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EXISTENCE AND NATURE OF AUDIT EXPECTATION GAP: NIGERIAN PERSPECTIVE

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ABSTRACT

The audit expectation gap is critical to the auditing profession because the greater the unfulfilled expectation from the public, the lower the credibility earning potential and prestige associated with the work of auditors. The study examined the level and nature of expectation gap (performance gap) between auditors and users of financial statements. It sought to establish whether audit expectation gap exists in Nigeria and the perception of the users' group on its existence. Respondents view was also sought on how the gap could be narrowed. Chi-square (γ 2) was used to analyze the data obtained from the study. The data were obtained through questionnaire. One hundred and sixty (160) copies of the instrument were distributed using purposive sampling technique. In this study, a cross-sectional survey was conducted to capture the perceptions of users of financial statements in Nigeria. The tests of hypothesis were done using Microsoft Excel 2010 version. Tests were carried out at a significant level of 5% and three degree of freedom. The findings of the study indicated that there is a wide expectation gap in the areas of auditors' responsibility for fraud prevention and detection. Audit expectation gap has negative impact on auditor's credibility. The users of financial statements should be enlightened more on the responsibilities of auditors on the financial statements, the role of the auditor should be clarified and quality control measures should be observed in audit firms.

Key Words: Auditing, audit expectation gap, credibility, financial statements, perceptions.

INTRODUCTION

The growth of Accountancy and auditing profession both in status and in number has been greatly accelerated by the ever-increasing complexity of commercial and industrial relations. Financial accounting information are statutorily required to be prepared in line with the universally accepted assumptions, principles and conventions of accounting which will aid intra-firm, inter-firm and

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industry comparisons overtime (Abel, 2001). The financial statements prepared by management must be audited by an independent person (Auditor).

There is concern that auditors and the public hold different beliefs about the auditors' duties and responsibilities, and the messages conveyed by audit reports; and also, that the existence of this expectation gap might cause the end users to eventually lose their trust in audit reports all-together. The existence of an audit expectation gap implies that the auditees and audit beneficiaries are dissatisfied with the performance of auditors. Asien (2007) argued that the unqualified audit opinion is wrongly seen as a certification that the firm is solvent, liquid and has the capacity to adapt to the dynamics of the environment which continuity of existence implies. This lack of understanding on the part of the public makes it difficult for them to know who has responsibility for financial statements preparation and the continued existence of the enterprise.

The audit expectation gap is denoted as the difference between what the public expects from an audit function and what the audit profession accepts the objective of auditing to be. The existence of an audit expectation gap is likely to be detrimental to the value of auditing and the well-being of the auditing profession as the contribution of auditing may not be fully recognized by society.

Best, Buckby & Tan (2001) claim that society's trust is the 'heartbeat of a profession'. Hence, if such trust disappears or is eroded in any way, the outcome is likely to involve skepticism and the depletion of value attributed to such profession. It can therefore be said that the auditing profession, which was once highly regarded and whose members were among the most credible professionals, has now become shrouded by mistrust and skepticism. Apparently, public misperceptions are a major cause of the legal liability crisis facing the accounting profession.

The term "audit expectation gap (AEG)" was first introduced to audit literature by Liggio (1974). He defines the AEG as the difference between the levels of expected performance as envisioned by users of a financial statement and the independent accountant.

Porter (1993) defines the expectation gap as the gap between society's expectations of auditors and auditors' performance, as perceived by society. It is seen to comprise two components: i) reasonableness gap (that is, the gap between what society expects auditors to achieve and what the auditors can reasonably be expected to accomplish); and ii) performance gap (that is, the gap between what society can reasonably expect auditors to accomplish and what auditors are perceived to achieve).

Despite the importance of the AEG to the auditing profession, there is paucity of research on how to address this issue in Nigeria. Therefore, this study seeks to empirically establish the perceptions of auditors, auditees (management and accountants) and audit beneficiaries (stockbrokers and investors), on the existence of audit expectation gap in Nigeria and how the gap could be narrowed.

Statement of the Problem

Auditors' reports add credibility to the financial reporting by ensuring that accounting statements follow the generally accepted guidelines and are accurate, but when the auditor's performance is below public expectations then his signature together with his brief opinion will no longer be useful to decision makers. The audit expectation gap is a detrimental issue to the auditing profession as the greater the gap of expectations, the lower the credibility, earnings potential and the prestige associated with the auditor's work. The audit expectation gap is harmful to the public, to investors and to politicians. Therefore, it becomes crucial to investigate the perceptions of all major stakeholders involved with financial reporting and the impact audit expectation gap could have on the audit profession.

Objectives of the Study

The objective of this study is to provide evidence on the existence of audit expectation gap in Nigeria, by investigating the perception of selected stakeholders. In order to achieve this aim, the study seeks to:

- a) Investigate the respondents' perceptions on the existence of audit expectation gap in Nigeria.
- b) Investigate the effect of expectation gap on credibility of the auditing profession in Nigeria
- c) Examine the perceptions of respondent groups on the existing duties and responsibilities of auditors.
- d) Highlight ways to reduce the expectation gap.

Research Questions

The study is designed to provide answers to the following research questions in order to achieve the stated objectives:

- a) To what extent does audit expectation gap exist in Nigeria?
- b) To what extent does the expectation gap affect the credibility of the auditing profession in Nigeria?
- c) To what extent do respondents' perception on the existing duties and responsibilities of auditors differ?
- d) In what ways can the expectation gap be reduced?

Research Hypotheses

The following null hypotheses were tested in order to provide answers to the aforementioned research questions:

Ho₁: There is no significant difference between the audit report and the expectations of its users in Nigeria.

Ho₂: The perceived audit expectation gap does not significantly affect the credibility of the auditing profession in Nigeria.

Ho₃: There is no significant difference in the perception of respondent groups on the existing duties and responsibilities of auditors.

LITERATURE REVIEW

Overview of Audit Expectation Gap

Historically, the word 'auditing' has been derived from the Latin word 'auditre' which means "to hear". In fact, such an expression conveyed the manner in which the auditing was conducted during ancient time. However, over a period of time, the manner of conducting audit has undergone revolutionary change. Auditing can be defined according to (Millichamp, 2002) as the independent critical examination of an expression of opinion, on the financial statement and underlying records of an enterprise, by an appointed auditor in accordance with the terms of his engagement and in compliance with any relevant statutory obligations and professional requirement.

The foundations for research in audit expectation gap were laid down in the seminar work of Lee (1970), who investigated the duties which auditors were expected to perform. This study ascertains the auditors' and the public's view of the roles and responsibilities of auditors through the use of questionnaire surveys. Liggio (1974) visualized the changing role of auditors at the initial stages and pioneered the concept of audit expectation gap.

Several accounting researchers and professional accounting bodies have offered their definitions. The expectation gap was originally defined as the difference between levels of expected performance as envisaged by auditors and users of financial reports. It is the gap between society's expectations of auditors and auditors' performance, as perceived by society (Shaikh&Talha, 2003). Ajayi, (2007:180) described the gap as, the public expectation of duties and responsibilities of external auditors as distinct from the statutory duties and responsibilities of these auditors. Expectation gap comes about when the public at large fixed their minds to what they expect from the auditors and what the auditors eventually does (Atu & Atu, 2010).

For the purpose of this study, the definition of the audit expectation-performance gap proposed by Porter (1993) is adopted. This gap is defined as that between:

- (i) Society's expectations of auditors; and
- (ii) Auditor's performance as perceived by society.

This gap comprises two major components:

- a) The 'reasonableness gap' the gap between what society expects of auditors and what auditors can reasonably be expected to accomplish.
- b) The 'performance gap' the gap between what society can reasonably expect of auditors and what it perceives they deliver. This may be subdivided into:
 - The 'deficient standards gap' the gap between the responsibilities, as defined by statue, case law, regulations and professional promulgations; and

• The 'deficient performance gap' – the gap between the expected standard of performance of auditors carrying out these responsibilities and auditors' actual performance of these duties.

Different Perspectives of the Audit Expectation Gap

A number of causes of the existence of the audit expectations gap have been put forward over the years. Ernest and Young (2002) found in the United States (US) that the fund managers constantly used non-financial performance measures in decision making. In this regard, the public is requesting the expansion of assurance function to cover not just the financial measures, but also the entire scorecard of an organization.

Another point of view is that the audit expectations gap is a result of corporate failure. The corporate failure, in turn, is regarded as audit failure. Corporate collapse is always accompanied by scrutiny of the roles of auditors and in some cases, litigations on the grounds that they have performed the task negligently (Power, 1994). Such focus is sharpened when the collapse of a company comes only a short time after its financial statements are given an unqualified audit opinion (Dewing and Russel, 2002). Another reason identified is the unreasonable expectations and a misunderstanding by the audit reports users of the audit functions. As argued by Boyd, Boyd, and Boyd (2001), user misunderstanding forms part of the elements that compromise the concepts of the audit expectations gap. This view appears to be advanced by the audit profession as a defense to the growing criticism on auditors. Unreasonable expectation is argued to have harmful implications on the auditing profession as the public may not be able to recognize the contribution of auditors to society and thereby undermine the value of audit function and limit auditors' work. (James & Izedonmi, 2010).

It is obvious from the discussion above that, the audit expectations gap exists because of various factors. It is reasonable to point out that the changes in the auditing environment have prompted the expectation questions. However, the underlying reasons for the existence of the audit expectations gap lie on its main players: the auditors and the users. On one hand, it is a direct result of the audit profession failing to respond appropriately to new issues arising from changes in the audit environment. For example, the refusal of auditors to assume responsibility for fraud detection and reporting exercise; and their involvement with non-audit services appear to have extended the audit expectations gap. On the other hand, the gap exists due to a misunderstanding or a lack of knowledge of the users over the audit functions. This misunderstanding then leads to unreasonable expectations. Perceived performance of auditors is an element which is difficult to measure as it changes consistently. It is however possible to substantially reduce but not to totally eliminate it (Olowookere, 2010).

Theoretical Framework

The study was anchored on a number of theories. These theories, which are briefly discussed and related to the study include:

- (i) The Role Theory;
- (ii) The Agency Theory.

The Role Theory: This provides a theoretical explanation for the existence of an audit expectation gap. Based on role theory, an auditor can be viewed as occupying a status or position as a profession in the social system. Due to the 'position' of a 'profession', auditors are required to comply with the prescriptions ascribed to them by the society. 'Failure to conform to the ascribed role or to meet role expectations creates the risk of social action to enforce conformity and to penalize nonconformity' (Davidson, 1975). According to Davidson (1975), 'the role of the auditor is subject to the interactions of the normative expectations of the various interest groups in the society (that is, different role senders) having some direct or indirect relationship to the role position.' He noted that these different groups (for example, management, the securities and exchange commission, institutional investors, analysts, auditors, accountants, etc.) may hold varying expectations of the auditor and these expectations may change from time to time depending on the re-specification of their own role requirements and the interaction of other forces in the society. Hence, the auditors are placed in multi-role and multi expectation situations. For the purpose of the study, stock brokers, investors, private accountants and management were used as role senders of the auditors.

The Agency Theory: In agency theory, a principal delegates decision making responsibility to an agent; in the case of a company the agents are the directors /managers. The theory implies entrusting resources to the agent and in turn these agents must usually produce a report regarding the use of resources both in quantitative and qualitative manner.

Those entrusted with decision making authority are generally regarded as having a duty of 'accountability' a duty to demonstrate how they managed the resources entrusted to them.

Audit serves a fundamental purpose in promoting confidence and reinforcing trust in financial information. Agency theory is a useful economic theory of accountability that helps to explain the development of the audit. Agency theory posits that agents have more information than principals and that this information asymmetry adversely affects the principals' ability to monitor whether or not their interests are being properly served by the agents. Agency theory is based on this relationship between investors (principals) and managers (agents).

An audit provides an independent check on the work of agents and of the information provided by an agent which, helps to maintain confidence and trust, (ICAEW, 2005). The simplest agency model assumes that no agents are trustworthy and if an agent can make himself better off at the

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expense of a principal then he will. Auditing is a means of monitoring that will lead to an overall reduction of agency costs (Ng, 2002).

METHODOLOGY

The Study Area

The study was undertaken in Edo State, Nigeria. Edo State was chosen because of its proximity to the researches in order to achieve the relative convenience and administration of the research instrument.

The Research Design

The study adopted a cross sectional survey design. This was designed to investigate the existence and nature of expectations gap in Nigeria and what needs to be done to bridge this gap.

Population, Sample Size and Sampling Technique

The population of the study from which the sample was drawn comprised of all the users of financial statements in Nigeria. Purposive sampling was adopted to ensure that only knowledgeable respondents were chosen. The obvious advantage of purposive sampling is that the researcher can use his skill and prior knowledge to choose respondents (Ogunbameru, 2003). This study examined the audit expectation gap among auditors and major users of financial statements in Nigeria (such as auditors, investors, stockbrokers, and management). One hundred and sixty (160) respondents were chosen from the population of study. The respondents were required to indicate the extent of their agreement or disagreement with each of the statements on a score of one (1) to five (5). A score of one (1) represented strong disagreement with the statement, while a score of five (5) represented strong agreements. This type of scaling was suggested when items are to be judged on a single dimension and arrayed on a scale with equal interval (Alreck and Settle, 1995).

Instrument for Data Collection

Both primary and secondary data were used for this study. The primary data were collected from the responses received from a structured questionnaire, while the secondary data were collected from journals and text books and internet.

Methods of Data Analysis

Descriptive statistical tools were used for the data presentation, which include Tables and frequency distribution. The inferential statistical tool used in testing the hypotheses formulated in the study was the chi-square technique. Since the data used in this study were not in absolute values but in frequency distribution, chi-square was considered to be most appropriate. Chi-square measures the difference between the expected and the observed frequencies and was calculated as follows:

$$\chi^2 = \underline{\Sigma(O-E)^2}$$

Ε

Where

O = Observed frequency

E = Expected frequency

Decision rule at any level of significance is that the null hypothesis is rejected if the calculated chisquare (χ^2) is greater than or equal to the critical value from the chi-square table, otherwise the null hypothesis is retained.

DATA ANALYSIS AND INTERPRETATION OF RESULTS

Respondents were grouped into four; auditors, investors, stockbrokers and management. A sample size of forty (40) is targeted for each respondent groups making a total of One hundred sixty (160) copies of questionnaire administered, a total of one hundred and forty four (144) copies were returned and used for analysis. This represents an overall response rate of ninety per cent (90%) for all the groups. These responses were used in providing answers to the questions raised in the study using Likert scale which measures the extent to which a person agrees or disagrees with the question. The most common scale is 1 to 5. Often the scale will be 1 = strongly disagree, 2 = disagree, 3 = not sure/neutral/no opinion, 4 = agree, and 5 = strongly agree.

Test of research hypotheses

Hypothesis One

Ho₁: There is no significant difference between the audit report and the expectations of its users in Nigeria.

This hypothesis states that there is no significant difference between what the auditor's report is and what the users of the report is

In Table 1, the Chi-Square (χ^2) calculated is 22.56, while the critical value is 21.03 from the statistical table. The Chi-Square calculated value (22.56) is less than the critical value (21.03). As a result of this, the research rejects the null hypothesis at 5% level of significance and 12 degree of freedom. It can be concluded that there is difference between the expectation of audit report users and that of the auditors. It therefore means that it is not what the users expect from the report that the report actually represent.

Ho₂: The perceived audit expectation gap does not significantly affect the credibility of the auditing profession in Nigeria.

This hypothesis states that audit expectation gap does not have significant effect of the credibility of the auditing profession in Nigeria.

In Table 2, the Chi-Square (χ^2) calculated is 22.00, while the critical value is 21.03 from the statistical table. The Chi-Square calculated value (22.00) is less than the critical value (21.03). As a

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result of this, the research rejects the null hypothesis at 5% level of significance and 12 degree of freedom. It can be concluded that audit expectation gap has significant effect on the credibility of the auditing profession in Nigeria. It therefore means that audit expectation gap affect the credibility of auditing profession in Nigeria significantly.

Ho₃: There is no significant difference in the perception of respondent groups on the existing duties and responsibilities of auditors.

This hypothesis states that there is no significant difference between what the auditors perceived as their duties and responsibilities and what the users perceived.

In Table 3, the Chi-Square (χ^2) calculated is 24.24, while the critical value is 21.03 from the statistical table. The Chi-Square calculated value (24.24) is less than the critical value (21.03). As a result of this, the research rejects the null hypothesis at 5% level of significance and 12 degree of freedom. It can be concluded that there is difference between what the auditors perceived as their duties and responsibilities and what the users perceived. It therefore means that it is not what the users perceived as auditors duties and responsibilities that are actually what the auditors take as their duties and responsibilities.

CONCLUSION

Researchers and the accounting profession have responded in different ways to the audit expectation gap. It is concluded that there is a wide expectation gap in the areas of auditors' responsibility for fraud prevention and detection. However, it must be noted that the expectation gap arises from a combination of excessive expectations and insufficient performance. The audit expectation gap is detrimental to the auditing profession as it has negative influences on the value of auditing and the regulation of auditors in the modern society. We established that if auditors are to retain the public's perception of them as providing a valuable service in society, the gap between the public's expectations of auditors' performance must be narrowed.

The study provides evidence about the nature of an audit expectation gap between auditors and users. The propositions made in the study were evaluated using selected items or statements of hypotheses. The results of the first hypothesis reveal that there is difference between the expectation of audit report users and that of the auditors. The results of the second hypothesis reveal that audit expectation gap has significant effect on the credibility of the auditing profession in Nigeria. The results of the third hypothesis reveal that there is difference between what the auditors perceived as their duties and responsibilities and what the users perceived.

In the light of the research findings, the following recommendations are made:

• The existing duties and responsibilities of auditors should be clearly defined and widened to include fraud detection.

- The public (users of financial statements) should be educated about the objects of an audit, auditors' role and responsibilities.
- The auditors should strive to ensure that he discharges his duties, objectively, professional
 and ethical conduct in order to sustain the confidence reposed in him by users for his
 services.
- Education of auditing practitioners should be encouraged through Mandatory Continuing Professional Education (MCPE) to all existing auditors in respect of their responsibilities under statute.
- There should be an independent government agency to oversee the implementation of audit regulations in Nigeria.
- The role of the auditor should be clarified so as to give a clear cut to the auditors and the users of audit reports.

REFERENCES

Abel, A. I. G. (2001). The Concept of True and Fair. The Institute of Chartered Accountants of Nigeria Students' Journal. April/June 6(2), ICAN Publication, Victoria Island Lagos.

Ajayi, C. A. (2007). Accounts of Banks and Insurance Companies. Lagos: Pumark Nigeria Ltd.

Alreck PL, Settle, R. B. (1995). The Survey Research Handbook. (2nd ed.). Chicago: Richard D. Irwin Inc.

Asein, A. A. (2007). Mandatory Rotation of External Auditors. The Nigerian Accountant. April/June, Vol. 40 No. 2 pp. 20-27.

Atu, O. K. & Atu, E. R. (2010). Auditing: The Journey so far and its Expectation Gap. The Nigerian Accountant, April/June

Best, P. J., Buckby S, Tan C (2001). Evidence of the Expectation Gap in Singapore, Management Audit. Journal, Vol. 16 No. 3 pp. 134-144.

Boyd, D. T., Boyd, S. C., & Boyd, W. L. (2001). The Audit Report: A Misunderstanding Gap between Users and Preparers. National Public Accountants. Vol. 3 pp. 56-60.

Davidson, L. (1975). The Role and Responsibilities of the Auditor: Perspective, Expectations and Analysis. Unpublished Background Paper for the Commission on Auditors' Responsibilities.

Dewing, I. P.& Russel, P. O. (2002). UK Fund Managers Audit Regulations and The New Accounting Foundation. Managerial Auditing Journal, Vol. 17 pp. 537-545.

Earnest, C. G. & Young (2002). How Intangibles are Driving Business Performance. Cambridge: Massachusetts Perseus Publishing.

Institute of Chartered Accountants of England & Wales (2005). Audit Quality Agency Theory and Assurance Faculty available at www.ICAEW.co.uk/auditquality.

James, O. & Izedonmi, F. I. O. (2010). Evidence of Audit Expectation Gap between Auditors and Users of Financial Reports in Nigeria. Journal of Business and Organizational Development. Vol. 2 September pp. 114-128.

Lee , T. A. (1970). The Nature of Auditing and its Objectives, Accountancy, Vol. 81 pp. 292-296.

Liggio, C. (1974). The Expectation Gap: the accountant's Waterloo. Journal of Contemporary Business. Vol. 3 pp. 27-44.

Millichamp, A. H. (2002). Auditing. Book Power/ELST Publisher, York Road, London.

Ng, A. Y. (2002). Public Accountability and Performance Auditing in Government. International Journal of Auditing, Vol. 6 No. 2 pp. 109-118.

Ogunbameru, **O. A.** (2003). Research Methods in Social Science (2nd Ed.) Norway: D-Net Communication E-Books Press.

Olowookere, **J. K.** (2010). An Evaluation of Audit Performance Gap in Nigeria. Being an Unpublished MSc. (Accounting) Thesis Submitted to The School of Postgraduate Studies, University of Lagos, Akoka.

Porter, B. (1993). An Empirical Study of the Audit Expectation Performance Gap. Account. Business Research. Vol. 24 pp. 49-68.

Power, M. (1994). The Audit Explosion, London: Demos.

Shaikh, J. &Talha, M. (2003). Credibility and Expectation Gap in Reporting on Uncertainties. Managerial Auditing Journal, Vol. 18 No. 6/7 pp. 517 – 529.

APPENDICES

HYPOTHESIS I

There is no significant difference between the audit report and the expectations of its users in Nigeria.

	SA		A		N		D		SD		TOT
RESPONDENTS	0	E	0	E	0	E	0	E	0	E	
AUDITORS	18	14.5	10	11.1	2	3.4	5	5.5	3	3.4	38
INVESTORS	19	14.1	11	10.8	1	3.3	4	5.4	2	3.3	37
STOCKHOLDERS	8	13.0	6	9.9	8	3.1	7	5.0	5	3.1	34
MANAGEMENT	10	13.4	15	10.2	2	3.2	5	5.1	3	3.2	35
TOTAL	55	55	42	42	13	13	21	21	13	13	144

Source: Researcher's computation using Microsoft Excel, 2010.

HYPOTHESIS II

The perceived audit expectation gap does not significantly affect the credibility of the auditing profession in Nigeria.

	SA		A		N		D		SD		TOT
RESPONDENTS	0	E	0	E	0	E	0	E	0	E	
AUDITORS	20	13.2	9	10.8	2	4.2	4	3.2	3	6.6	38
INVESTORS	9	12.8	15	10.5	6	4.1	3	3.1	4	6.4	37
STOCKHOLDERS	10	11.8	5	9.7	6	3.8	4	2.8	9	5.9	34
MANAGEMENT	11	12.2	12	10.0	2	3.9	1	2.9	9	6.1	35
TOTAL	50	50	41	41	16	16	12	12	25	25	144

Source: Researcher's computation using Microsoft Excel, 2010.

HYPOTHESIS III

There is no significant difference in the perception of respondent groups on the existing duties and responsibilities of auditors.

	SA		A		N		D		SD		TOT
RESPONDENTS	0	E	0	E	0	E	0	E	0	E	
AUDITORS	15	13.5	13	12.1	2	3.4	3	4.8	5	4.2	38
INVESTORS	19	13.1	11	11.8	1	3.3	4	4.6	2	4.1	37
STOCKHOLDERS	8	12.1	6	10.9	8	3.1	7	4.3	5	3.8	34
MANAGEMENT	9	12.4	16	11.2	2	3.2	4	4.4	4	3.9	35
TOTAL	51	51	46	46	13	13	18	18	16	16	144

Source: Researcher's computation using Microsoft Excel, 2010.

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НҮРО	THESIS	1			НҮРО	THESIS	11		
0	Е	D	D^2	D^2/E	O	Е	D	D^2	D^2/E
18	14.5	3.5	12.25	0.84	20	13.2	6.8	46.24	3.50
10	11.1	-1.1	1.21	0.11	9	10.8	-1.8	3.24	0.30
2	3.4	-1.4	1.96	0.58	2	4.2	-2.2	4.84	1.15
5	5.5	-0.5	0.25	0.05	4	3.2	0.8	0.64	0.20
3	3.4	-0.4	0.16	0.05	3	6.6	-3.6	12.96	1.96
19	14.1	4.9	24.01	1.70	9	12.8	-3.8	14.44	1.13
11	10.8	0.2	0.04	0.00	15	10.5	4.5	20.25	1.93
1	3.3	-2.3	5.29	1.60	6	4.1	1.9	3.61	0.88
4	5.4	-1.4	1.96	0.36	3	3.1	-0.1	0.01	0.00
2	3.3	-1.3	1.69	0.51	4	6.4	-2.4	5.76	0.90
8	13.0	-5.0	25.00	1.92	10	11.8	-1.8	3.24	0.27
6	9.9	-3.9	15.21	1.54	5	9.7	-4.7	22.09	0.28
8	3.1	4.9	24.01	7.75	6	3.8	2.2	4.84	1.27
7	5.0	2.0	4.00	0.80	4	2.8	1.2	1.44	0.51
5	3.1	1.9	3.61	1.16	9	5.9	3.1	9.61	1.63
10	13.4	-3.4	11.56	0.86	11	12.2	-1.2	1.44	0.12
15	10.2	4.8	23.04	2.26	12	10.0	2.0	4.00	0.40
2	3.2	-1.2	1.44	0.45	2	3.9	-1.9	3.61	0.93
5	5.1	-0.1	0.01	0.00	1	2.9	-1.9	3.61	1.24
3	3.2	-0.2	0.04	0.01	9	6.1	2.9	8.41	1.38
144	144	0.0	157	22.56	144	144	0.0	174	22.00

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HYP	OTHESIS	III		
О	Е	D	D^2	D^2/E
15	13.5	1.5	2.38	0.18
13	12.1	0.9	0.74	0.06
2	3.4	-1.4	2.05	0.60
3	4.8	-1.8	3.06	0.64
5	4.2	0.8	0,60	0.14
19	13.1	5.9	34.74	2.65
11	11.8	-0.8	0.67	0.06
1	3.3	-2.3	5.48	1.64
4	4.6	-0.6	0.39	0.08
2	4.1	-2.1	4.46	1.08
8	12.0	-4.0	16.34	1.36
6	10.9	-4.9	23.63	2.18
8	3.1	4.9	24.31	7.92
7	4.3	2.8	7.56	1.78
5	3.8	1.2	1.49	0.40
9	12.4	-3.4	11.53	0.93
16	11.2	4.8	23.23	2.08
2	3.2	-1.2	1.34	0.43
4	4.4	-0.4	0.14	0.03
4	3.9	0.1	0.01	0.00
144	144	0.0	164	24.24

Source: Researcher's computation using Microsoft Excel, 2010.