

**FROM COMPLIANCE TO CONTINUOUS IMPROVEMENT
FOCUSED NON-FINANCIAL AUDITING: A COMPARISON OF
ATTITUDES BETWEEN AUDITORS AND THEIR CLIENTS**

Damien J. Power, Milé Terziovski & Amrik S. Sohal

*Working Paper 47/02
November 2002*

WORKING PAPER SERIES



ISSN 1327-5216

Abstract

(Abstract on next page)

This paper is a work in progress. Material in the paper cannot be used without permission of the author.

Abstract

The purpose of this study is to compare the attitudes of non-financial auditors with that of their clients regarding the conduct of these audits, and the auditing process in general. The research involved the development and application of two survey instruments, one applied to a sample of 300 practising non-financial auditors, the other to a sample of 1500 of their clients. The respective response rates from each survey were 42% for the auditor sample (126 responses) and 27% for the client sample (400 responses). The research study revealed the following key findings:

The non-financial auditor sample saw compliance focused auditing as being of significantly less importance than did their clients. On the other hand, they saw auditing focused on continuous improvement as being significantly more important. The client group appear to prefer an auditing style that is a combination of both compliance and continuous improvement auditing, whereas the auditors appear to be highly focused on continuous improvement.

Non-financial auditors believe they are providing a style of auditing that is strongly focused on developing continuous improvement of client's quality systems. Their clients have entirely the opposite view, believing they are getting less continuous improvement focused auditing than they would like, and more compliance auditing than they need.

Based on the results of this study, we conclude that there is a significantly different view as to the "ideal" auditing style. The client group appear to see this as a combination of both compliance and continuous improvement auditing, whereas the auditors see it as being entirely focused on continuous improvement. This analysis verified that significant differences in expectation of audit conduct and performance exist between non-financial auditors and their clients. The main implication of our findings is that the auditing fraternity needs to bridge the gap that seems to exist between themselves and their clients. The new ISO 9001-2000 standard may play a key role in this process.

FROM COMPLIANCE TO CONTINUOUS IMPROVEMENT FOCUSED NON-FINANCIAL AUDITING: A COMPARISON OF ATTITUDES BETWEEN AUDITORS AND THEIR CLIENTS

INTRODUCTION

ISO certification, and the appropriate role of the non-financial auditor in the certification process, has been the subject of some debate and controversy for some time. As certification to quality (and other) standards has become more popular, and as organizations have developed more robust and mature quality cultures, there has been debate as to what the role of the auditor should be. In order to throw some light on this debate, this paper traces some of the areas of controversy in the literature. It then reports the findings of two surveys conducted with a sample of non-financial auditors and their clients. The purpose is to identify whether there are differences between the two groups in their views of the appropriate role of the non-financial auditor, the current conduct of the audit, and the skills and abilities required for effective auditing.

LITERATURE REVIEW

There are Contrasting Views as to the Purpose of the Non-Financial Audit:

Ingman (1991) takes the view that the quality audit should be used as a means of strengthening the quality system by removing barriers that may impede the continuous improvement process. Rather than a bureaucratic process, he sees it as a tool that can be used specifically to remove what he describes as "...bureaucratic encumbrance, the cancer of any quality system". To facilitate this he believes the use of feedback and involvement of all parties is essential.

Russell and Regel (1996) take this view further by developing a formal process to ensure that the audit acts to facilitate this type of improvement. They state that many clients believe that the audit process is complete when the audit report has been delivered, and that this signals the end of the involvement of the auditor in the process. In fact they believe that this constitutes at most three-fourths of the process, with the most important phase of implementation and verification of corrective actions constituting the final, and in their view most important, stage.

There is a view that the appropriate training/skills and competencies of non-financial auditors require proper definition:

Rothery (1993) considers that quality audit training should include conformity standards, assessment techniques, work planning and organising, verbal and written communication, managing, knowledge of production, accountancy, systems analysis and engineering, development of effective work relations, changing technology, basic accountancy and costing systems.

According to Mirams and McElheron (1995) one of the difficulties associated with providing adequate training programs for quality auditors is that it is difficult to participate in a recognised Lead Assessor Certification Program unless the person is performing multiple supplier audits. Low and Omar (1997) contend that the content of the quality audit needs to be dynamic and kept up to date to include changes in organisational structures. In view of this auditor training and professional development needs to reflect the workplace in which the audits are occurring. Sayle (1981) considers that the value of on-the-job training will depend on the effectiveness of the auditor providing the supervision. Whilst the trainee auditor may copy the supervisor's bad habits as well as skills, acting as an observer or as a member of the audit team can provide a valuable learning experience.

Rothery (1993) Mills (1993) indicate the need for a minimum four years full-time practical work experience, at least two of which are in quality assurance. Mills (1993) considers that the potential auditor's experience needs to be viewed in relation to the content of their job rather than by job title or functional title of the department in which the experienced was gained.

Whitford and Andrew (1994) state that auditors often speak in the direct language of the Standard rather than the operations of particular types of business. This may lead to misunderstandings when the Auditor is communicating with general staff who are unfamiliar with the standard or technical jargon. The authors recommend that the use of an auditor escort may facilitate interpretation.

There is a perception that the role of the non-financial auditor is changing:

Williamson et al (1996) claim that there is a poor overall understanding of the current philosophy regarding the proper conduct of quality audits. They believe that auditors give more attention to whether the client's quality system is effectively documented and less to the outcomes of the system. They also state that auditors need to change their approach and acknowledge the relevance of the product or service being produced or delivered, and that this issue will be the challenge to certification over the next few years. Willborn and Chen (1994) see the quality auditor as a professional who not only assesses compliance with applicable standards, but also identifies opportunities for improvements and assists the client in the registration of the organization's quality system. This in turn should lead to a move towards improved cooperation between the client and the auditor in a constructive drive for continuous improvement.

Rothery (1993) writes that there is a strong movement for the quality auditor to focus on quality improvement rather than surveillance. This view is shared by Chan, Willborn, Xiao and Li (1993) who write that the role of the auditor is not just to use a checklist to identify whether the auditee has complied with the relevant standards. Increasingly the auditor's role is to contribute to the organization's overall quality management with a move from inspector to continuous improvement facilitator. Fiorentino and Perigord (1994) go further and define the true function of the quality audit as on the job training. They believe that as companies are forced to change with altered business climates, so quality auditors are "...assuming a new role in helping companies improve their people, processes, products and customers" (Fiorentino and Perigord, 1994.1).

There are conflicting views on what constitutes a successful audit:

Rice (1994) contends that focussing the audit on consolidating long-term relations rather than meeting short-term goals is an important factor in ensuring the non-financial auditing process delivers successful outcomes. He recommends clear communication, preparedness, setting of objective criteria, focussing of problems, pre-decision consultations, sensible disagreements and a commitment to working relationships as important elements of the audit process.

The follow-up and implementation of corrective actions, and the general conduct of the closing meeting, are two aspects of the auditing process that receive a considerable amount of emphasis in the literature. Williamson et al (1996) found in a survey of 274 quality auditors in the UK that they regarded evidence of implementation of corrective actions as providing the strongest evidence of an effective quality system.

RESEARCH HYPOTHESES

As a result of the review of the literature, and the subsequent refinement of the survey instruments, the following hypotheses were developed for testing:

H1: There are differing perceptions between non-financial auditors and their clients of the purpose of the audit, the appropriate role and style to be adopted by the auditor and what constitutes a successful audit.

H2: Clients of non-financial auditors believe there is a difference between actual and required auditing practice.

H3: There are differing perceptions between non-financial auditors and their clients of the qualifications, skills and experience required by the auditor.

RESEARCH DESIGN AND METHODOLOGY

As a result of this literature review two survey questionnaires were developed. These survey instruments were designed to provide opportunities for testing a number of hypotheses using a range of inferential and descriptive techniques. This paper focuses on three of these hypotheses (as detailed above).

Quantitative Research Method

Survey Instrument Trial

In order to test the validity and reliability of constructs developed from the review of the literature, the two survey instruments were trialed with a sample of approximately 100 non-financial auditors. From this trial 36 responses were received. Factor analysis was used to test these results for construct validity and reliability of extracted factors. Many authors recommend the cautious interpretation of factors extracted from samples of less than 50 (Hair, Anderson et al. 1998:pp.98-99). In order to compensate for the small trial sample a process of academic/practitioner review complemented these results. This process allowed qualitative analysis and comment on the structure and content of the surveys and led to their further refinement.

Survey Samples

Samples for the conduct of the surveys were derived from two separate populations. The auditor survey was conducted with a group of 300 auditors, 263 of who were employed by QAS (Quality Assurance Services – the largest third party certifier in Australia), and 37 from New Zealand.

The survey of client organizations used a randomly selected sample of 1500 organizations certified under an ISO standard. This group of 1500 was selected from a database of 7000 certified organizations Australia wide.

Factor Analysis

Introduction

The process followed for factor analysis employed an exploratory model, with a principal components extraction employed and a Varimax rotation applied. The final factors extracted were also subjected to reliability testing with alpha coefficients produced for each. Samples used for factor analysis varied based on whether the items were included in both instruments or not.

Summary of Factors Extracted

As a result of this analysis the following factors were derived:

Expected Audit Practice:

Auditing for continuous improvement.

ALPHA RESULTS: Client Organizations = .7973 Auditors = .8044

Auditing for compliance.

ALPHA RESULTS: Client Organizations = .8043 Auditors = .7811

Actual Audit Practice:

Auditing for continuous improvement.

ALPHA RESULTS: Client Organizations = .8689

Auditing for compliance.

ALPHA RESULTS: Client Organizations = .7947

Auditing style that is detached and inflexible.

ALPHA RESULTS: Client Organizations = .6642

Professional Knowledge and Experience:

Business management skills.

ALPHA RESULTS: Client Organizations = .7675 Auditors = .6594

Auditing skills.

ALPHA RESULTS: Client Organizations = .7078 Auditors = .5671

Technical skills.

ALPHA RESULTS: Client Organizations = .6741 Auditors = .7295

Note: Where alpha results were less than .7 further analysis was conducted to ascertain the alpha value when variables were deleted. In all cases there was no improvement. In order to protect the integrity of the construct the factors were left intact in all cases.

Analysis Techniques

The specific quantitative techniques employed for analysis varied according to the nature of the hypotheses being tested and the design of the surveys:

Hypotheses 1 and 3: These two hypotheses required the comparison between replies to the same questions across the two separate samples. As such the methods of comparison used were the independent samples tests for comparison of means.

Hypothesis 2: Testing this hypothesis involved comparing the replies of managers responsible for quality in the client organizations to two separate questions (i.e. the “A” and “B” items contained in Part 4 of the client organization survey). To meet this requirement Paired Samples Tests for comparison of means were used on both transformed and untransformed data.

QUANTITATIVE ANALYSIS

Survey Response

300 non-financial auditors were surveyed with 126 responding, (response rate of 42%), while 1500 companies were surveyed with 400 responding (response rate of 27%).

Comparison of Averages of Two Samples

Hypothesis 1

In order to test this hypothesis the two factors extracted from the “Expected Audit Practice” group of items were compared between the Non-Financial Auditor and Client Organization samples. These were the “Auditing for Continuous Improvement” (consisting of 14 individual items) and “Auditing for Compliance” (consisting of 11 individual items) constructs. Both were compared between the two groups on an item by item basis, and the results tested for statistical significance.

Results

H1: There are differing perceptions between non-financial auditors and their clients of the purpose of the audit, the appropriate role and style to be adopted by the auditor and what constitutes a successful audit.

Outcome: *Null Hypothesis Rejected*

The results of the comparison in attitudes between non-financial auditors and client organizations to auditing for Continuous Improvement and Auditing for Compliance showed that for both constructs the difference in attitudes was highly statistically significant.

Auditing for Compliance

Comparison between the two groups yielded the following results.

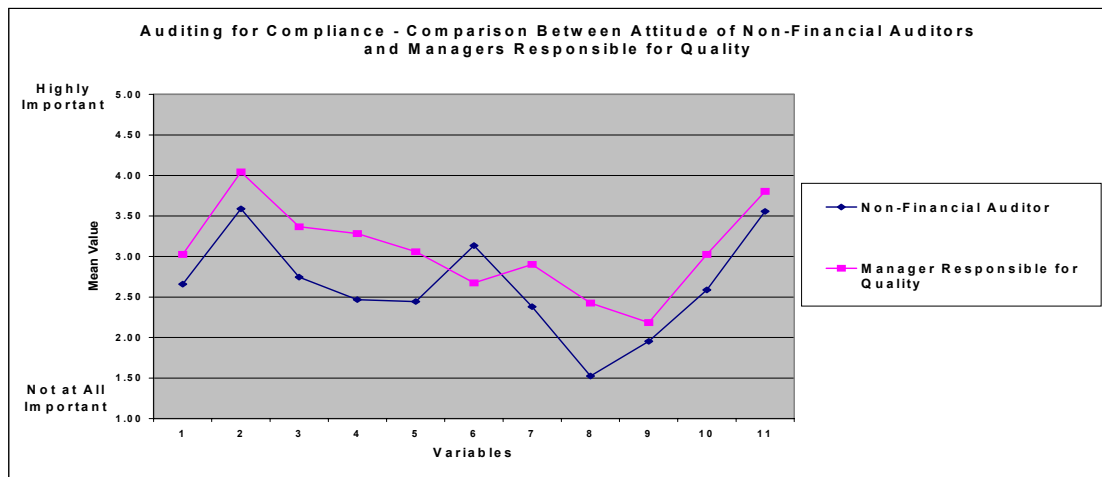


Figure 1: Auditing for Compliance: Comparison Between Attitude of Non-Financial Auditors and Managers Responsible for Quality.

On 10 of the 11 variables making up this construct the non-financial auditor sample saw auditing for compliance as being less important than their clients. The one variable where this trend did not apply was with item 6 (“The auditor should remain detached and not get involved with the client during the audit”), with the auditors seeing a detached style of auditing as more important than their clients. For 10 of the 11 items making up the construct the difference between the two samples was found to be significant at $p < .01$. The item where the difference was not statistically significant was “Knowledge of the standard alone is enough to conduct effective audits”.

Auditing for Continuous Improvement

Comparison between the two groups yielded the following results.

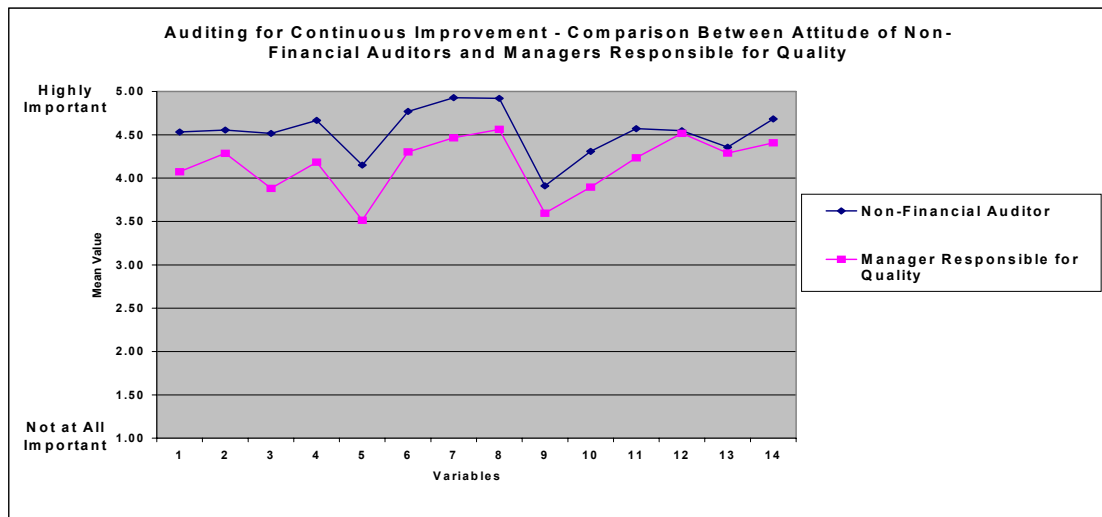


Figure 2: Auditing for Continuous Improvement: Comparison Between Attitude of Non-Financial Auditors and Managers Responsible for Quality.

For this construct the non-financial auditors saw this style of auditing as more important than did their clients on all 14 variables. For 12 of the 14 items the difference in the two samples was found to be significant at $p < .01$. The attitudes of the two groups to the two items “An audit is successful when communication has been open and frank”, and “An audit is successful when there is evidence of commitment to improvement” were almost identical.

Comparison Between the Two Constructs

Below is a comparison between the attitudes of each sample to the two constructs.

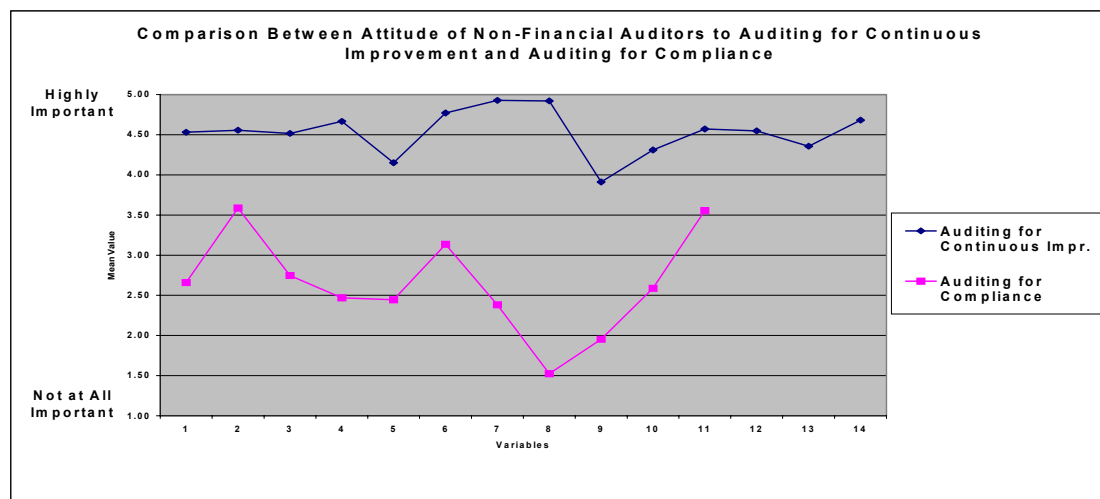


Figure 3: Comparison Between Attitude of Non-Financial Auditors to Auditing for Continuous Improvement and Auditing for Compliance.

The dramatic difference in attitude among the non-financial auditors between auditing for compliance and auditing for continuous improvement is demonstrated here. This is contrasted with the attitudes of client organizations. Although for this group it could also be said that the two constructs represent entirely different paradigms, the difference is not as stark. This is important to bear in mind when considering what the two samples see to be the ideal auditing style. It could be concluded that this style could be a combination of the two constructs for the client, whilst for the auditor this is seen to be almost solely continuous improvement focused.

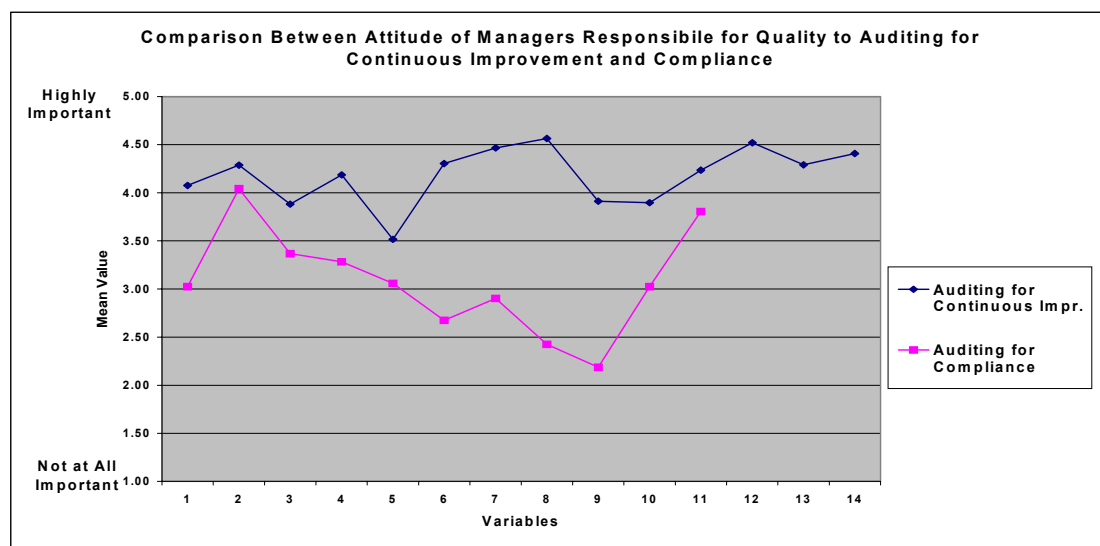


Figure 4: Comparison Between Attitude of Managers Responsible for Quality to Auditing for Continuous Improvement and Auditing for Compliance.

Hypothesis 2

In order to test this hypothesis the three factors extracted from the “Actual Audit Practice” group of items (i.e. from the Client Organization survey) were compared with the responses of the same group regarding “Expected Audit Practice”. Three constructs were developed, being Auditing for Continuous Improvement (12 items), Auditing for Compliance (5 items) and An Auditing Style that is Detached and Inflexible (5 items). These last two were combined for the purpose of this analysis into a single construct called

“Auditing for Compliance”. Both were compared on an item by item basis, and the results tested for statistical significance.

Results

H2: Clients of non-financial auditors believe there is a difference between actual and required auditing practice.

Outcome: *Null Hypothesis Rejected*

The results of the comparison between actual and desired auditing styles within client organizations showed that for both constructs the difference is highly statistically significant. Further comparison between perceptions of non-financial auditors and clients of the style of auditing being delivered also revealed significant differences.

Auditing for Compliance

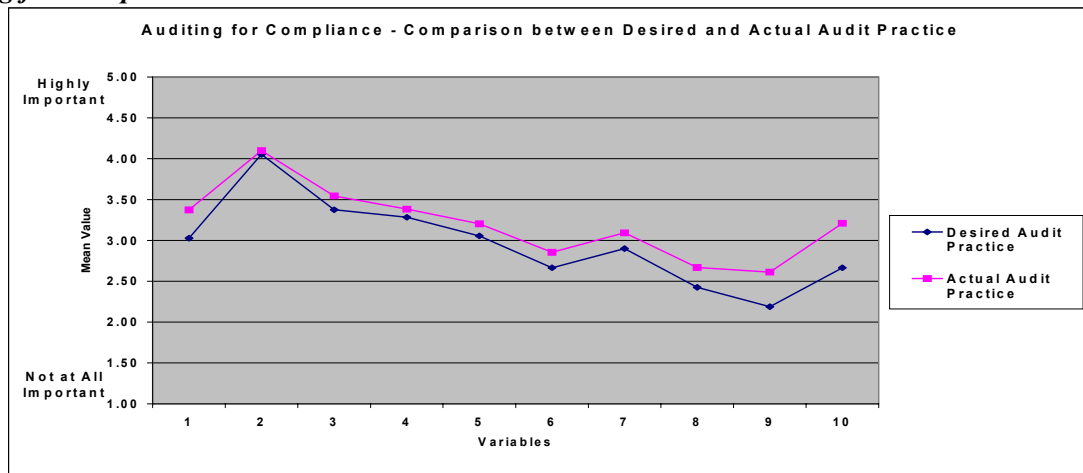


Figure 5: Auditing for Compliance: Comparison Between Desired and Actual Audit Practice.

The results show that the level of compliance style auditing is generally higher than that desired across the full data set. Analysis of the differences for each item showed this difference to be statistically significant at $p < .01$ for 8 of the 10 variables. The two items where the difference was not found to be significant were “The purpose of the audit is to assess compliance using evidence of a documented system” and “It is the role of the auditor to solely inspect the client’s system”.

Auditing for Continuous Improvement

The difference between desired and actual conduct for this construct was even more pronounced.

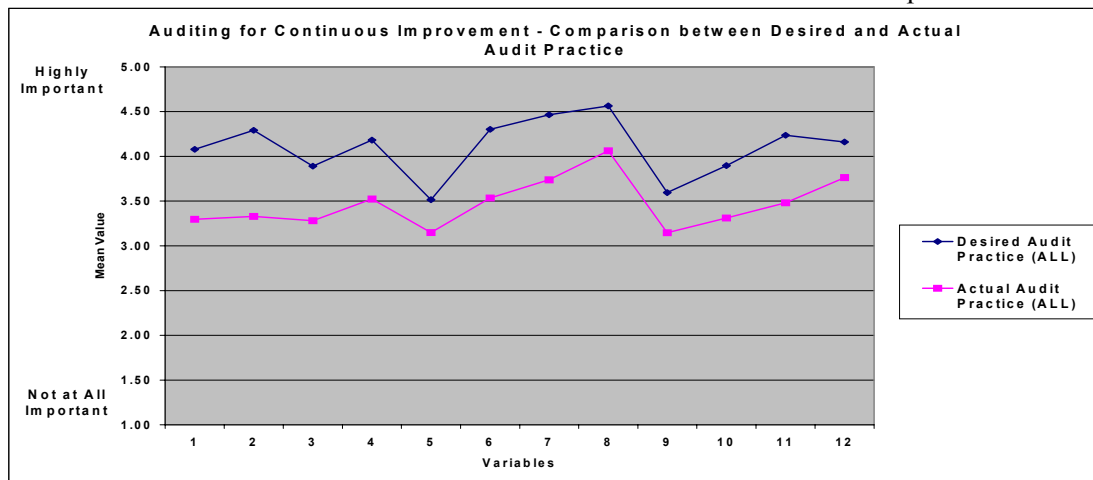


Figure 6: Auditing for Continuous Improvement: Comparison Between Desired and Actual Audit Practice.

The results show a significant perceived shortfall in terms of auditing with a view to facilitating continuous improvement, which is further supported by the fact that this difference was significant at $p < .01$ for all 12 items.

Comparison with the Perceptions of Non-Financial Auditors

A comparison between how non-financial auditors see themselves conducting audits, and the reported conduct of audits as seen by clients indicates the existence of a wide gap.

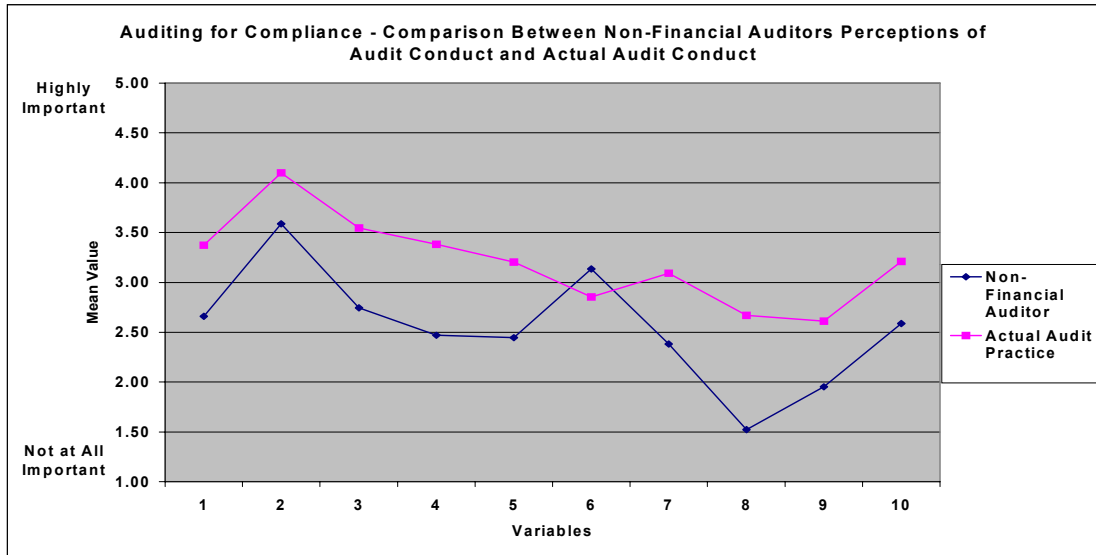


Figure 7: Auditing for Compliance: Comparison Between Non-Financial Auditor's Perceptions of Audit Conduct and Actual Audit Conduct.

Non-financial auditors see themselves as placing substantially less emphasis on compliance based auditing than do their clients. The single item where the situation was reversed was with the variable "The auditor should remain detached and not get involved with the client during the audit". In this case auditors were seen to be less detached than their clients would prefer. For 9 of the 10 variables the difference was significant at $p < .01$, while for the tenth it was significant at $p < .05$.

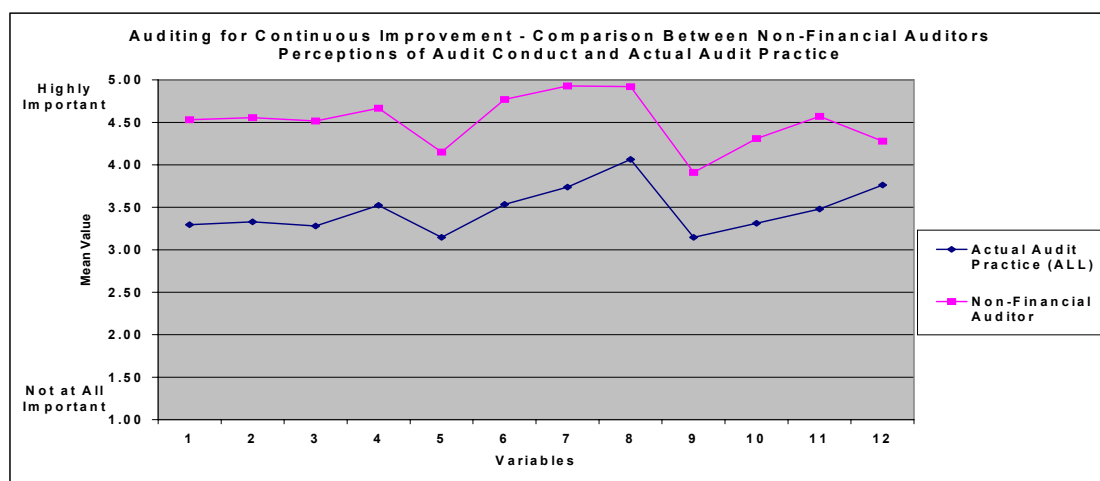


Figure 8: Auditing for Continuous Improvement: Comparison Between Non-Financial Auditor's Perceptions of Audit Conduct and Actual Audit Conduct.

The gap between actual and perceived (i.e. by the auditors) audit conduct is even more starkly highlighted by the Auditing for Continuous Improvement construct. Auditors clearly see themselves as providing a highly continuous improvement focused auditing style that is at odds with the perception of actual audit practice provided by their clients. For all 12 variables the difference was significant at $p < .01$.

Hypothesis 3

Introduction

In order to test this hypothesis the three factors extracted from the “Professional Knowledge and Experience” group of items (i.e. from both the Client Organization and Non-Financial Auditor surveys) were compared. Three constructs were developed being Business Management Skills (6 items), Auditing Skills (4 items) and Technical Skills (3 items).

Results

H3: There are differing perceptions between non-financial auditors and their clients of the qualifications, skills and experience required by the auditor.

Outcomes:

CONSTRUCT	RESULT
Business Management Skills	<i>Null Hypothesis Rejected</i>
Auditing Skills	<i>Null Hypothesis Accepted</i>
Technical Skills	<i>Null Hypothesis Rejected</i>

Table 1: Outcomes from Analysis of Hypothesis 3.

The results of the comparison between the auditor and client groups in terms of qualifications, skills and experience required for non-financial auditing showed that there was a significant difference in perceptions for two of the three constructs.

Business Management Skills

Comparison for this construct shows a significant difference in attitude between the two groups. This is supported by the statistical tests, which showed that 5 of the 6 items were different at a statistical significance of $p < .01$. The item where there was no significant difference related to “Customer Service Experience”. The direction of the difference was also interesting, in that the auditors saw these skills as being of greater importance than did the client organizations.

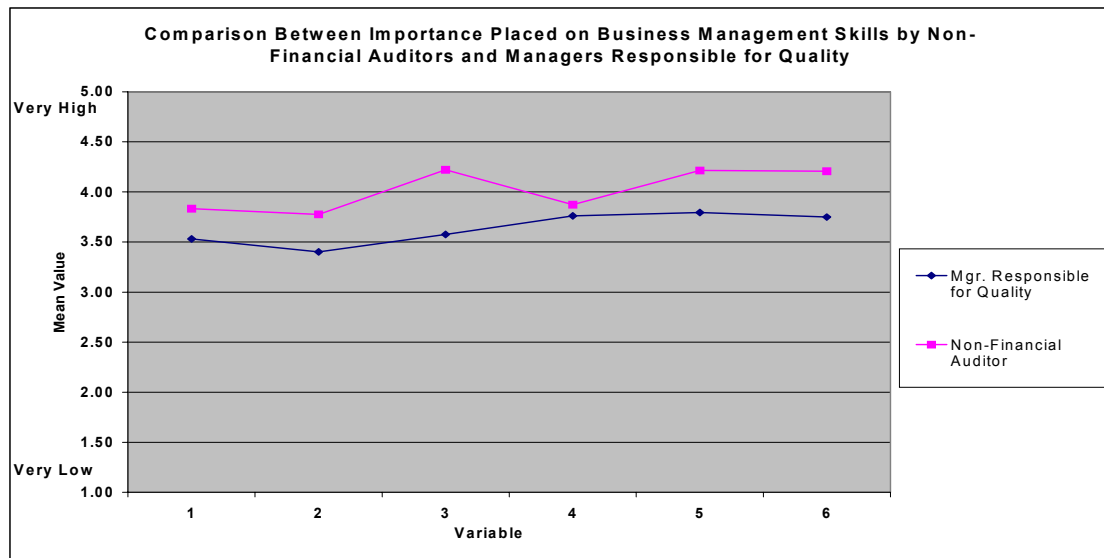


Figure 9: Comparison Between Importance Placed on Business Management Skills by Non-Financial Auditors and Managers Responsible for Quality.

Auditing Skills

There was no significant difference recorded in the attitudes of both groups for any of the four items making up this construct.

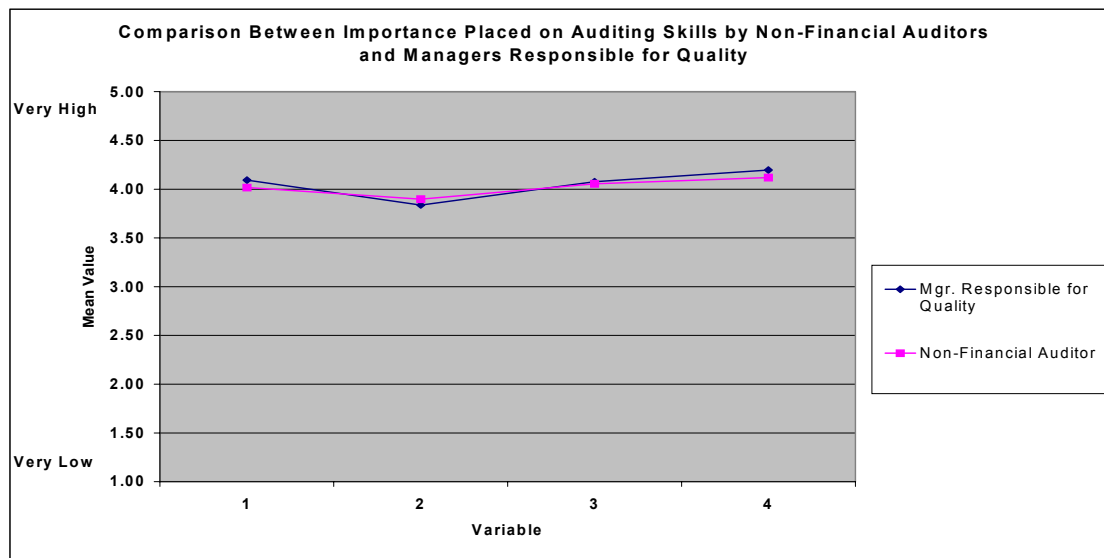


Figure 10: Comparison Between Importance Placed on Auditing Skills by Non-Financial Auditors and Managers Responsible for Quality.

Technical Skills

Two of the three items making up this construct were found to be different at $p < .05$. The item where the difference was not significant related to “Knowledge of Statistical Techniques”. The two items that did record a significant difference related to “Knowledge of Computing” and “Knowledge of Problem Solving Techniques”, and in both cases the auditors saw them as having a higher level of importance than the client organizations.

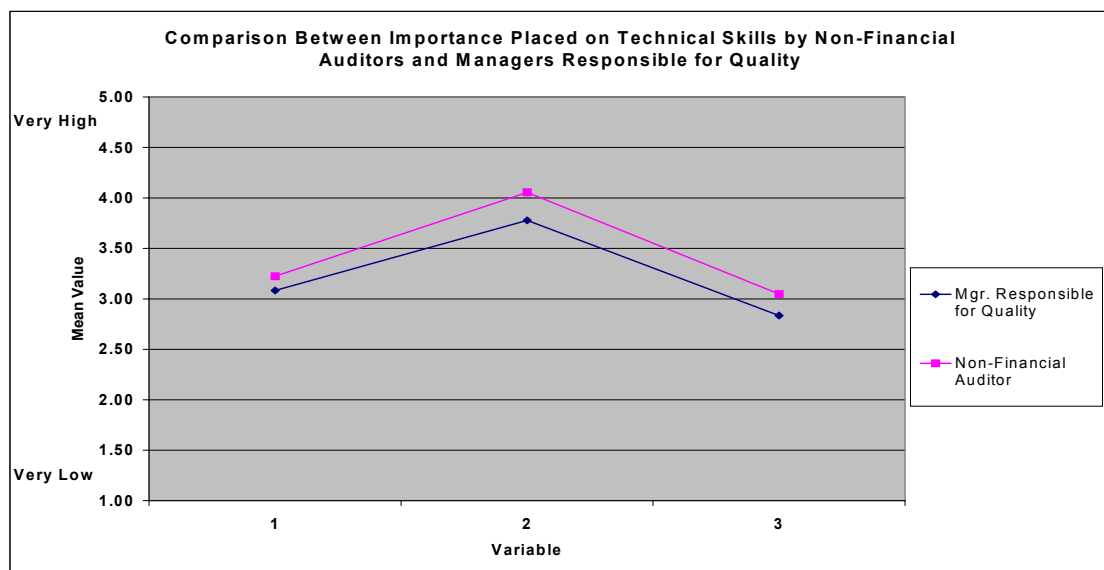


Figure 11: Comparison Between Importance Placed on Technical Skills by Non-Financial Auditors and Managers Responsible for Quality.

SYNTHESIS

Hypothesis 1

H1: There are differing perceptions between non-financial auditors and their clients of the purpose of the audit, the appropriate role and style to be adopted by the auditor and what constitutes a successful audit.

Two constructs were developed and tested under this hypothesis being “Auditing for Continuous Improvement” and “Auditing for Compliance”. For both constructs significant differences were found

between the attitude of non-financial auditors and their clients as to their relative importance. The non-financial auditor sample saw compliance focused auditing as being of significantly less importance than did their clients. On the other hand, they saw auditing focused on continuous improvement as being significantly more important than did their clients. This analysis further indicated that the two samples had a different view as to the “ideal” auditing style. The client group appear to see this as a combination of both compliance and continuous improvement auditing, whereas the auditors see it as being entirely focused on continuous improvement. This analysis verified that significant differences in expectation of audit conduct and performance exist between non-financial auditors and their clients.

Hypothesis 2

H2: Clients of non-financial auditors believe there is a difference between actual and required auditing practice.

Two constructs reflecting a compliance focused auditing style, and one directed at continuous improvement were also used to test this hypothesis. The results overall indicated there to be a significant difference between required and actual audit conduct for both styles of auditing within client organizations. Further comparisons between perceptions of non-financial auditors and clients of the style of auditing being delivered also revealed significant differences. The results indicated there to be a significantly higher level of compliance style auditing than desired, and significantly less continuous improvement style auditing. Further, non-financial auditors see themselves as placing significantly less emphasis on compliance based auditing than do their clients. For continuous improvement auditing this perception is reversed, with the auditors seeing themselves as providing a far higher level of this style of auditing than do their clients. The conclusion drawn from this analysis is that client organizations see a significant difference in the way they would like to see non-financial audits conducted and actual audit practice. There is also a sizeable gap in the perceptions of non-financial auditors (i.e. in terms of how they believe they are conducting audits), and actual audit practice as reported by their clients.

Hypothesis 3

H3: There are differing perceptions between non-financial auditors and their clients of the qualifications, skills and experience required by the auditor.

For this hypothesis three constructs representing different groups of skills were developed for testing. These were “Business Management Skills”, “Auditing Skills” and “Technical Skills”. The results indicated that there was a significant difference in perceptions between auditors and their clients of the relative importance of business skills and technical skills, but not for auditing skills. For both the business management skills group and those relating to technical skills the non-financial auditor sample saw them to be of more importance than did their clients. In general, auditors see business management and technical skills as more important for their effective operation than do their clients.

CONCLUSION

Based on the results of this study, we conclude that there is a significantly different view as to the “ideal” auditing style. The client group appear to see this as a combination of both compliance and continuous improvement auditing, whereas the auditors see it as being entirely focused on continuous improvement. This analysis verified that significant differences in expectation of audit conduct and performance exist between non-financial auditors and their clients. Furthermore, client organizations see a significant difference in the way they would like to see non-financial audits conducted and actual audit practice. There is also a sizeable gap in the perceptions of non-financial auditors (i.e. in terms of how they believe they are conducting audits), and actual audit practice as reported by their clients. In general, auditors see business management and technical skills as more important for their effective operation than do their clients. The main implication of our findings is that the auditing fraternity needs to bridge the gap that seems to exist between themselves and their clients. The new ISO 9001-2000 standard, just released, may play a key role in this process.

REFERENCES

- Bettes, D. C. (1993). "'Training of Internal Quality Auditors'." Industrial and Commercial Training **25**(7): 18-21.
- Chan, F. Y., W. Willborn, et al. (1993). "'Research Report: An Expert System for quality Management Auditing'." Asia Pacific Journal of Quality Management **2**(1): 65-72.
- Fiorentino, R. and M. Perigord (1994). "'Going from an Investigative to a Formative Auditor'." Quality Progress **27**(10): 61-65.
- Hair, J. F., R. E. Anderson, et al. (1998). Multivariate Data Analysis, Prentice Hall International.
- Ingman, L. C. (1991). "'The Quality Audit'." Pulp and Paper **65**(10): 125-127.
- Low, S. P. and F. H. Omar (1997). "'The Effective Maintenance of Quality Management Systems in the Construction Industry'." International Journal of Quality and Reliability Management **14**(8): 768-790.
- Mills, D. (1993). Quality Auditing. London, Chapman and Hall.
- Mirams, M. and P. McElheron (1995). Gaining and Maintaining the New Quality Standard. London, Pitman Publishing.
- Rice, C. M. (1994). "'How to Conduct an Internal Quality Audit and still have Friends'." Quality Progress **27**(6): 39.
- Rothery, B. (1993). ISO 9000. Aldershot, Hants., Gower Press.
- Russell, J. T. and T. Regel (1996). "'After the Quality Audit: Closing the Loop of the Audit Process'." Reviewed in Quality Progress **29**(6): 65-67.
- Sayle, A. J. (1981). Management Audits: The Assessment of Quality Management Systems. London, McGraw-Hill Book Company (UK) Ltd.
- Whitford, B. and R. Andrew (1994). The Pursuit of Quality. Perth, Beaumont Publishing House.
- Willborn, W. and T. C. E. Chen (1994). Global Management of Quality Assurance Systems. New York, McGraw-Hill Inc.
- Williamson, A., J. H. Rogerson, et al. (1996). "'Quality System Auditor's Attitudes and Methods: A Survey'." International Journal of Quality and Reliability Management **13**(8): 39-52.