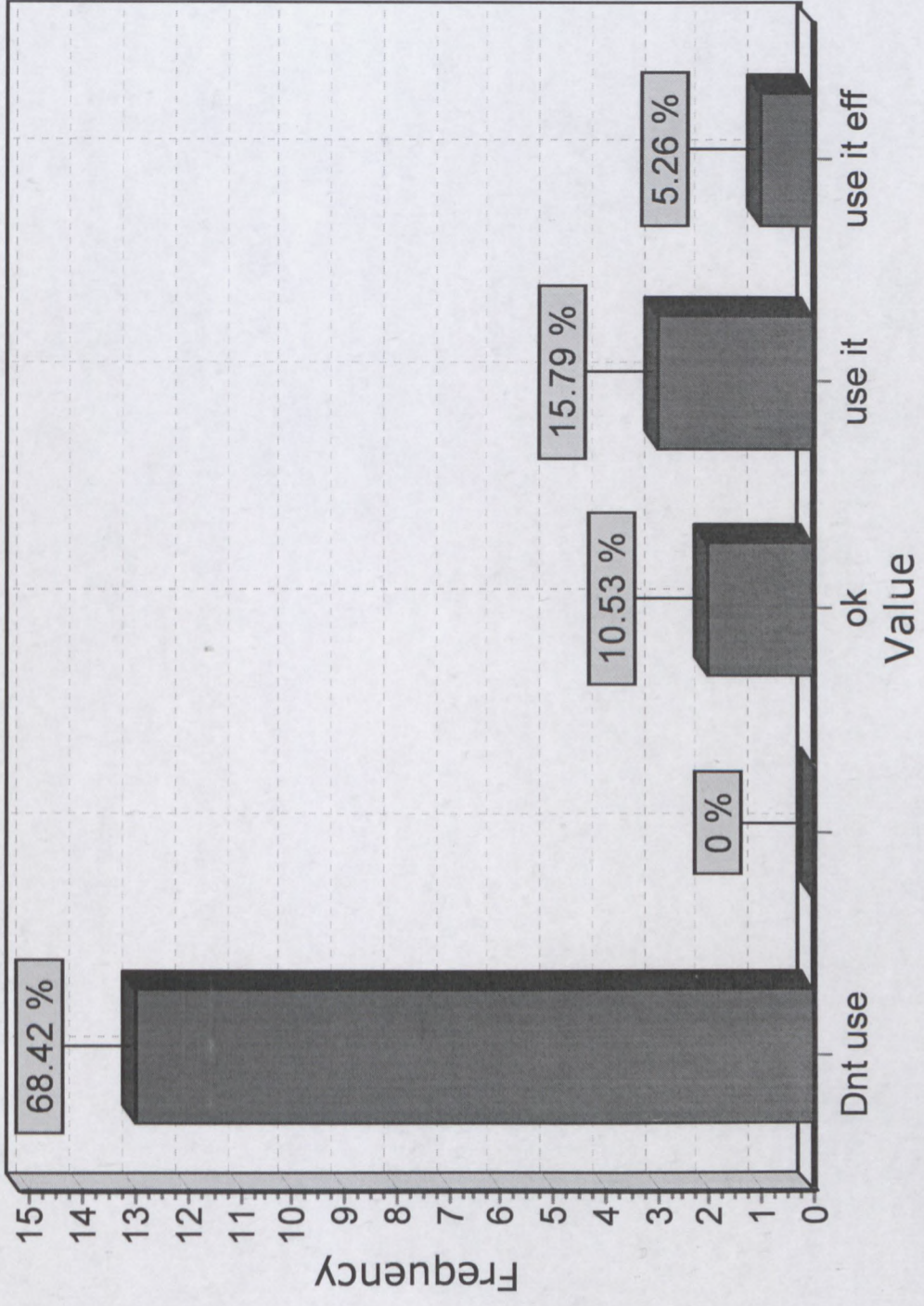
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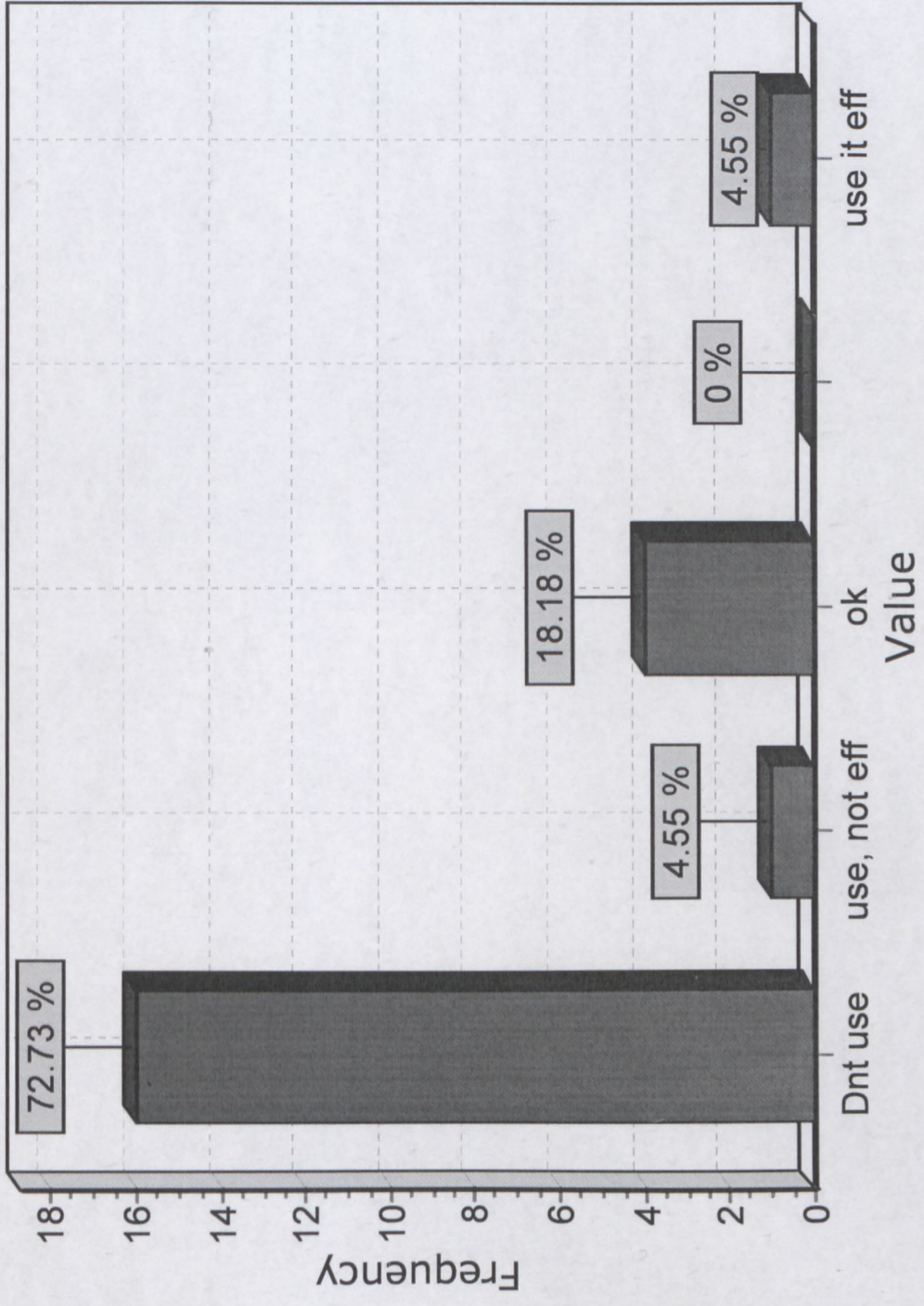
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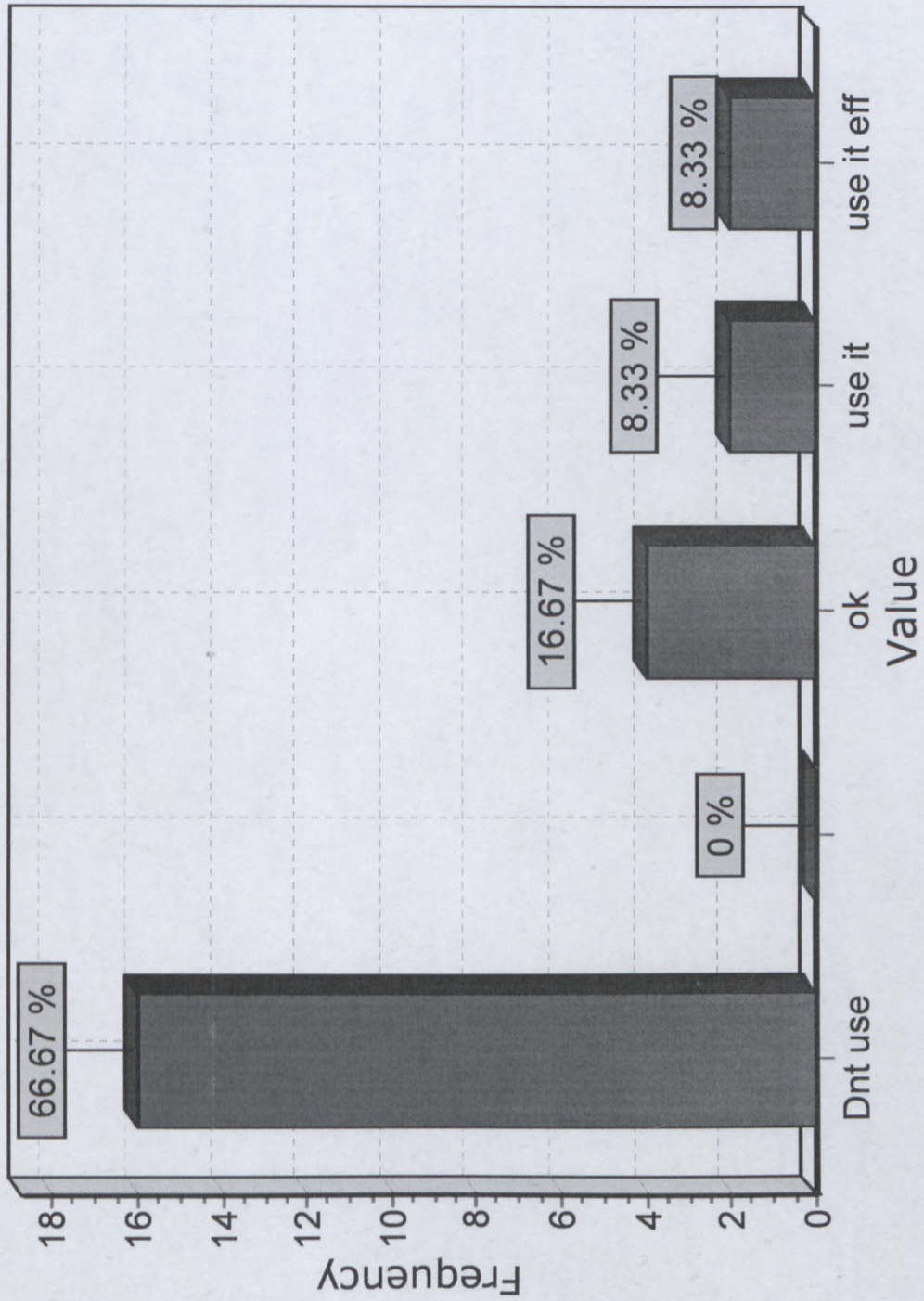
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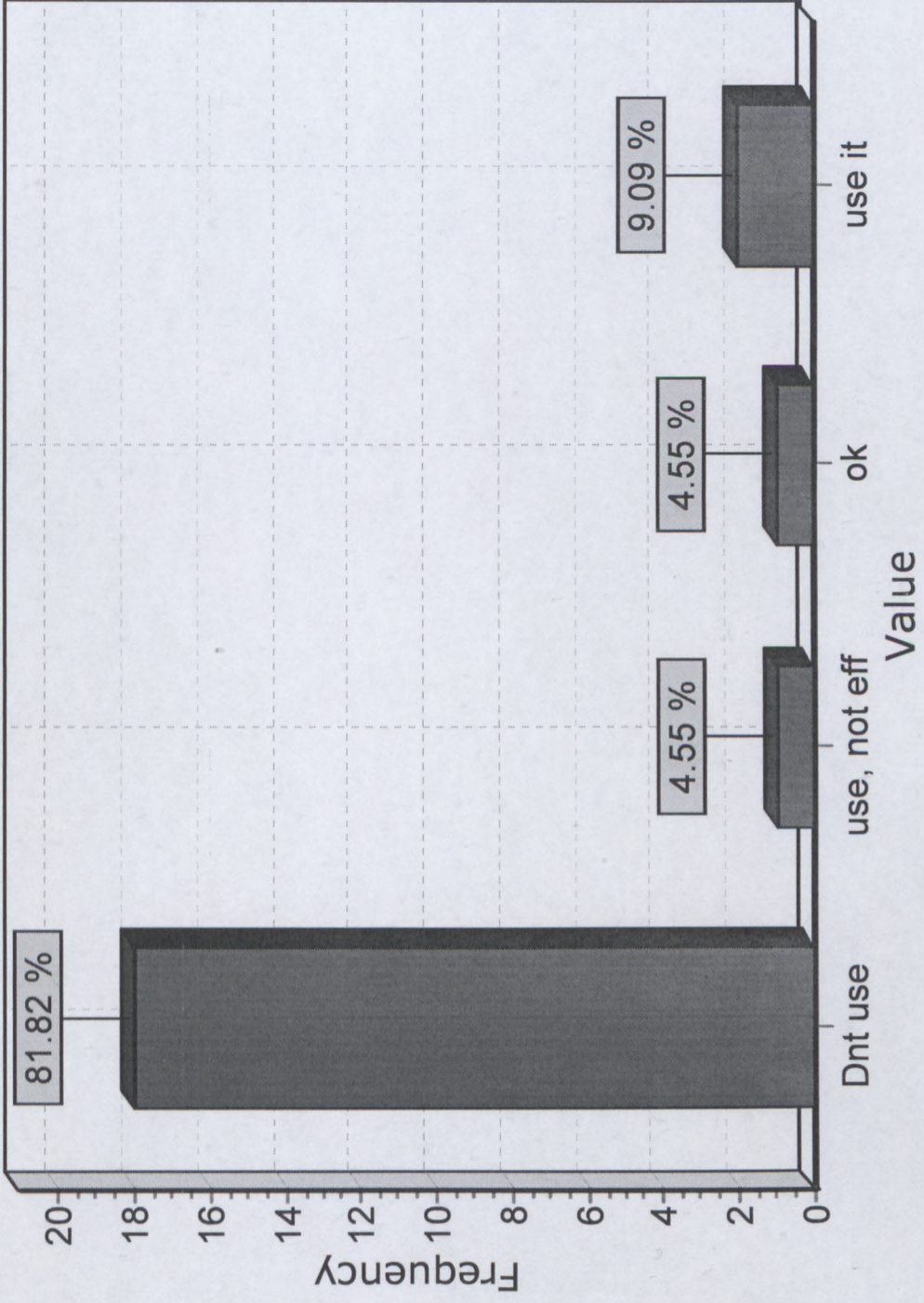
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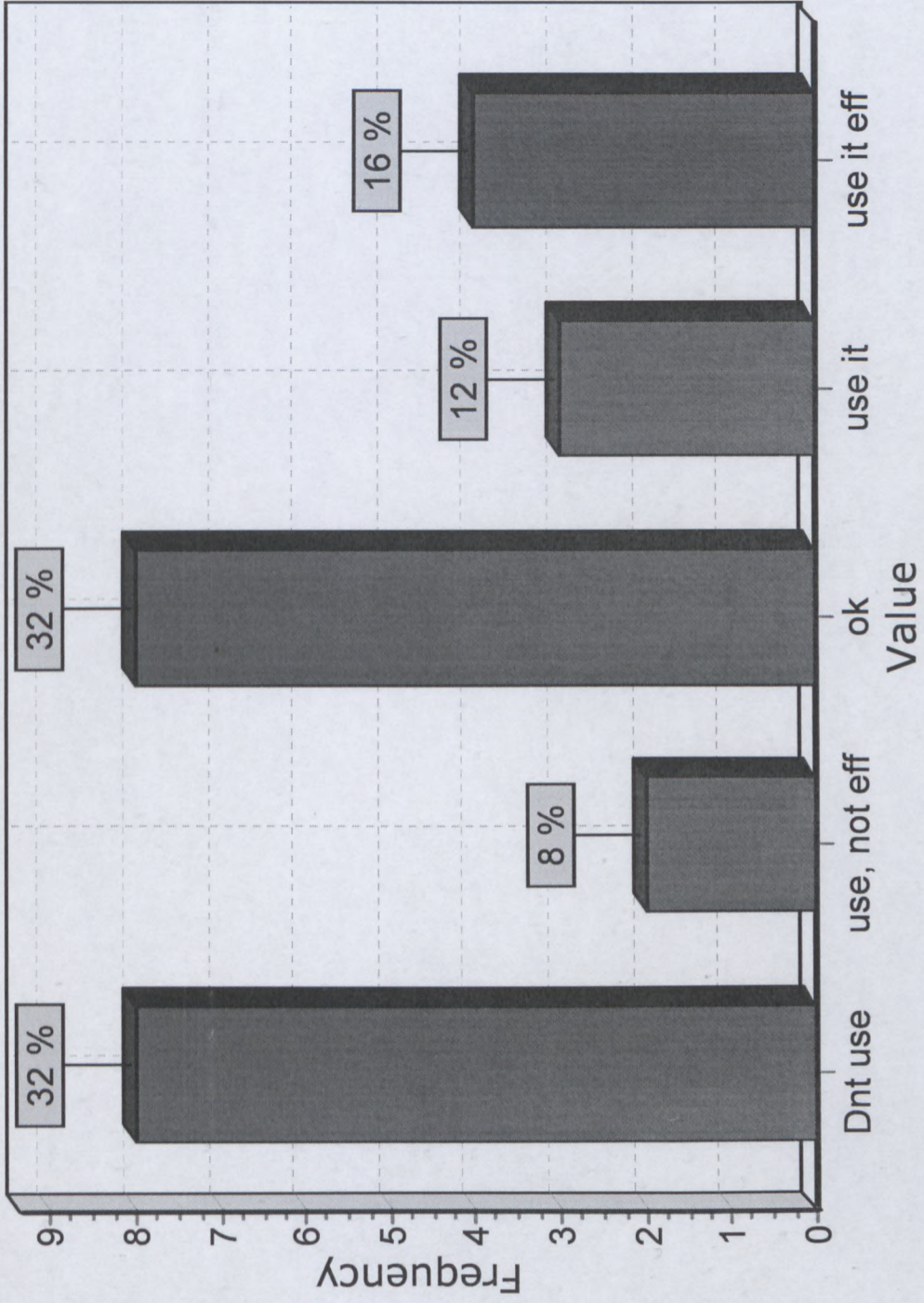
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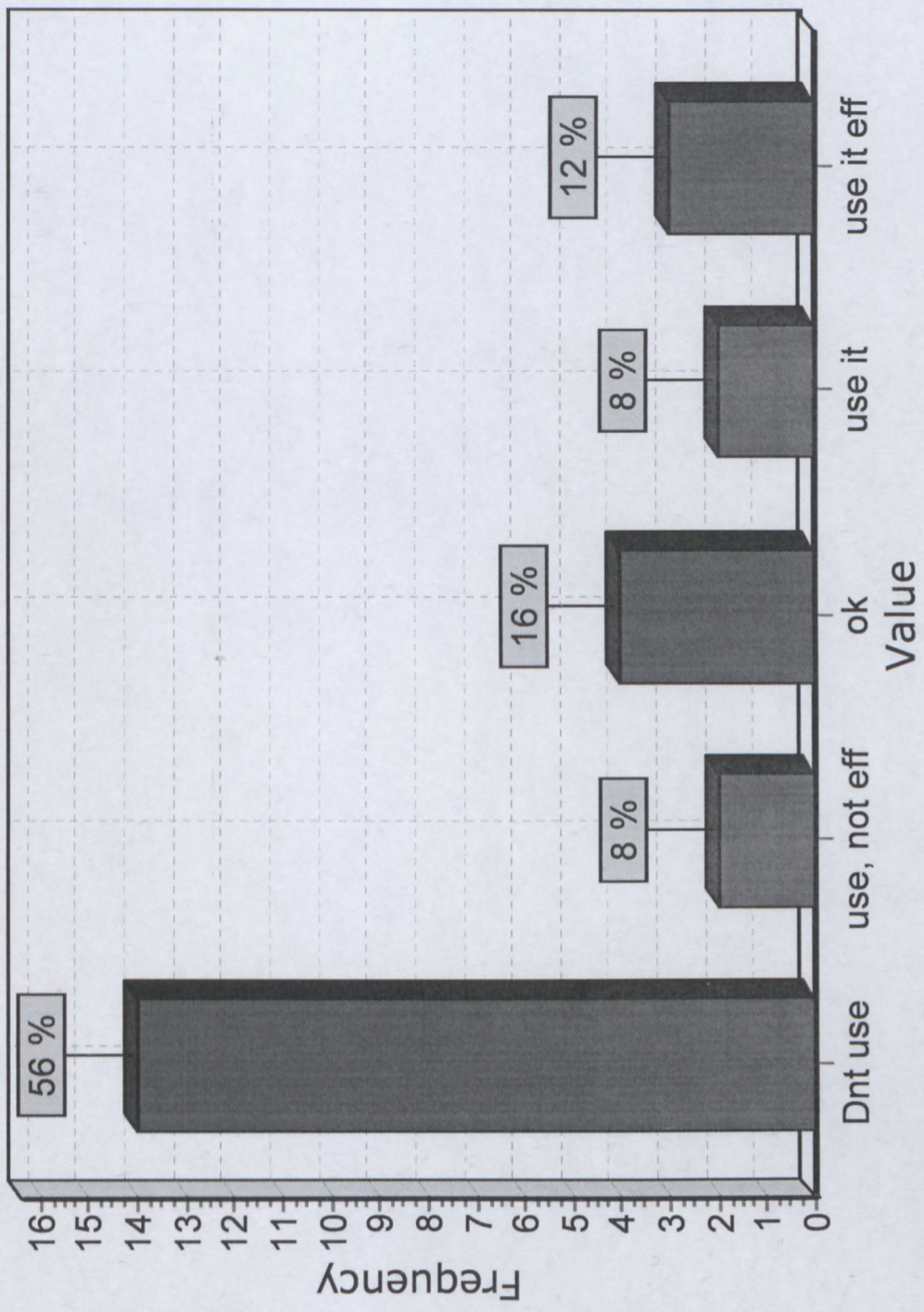
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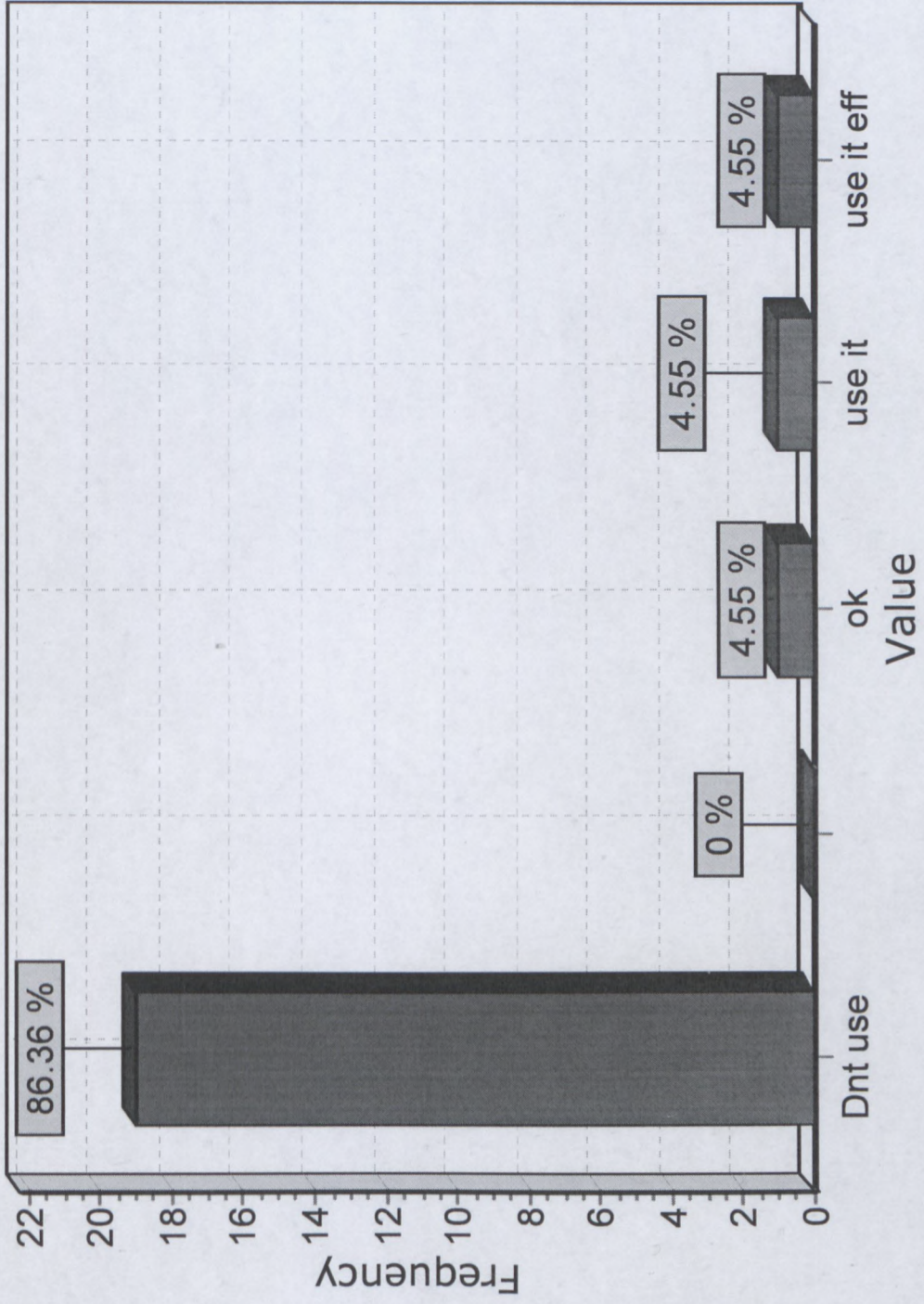
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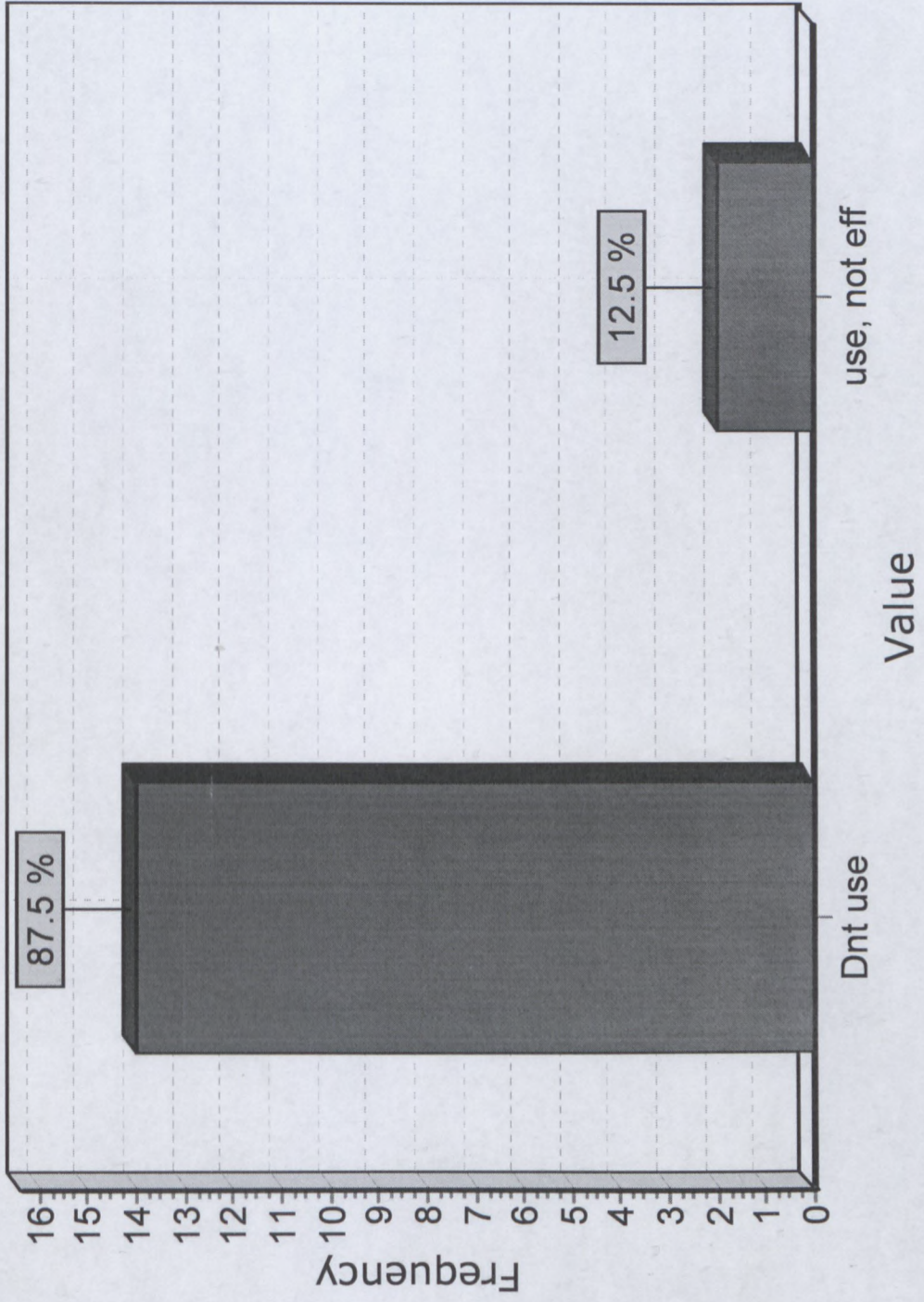
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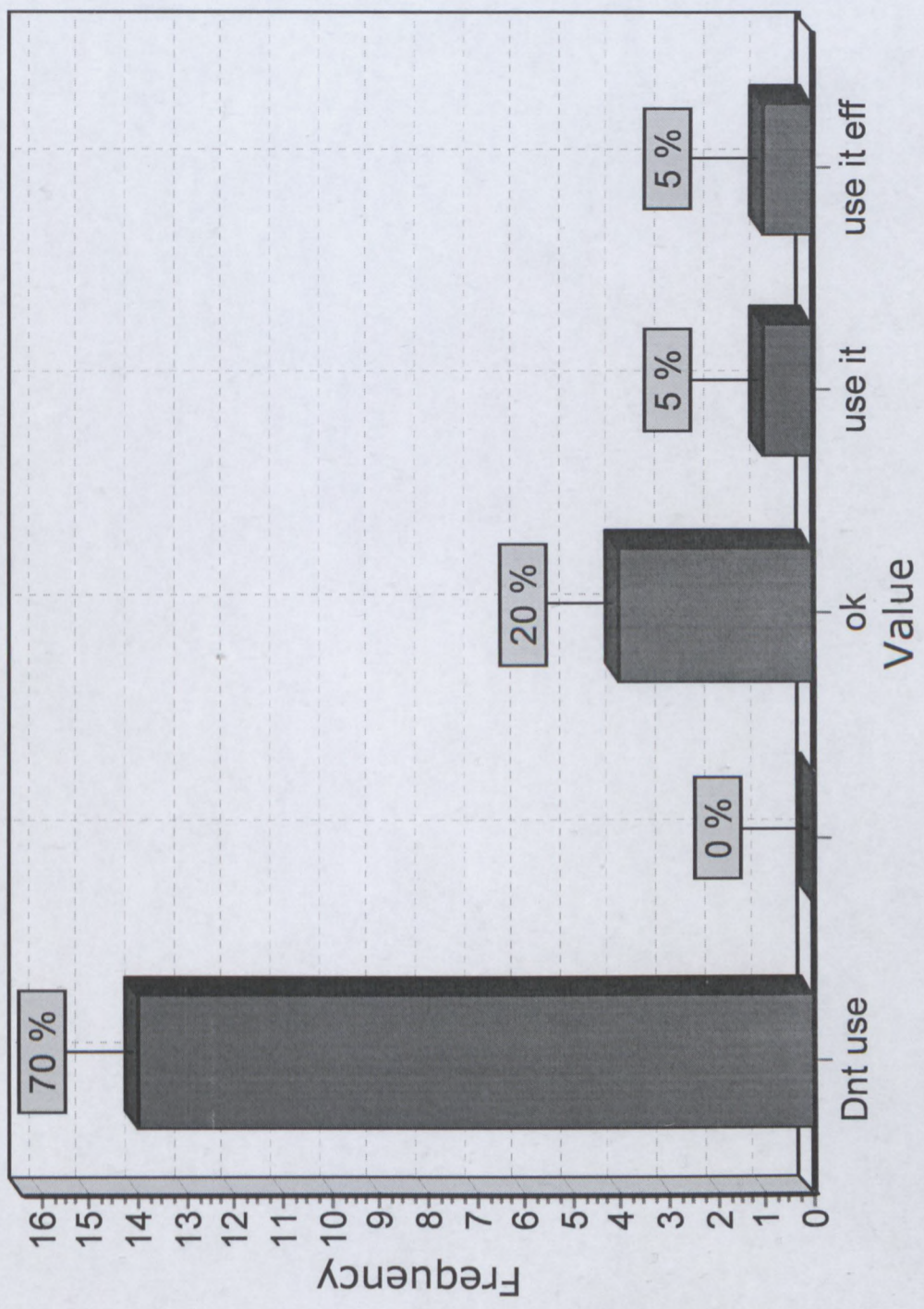
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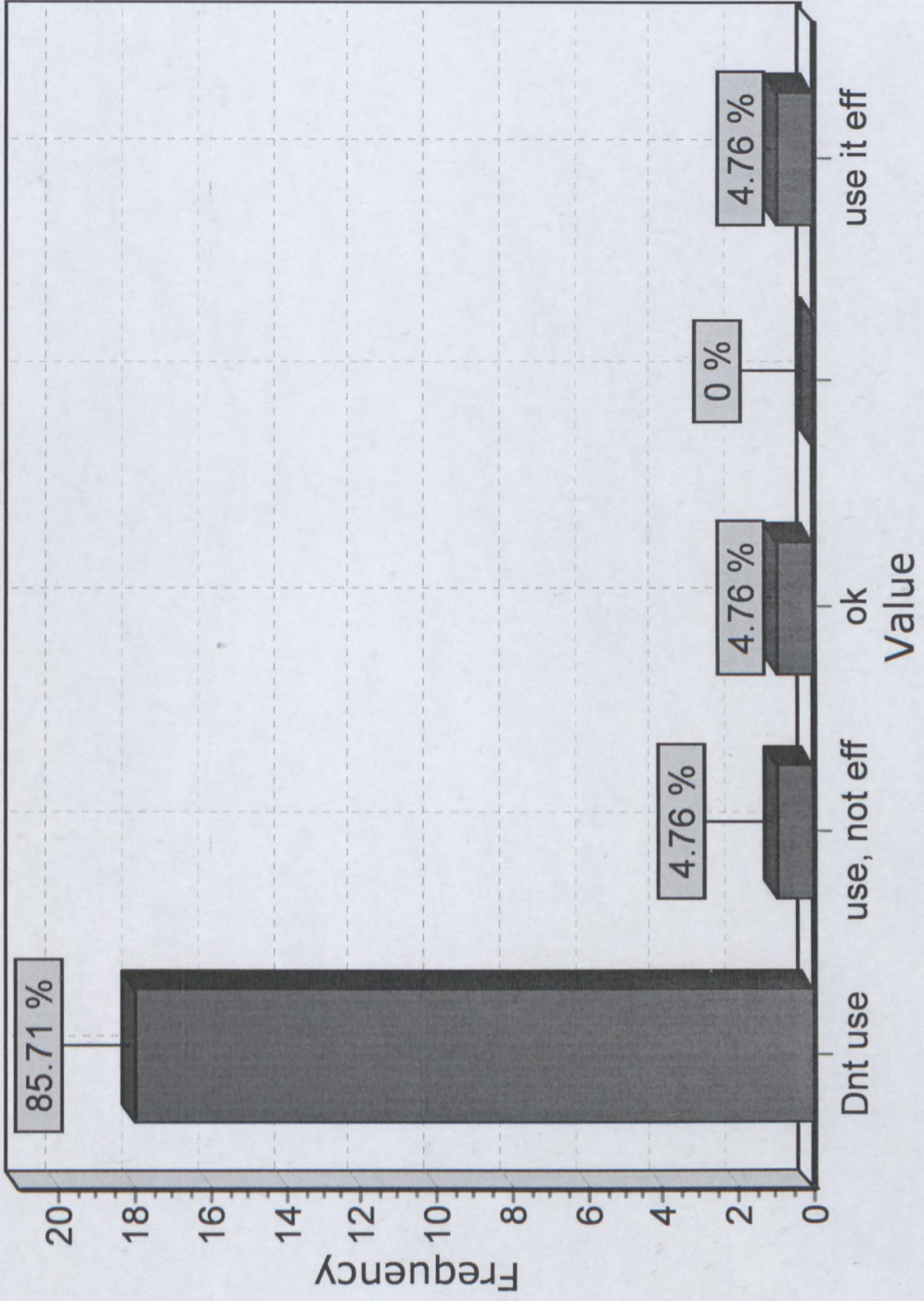
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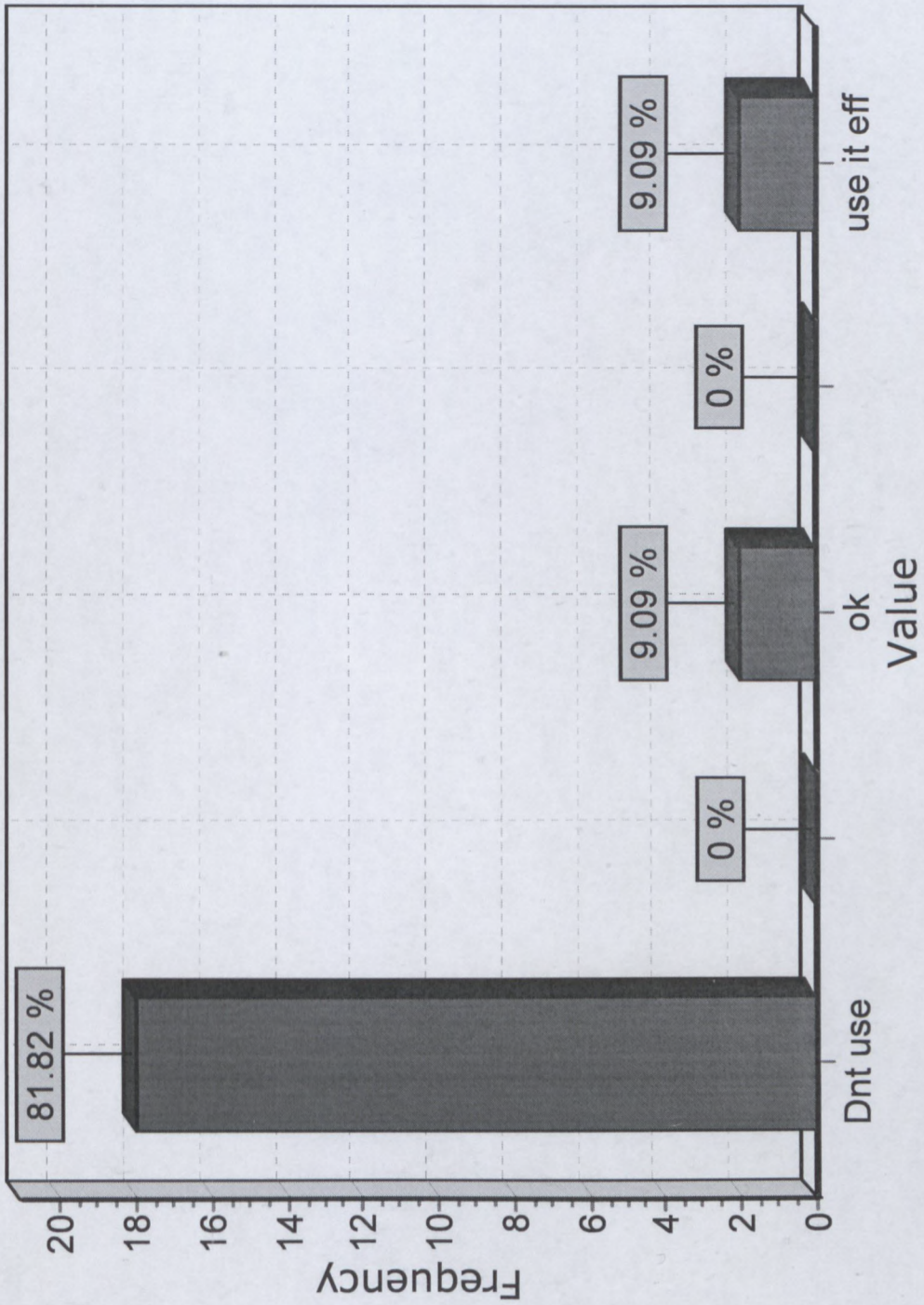
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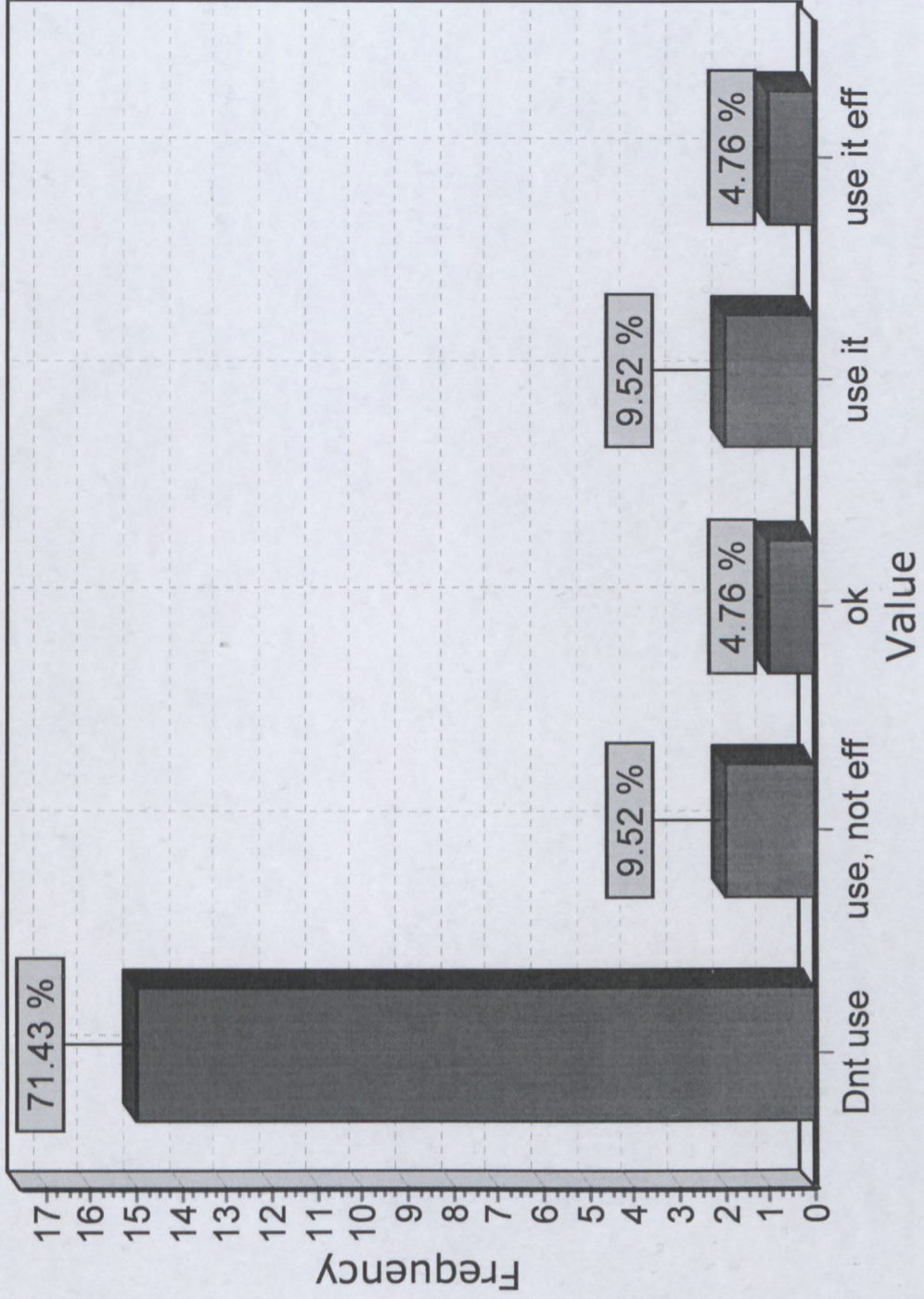
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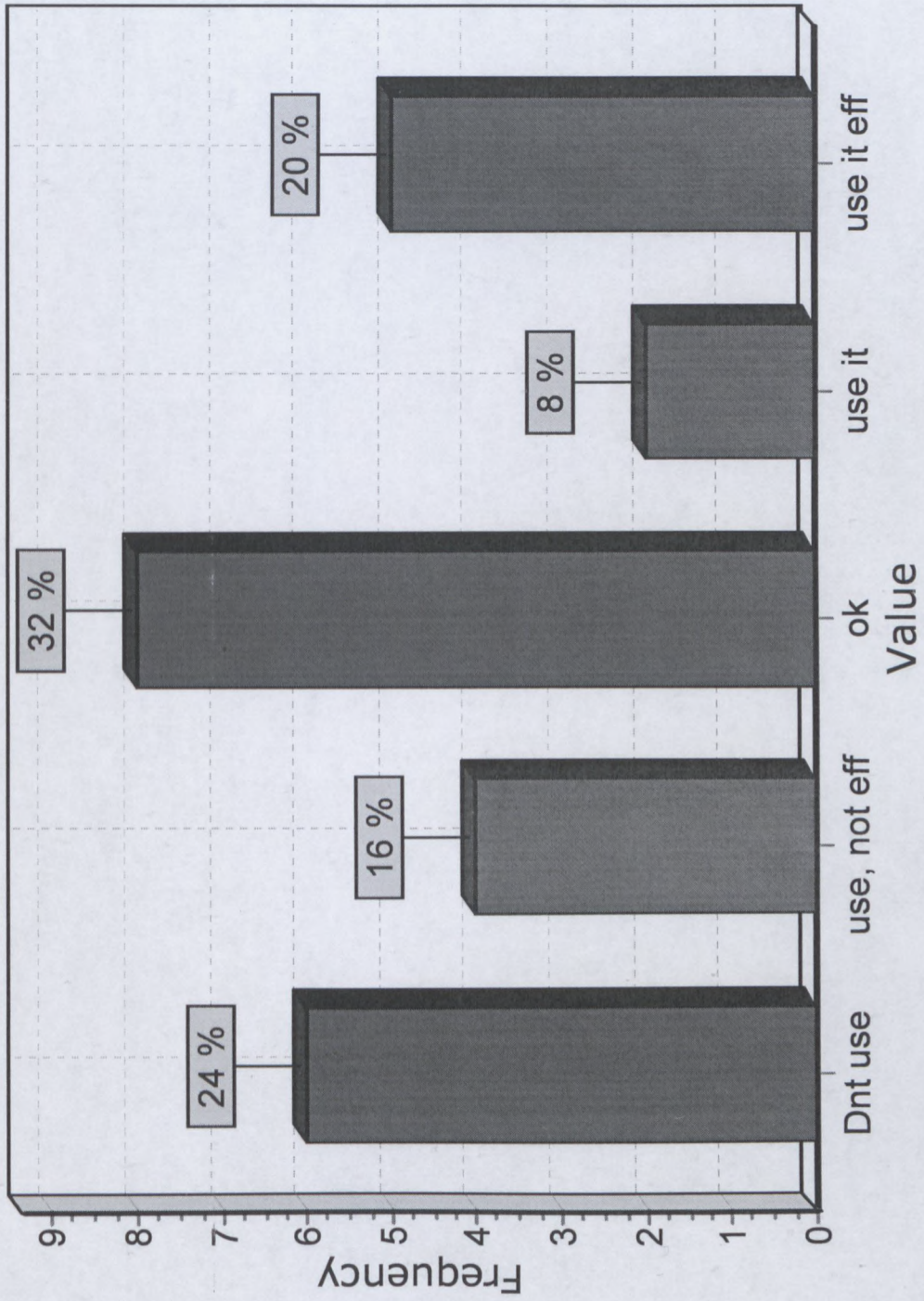
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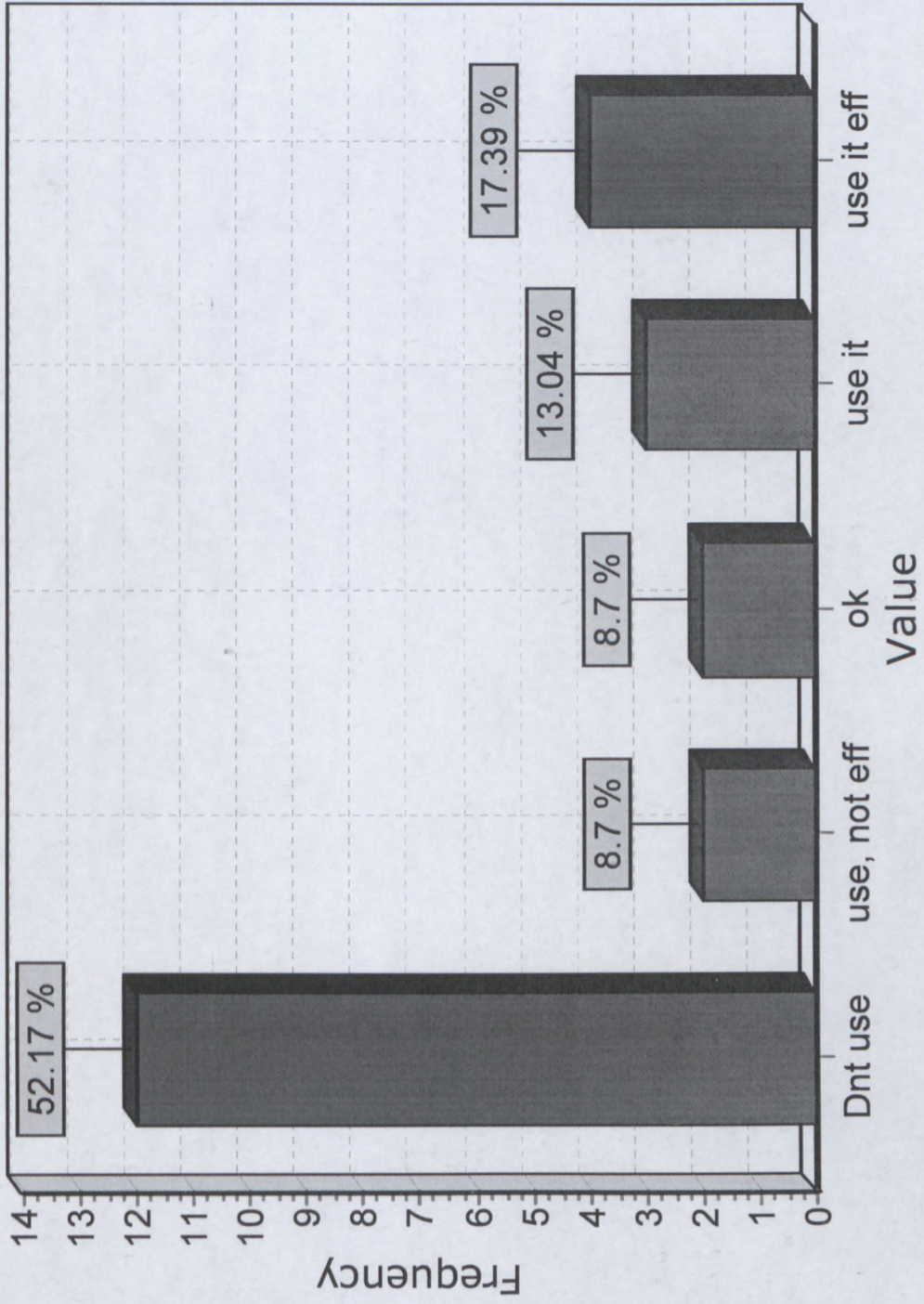
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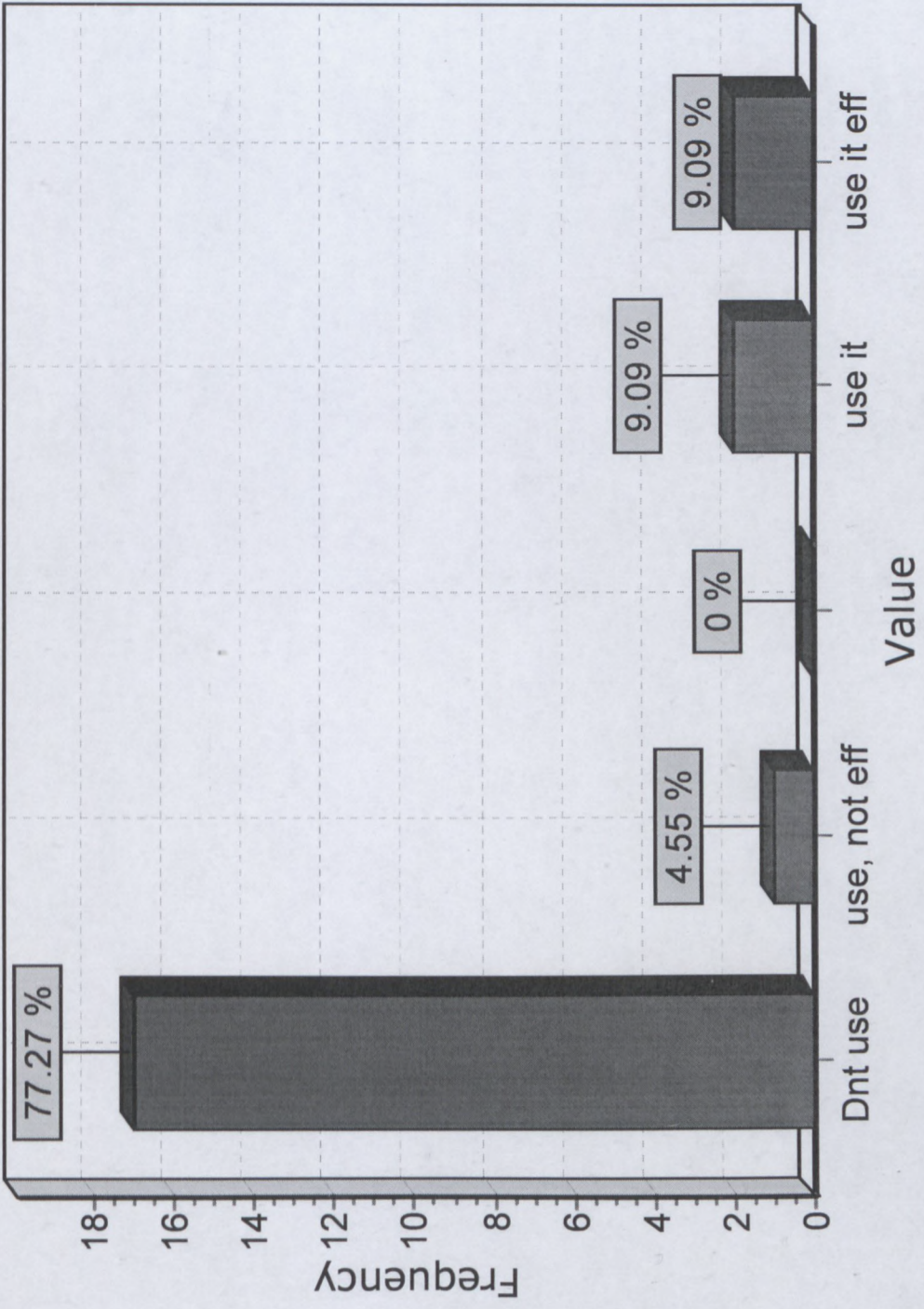
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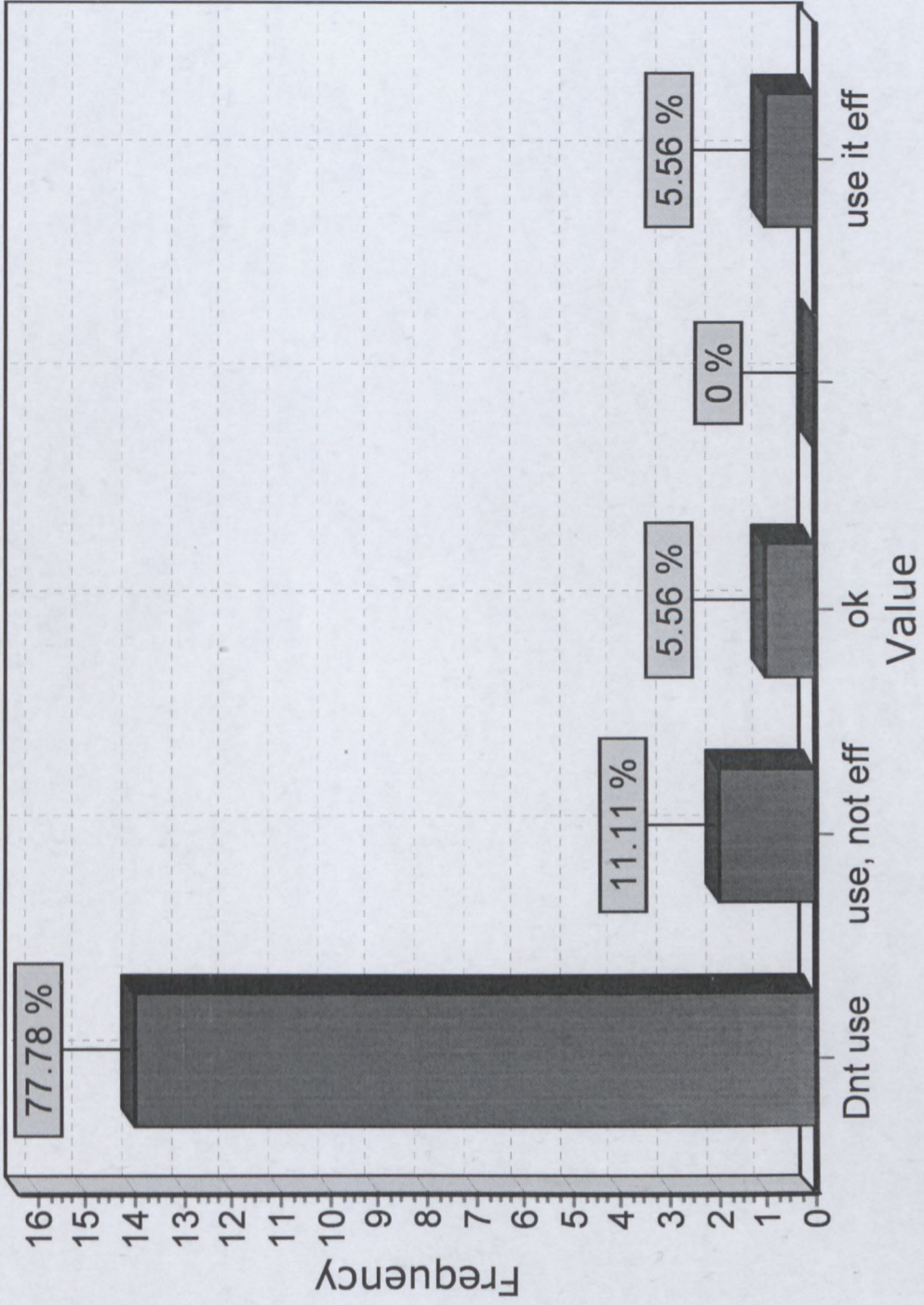
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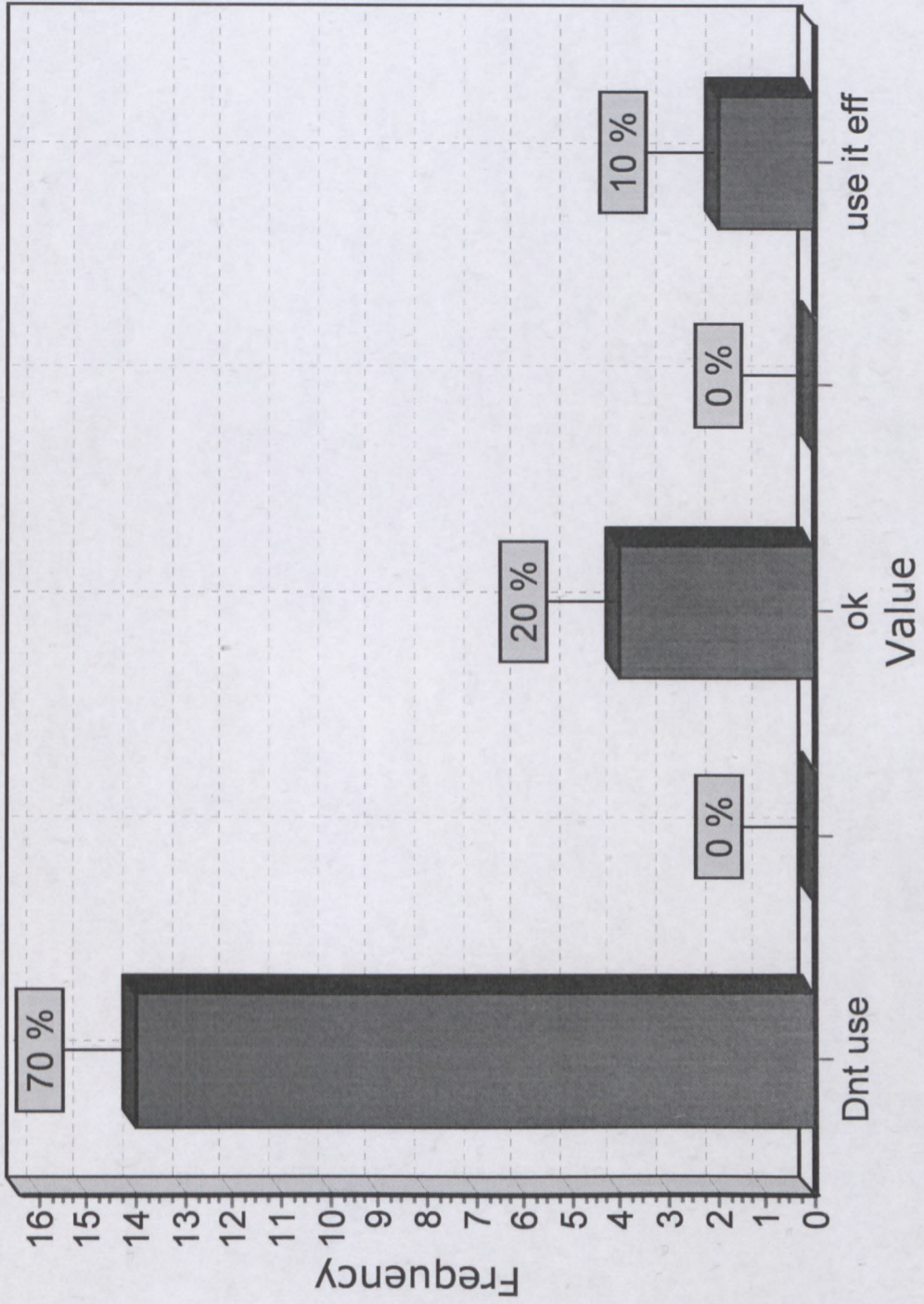
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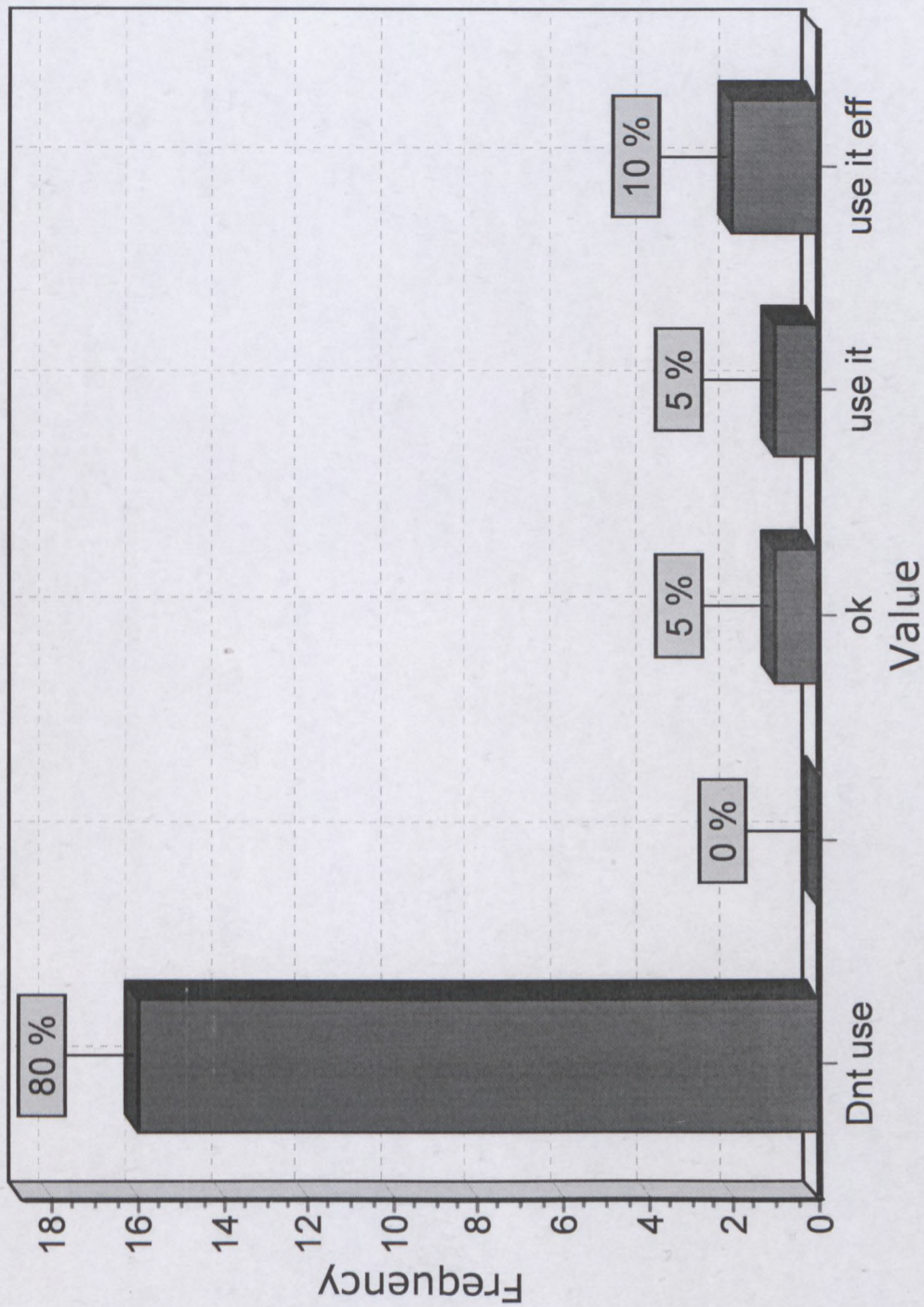
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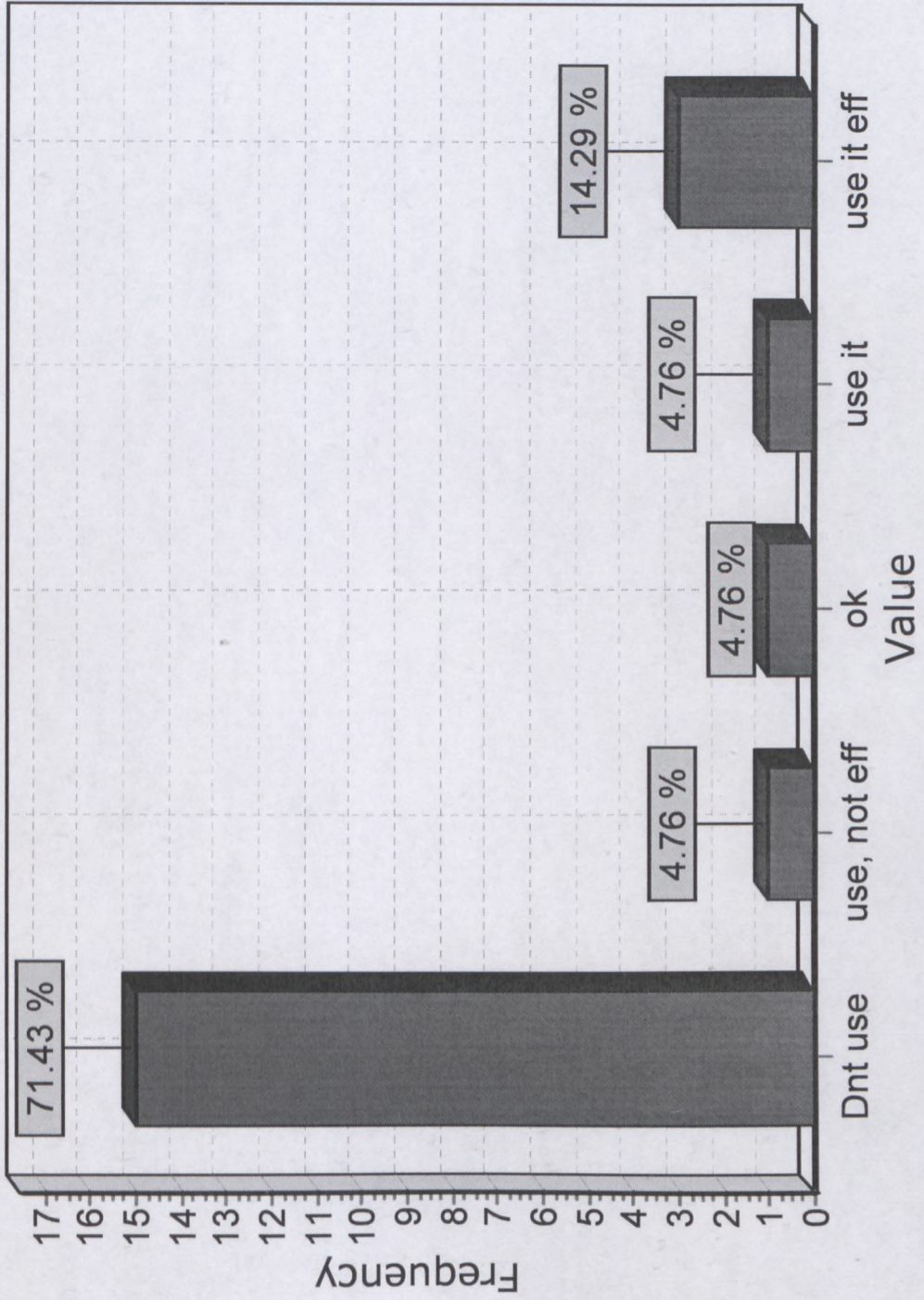
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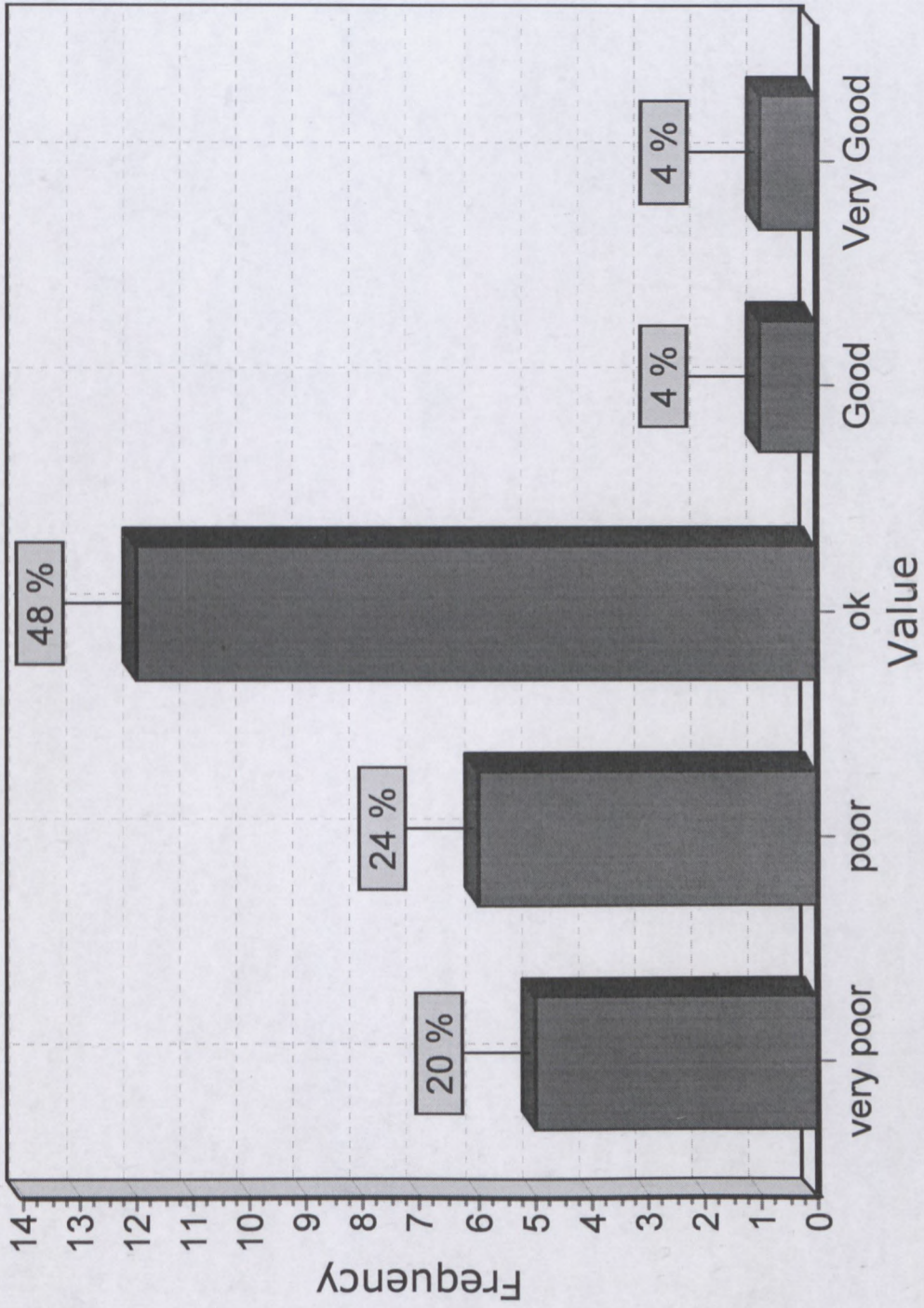
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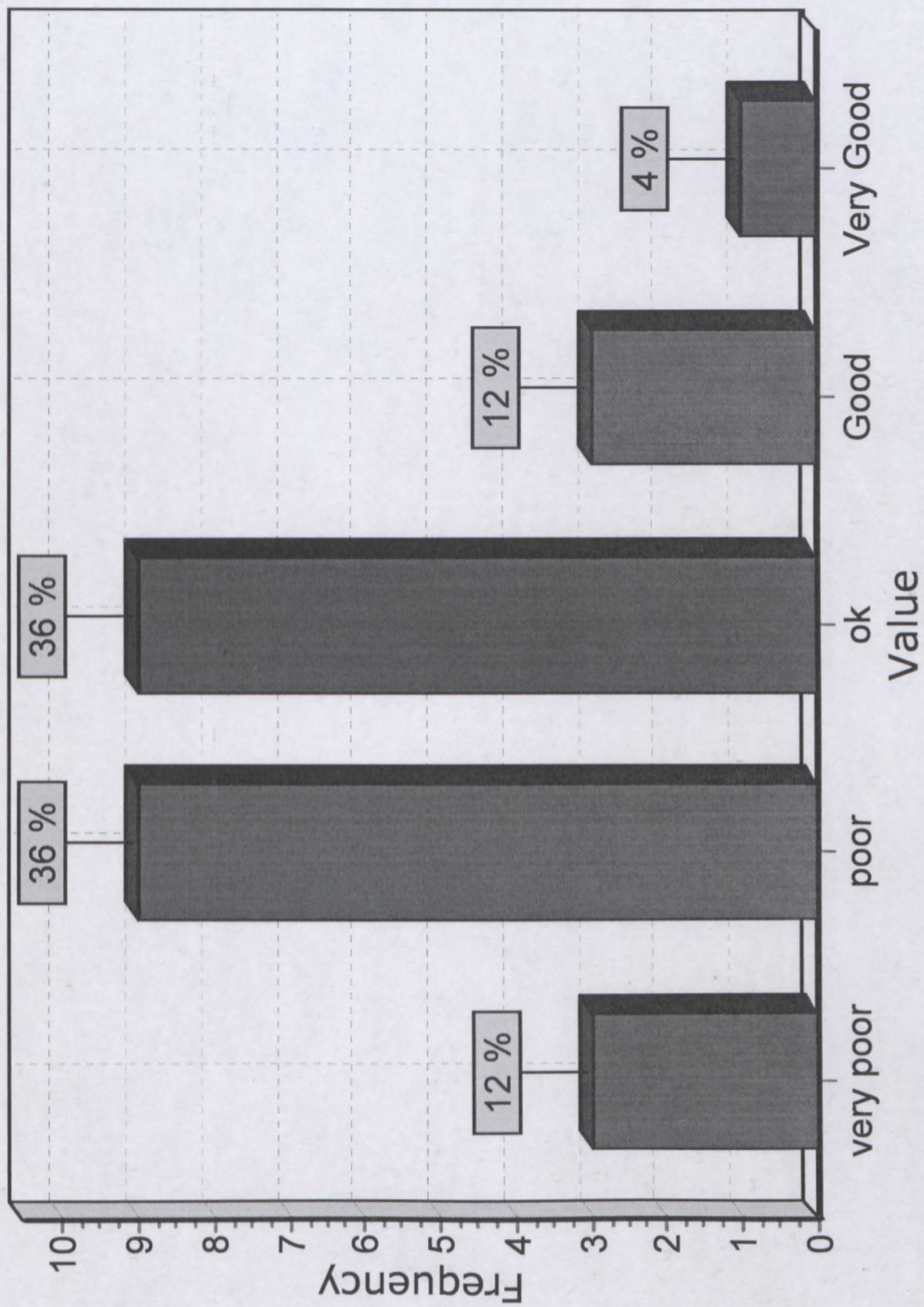
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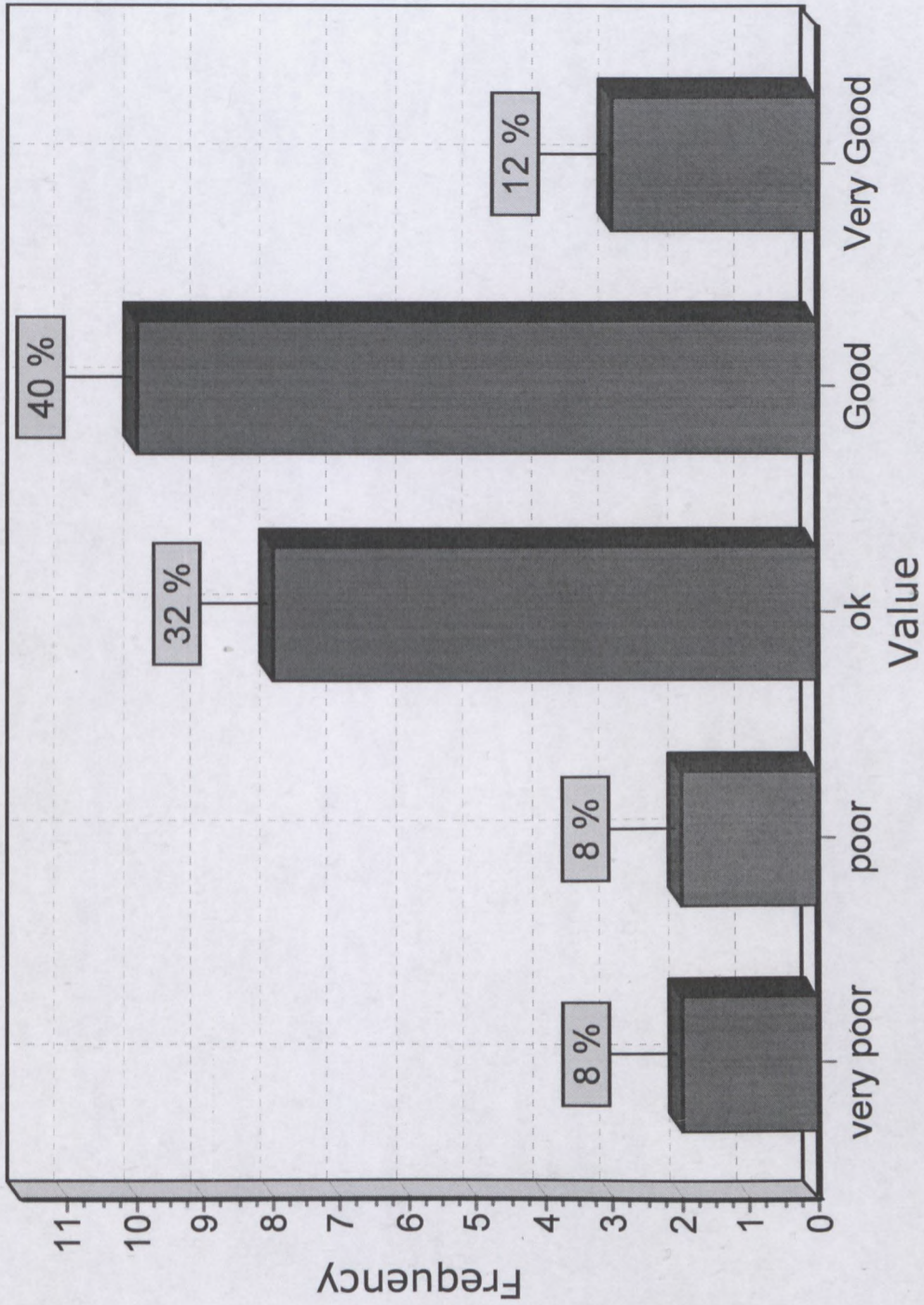
Barchart for Q9



Barchart for Q10

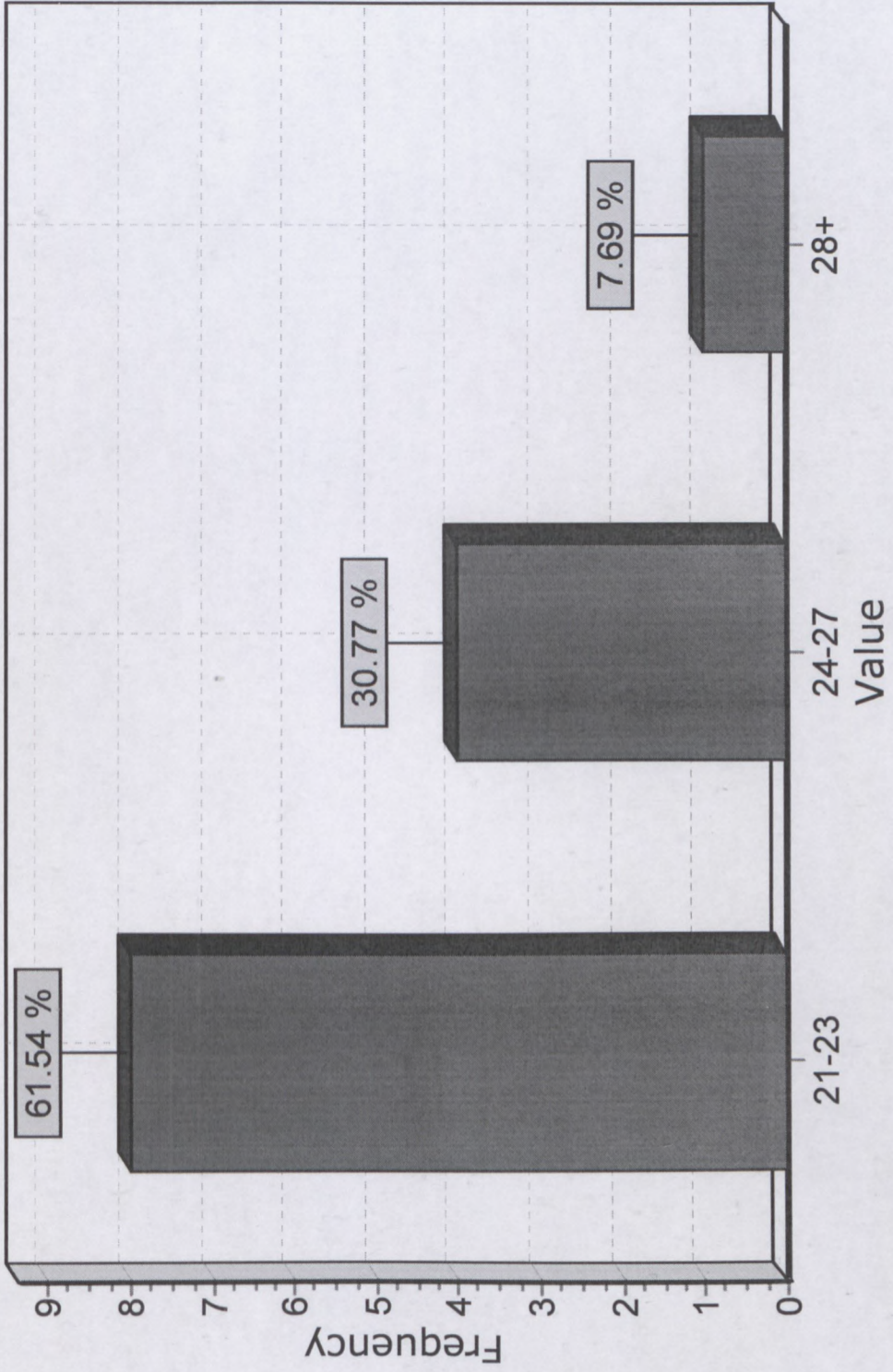


Barchart for Q11

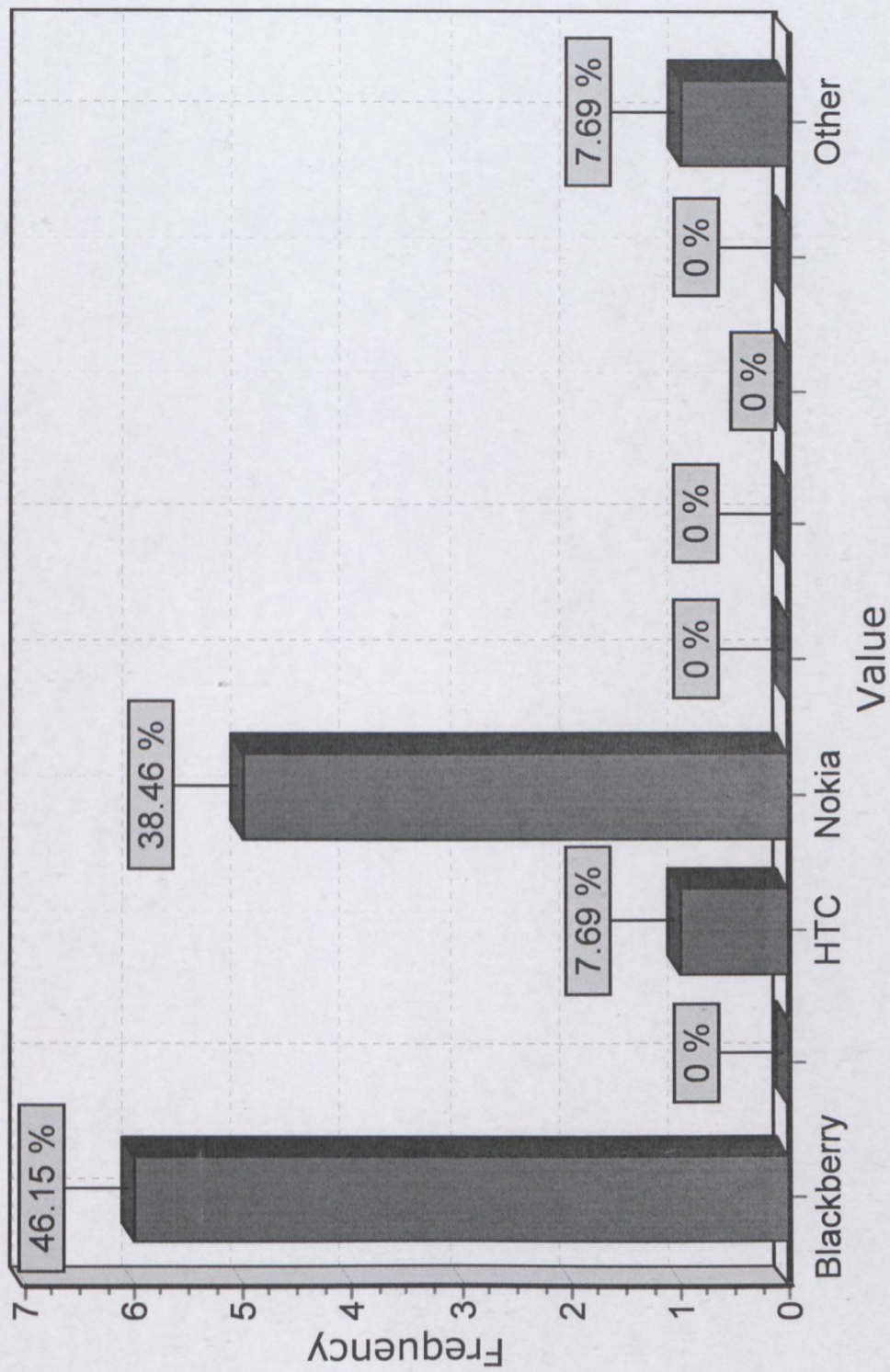


7.3.5 Journalism Results

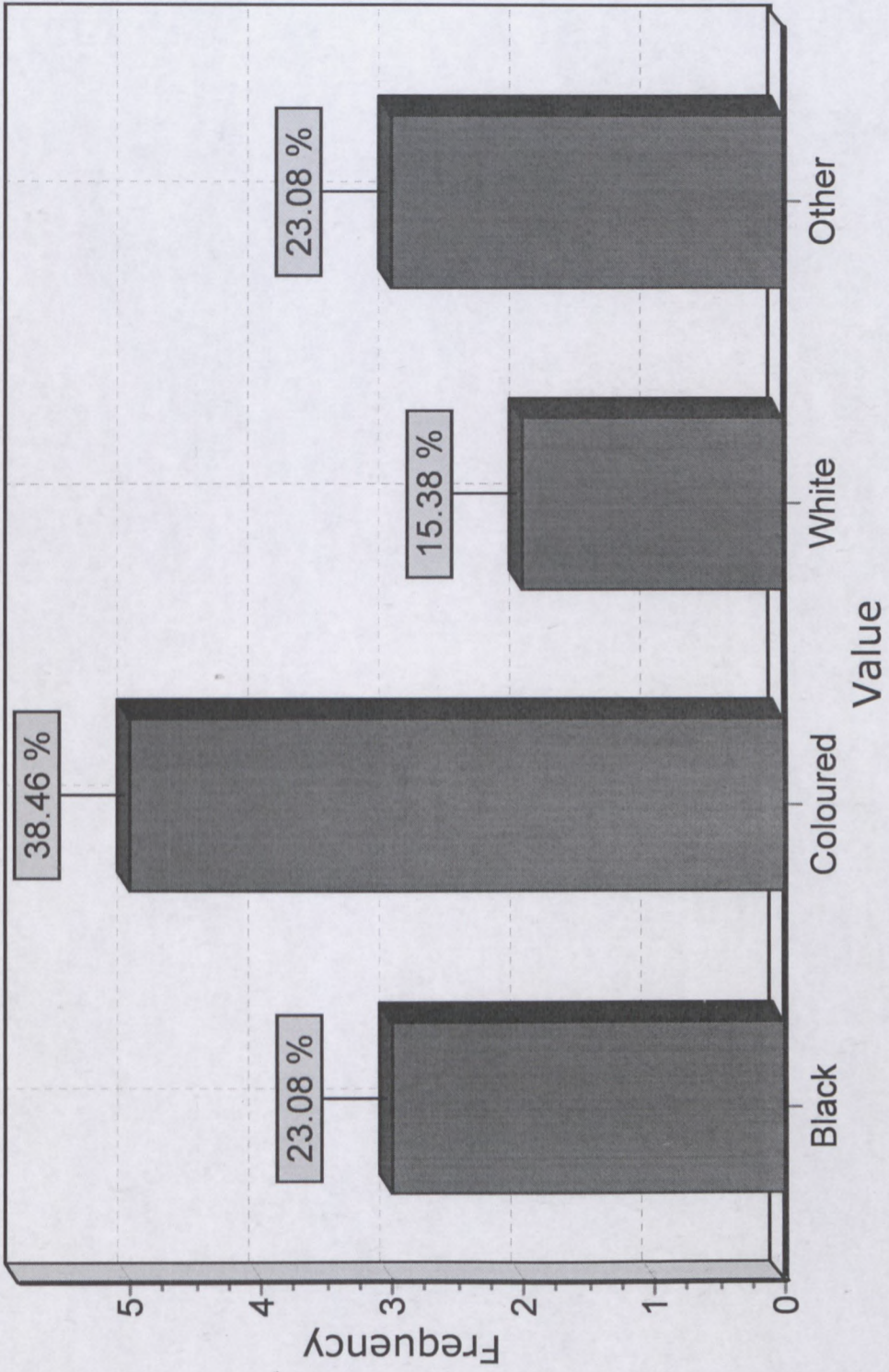
Barchart for AGE



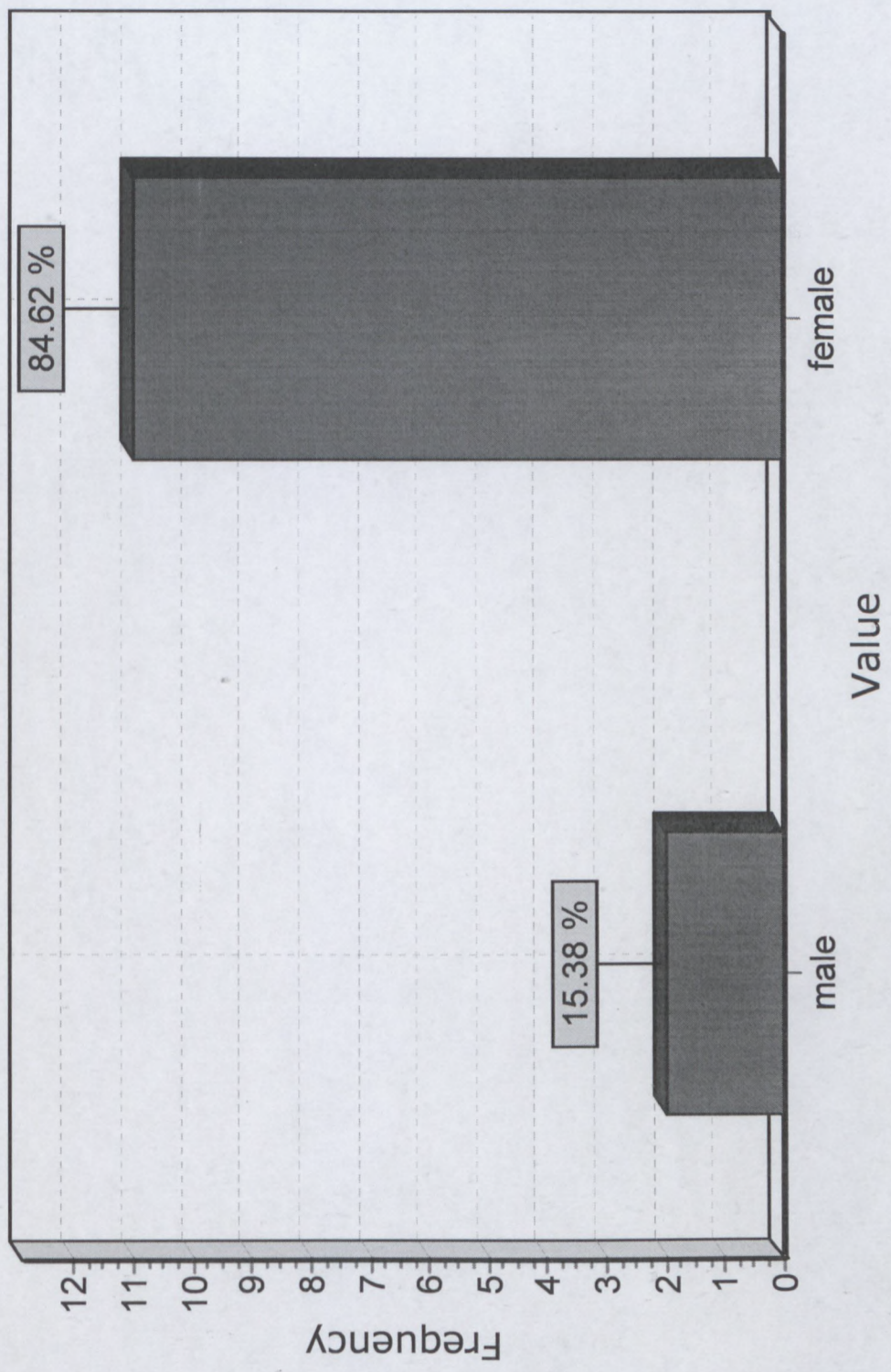
Barchart for CELLPHONE



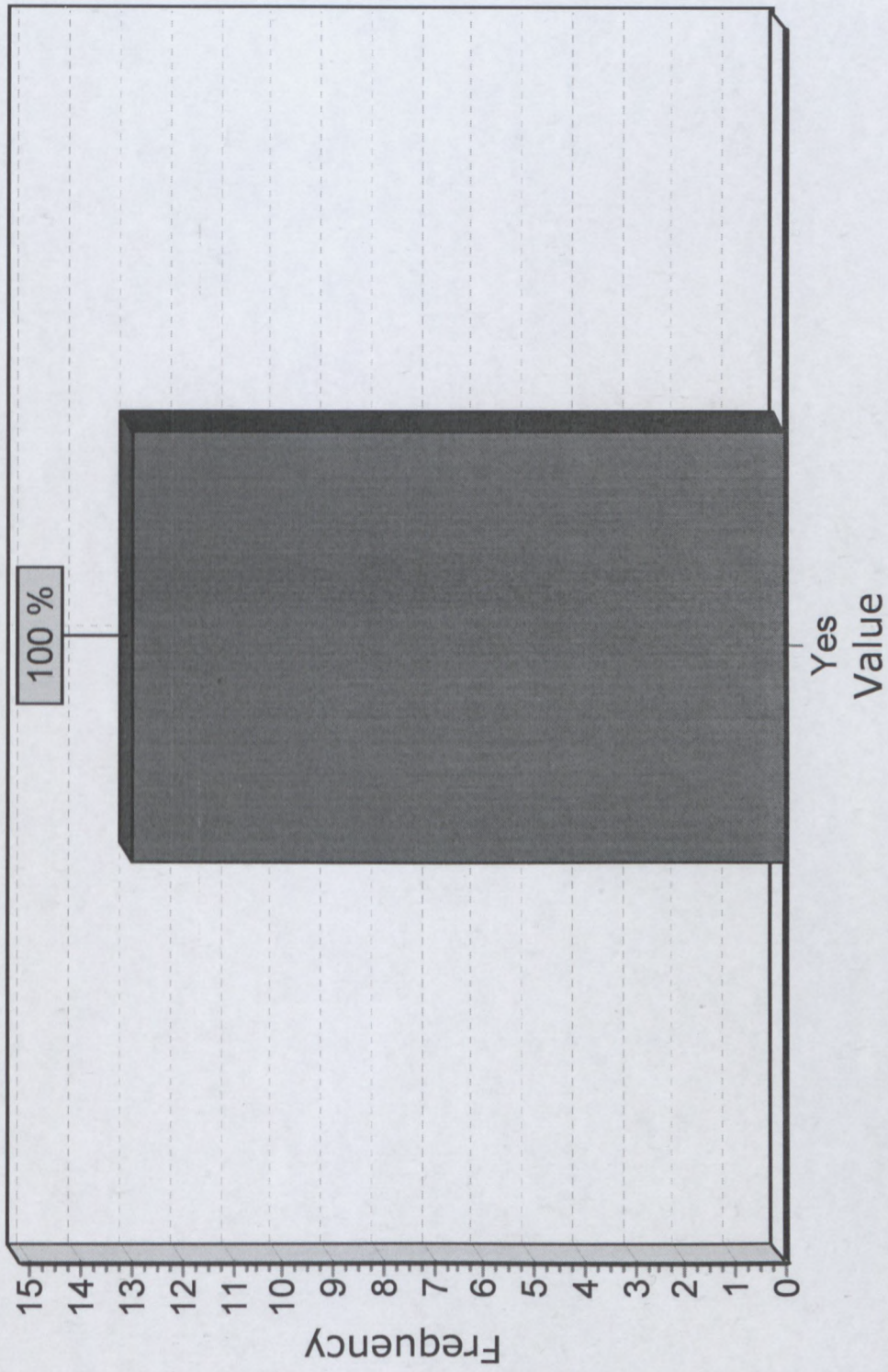
Barchart for RACE



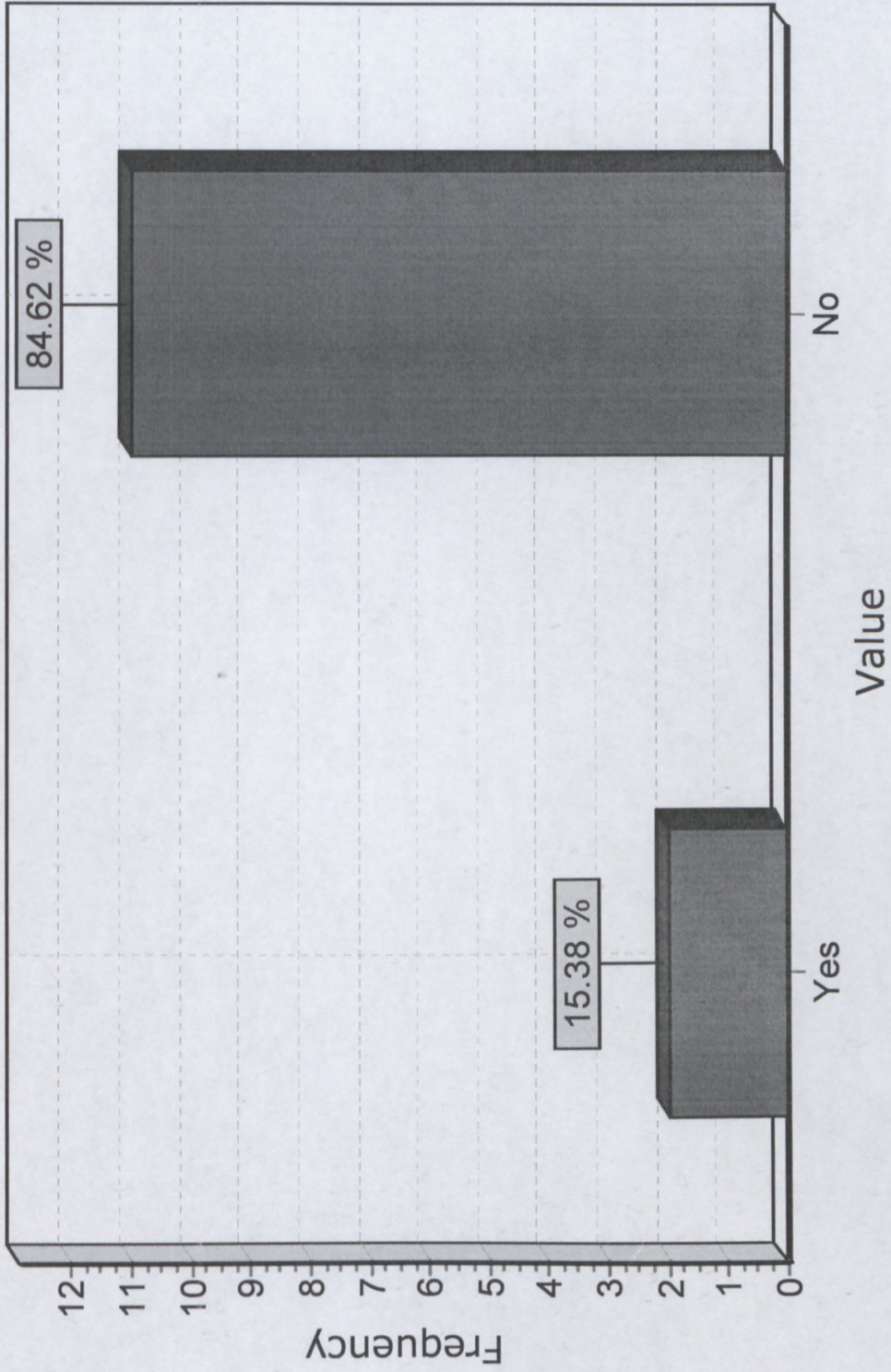
Barchart for SEX



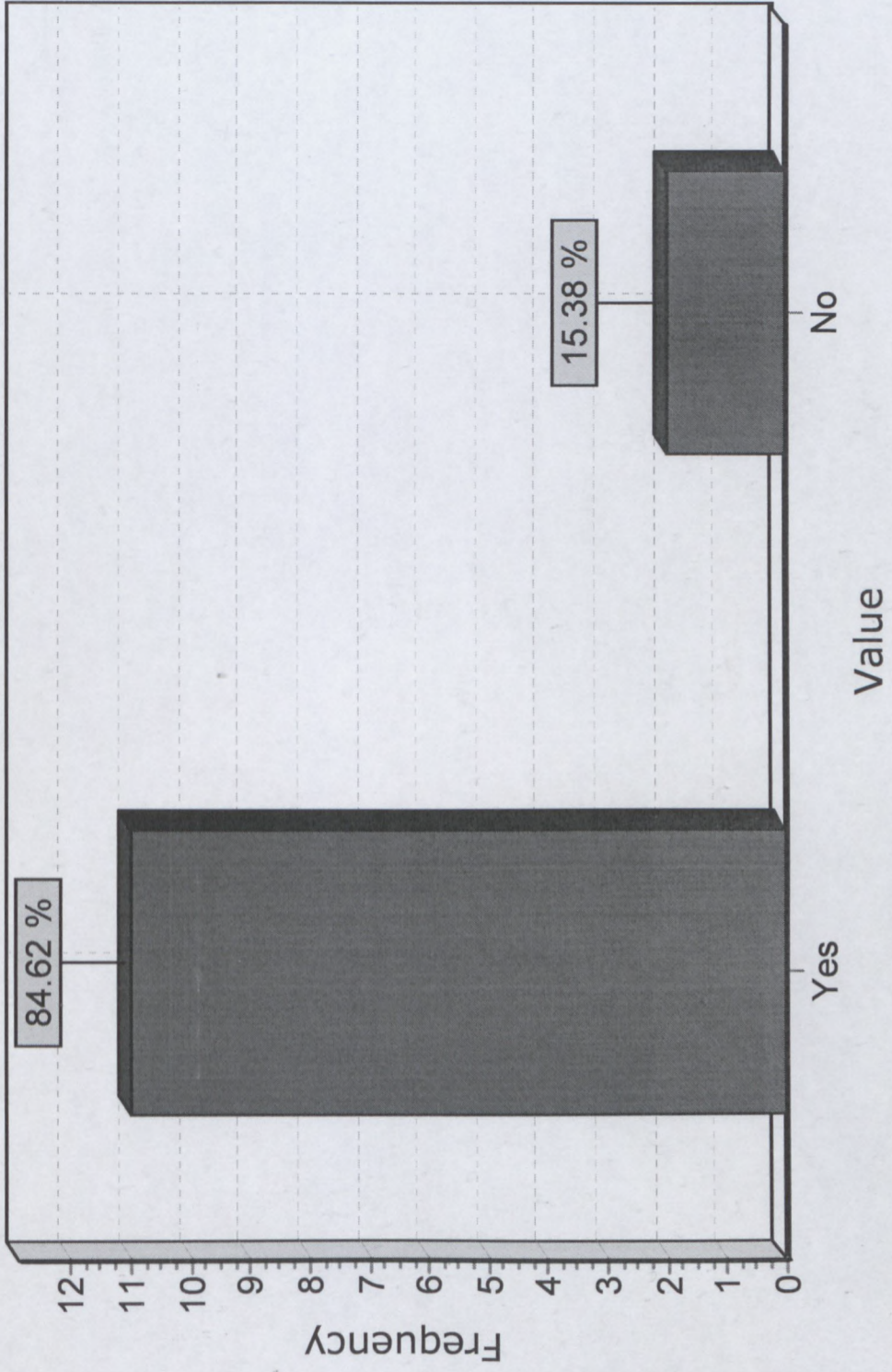
Barchart for Q1



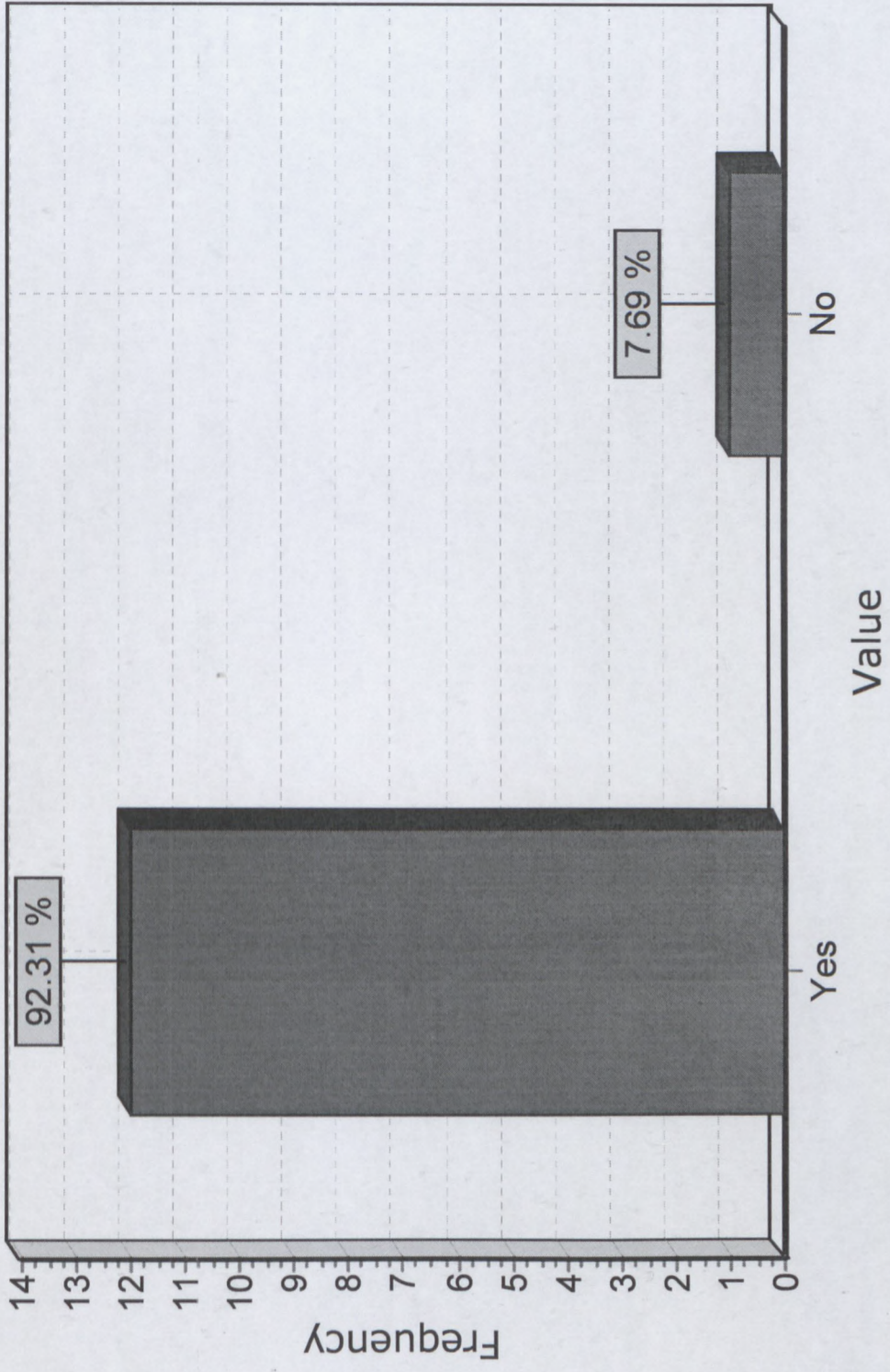
Barchart for Q2BLOGGIN



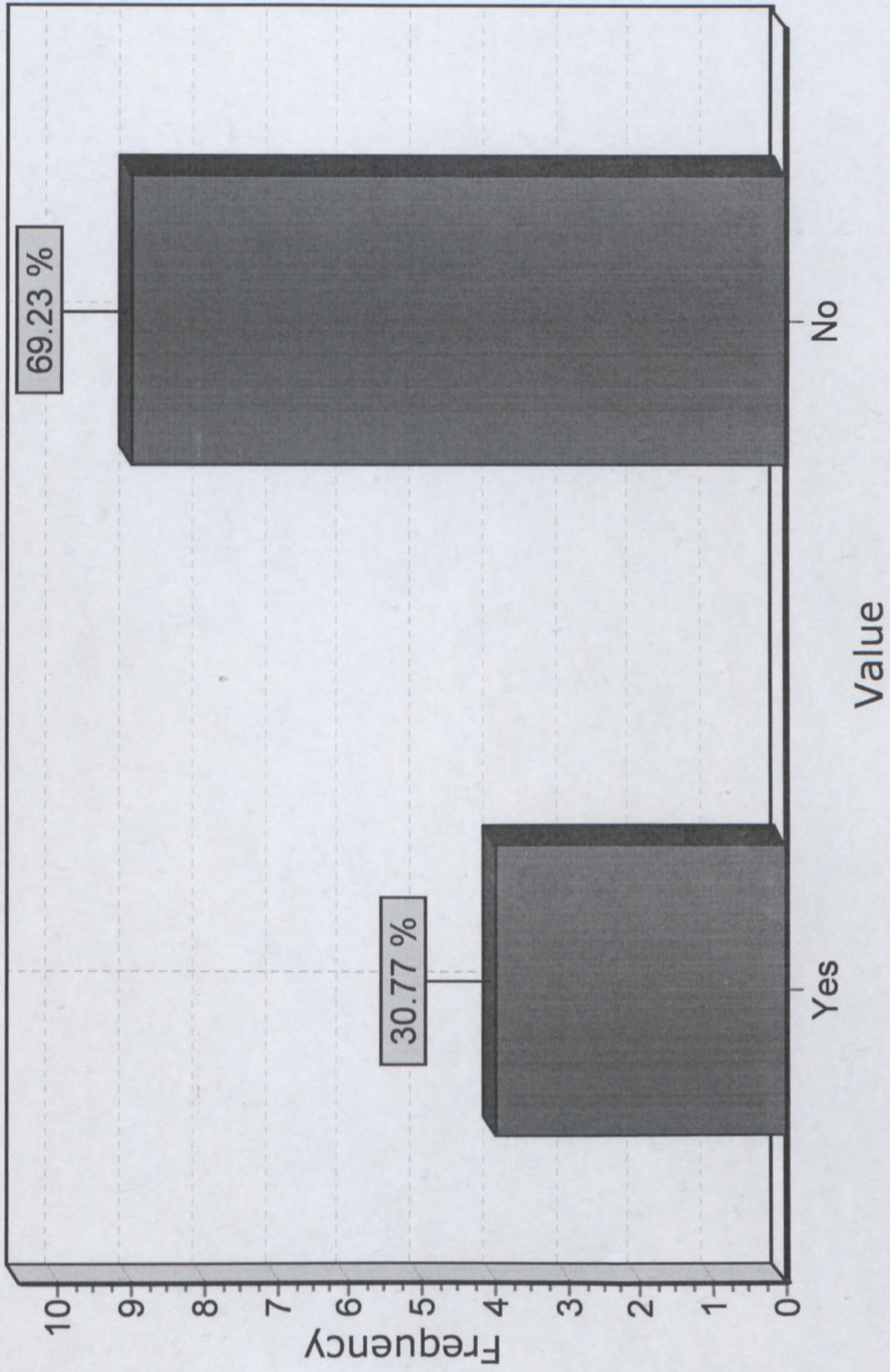
Barchart for Q2EMAIL



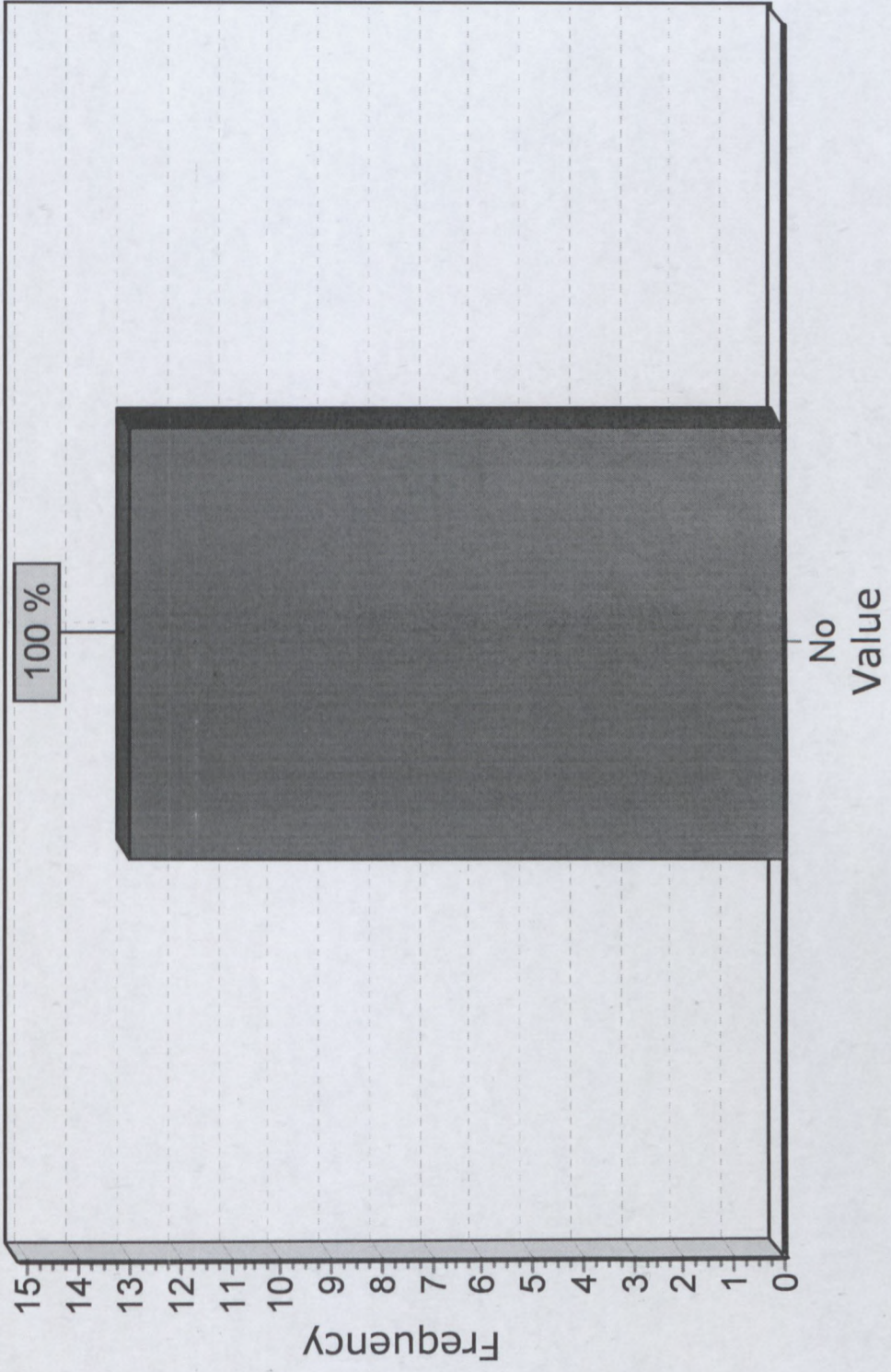
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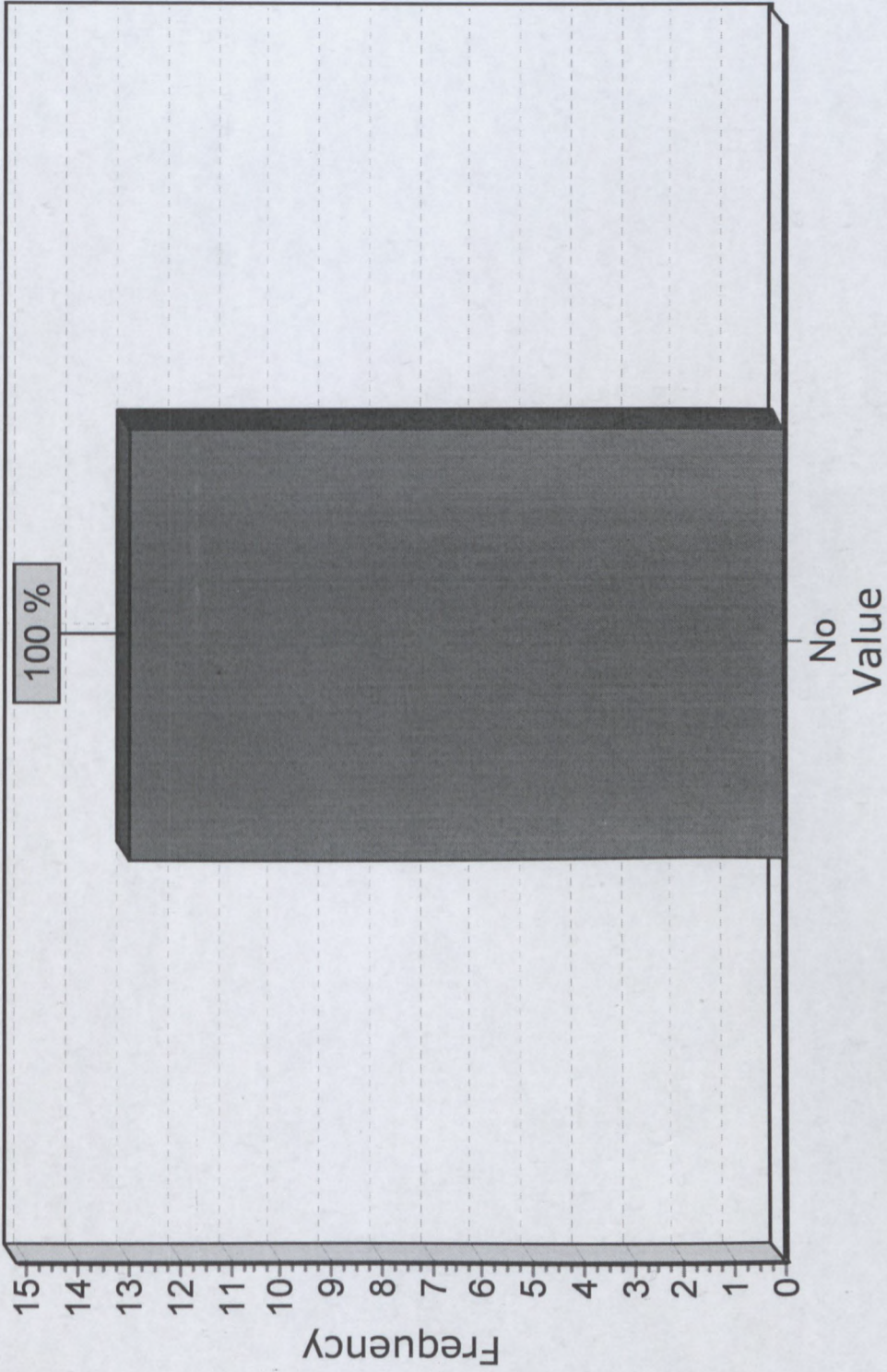
Barchart for Q2MXIT



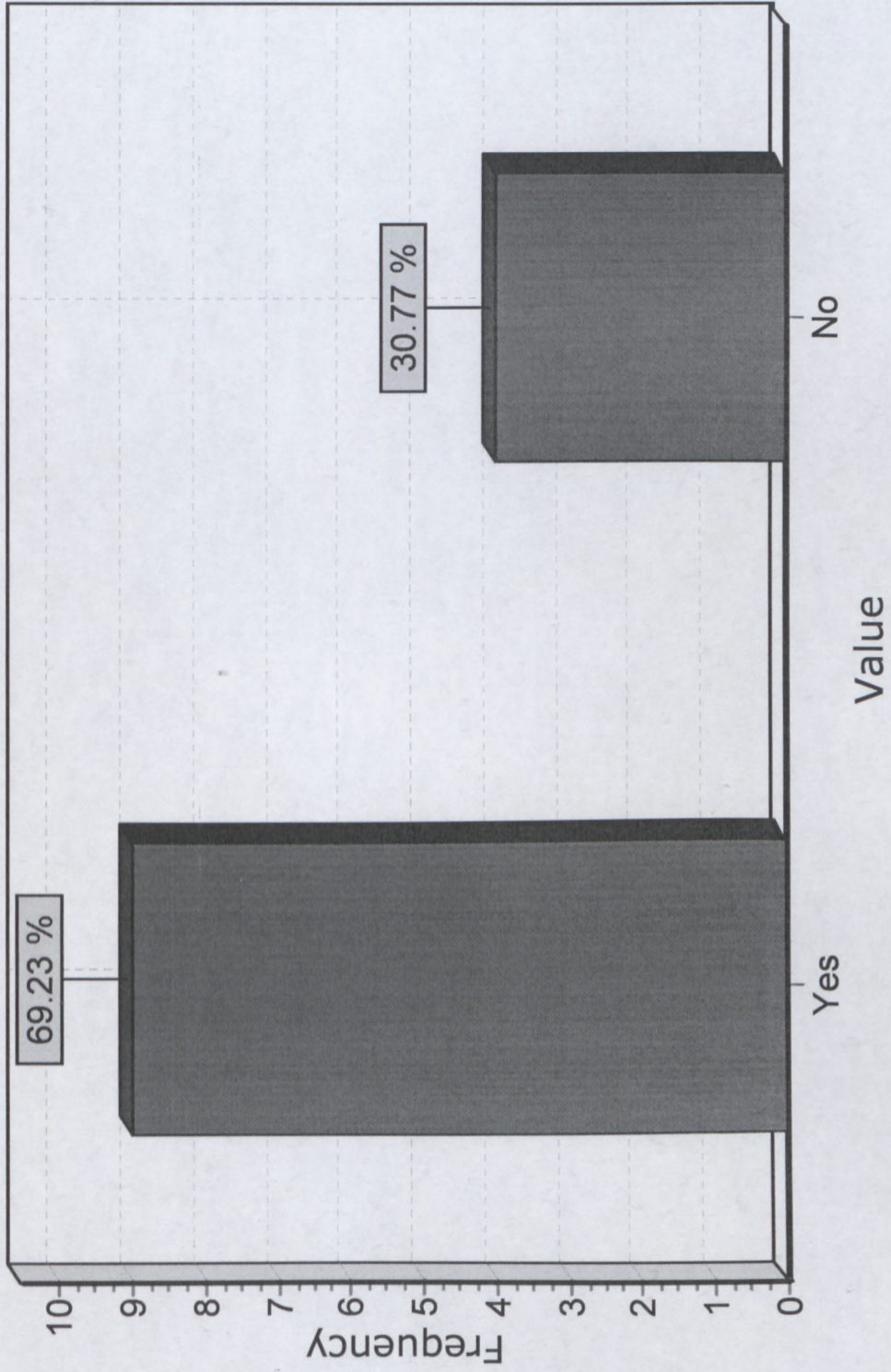
Barchart for Q2NONE



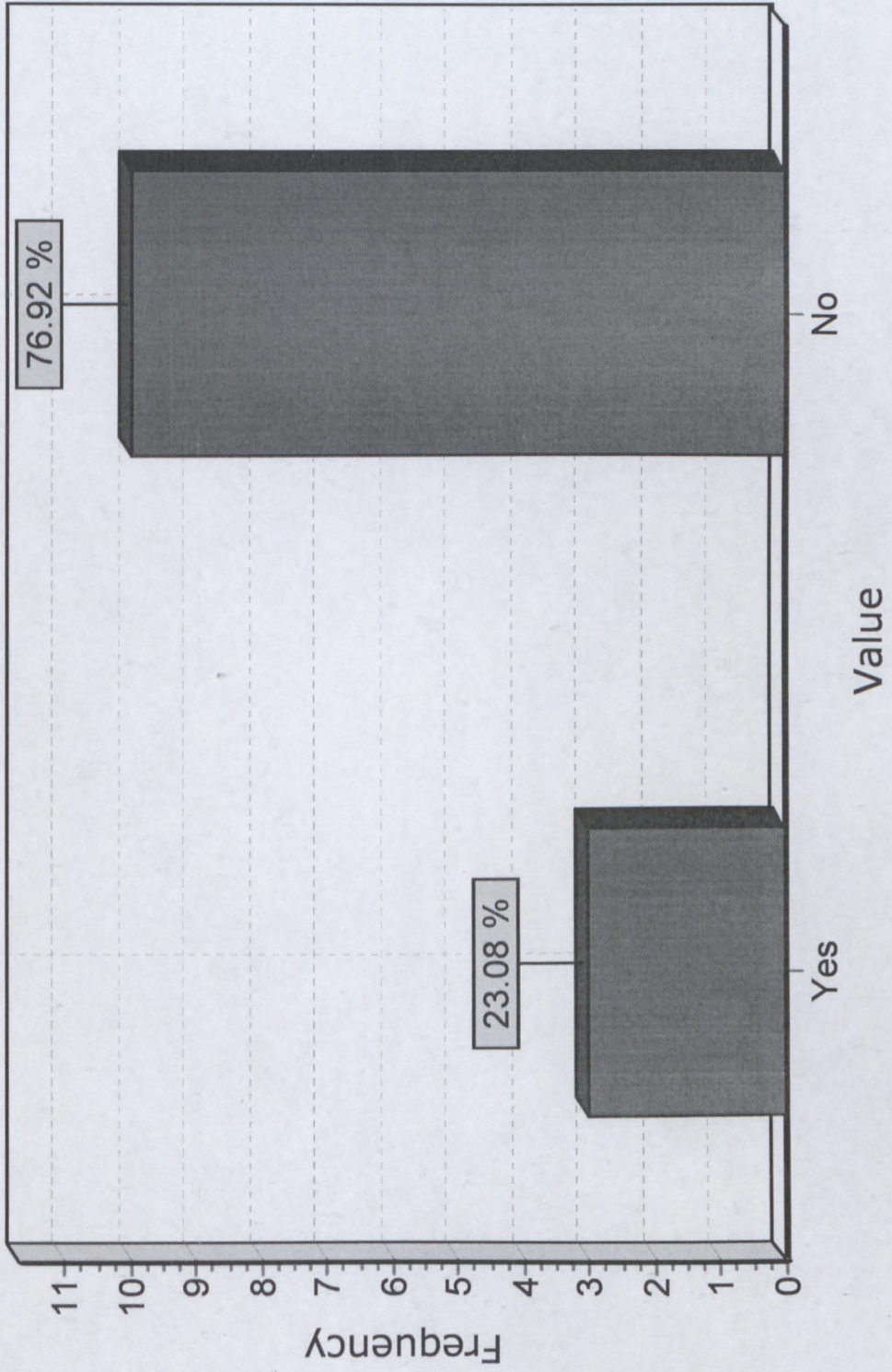
Barchart for Q20THER



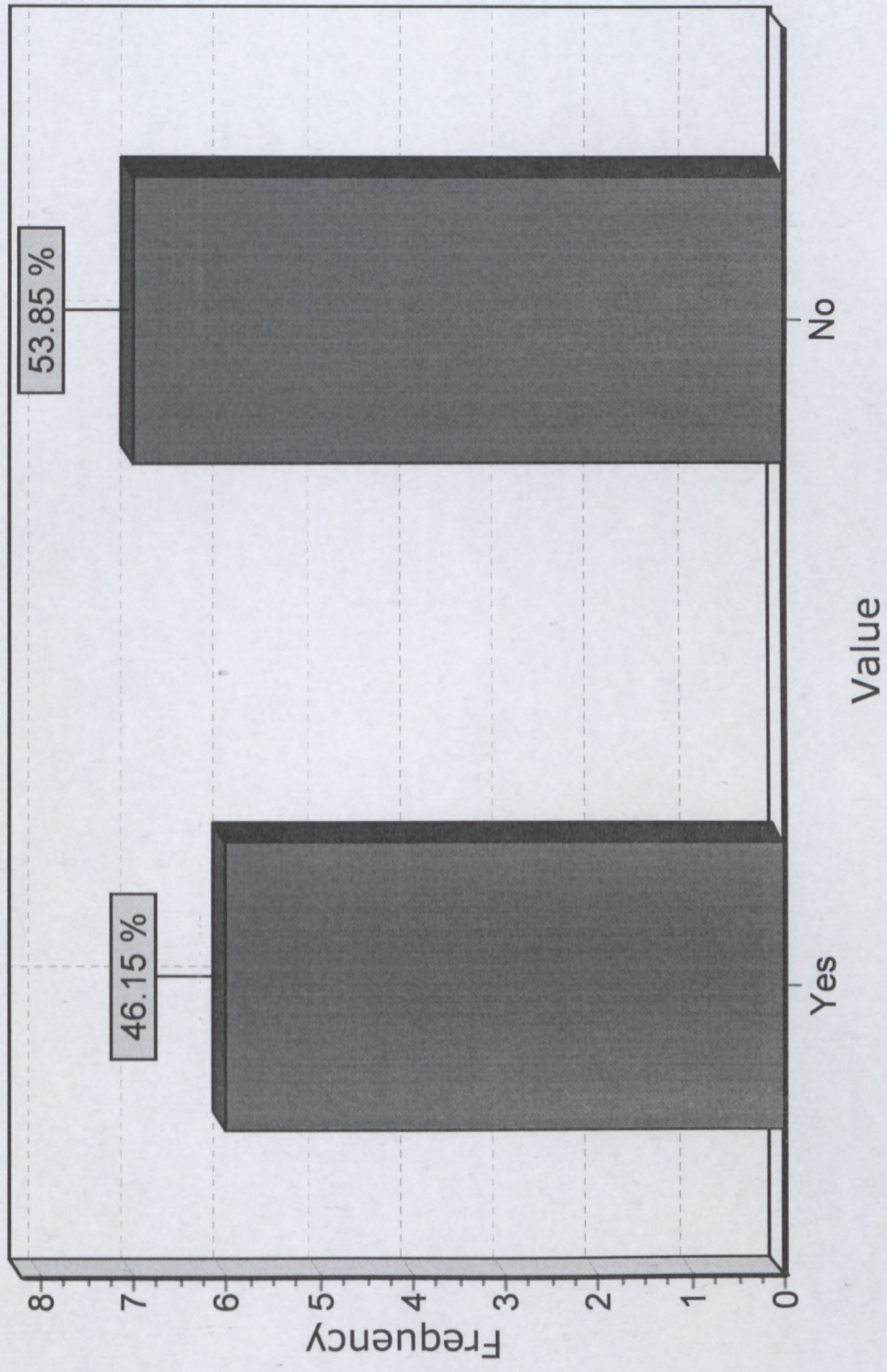
Barchart for Q2TWITTER



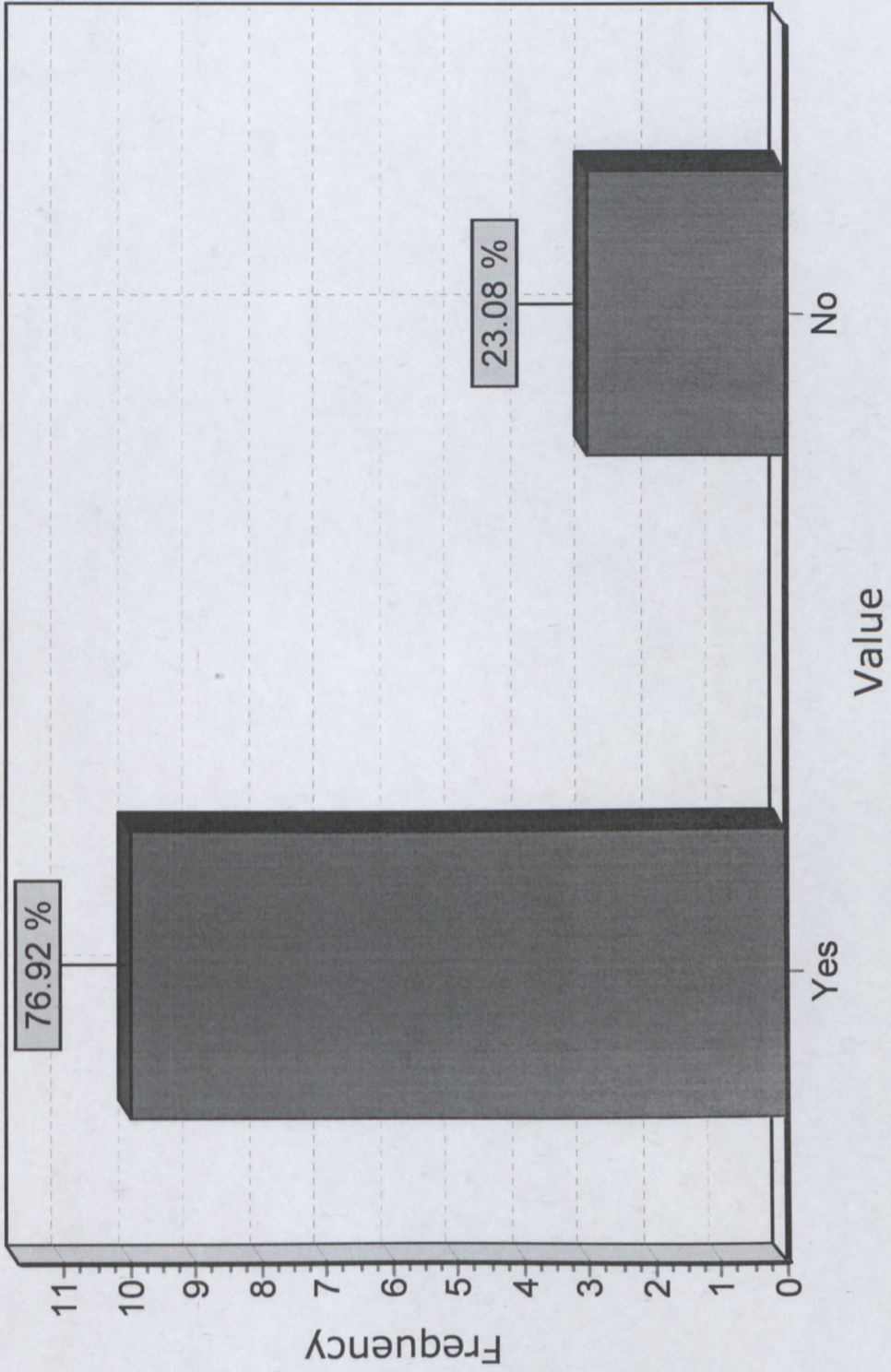
Barchart for Q2YOUTUBE



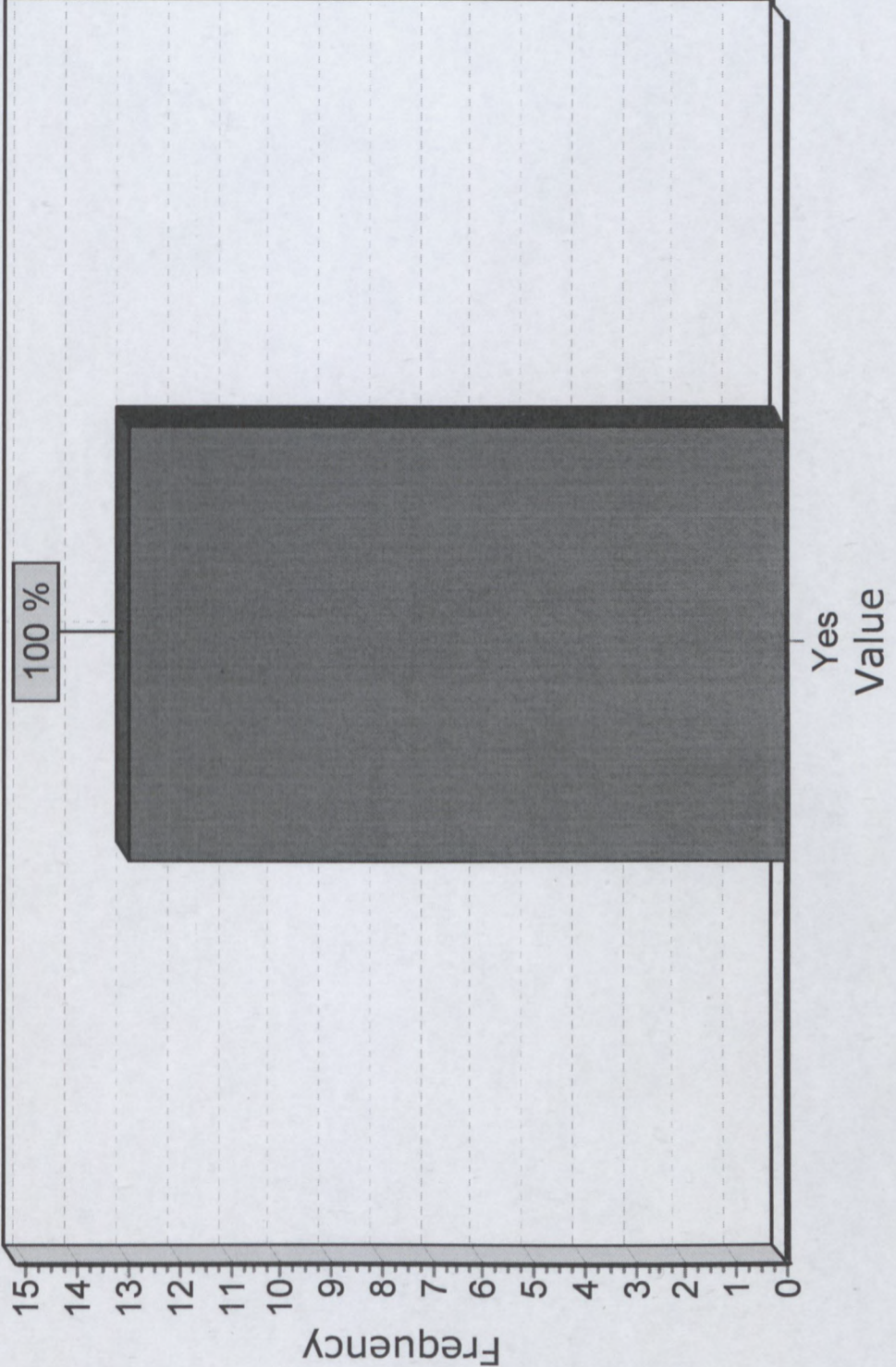
Barchart for Q3BLOGGIN



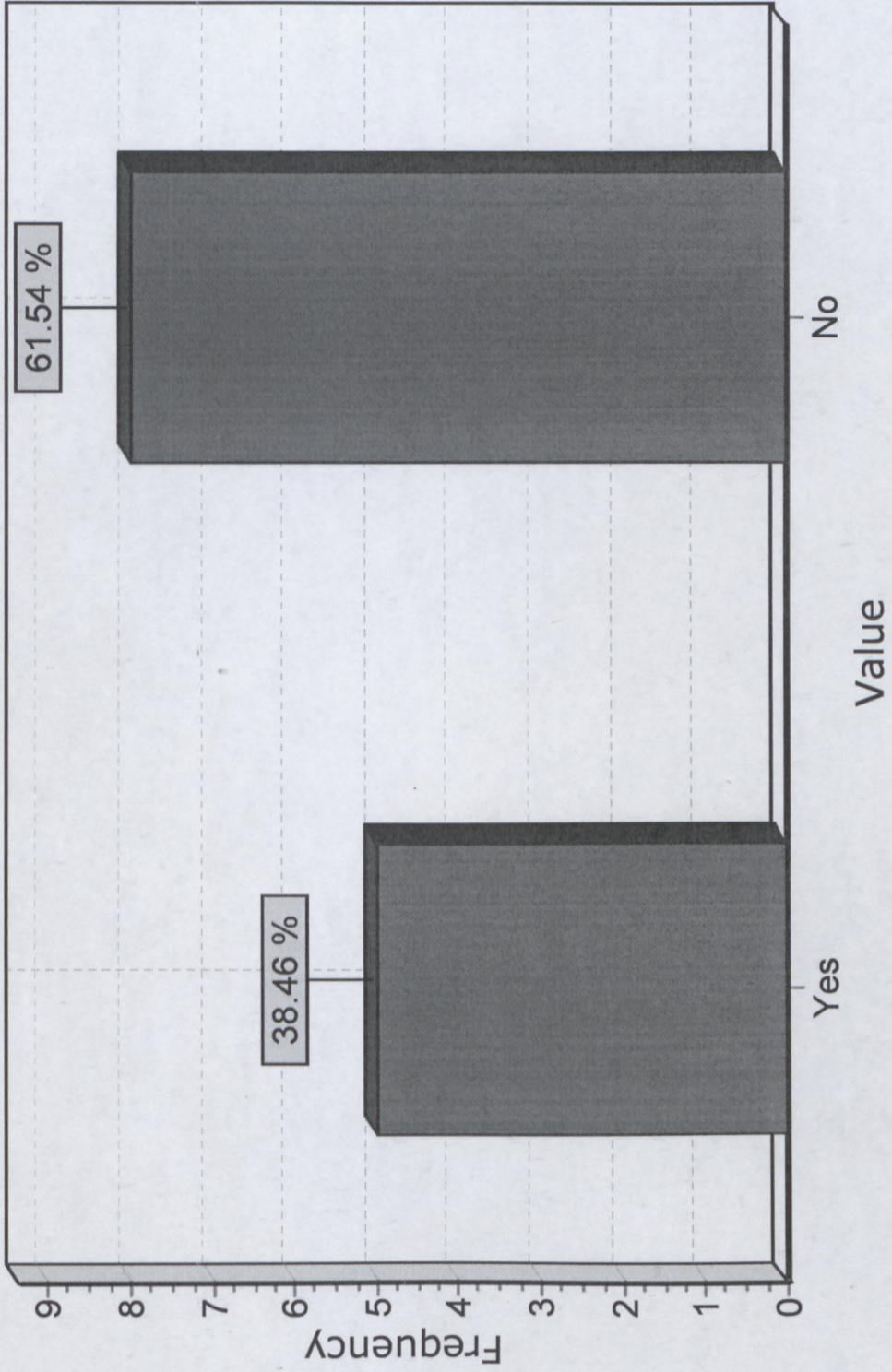
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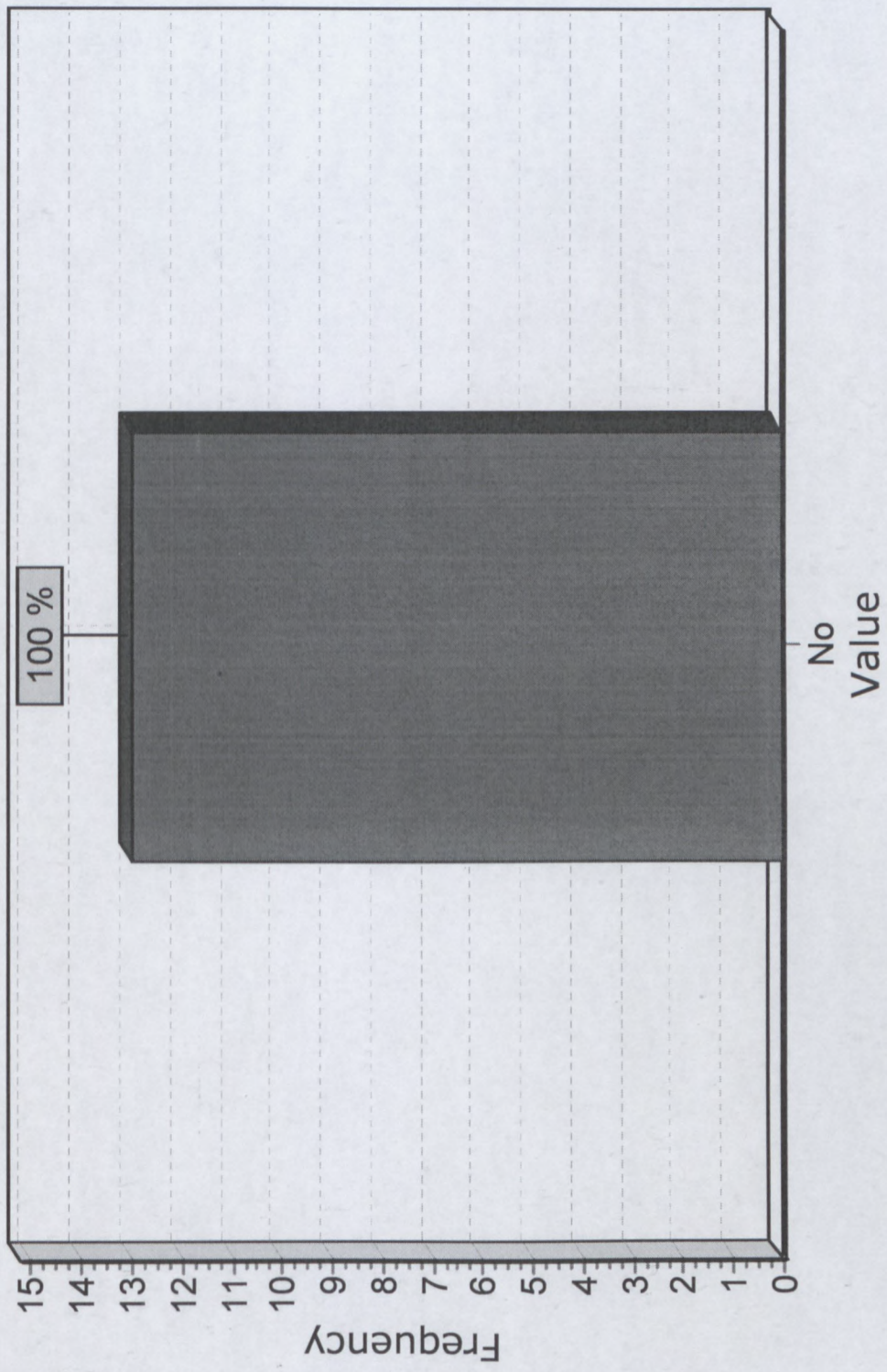
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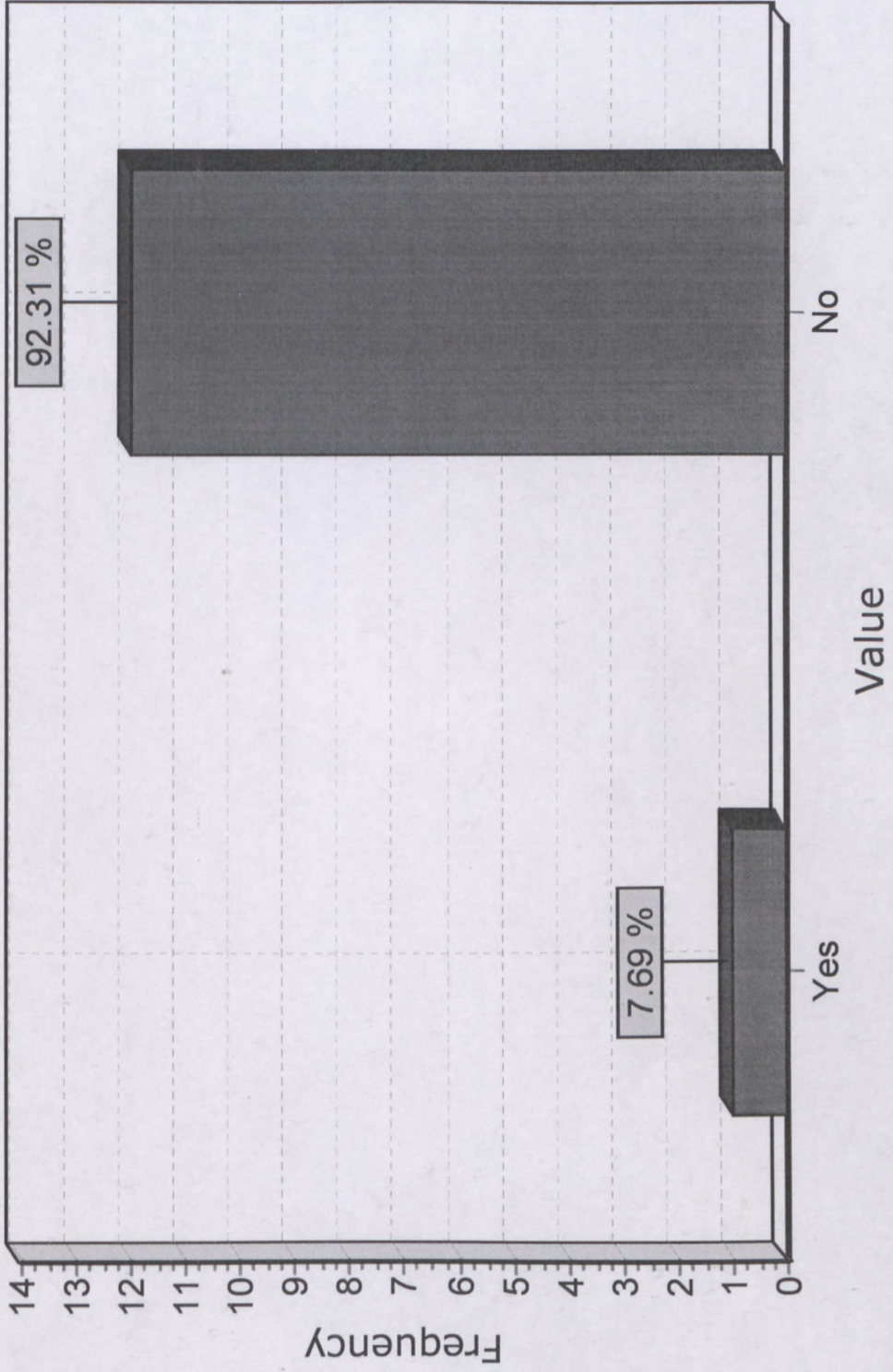
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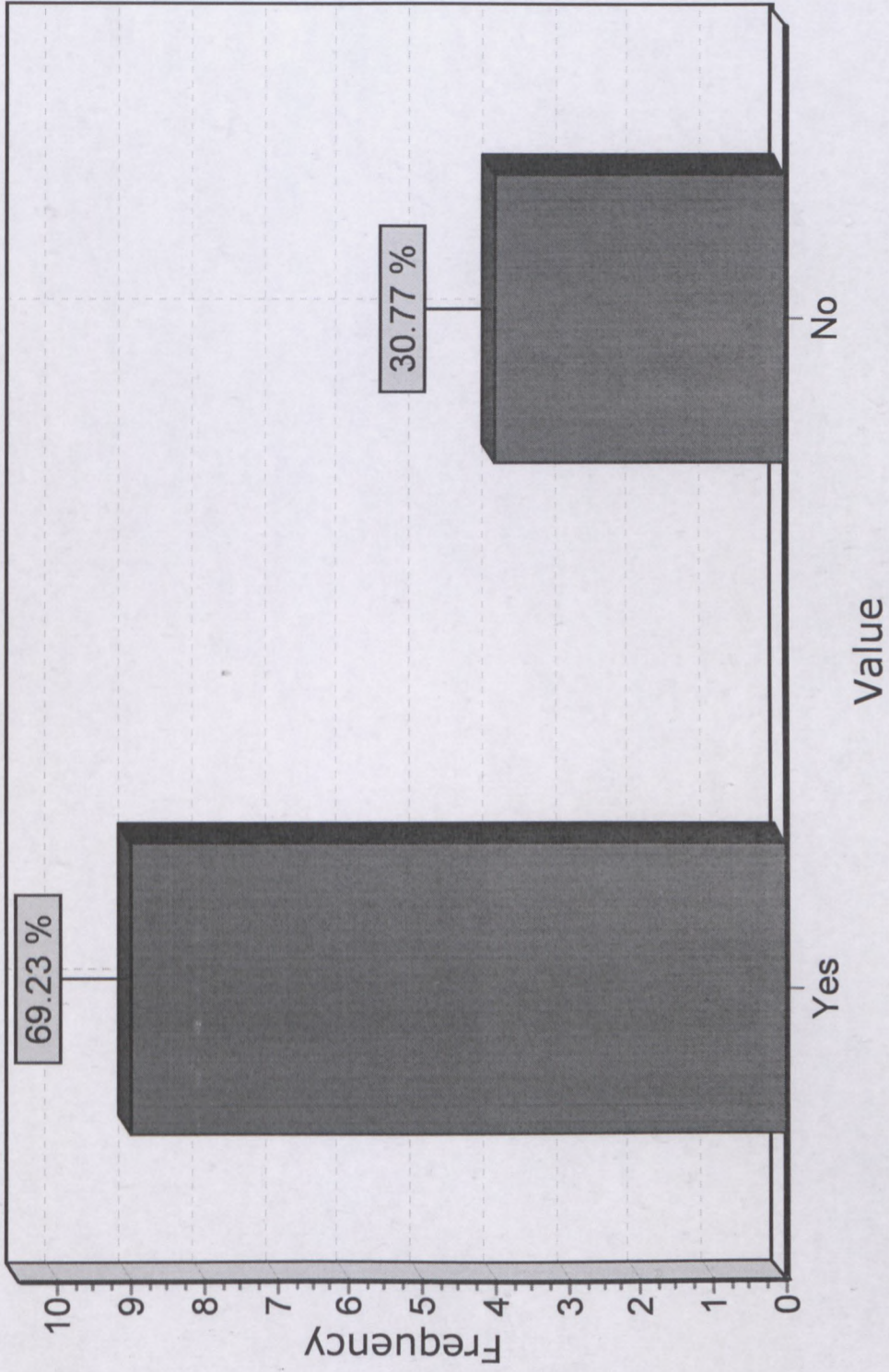
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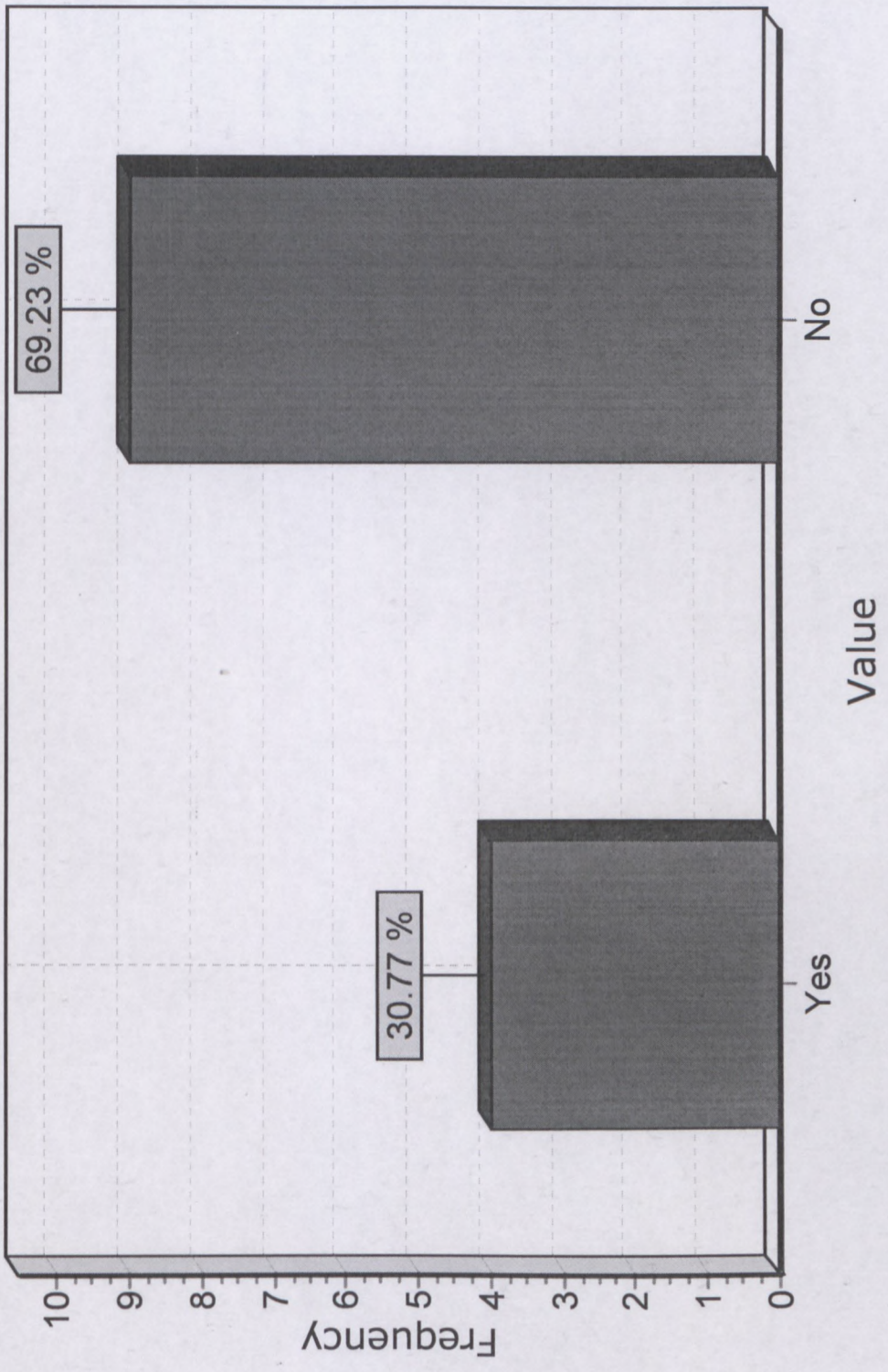
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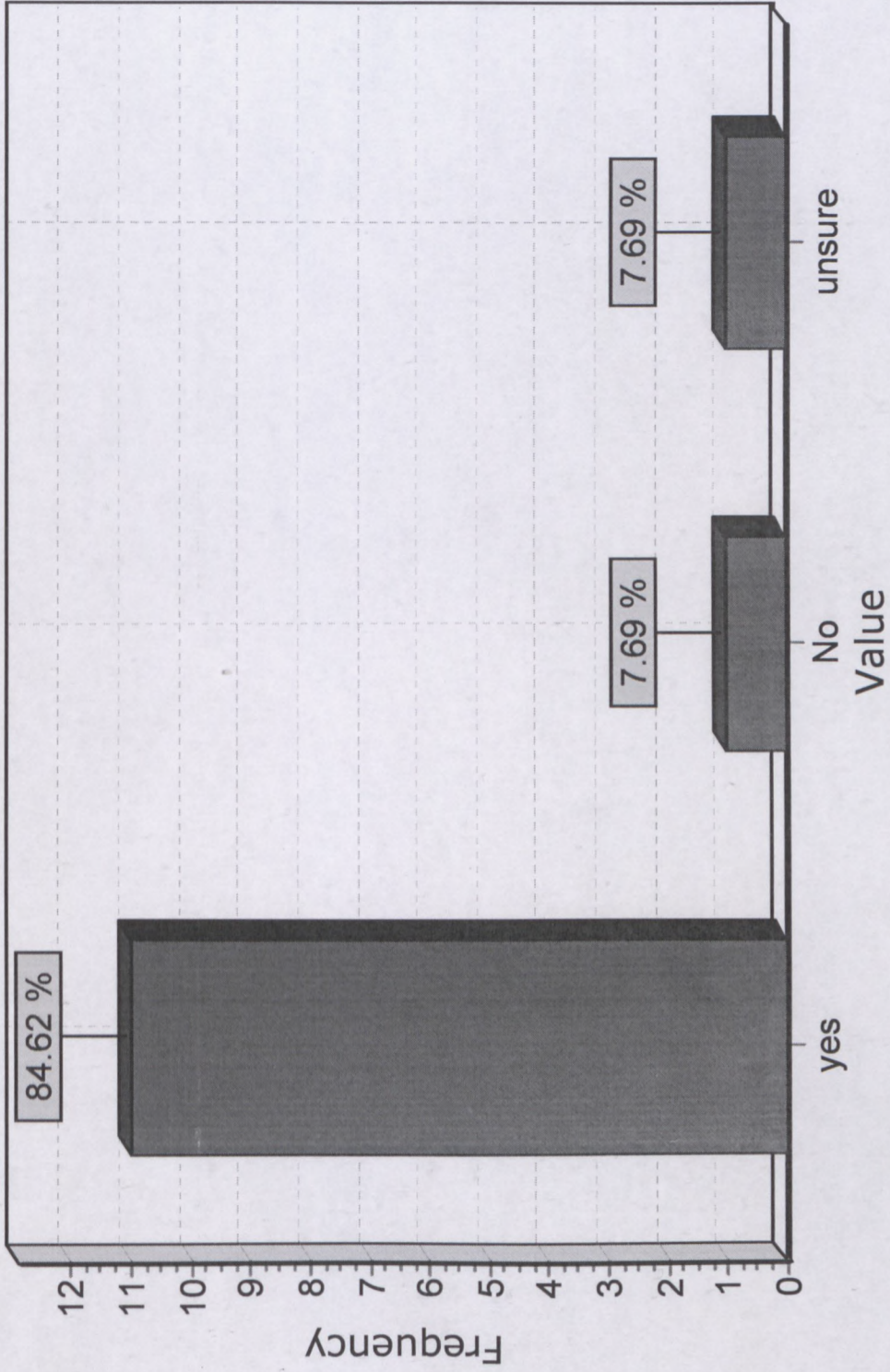
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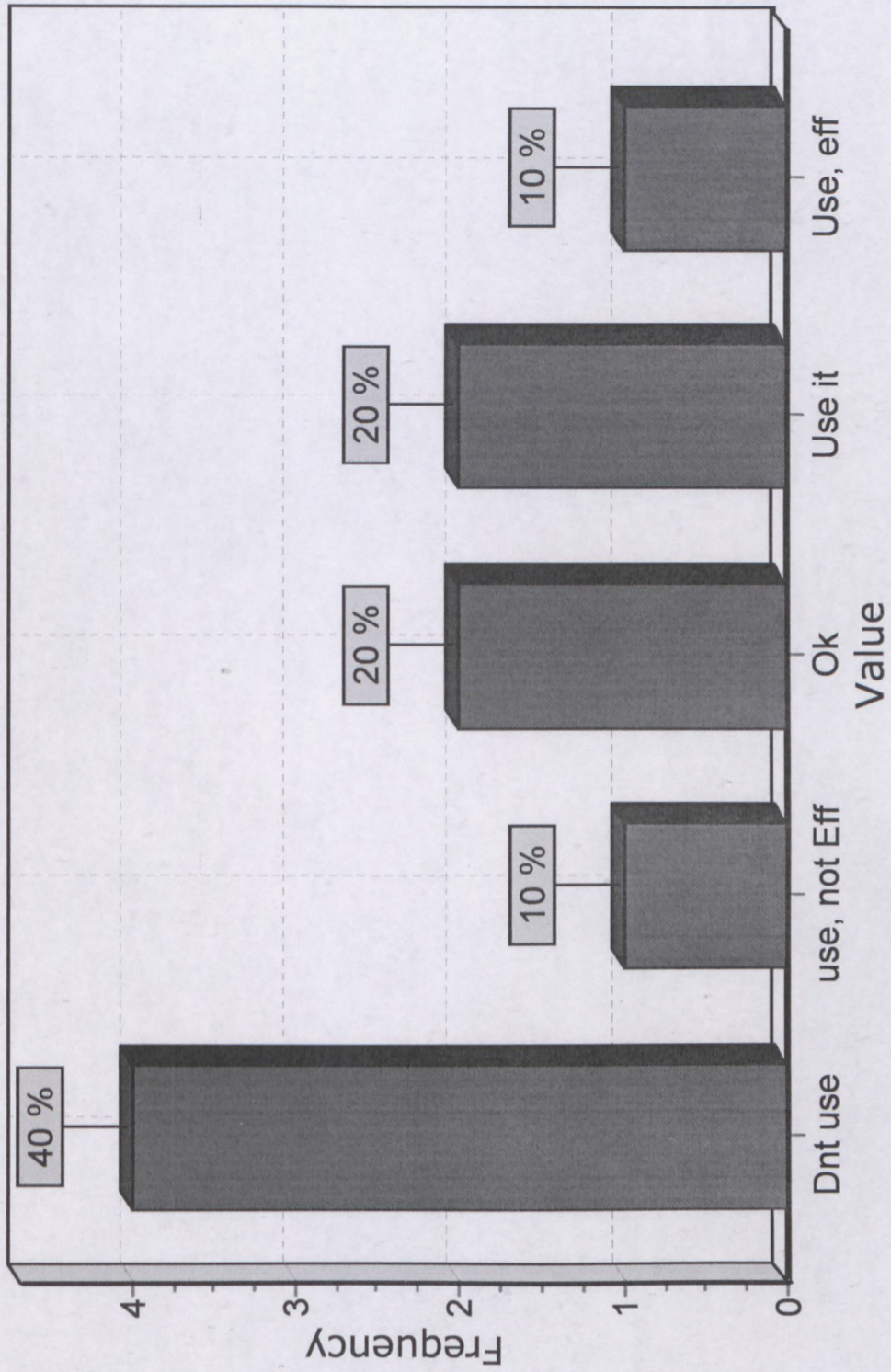
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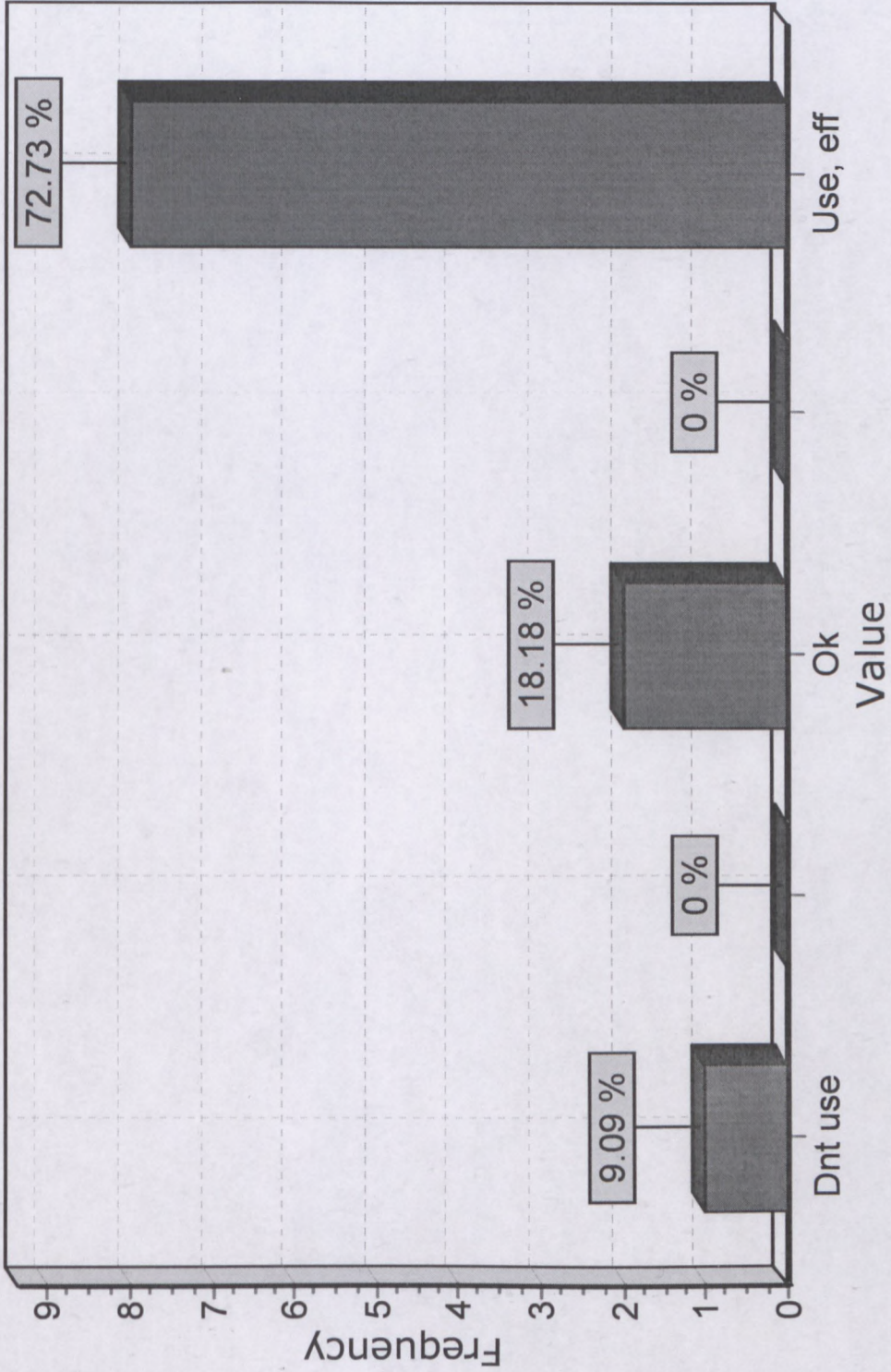
Barchart for Q4



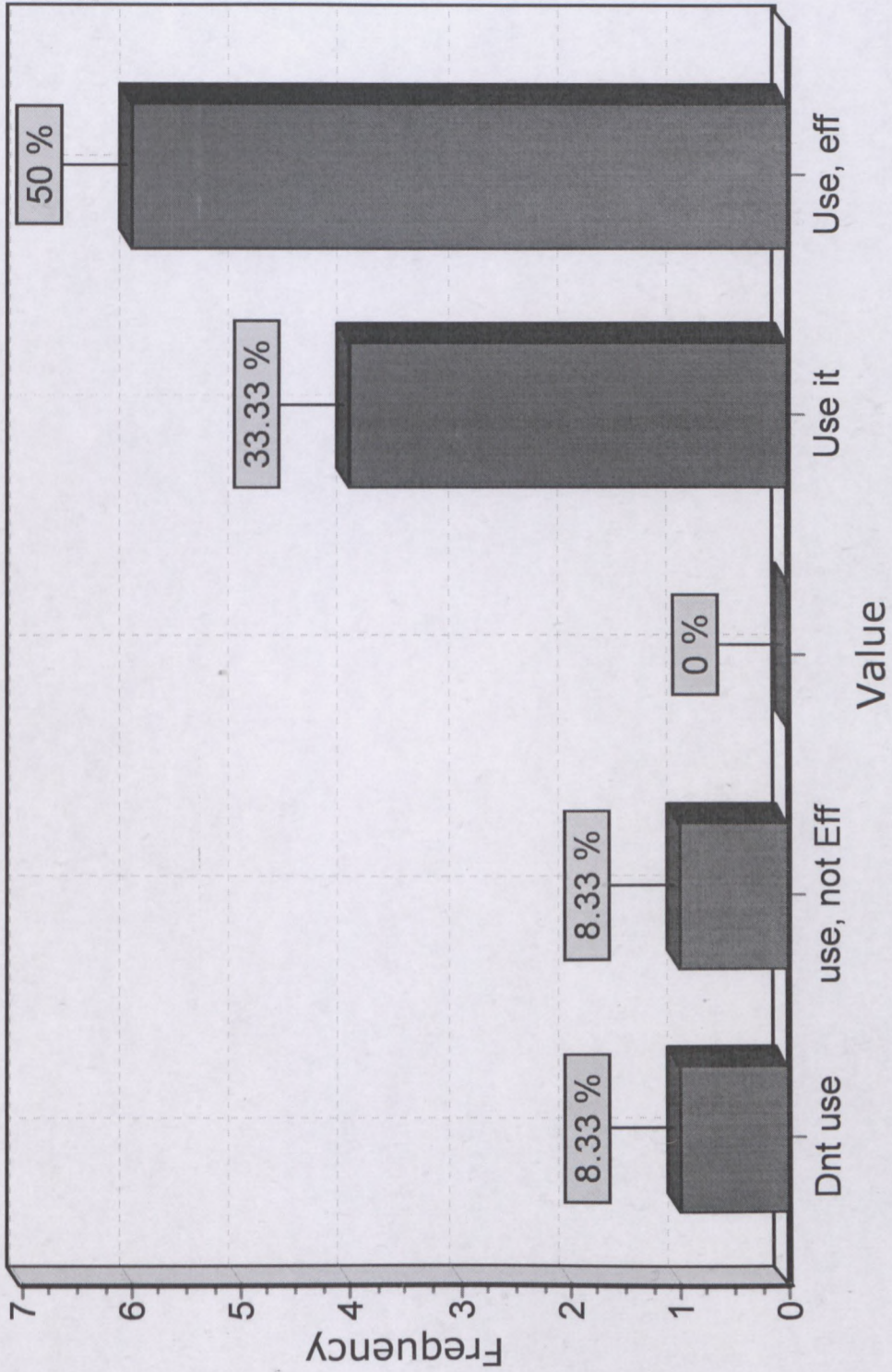
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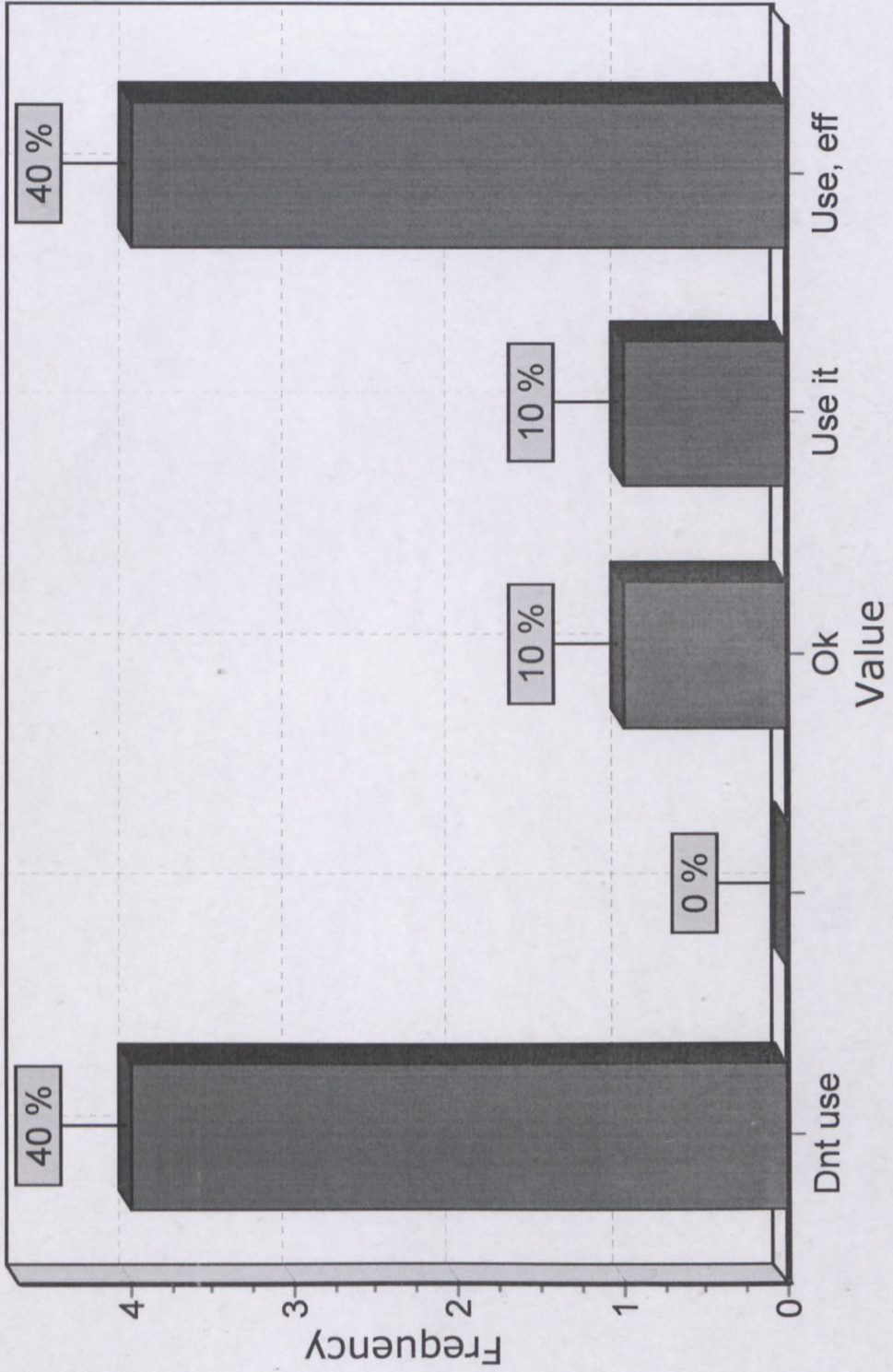
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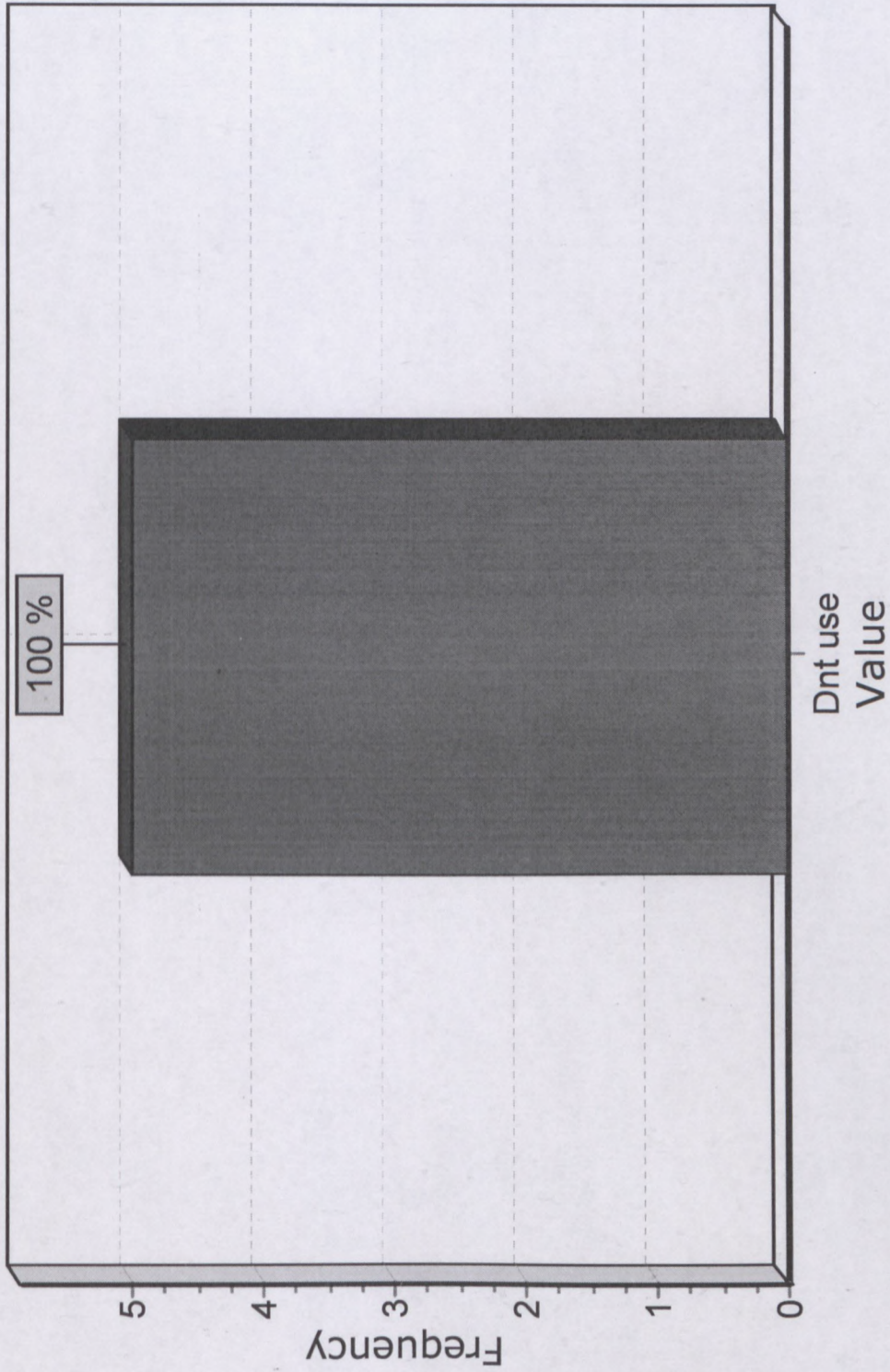
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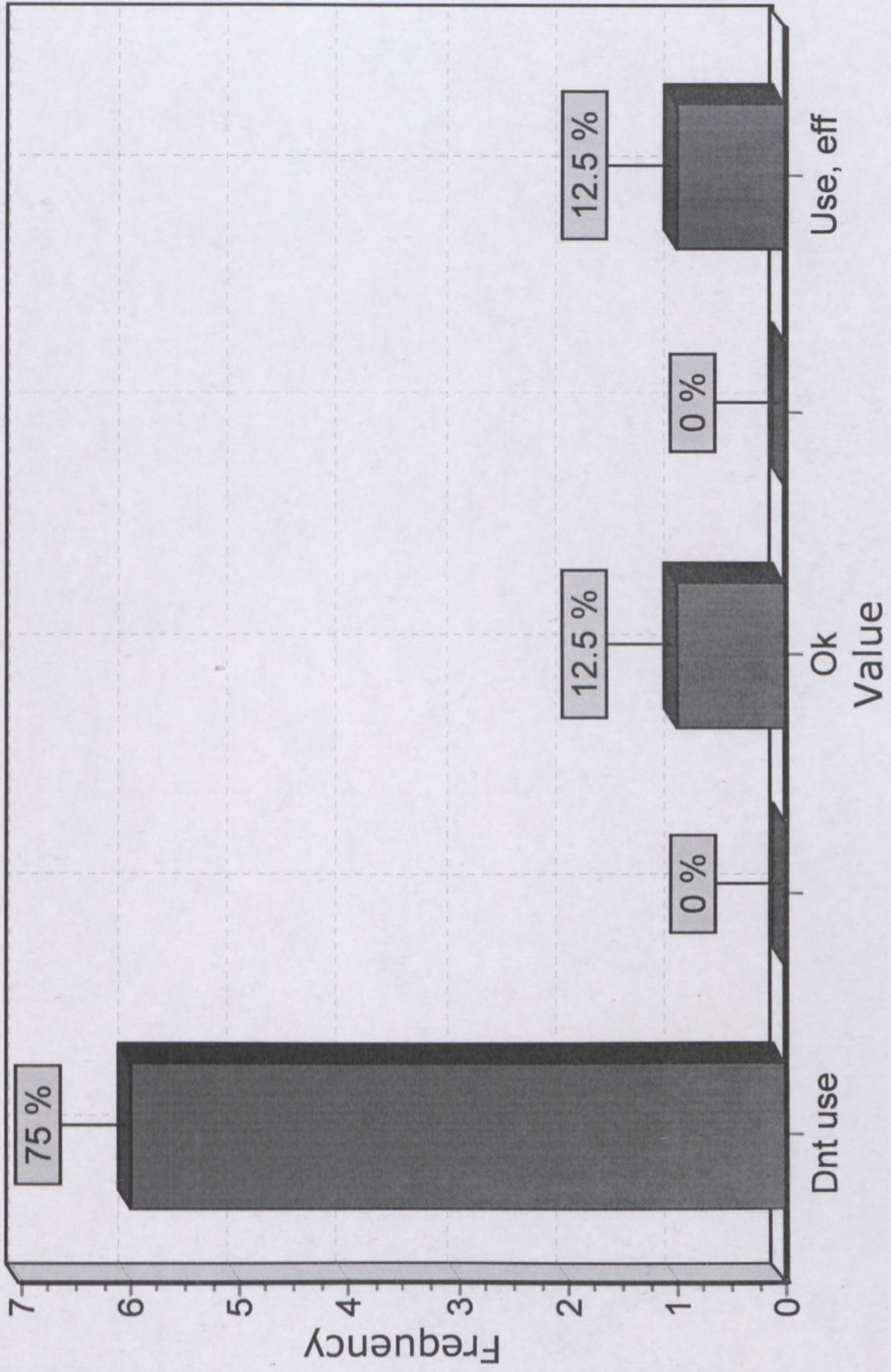
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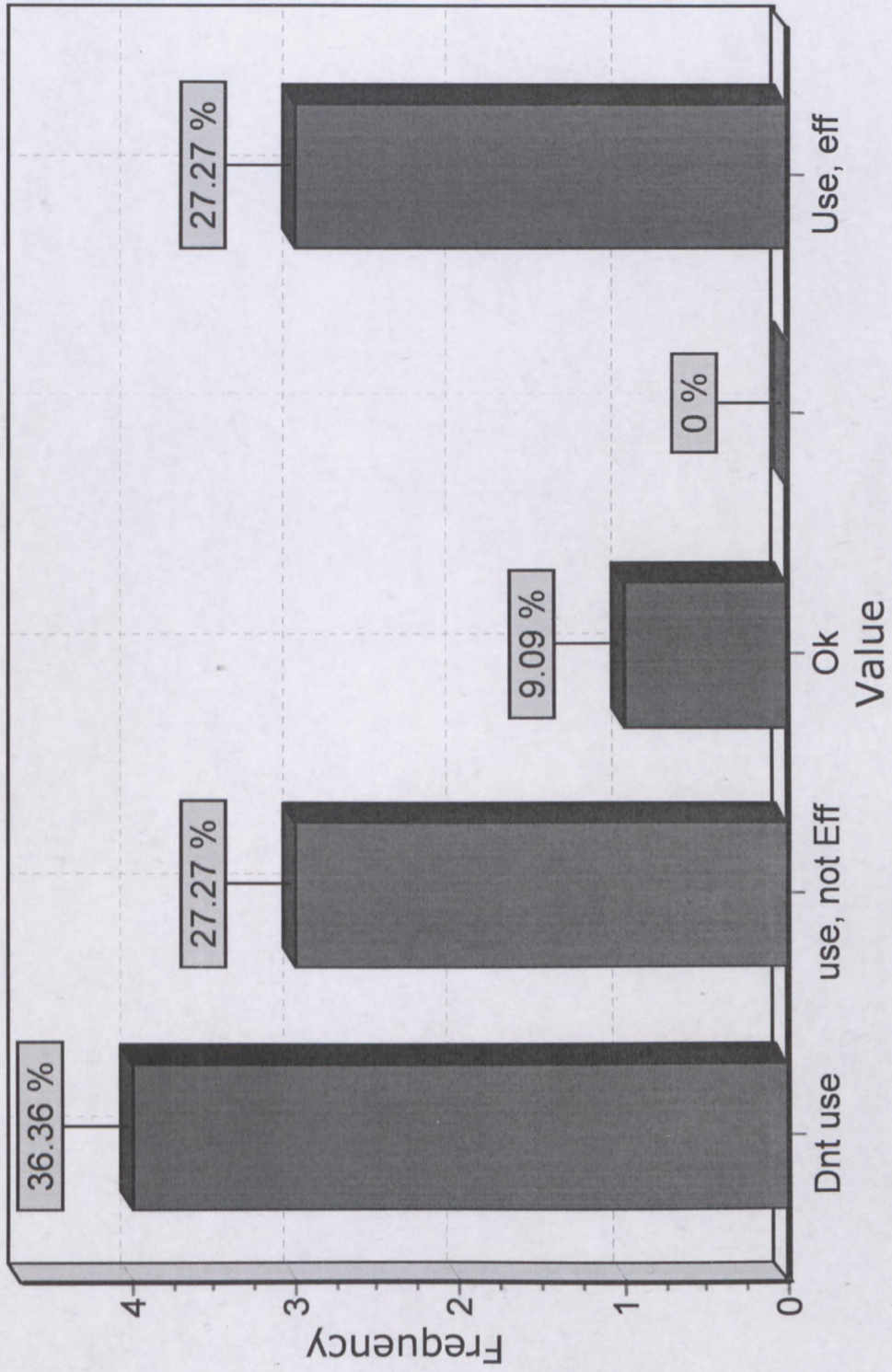
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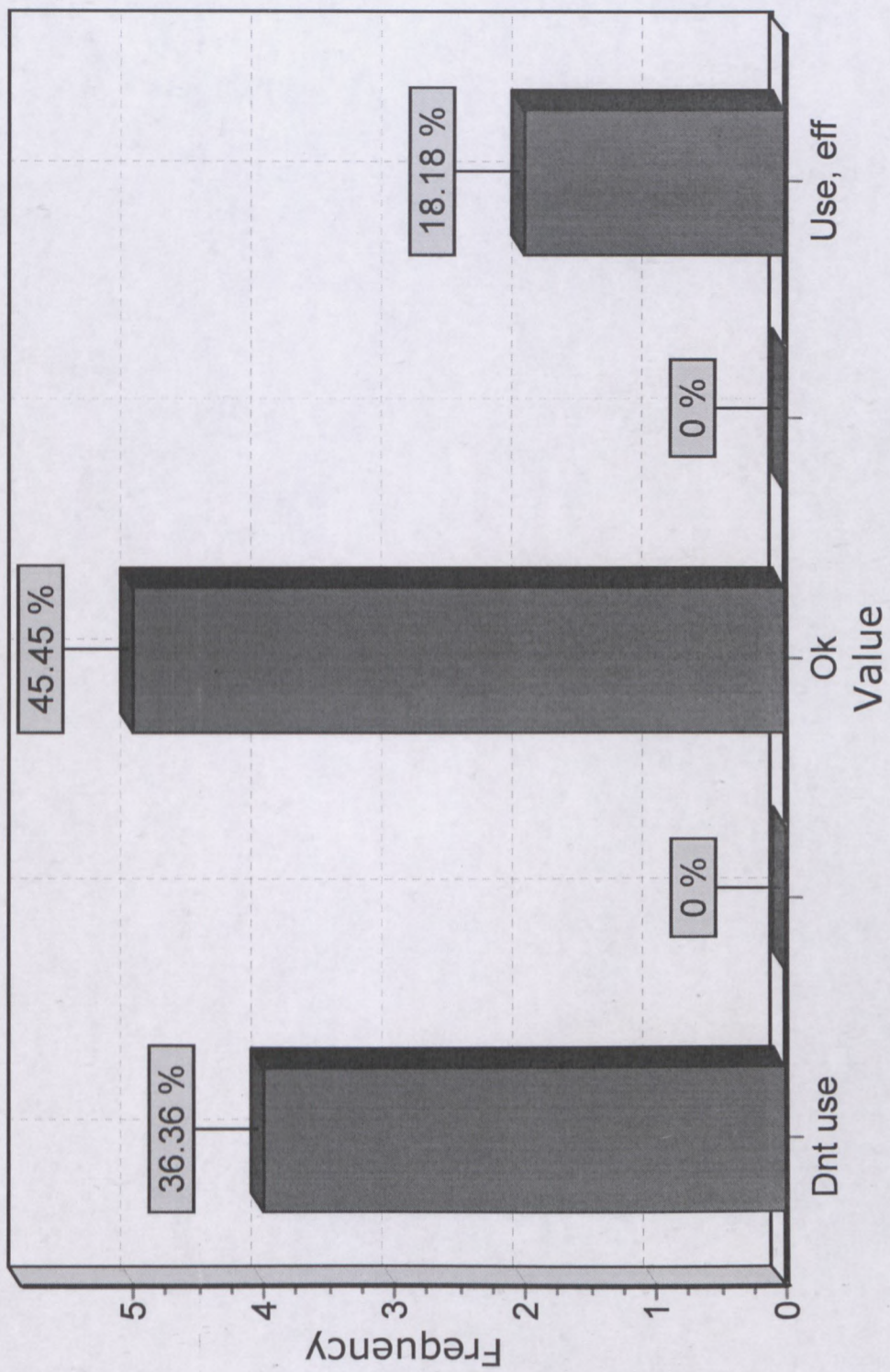
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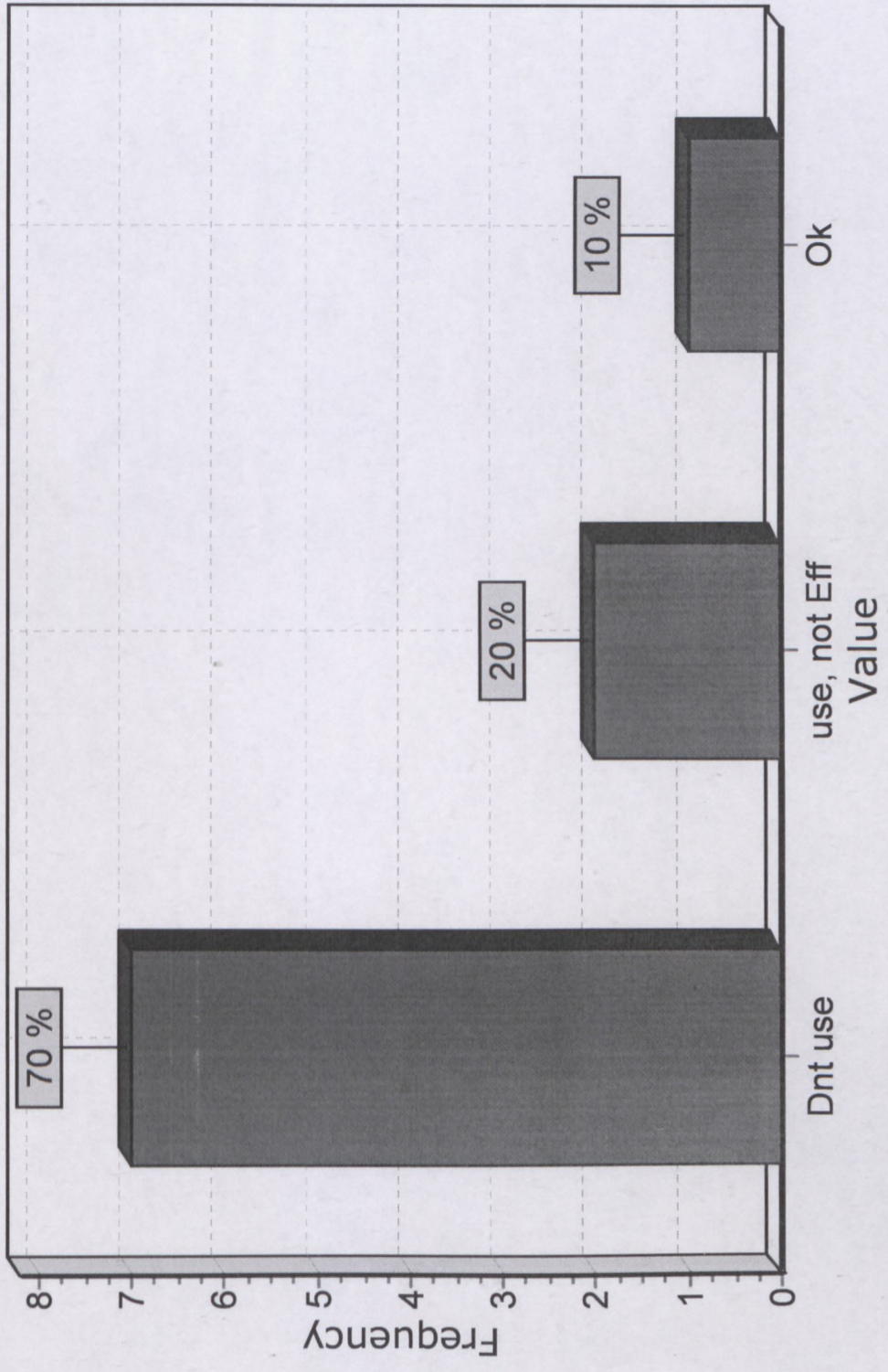
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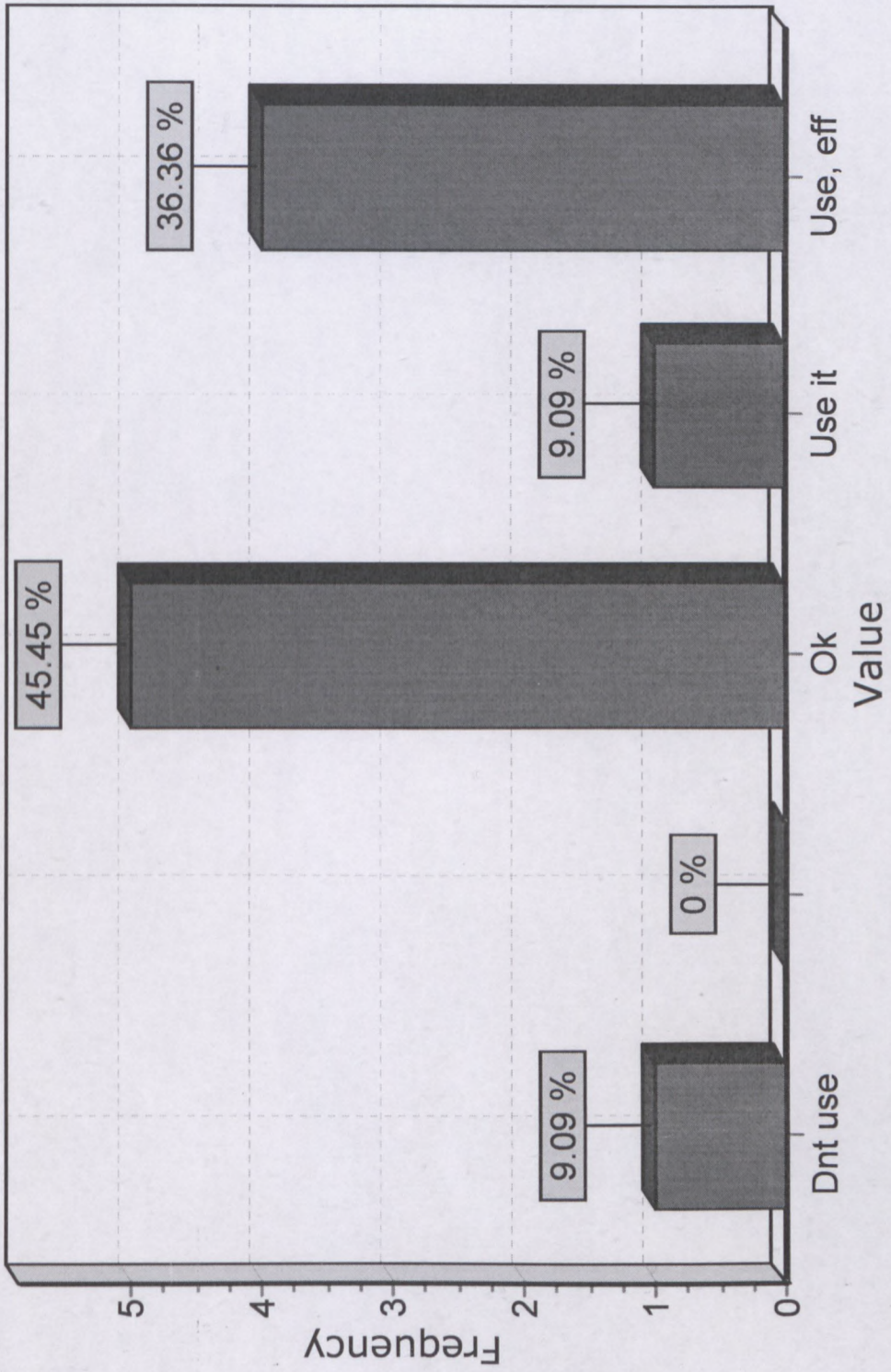
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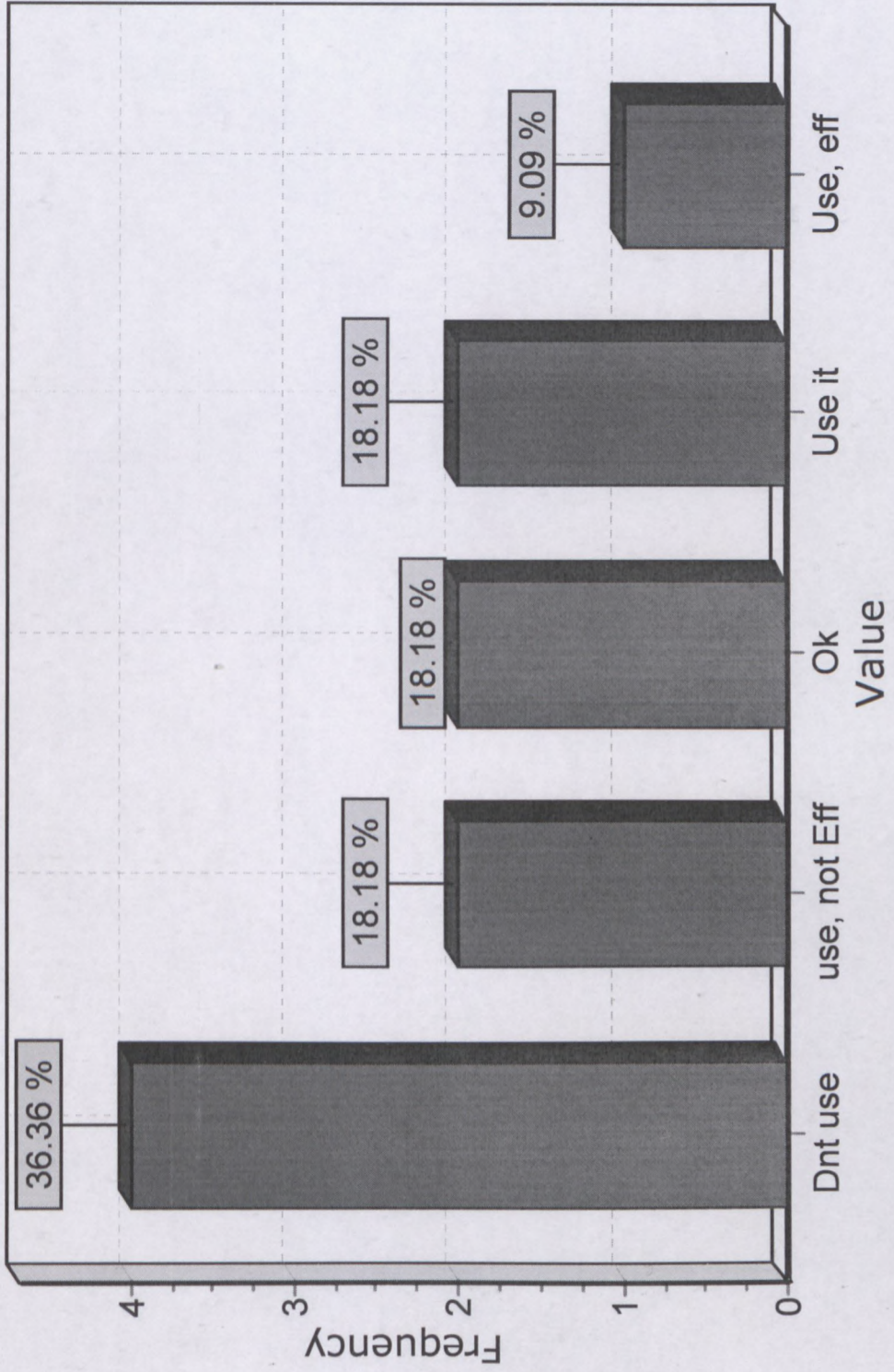
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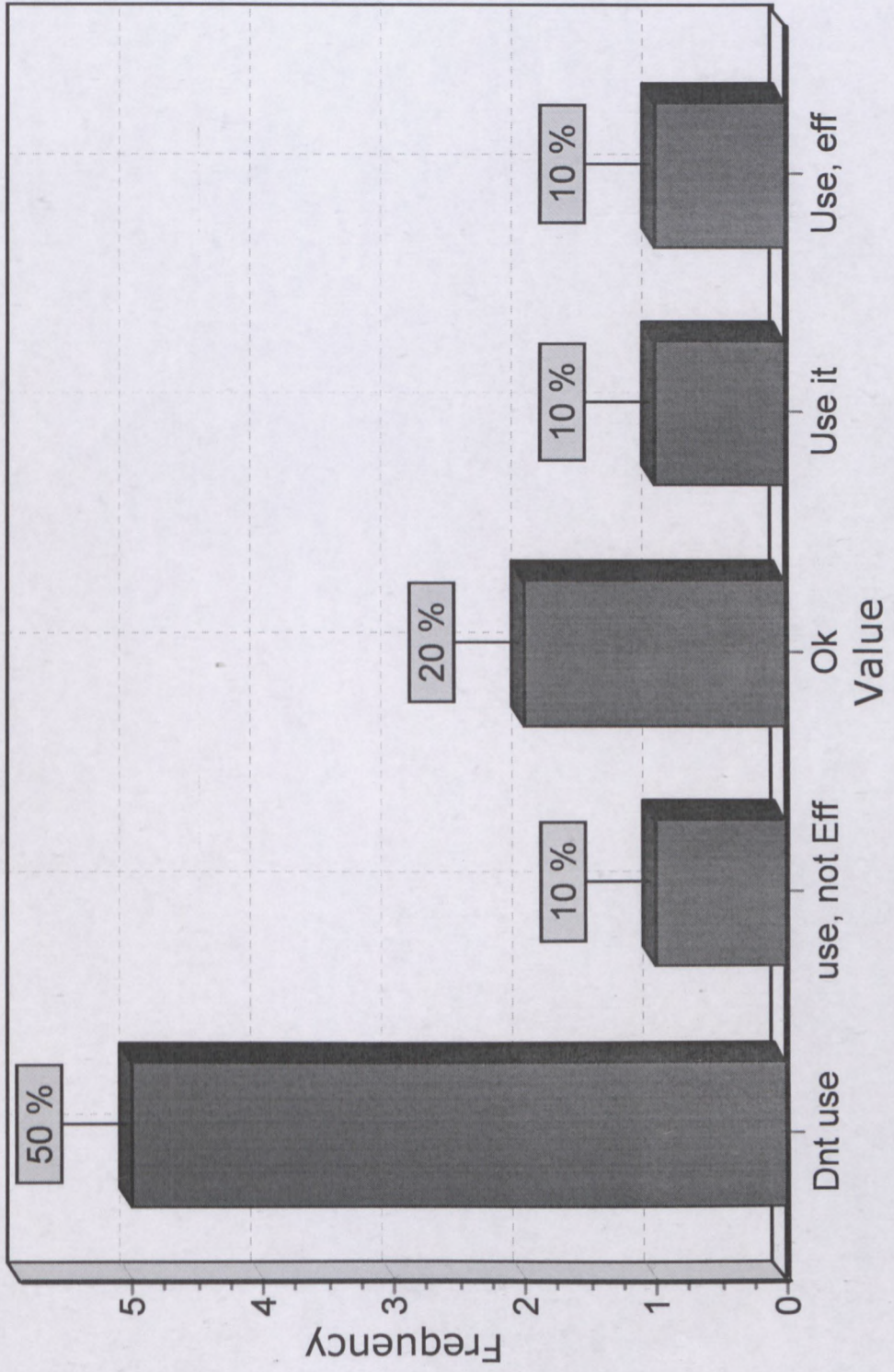
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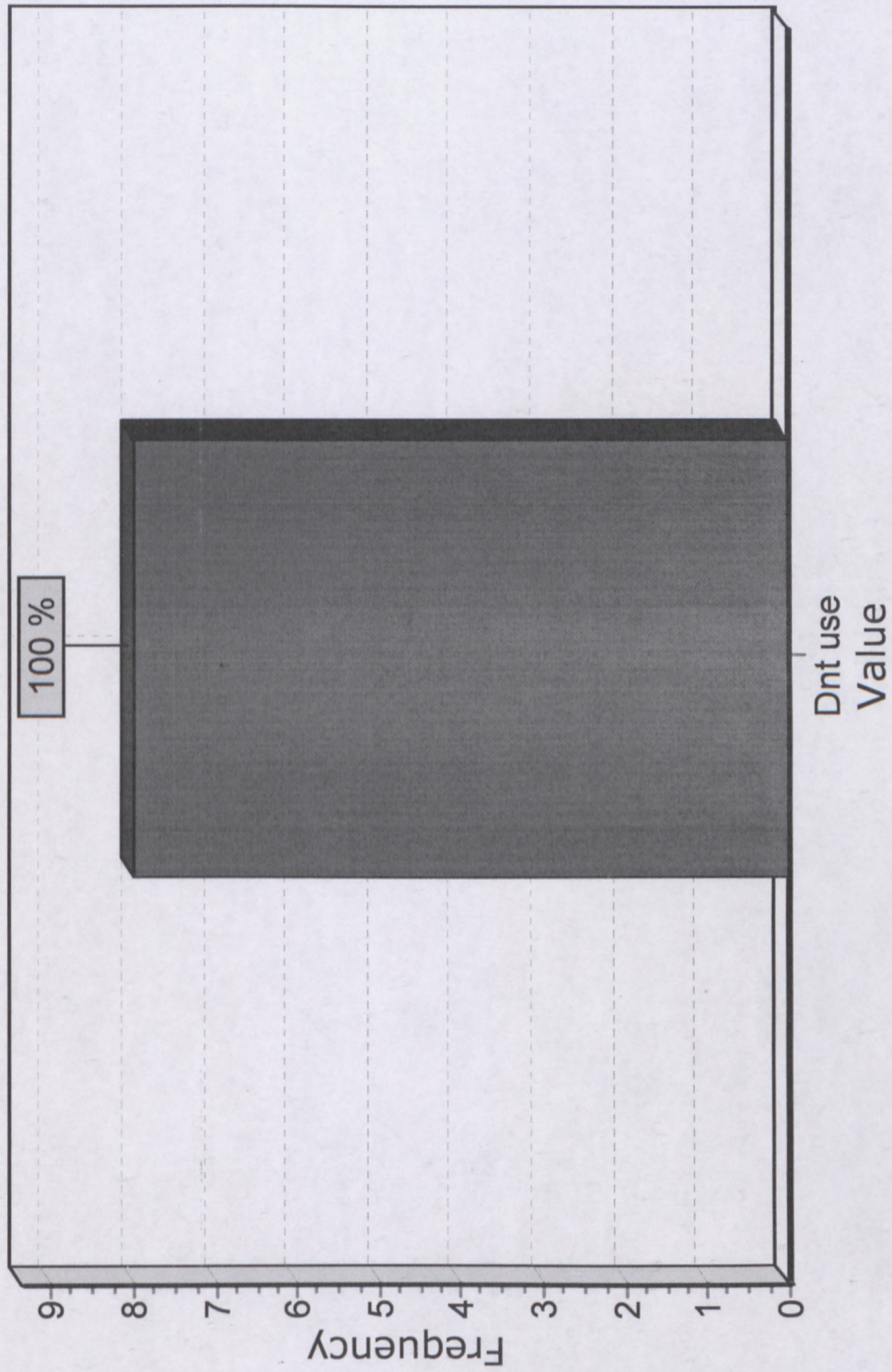
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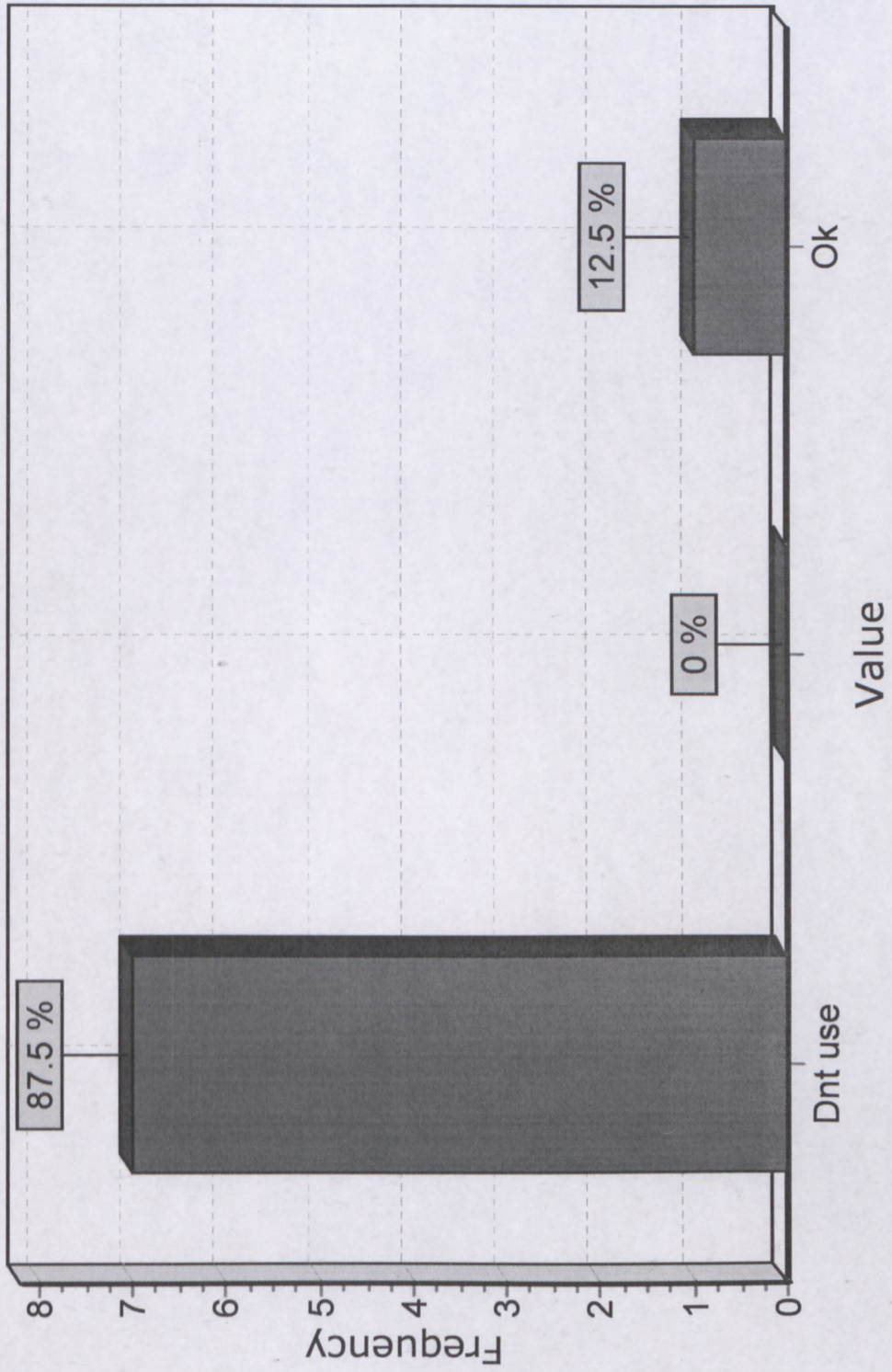
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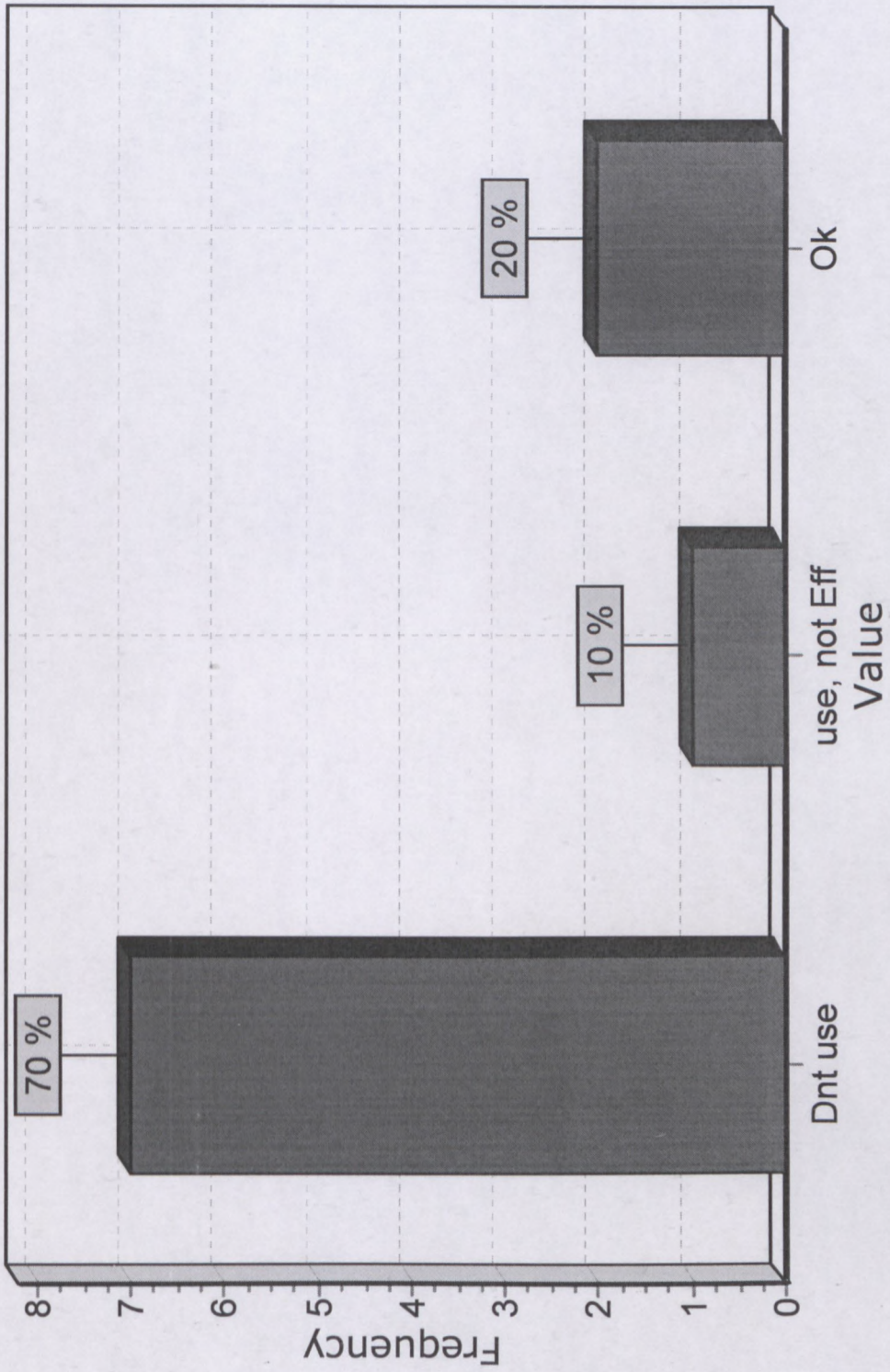
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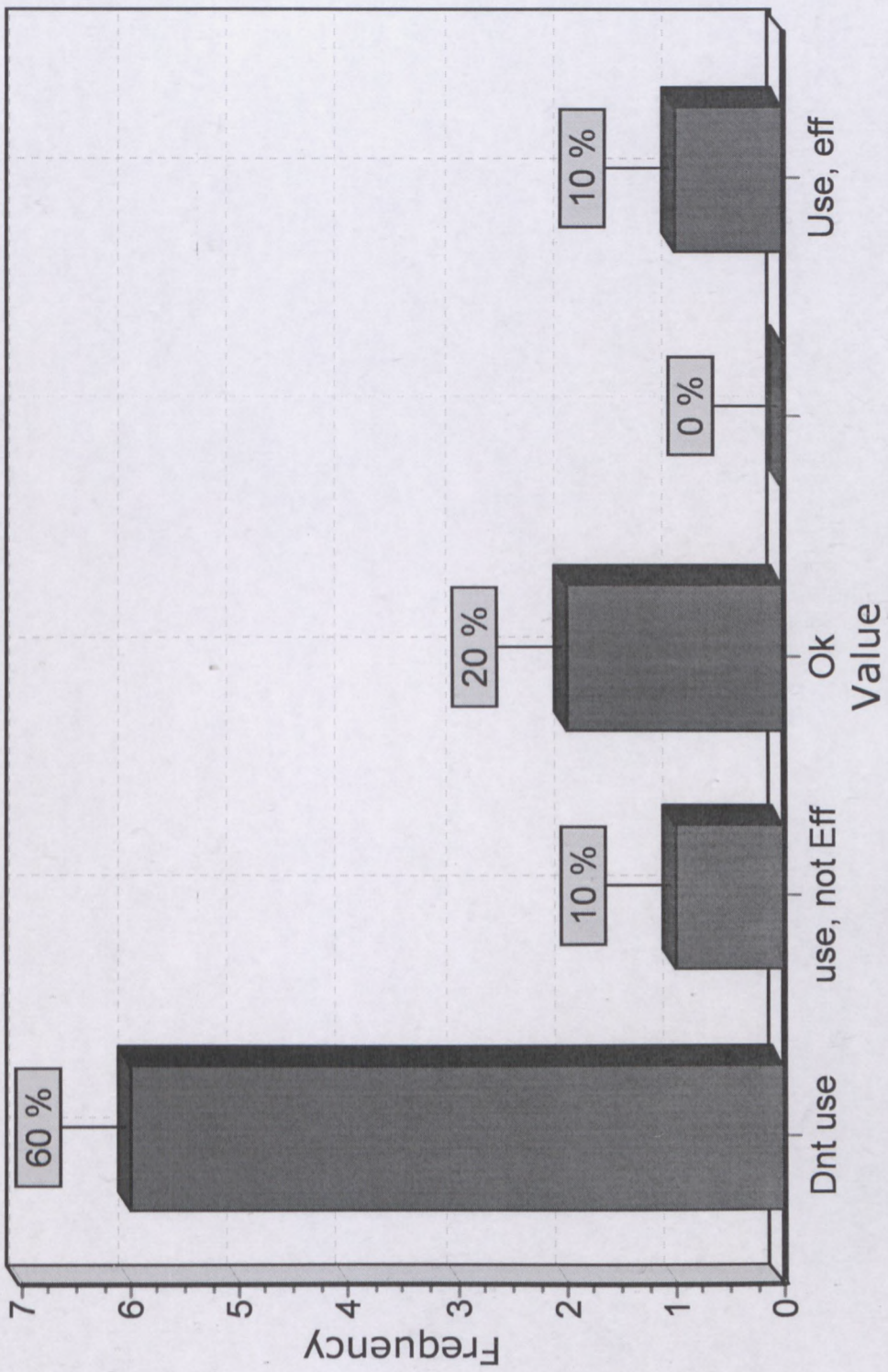
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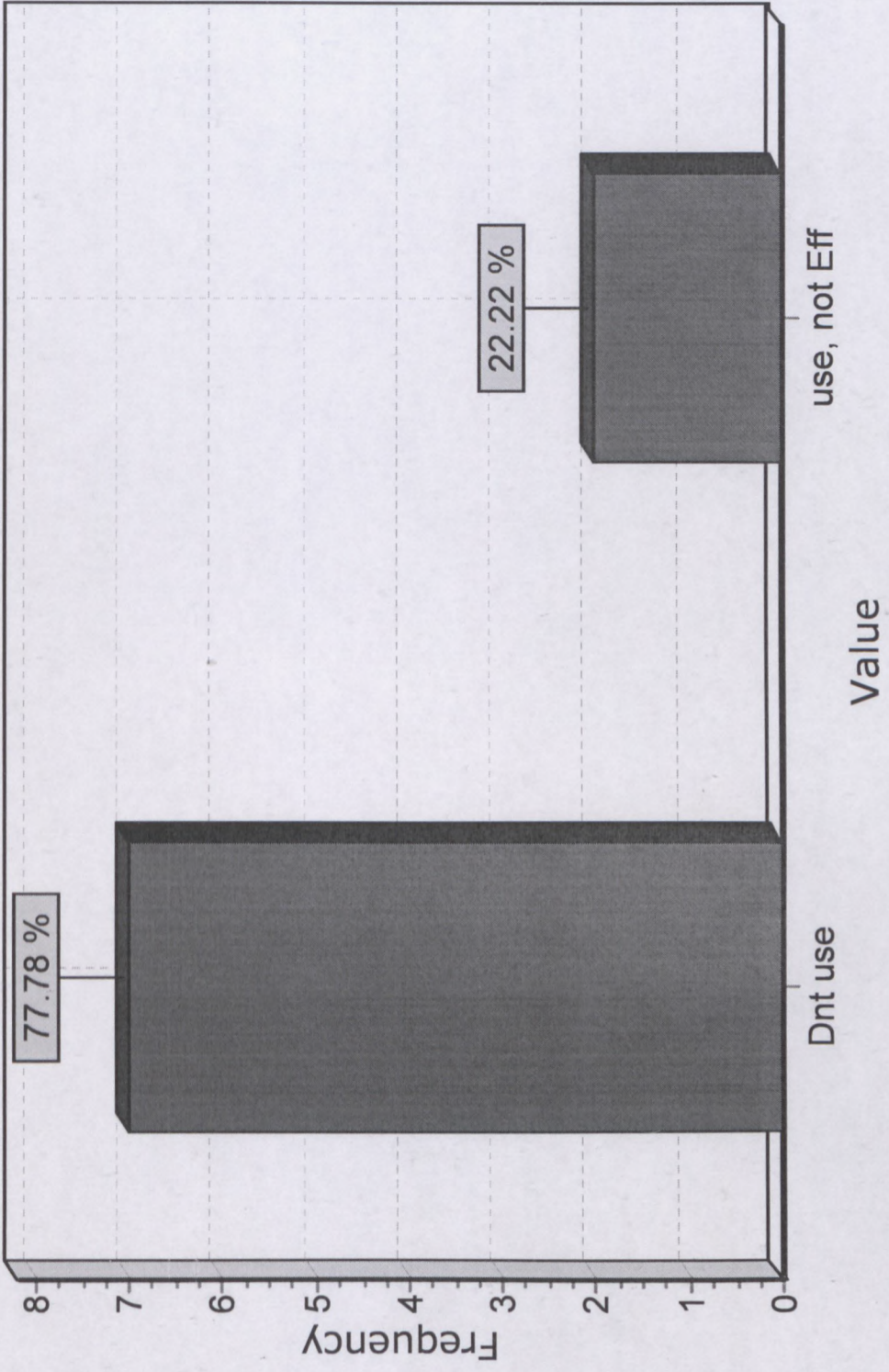
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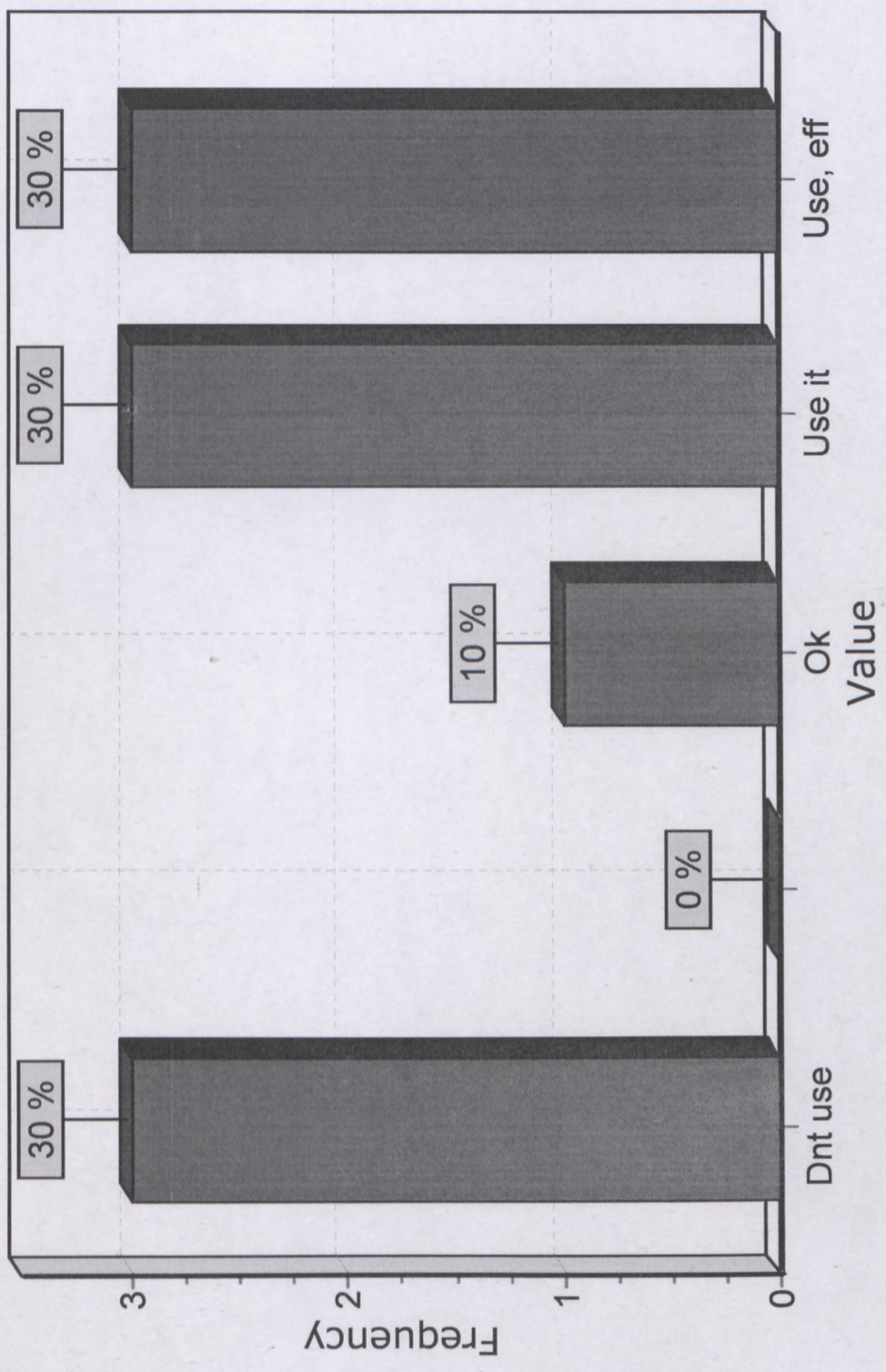
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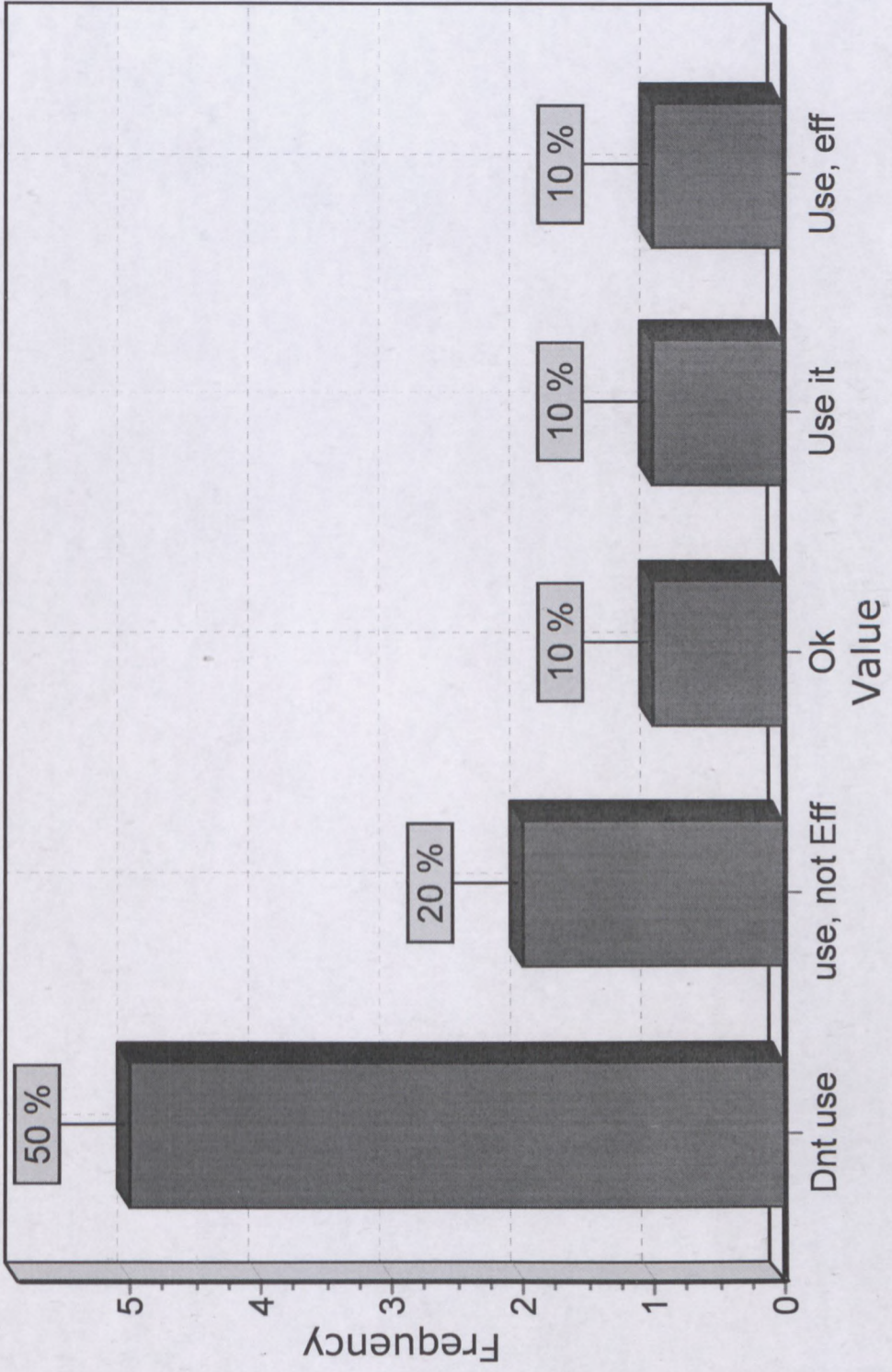
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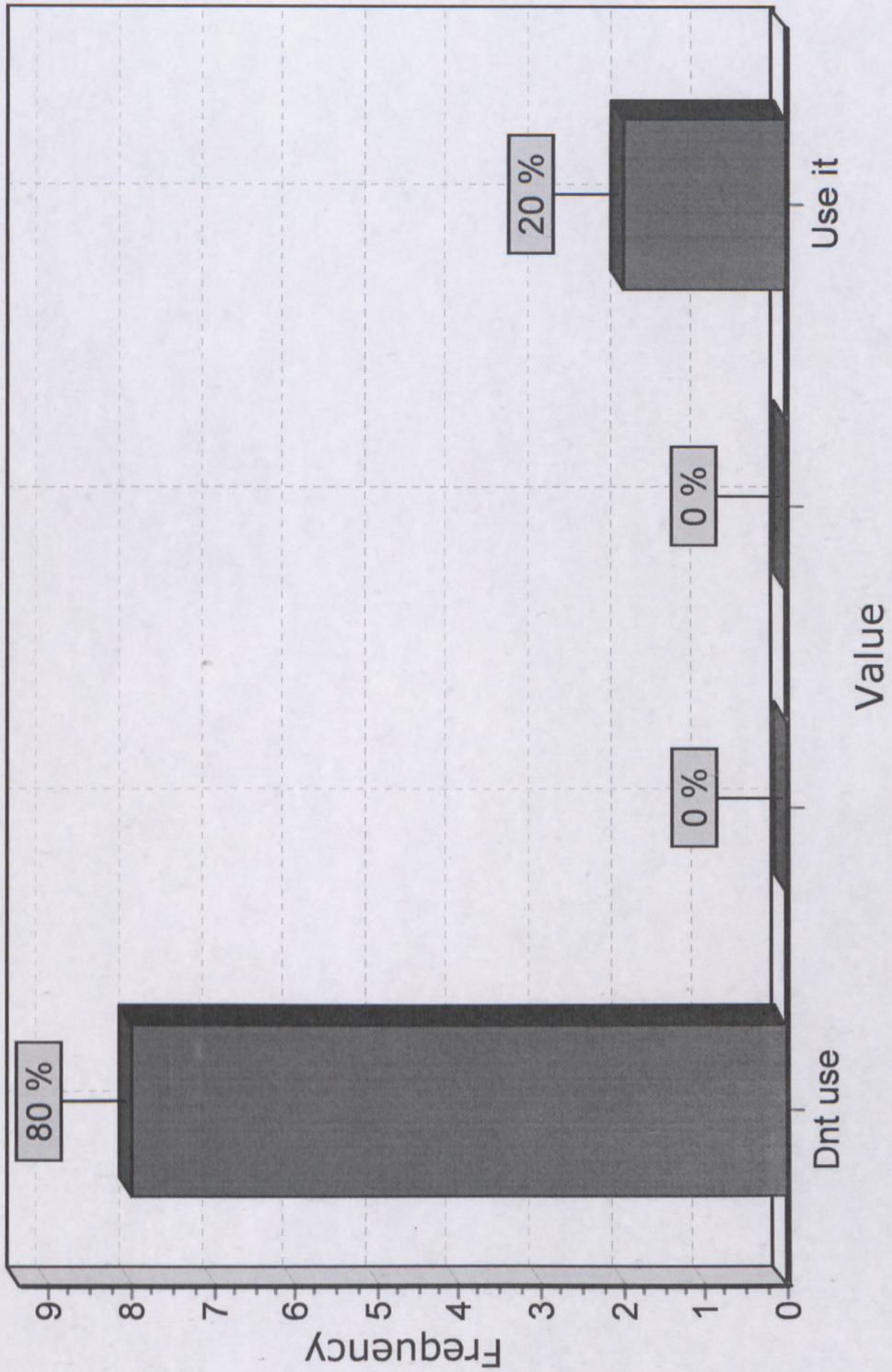
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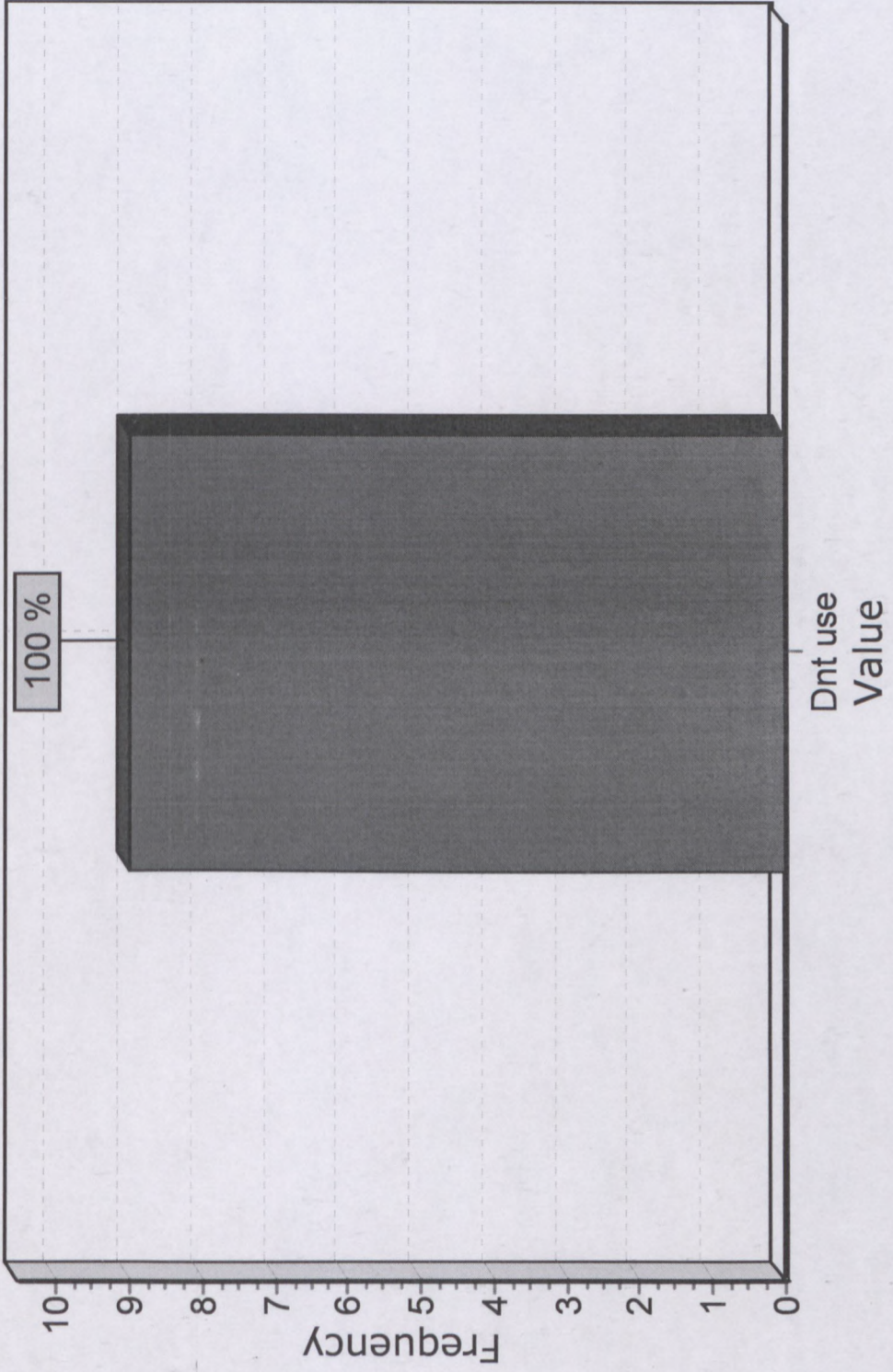
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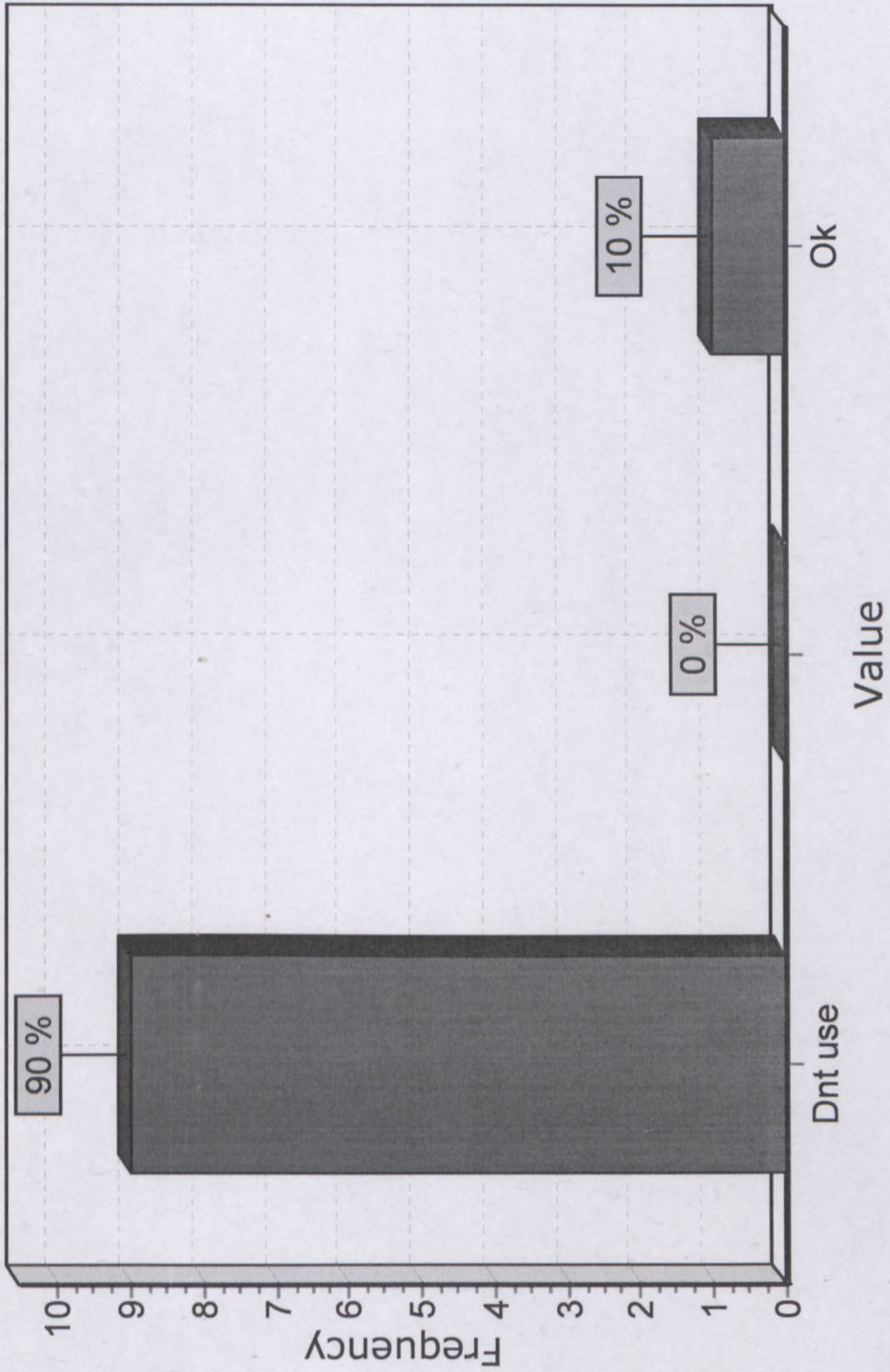
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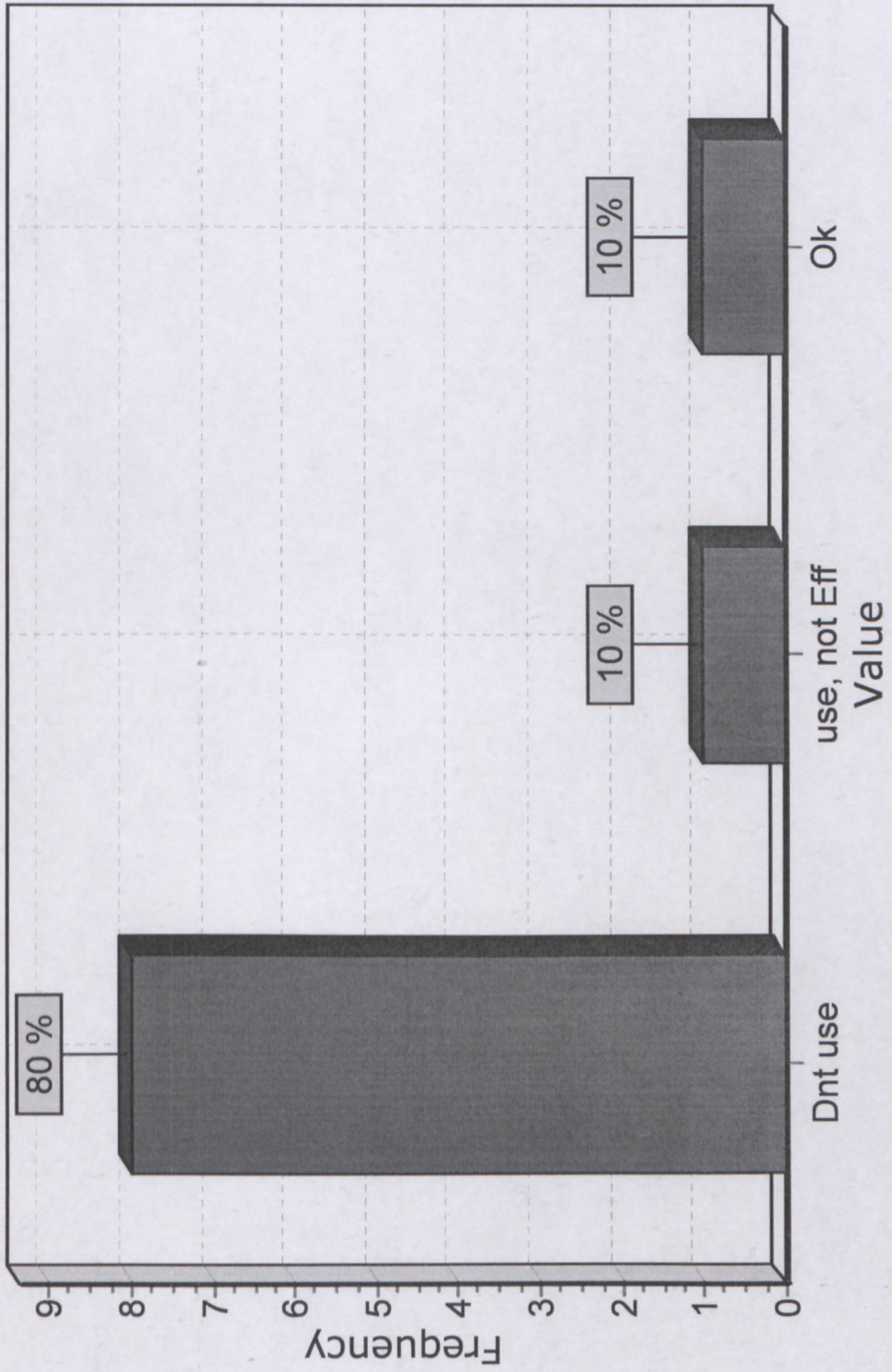
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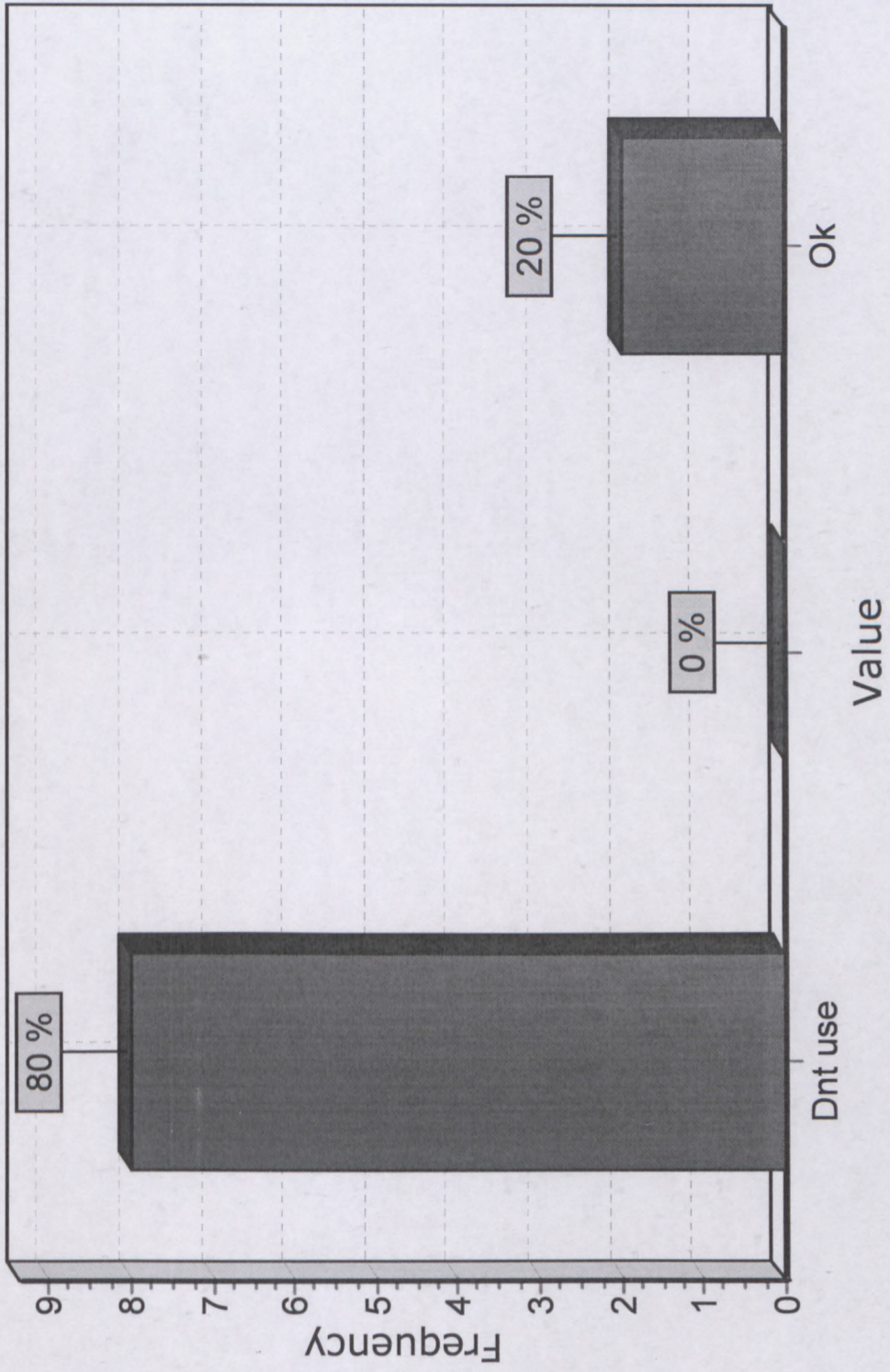
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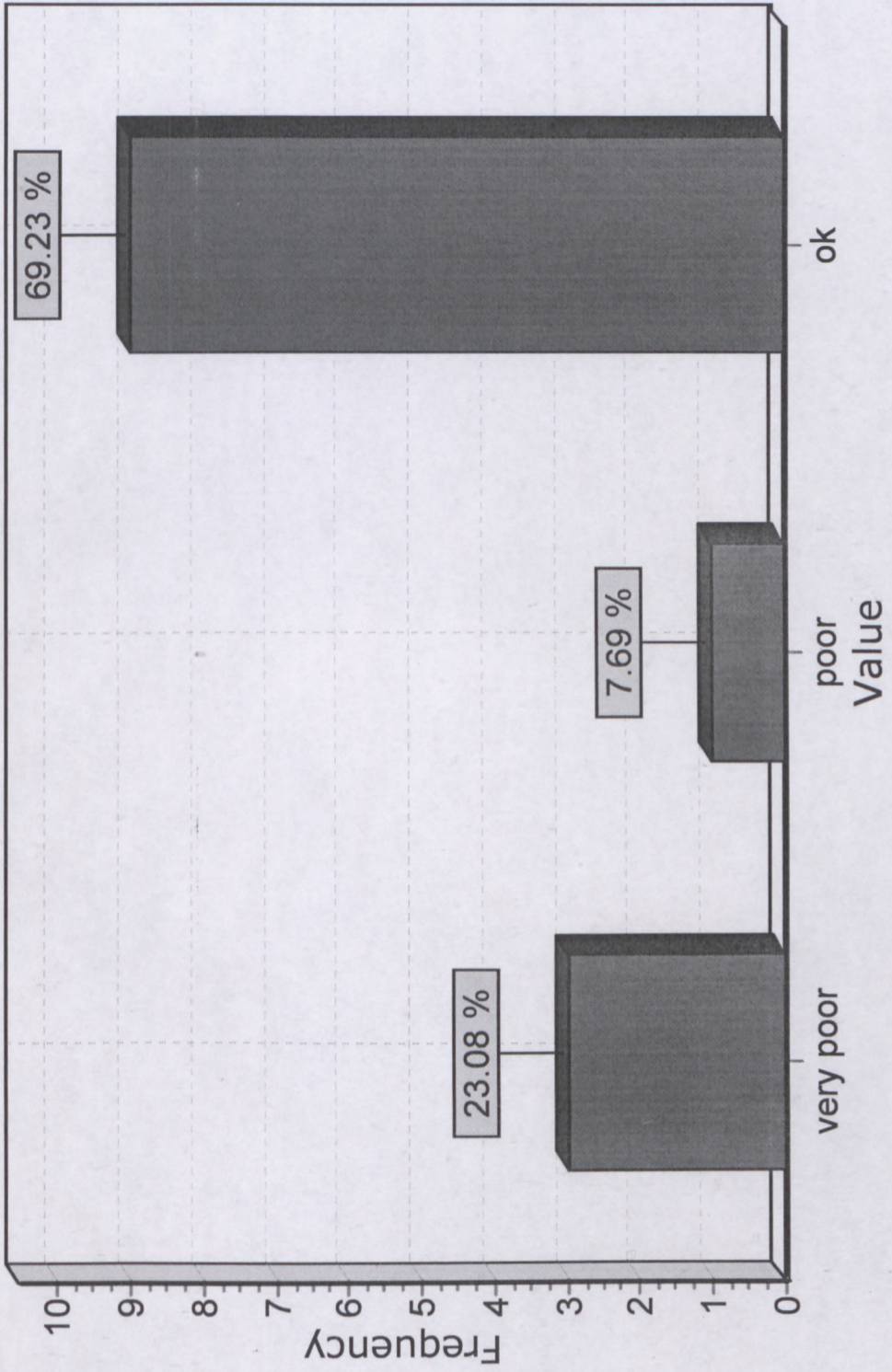
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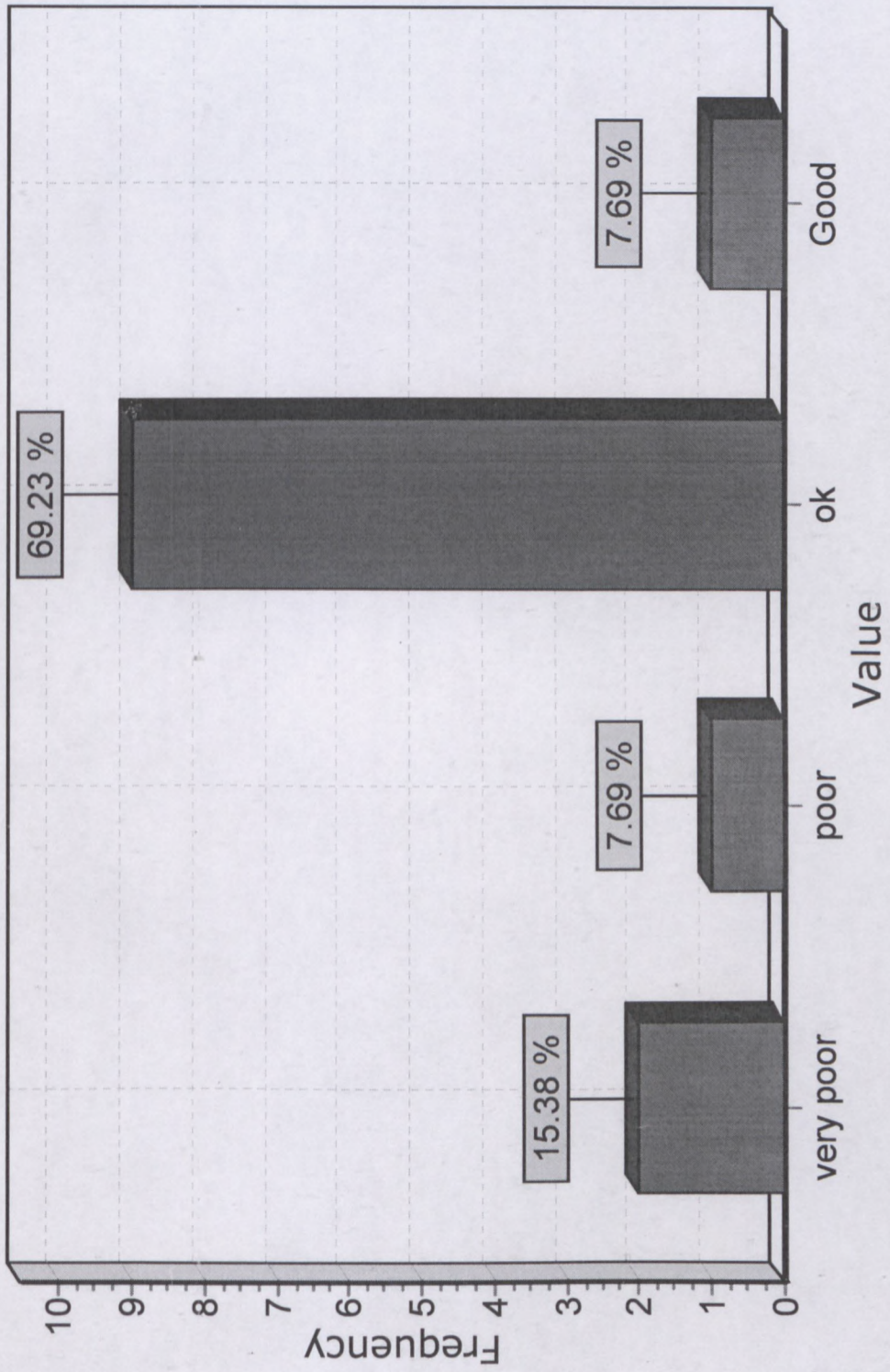
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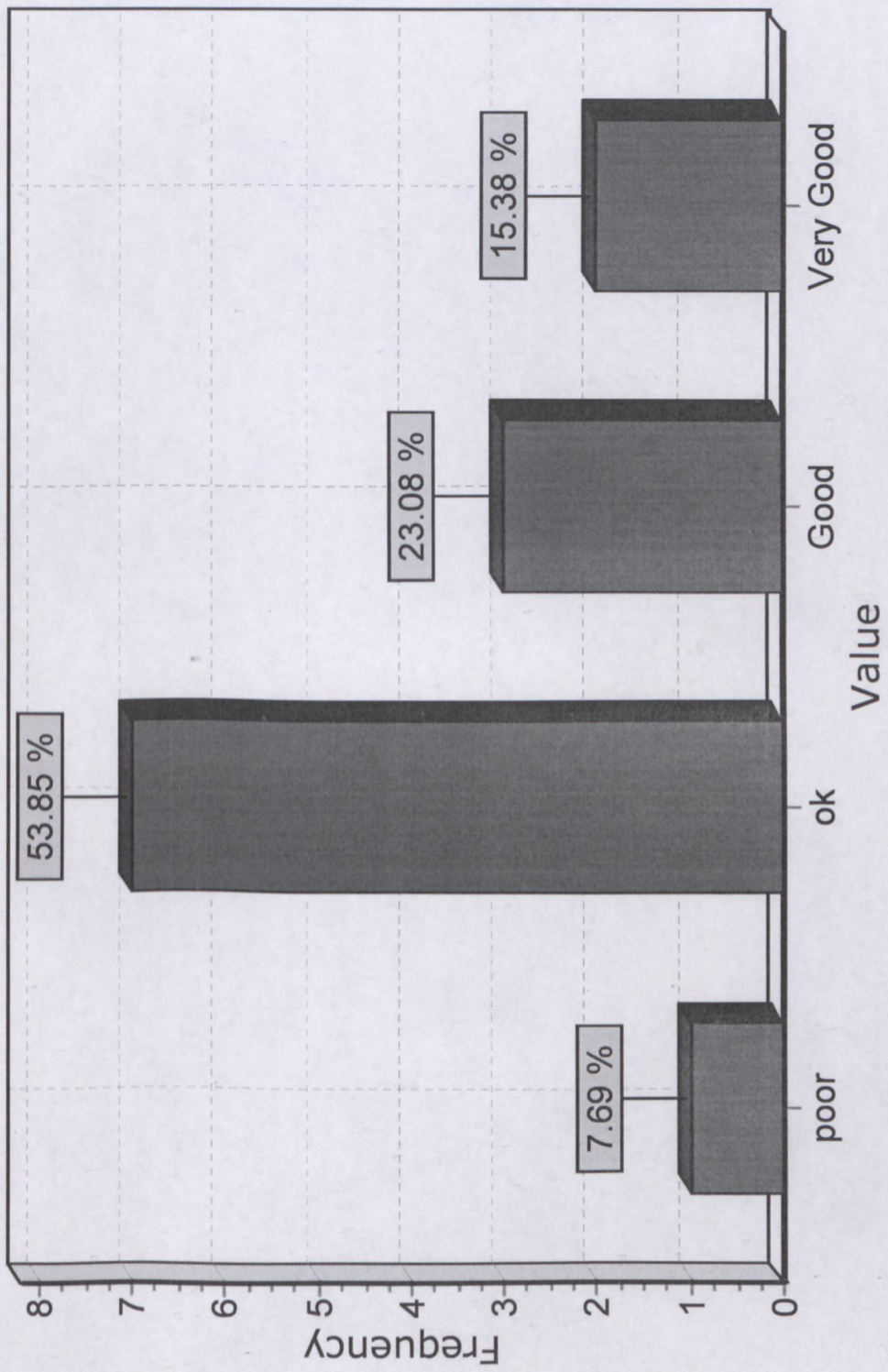
Barchart for Q9



Barchart for Q10



Barchart for Q11



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