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SCIENTIFIC EVALUATION OF THE PROCESS OF SCANNING AND FORENSIC ANALYSIS OF THUMB PRINTS ON BALLOT PAPERS

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ABSTRACT

The research reported in this paper was motivated by the petitions submitted to the Election Petition Tribunals in Nigeria alleging multiple thumbprints of ballot papers in the elections held in 2007. Some of the Election Petition Tribunals exercised their discretion by granting the Petitioners the leave sought to inspect, scan and carry out forensics analysis of multiple thumbprints on ballot papers. The objective of the paper is to provide a legal framework for the truth, validity and admissibility in the court of law the process of scanning and forensic analysis of thumb prints on ballot papers in a developing country such as Nigeria. The method proposed to accomplish this objective has a number of phases. First, the features of thumbprint, certified procedure for thumb printing and certified quality check list for thumb printing are reviewed. Second, the practical issues of the certification and acceptability of the procedure for scanning and forensic analysis of thumb prints on ballot papers are proposed. Thirdly, the premises and conclusions of the logic of the admissibility, scientifically and in the court of law, of the results obtained from scanning and forensic analysis of thumb prints on ballot papers are also presented.

INTRODUCTION

Thumbprints are the results of minute ridges and valleys found on the thumb of every person. It is an impression of the friction ridges of all or any part of the thumb. A friction ridge is a raised portion of the epidermis on the palmar (palm and thumbs) skin, consisting of one or more connected ridge units of friction ridge skin. Thumbprint is also an impression of the coetaneous ridges of the fleshy distal portion of a thumb, which may be made by applying ink and pressing the thumb on paper. Each print has an exclusive and unique owner since there have never been two individuals recorded with the same thumb print Eckert, (1996).

In criminal cases, thumbprint has been described as rolled print or latent print in Michael and Imwinkelried, (2006). Rolled prints are typically produced when a person is arrested in connection with a crime. As part of the booking process, the police or other security agent rolled the arrestee's thumb in ink and then impressed it on a card. The card is then subsequently stored in libraries of such cards maintained by local, state and national government agencies. Latent print, in contrast, is typically produced at a crime scene and is usually not readily visible. It occurs when the natural secretions of the skin are deposited on a surface through thumb contact at the crime scene. The best way to render latent thumbprints visible, so that they can be photographed, is complex and depends,

for example, on the type of surface involved. A powder or chemical reagent is often used to produce a high degree of visual contrast between the ridge patterns and the surface on which the thumbprint was left. If the police suspect that a criminal might have left a thumb print impression on a particular surface, such as glass tabletop, they can use techniques such as the application of special powders to visualize the image. When an image is found, it is photographed for comparison with the images in the libraries of the thumb print cards.

The causation of the wide acceptability of thumbprint for identification over other biometrics has been presented in Roberts, (2005), Michael and Imwinkelried, (2006), Palmiotto, (1994) and Salter, (2006). The reasons for the much larger market of personal authentication using thumbprints include:

a. Small and inexpensive thumbprint captures devices.
b. Fast computing hardware.
c. Recognition rate and speed to meet the needs of many applications.
d. The explosive growth of network and internet transactions.
e. The heightened awareness of the need for ease-of-use as an essential component of reliable security.

Thus, thumbprint remains the most universally accepted legal indicator for uniqueness of any individual world wide. In 2007, Presidential, Governorship, National Assembly (Senate and Representative) and State Assembly elections were held in Nigeria. Many petitions were raised alleging multiple thumbprints on ballot papers. Consequently, election petition tribunals were set up in each of the thirty States and Federal level to look at the cases. Some of the tribunals granted the leave sought by the petitioners to inspect, scan and carry out forensic analysis of thumbprints on ballot papers. The objectives of the research reported in this paper are to:

a. Enumerate the scientific basis for scanning and forensic analysis of thumbprints on ballot papers.
b. Assess and evaluate the process of scanning and forensic analysis of thumbprints on ballot papers with a view to demonstrating their reliability, validity and admissibility in the court of law.

FEATURES OF THUMBPRINTS

Thumbprint is the result of minute ridges and valleys found on the hand of every person. The ridges of thumb form pattern of loop, whorl and arch as presented in Salter, (2006), Eckert, (1996), Wayman et al, (2005) and Yount, (2007). Each of the three pattern types has focal points which are used for classification.

In the loop pattern, there are two focal points, namely; core (centre) and delta. The delta is the area of the pattern where there is a triangulation or a dividing of the ridges. In the process of recording thumbprints, the delta and the area between the delta and the core must be completely recorded. The loop is further classified into central pocket loop, ulnar loop and radial loop. A whorl pattern has two or more deltas. In the process of recording thumbprints, all deltas and the areas

between them must be recorded. The whorl is further classified into plain whorl, double loop whorl and accidental whorl. The arch pattern has no delta or core. The arch is further classified into plain arch and tented arch.

It is a scientific fact that any thumbprint which does not bring out one of the listed patterns is not good for any forensic analysis.

CERTIFIED PROCEDURE FOR THUMB PRINTING

There are standard rules that must be obeyed in the process of taking any thumbprint for it to be acceptable for scanning and forensic analysis. The major steps for thumb printing are:

a. Thumb to be printed must be clean and dry. Wiping the thumb with an alcohol swab and then drying them should prevent perspiration from being a problem. If the individual's occupation has caused a wearing down or rough surface on the thumb, lotion is used to soften the thumb while the lotion must be wiped off carefully before printing.
b. Thumb printing must be supervised by a forensics expert or technician. For example, the individual being thumb printed must be made to relax, look at some distant object to distract him or her from what the expert or technician is doing.
c. If using the ink and paper method, roll the thumb on the inking plate or Porelon Pad so that the entire thumbprint pattern area is evenly covered with ink. The ink should cover from one edge of the nail to the other and from the crease of the first joint to the tip of the thumb. Using the right amount of ink is of vital importance. Too little ink would cause the thumbprint impression to be too light while too much ink would cause the fine details of the thumbprint impression to run together.
d. Roll the thumb from nail to nail in the space provided for thumb printing while care is taken to lift the thumb up and away after rolling in other to avoid smudging.

It has been proffered in http://www.fbi.gov/hq/cjisd/fproll.html that any thumbprint that was not taken in accordance with the above stated steps is not acceptability and forensic analysis.

CERTIFIED QUALITY CHECK LIST FOR THUMB PRINTING

Federal Bureau of Investigation (FBI) of United States of America presented a certified quality checklist of thumb printing in http://www.fbi.gov/hq/cjisd/fproll.html. To verify and validate that thumbprint impressions meet the FBI standard, the following checklist is used:

a. The thumbprints must be rolled fully, from nail to nail in order to register full thumbprint rather than partial thumbprint of the same person.
b. If the thumbprint impression is a loop, the delta and core must be present. If the thumbprint impression is a whorl, all the deltas must be present.
c. The thumbprint impressions must be clear and distinct.
d. The thumbprint impressions must be uniform in tone and not too dark or light in order to ensure appropriate thumbprint of the same person.

e. If LiveScan equipment is used to capture thumbprint impressions, it is important to clean the equipment regularly and calibrate it routinely per the manufacturer guidelines, to ensure the quality and integrity of the thumbprint images.

RELIABILITY AND VALIDITY OF THE PROCEDURE FOR SCANNING AND FORENSIC ANALYSIS OF THUMBPRINTS ON BALLOT PAPERS

Truth, validity and reliability are the primary indices for measuring and authenticating any procedure for scanning and forensic analysis of thumbprints on the ballot papers used in any election. In Monk, (1985), it is stated that deductive reasoning is the process of arriving at logically necessary conclusion from initial premises. Deduction is concerned with the validity of an argument and not with its truth. Truth is congruent with the state of affairs in the world while validity is concerned with the internal structure of an argument. The independence of truth and validity allows true statements to be derived from invalid arguments and false statements to be derived from valid arguments. Whereas a procedure can be true, it does not imply that it is valid; a valid procedure would necessarily be true and reliable. We address the practical issues of truth, validity and reliability in the context of a real/artificial life scenario and election scenario in a developing country such as Nigeria.

Real/Artificial Life Scenario

a. Consider a situation in the field of photography where the picture of an object is taken concurrently using three different cameras. The quality of the three pictures would likely differ subject to the forces that drive each of the cameras. The forces that are relevant in this instance include, among others, human, hardware, software and consumables such as paper, film, light intensity or weather conditions.
b. In domestic life, the knife used for cutting yams that are meant for planting cannot be used for cutting yams that are meant for cooking, barbing the head of human beings or shaving the beard of a human being.
c. In farming, the hoe used for hipping in the farm land cannot be used for weeding or harvesting palm fruits.
d. In the computer world, the scanner of a programming language is unique and cannot be used to scan any other programming language in the spirit of compiler design and construction because each programming language has its unique constructs.

Election Scenario

a. The ballot papers were produced by the Independent National Election Commission (INEC) of Nigeria without a mindset of scanning and forensic analysis on them.
b. The scanning machine used by the Petitioners was not certified for thumbprints forensics. A scanner built for the recognition of the characters of a natural language or computer language cannot be appropriate for scanning and recognizing the characters of a thumbprint which is graphic in nature. In the scientific world, scanning goes beyond the taking of the

photocopy of an object. Scanning involves the recognition of the characters of an object and matching those characters to some patterns stored in an existing certified database.

c. During the process of scanning ballot papers, some may jam on the scanning machine, thereby causing the jammed ballot papers to be reloaded for re-scanning. A major consequence of this is the distortion of the sequence order of the impressions, especially when the scanner is automated to serially renumber or index each ballot paper. Moreover, some images could be poorly scanned due to the poor quality of the source document (ballot papers), malfunction of the scanner hardware and software, and errors arising from scanner operator. Another factor that may cause poorly scanned impression is the situation when some ballot papers have dust on them or were badly folded by the voters. It has been demonstrated in Epstein, (2002) that the impression of dust or a fold, especially, when it aligns with a thumbprint is a likely causation of a distortion of a thumbprint impression.

   The following are practical issues that can be contested in the court of law:

   i. The method adopted for filtering bad images from good images by any parties that were presenting results of scanning and forensic analysis of thumbprints in any case.
   ii. The method adopted for re-sequencing the scanned impressions by any parties that were presenting results of scanning and forensics analysis of thumbprints in any case.

d. In database processing, each object has a unique identifier. It has been reported in McGee, (1974), Silberschatz et al (2002) and Akinyokun, (1990) that the ethics of data processing does not allow the manipulation of the unique identifier of any object in a database. The stipulation that certain attributes of an object form a unique identifier of the object constrains the object of legal insertion, deletion and update such that any manipulation of the unique identifier of the object, presupposes a different object entirely.

e. The life cycle of forensics programme has the following phases:

   i. Identification.
   ii. Individualization.
   iii. Evidence.
   iv. Analysis of evidence

In the elections held in Nigeria in 2007, some thumbprints alleged to be multiple thumbprints were identified. However, no individuals caught in the act of multiple thumb printing were standing trial before any Election Petition Tribunals. If the scanning of ballot papers was carried out by a party to the total exclusion of any other parties, such an exercise constitutes a breach of Helsinki 1978 Declaration on standard procedure for information collection and processing as reported in Griethuysen, (1982). The Declaration stipulates that where information involving two or more parties is at stake, the syntactic rules and semantics rules for processing the information and communicating the results of processing have to be jointly determined and agreed upon by all parties; otherwise the integrity of the processing and communications are questionable.

The following are practical issues that can be contested in the court of law:

i. The level of the involvement of the "Forensic Expert" in the thumb printing of ballot papers by voters on the day of election.
ii. The levels of the involvement of the Forensics Expert in the acquisition of the ballot papers from the Independent National Electoral Commission (INEC) of Nigeria for scanning and online or offline transportation of the scanned ballot papers to a certified laboratory agreed upon by all the stakeholders of the election (petitioner, respondents and election tribunal).
iii. The truth and validity of the scientific method adopted by the Forensics Expert in transferring the scanned images to a certified laboratory overseas.

The truth and validity of scientific method adopted by the Forensics Expert in recognising thumbprint patterns, factorising thumbprints into clusters, cluster analysis and evaluation of the error margin of the pattern matching.

f. Forensics study and analysis are exclusive preserve of the Police or any certified National Investigation Bureau such as the FBI in USA, Scotland Yard in UK and so on. In all the Election Petition Tribunals in Nigeria, there were no government or state security agencies that were responsible for the forensic analysis of multiple thumbprints on ballot papers. The Petitioners carried out the forensic analysis and interpretation of their results without the guidelines that were jointly agreed upon by all the stakeholders of the elections. Moreover, the representatives of the stakeholders of the elections were not, collectively and jointly, on ground at every stage of scanning and forensic analysis of thumbprints on the disputed used ballot papers.
g. The Petitioners did not carry out the matching of the thumbprint of any individual with thumbprints profiles provided by a certified national thumbprints profile database since INEC has no certified voters' thumbprints profiles database.

The truth, validity and reliability of the procedure for scanning and forensic analysis can be guaranteed if and only if the representatives of all the stakeholders of the election which is under review fully participate in all the stages of scanning and forensic analysis. It is also noted that if there are concrete evidence to support flawed scanning process, the basis for forensic analysis would not arise. If the premise of logic is wrong, then the conclusion of the logic would be wrong. Whereas in the computer world, "garbage in, garbage out", in the Christian world, a house built on sand would collapse.

ADMISSIBILITY IN LAW COURT THE RESULTS OBTAINED FROM SCANNING AND FORENSIC ANALYSIS OF THUMBPRINTS ON BALLOT PAPERS

The premises and conclusions of the logic of admissibility of the results obtained from scanning and forensic analysis of thumbprints on ballot papers are presented as follows:

a. The scanning and forensic analysis were carried out on ballot papers used in the areas that were presumed to be the stronghold of the first Respondent. Thus, the ballot papers used in the areas that were presumed to be the stronghold of the Petitioners were not subjected to scanning and forensic analysis. There is a case of processing incomplete data in this instance. In database system, the processing of incomplete data, in principle and practice, produces incomplete output reports. Any interpretation, planning, decision-making, forecasting and value judgement based on incomplete data in any situation are incomplete and in conclusive.

b. There is a concept of picture distortion in forensics which may arise during the process of offline transfer or online transmission of picture from one medium to another medium. A picture distortion may arise from the overlay of the primary picture with many foreign secondary and tertiary images prior to and during scanning through humans; technology of hardware or software; interruption or malfunction of hardware or software; and consumables. Electronic evidence exists to show a strong possibility of thumbprints manipulation prior to and during forensic analysis. Application software was developed, tested and run on the floor of one of the Election Petition Tribunals in Nigeria with a view to demonstrating the following:

   i. Electronic erasure of thumbprints from many ballot papers and electronic replacement of the erased thumbprints with a particular thumbprint.
   ii. The cropping of thumbprints from ballot papers and the associated flaws.
   iii. The manipulation of the ballot paper serial number which serves as the unique identification of a voter in an election situation and the associated flaws.
   iv. The effect of picture distortion on the quality of the output of scanned ballot papers.

The malicious, mischievous or wilful electronic manipulation of ballot papers and thumbprints, as demonstrated on the floor of the Tribunal, can be prevented if and only if the representatives of all the stakeholders were made to jointly participate in the collection of ballot papers from INEC, inspection, scanning, forensic analysis and interpretation of results. In the absence of joint participation in this regards, any results tendered for cross examination and court address are in serious doubt, defective and contentious.

c. It is noted that if the following are missing:

   i. Specific thumbprint pattern types that were replicated,
   ii. Database of voters profile used for recognition and matching of thumbprints,
   iii. Specific individuals that have the identified thumbprint pattern types and ,
   iv. Correlation coefficients of thumbprints and the factor analytic model of the scanned thumbprints.

Then, the findings and conclusions of the Forensics Expert are grossly based on generalized evidence rather than concrete evidence

d. The due process of computer forensics which is characterized by the following is missing

from the steps taken to carry out the forensic analysis by the Petitioners:

i. Identification of thumbprints alleged to be the replica of the thumbprint of some specific voters. Indeed, identification was based on a general feeling of the Petitioners.
ii. No specific individual was caught in the act of multiple thumb printing during election and standing trial before any Election Petition Tribunals. Therefore, the individualization of alleged multiple thumbprints, in this instance, was arrantly generalized.
iii. No concrete evidence that some individuals (voters) were responsible for multiple thumb printing during election.
iv. Forensic analysis involves the matching of identified thumbprints of individuals with certified thumbprint profiles database. It has been reported in Punch, (19-01-2008) that INEC has no certified thumbprint profile database of Nigerian voters. It is true and valid that no certified thumbprint profile databases in Europe, United States of America, Latin America, Asia and China contains Nigerian voters' thumbprint profile database as a subset.

e. The deficiency of Nigerian 1999 Constitution and 2006 Electoral Act has become obvious because of their failure to prescribe a constitutional guide for scanning and forensic analysis of thumbprints on ballot papers of any elections in Nigeria. The prescription of the procedures is relevant because, in the scientific evaluation of any situation in the law court, there must be a constitutional guide. Decided court cases on constitutional violations in Harvey v. Horan, (2001), Tanli vs Turkey, (1996), Regina vs Chief Constable of South Yorkshire Police, (2004) and Gordon Wayne Bese Vs Director of Forensic Psychiatric and Attorney General of British Columbia, (1999) have shown the relevance of constitutional guide in any scientific evaluation of any litigation before any court of law.

FINDINGS AND CONCLUSIONS

The findings are that the following instruments were not on ground in Nigeria prior to and during the 2007 elections held in Nigeria:

a. Constitutional guide for scanning and forensic analysis of thumbprints on ballot papers in elections organized by INEC in 2007.
b. INEC mindset on scanning and forensic analysis of thumbprints of voters of elections in 2007.
c. Certified Nigerian voters' thumbprint profile database developed and maintained by INEC.
d. Certified forensics department in Nigeria equipped with standard laboratory and forensics experts for scanning and forensic analysis of thumbprints on ballot papers used during elections.
e. Evidence that some individuals were caught in the act of multiple thumb printing during any of the elections held in 2007.

Application of science in solving specific crimes is a serious business that requires adherence to standards and strict rules. The proper collection, preservation, and forensic analysis of evidence is a tremendous tool that must be fully exploited without giving room to doubt. Scientifically, it would be inappropriate to overlook the limitations imposed by the lack of specific focus on biometric challenges while INEC was making preparation for the 2007 elections in Nigeria. As a standard, INEC should have recruited trained technicians in the domain of Forensics to handle the process of registering thumbprint impressions during voters registration and election. Any attempt to engage in thumbprint forensic analysis to determine multiple or double voting at a later date will be scientifically untenable. INEC should have maintained a standard database of voters' profiles with their thumbprint details warehoused under a standard condition and environment to preserve the integrity of such a database. INEC should have warehoused all the ballot papers in a save place preferably in a strong room with adequate security and air conditioning to avoid third parties and unauthorized INEC staff from having access to them.

Refusal to adhere to specific, universally acceptable standard created professional challenges at the time of scanning, forensic examinations and pattern matching. This resulted in a scenario akin to 'creating new rules in the middle of a game'. The following conclusions were drawn:

a. There was a concrete evidence of manipulation of ballot papers, which served as input data to the scanning machine by the Petitioners. It was reliably gathered that the Petitioners illegally accessed the used ballot papers before they formally obtained the permission of the Election Petition Tribunals to inspect them. Such action constitutes a serious threat to the integrity of the ballot papers and the results obtained from scanning and forensic analysis.
b. The scanning machine employed by the Petitioners' "Forensic Expert" was subject to manipulations because it was programmed to capture a specific portion/segment/area of the disputed used ballot papers using its on-board Capture Perfect 3.0 software. The scanning machine could have been pre-programmed to capture thumbprint impressions that were legitimately vote cast for the first Respondent. A joint participation of the representatives of all the stakeholders in scanning would prevent any manipulation of that kind.
c. The scanned results serve as the input to forensic analysis. There were concrete evidence on flawed input to the scanning machine, forensic analysis, hence results obtained at these two levels and their interpretation cannot be adjudged to be flawless.
d. A specific individual was not identified as suspect.
e. A specific certified thumbprint profile database was not used for the forensic analysis.
f. Representatives of the Respondents did not participate in the process of inspection, scanning and forensic analysis of thumbprints on ballot papers, and interpretation of the results obtained therein. Moreover, no specific authority was jointly agreed upon by the stakeholders of the election in the scanning, forensic analysis and interpretation.
g. No specific thumbprint pattern type was identified with any individual.
h. A specific threshold rules for matching thumbprints, jointly agreed upon by the stakeholders of the election, was not applied in the forensic analysis and the interpretations of their output reports.

On the basis of the monumental flaws listed above, the results obtained from scanning and forensic analysis cannot be reliable, valid and admissible scientifically and legally.

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RESUMES OF AUTHORS

PROFESSOR AKINYOKUN, Oluwole Charles

Professor Charles Oluwole Akinyokun had BSc. First Class (Combined Honours) in Computer Science and Mathematics from Obafemi Awolowo University, Ile-Ife, Osun State, Nigeria in 1979 and PhD in Computing Studies from the University of East Anglia, Norwich, United Kingdom in 1984. He took up academic career in Obafemi Awolowo University in 1985 October as a Lecturer I of Computer Science. He moved to the Federal University of Technology, Akure in 1987 September as Senior Lecturer of Computer Science. He has been a Professor of Computer Science in the Federal University of Technology, Akure, Ondo State, Nigeria since October 1995. He is a Commonwealth Scholar and Fellow, Fellow of Nigerian Computer Society, Member of the Computer Professional Registration Council of Nigeria, Expert in Artificial Intelligence and Nigerian Representative in the International Federation for Information Processing (IFIP) Technical Committee on Artificial Intelligence between 1992 and 1996.

His BSc. Dissertation was on the recognition and matching of patterns and PhD thesis was on the recognition and matching of views in a distributed database processing environment. The PhD research was the nucleus of a distributed database/computer network research project that involved eight British universities sponsored by the Science and Engineering Research Council of United Kingdom (UK). He has been actively involved in Research and Development (R&D) in Computer Network, Database System, Expert System, Neuro-Computing which involves fuzzy logic, neural networks and genetic algorithms, Mobile Agent Technology, Data Mining and Warehousing since 1985. The research focus has been on the principle and practice of pattern recognition and matching with considerable application to human resource management (procurement, development and performance evaluation), diagnosis and therapy in the domain of medicine and performance evaluation of Information and Communications Technology (ICT) resources. His publications have featured prominently in reputable national and international conference proceedings and journals.

PROFESSOR. ADEGBEYENI, Emmanuel Ola

Professor Emmanuel Ola Adegbeyeni had B.Sc (Hons) in Mathematics (1967), M.Sc in Industrial Maths and Statistics (1969), M.Sc in Computer Science (1975) and Ph.D in Computer Science (1977). He is a Fellow of EDI and NFORN; a member of British Computer Society, Nigerian Computer Society, Computer Professional (Registration Council) of Nigeria (CPN), Institute of Electronic and Electrical Engineering of America, India Institute of Science and Science Association of Nigeria.

He has well over forty one years post B.Sc. working experience. He was a Manager of Data Processing in Research Bureau Nigeria. Limited and Unilever Group of Companies. He started academic career in the University of Lagos as Lecturer II in Computer Science and got to the pick of academic career as a Professor of Computer Science. He has a focussed teaching and research in Computer Simulation, Information and Communications Technology and Computer Applications in Business. He took up career in civil service as Assistant Director of the Computer Unit of the Federal Ministry of Transport in late 70s and grew to the level of Acting Permanent Secretary, Federal Ministry of Transport, Aviation and Communications.

At the international level, he has served as an expert in Transport and Information Technology to the Organization of African Unity (OAU), Information Technology and Transport to the Economic Commission of Africa (ECA), Transportation and Information Technology to the World Bank, Quantitative Economist/Forecaster to the OPEC

and Shipping Information Technology to the Ministerial Conference, West Africa. He was the National Coordinator of World Bank Transport/Information Technology (IT) and Chairman of United Nations Committee on Shipping (UNCTAD) in Geneva. He led Nigerian and African teams to the United Nations Economic Commission for Africa; Organisation of African Unity; World Bank, Washington DC and many international Computer Conferences Seminars and Workshops in the 90s.

LEGAL AND ETHICAL FACTORS AFFECTING NON-PROFIT ENTERPRISE

Stephanie Bardwell, Christopher Newport University

ABSTRACT

The goal of this study is to define a mix of legal, ethical and economic factors of the most successful non profit enterprises whose missions involve community welfare objectives. The design of the instrument to collect data and a review of factors to be tested will be explored via feedback questionnaires and focus groups. Financial and legal improprieties which impede the accomplishment of the non profit will be explored. The evaluation of the pertient factors, especially the factors of board composition, fiduciary duties of boards, fundraising practices and mission assessment will be highlighted

AN EXAMINATION OF THE INTEREDEPENDENCE OF ETHICS AND SUSTAINABILITY: WHY SUSTAINABILITY IS THE ETHICAL CHOICE

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ABSTRACT

Sustainability and ethics are two popular topics in organization and business studies, as well as in other social sciences. The meanings of sustainability and ethics, and related relevant decisions and implications vary greatly depending on the context and discipline. However there is an intuitive notion that sustainability and ethics are interdependent. Sustainability implies that the system, activity or resource is able to stay as it is or grow and develop without undesired changes or depletion. In this paper I will argue that any basis for ethical decision making must be one that has sustainability as one of its main explicit concerns or implicit outcomes. Using the 'tragedy of the commons' as an exemplar, I will examine several ethical philosophies, perspectives or frameworks, such as utilitarianism, rights and justice, and explore their relationship with the basic ideas of sustainability. The conclusion is that one ultimate purpose of business ethics is to 'protect the commons', in other words businesses must establish and maintain sustainable practices. The implications of such a stance, the difficulties in defining the relevant 'commons' and determining what needs to be sustained will be discussed.

INTRODUCTION

In this paper I examine the relationship between organizational ethics and sustainability. I will argue that for any basic ethical philosophy to be a legitimate framework for organization ethics and to guide decision making, it must address the problem of resource depletion, or the 'tragedy of the commons'. The paper opens with a brief exploration of sustainability and what constitutes the specific 'commons' that organizations need to be concerned with. Business ethics and related concepts are presented next. These are followed by the argument that sustainability must be a core component of organizational ethics. The paper concludes with suggestions for further development and research.

SUSTAINABILITY – MAINTAINING THE COMMONS

A village has what they call the 'Commons' – in this case a set amount of common grazing land. Sheep graze on this land. However, the land can sustain only a certain number of sheep. If too many sheep graze on the land, the grass cannot grow back. Over time the grazing potential of the land will become less and less. Eventually the land will be bare and the sheep will starve. If the number of sheep is equal to or less than the maximum the grazing land can sustain, then the grazing land can last indefinitely. The village has 100 people and 100 sheep, with each person owning one

sheep. The grazing can grow back at the rate that 100 sheep can eat. This means that the common can sustain 100 sheep. All is well until the 101st sheep … This threat to the continuation and maintenance of a common resource is known as the 'tragedy of the commons' (Hardin, 1968).

The problem of the 101st sheep is a problem of sustainability. If another sheep is allowed to graze on the common grazing land, *ceteras paribus,* the grazing land will not be able to recover. It will be overexploited. It can feed 101 sheep for a short time but will eventually not be able to feed any sheep at all. Garrett Hardin wrote in 1968 about the problem of overpopulation in his article "Tragedy of the Commons", and that term has since been used to describe many situations where a common resource is in danger of overexploitation. Some examples are the exploitation of fisheries (Bell, 1986), the labor market (Burton & Dunn, 1996), privacy (Regan, 2002) and the global climate (Marburger, 2008). Sustainable exploitation practices are the alternative to overexploitation and decline of a resource. But what does sustainability mean and imply? What is it that needs to be sustained?

Sustainability in this context refers to sustainability of a renewable resource. The resource is finite and can be renewed at some rate. Sustainability is the ability of the renewal process to maintain or increase the amount of the resource available. The alternative to sustainability is depletion or decline. Depletion happens when resource use is higher than the ability of the resource to be replaced. Some might argue that a strict definition of sustainability does not include growth; however for the purpose of this paper sustainability can include either a steady state or growth.

Not all situations involving maintenance or growth are sustainability problems. As individuals we would like to maintain or enhance elements our lifestyle, job, career, personal life, health, wealth, future, family and so on. In a similar way, an organization might want to maintain or increase its profitability, stock price, market position, reputation, workforce, technology or product/service. However these are not concerned with common resources, therefore sustainability is not the appropriate framing.

Sustainability is the appropriate framing when we consider maintaining common renewable finite resources in a stable state or maintaining and creating a balance between the resource usage and renewal. These are overlapping concerns, but not be the same. Maintaining the resource in a stable state in our grazing land example translates to maintaining the current condition of the fixed amount of grazing land. It will be able to sustainably feed 100 sheep in perpetuity. Another example would be limiting fishing to the amount that would not decrease the overall number of fish over time. A certain number of fish can be caught without upsetting the various food chains and ecologies.

Maintaining a balance between use and renewal is different than maintaining things as they are. In our example, if it is possible to increase the size of the grazing land, develop a higher yield grass or sheep that eat less, then the total yield can increase. Increasing the size of the grazing land and using different grass both change the common grazing land. Only sheep that eat less will increase the yield without changing the original grazing land. Better fishing techniques that minimize incidental killing and ecological damage increase the number of fish available for market, and fish farms further increase availability without affecting wild fish stocks. Both of these strategies leave the fishery in a steady state. Recycling is a technique on the usage side that increases the yield of a resource.

A relevant question is what are the common resources that we should be concerned with? This will differ depending on the organization, but in general they are the resources used or impacted by the input, processing and output of the organization as a transformation function. These vary widely from can range from impacts on the global climate, local environmental, renewable resources (soil, fisheries, forests), finite resources (minerals, petroleum), and even social resources such as the labor supply and infrastructure. In examining ethics in general it is very important to appropriately frame the situation (Hartman, 2008). The same is true with sustainability.

BUSINESS ETHICS AND SUSTAINABILITY

Business can be considered as an ethical social behavior that makes important contributions to society (Block & Cwik, 2007). It provides goods and services and utilizes resources in ways that are impossible or far less efficient for individuals working alone. From a purely philosophical point of view, some have proposed that corporate ethics are inherently impossible (Bevan & Corvellec, 2007). However, the prevailing viewpoint is that organizational ethics is essential for society to effectively exist. The current call is for a corporate environment where ethics is the norm using a stakeholder approach (Thomas, Schermerhorn & Dienhardt, 2004). The stakeholder approach to organizations is an alternative to the notion that corporations exist to maximize stockholder wealth. Although stockholder wealth is a legitimate concern, the stakeholder perspective acknowledges that many others have an interest or a 'stake' in the organization. Customers, suppliers, employees, the local community, competitors, and a host of others are affected by the operations of a business. The stakeholder approach replaces 'stockholder wealth maximization' with 'stakeholder interest optimization' as the guiding principle. The stakeholder approach gained prominence because of the importance of an approach that could address the tragedy of the commons (Shultz & Holbrook, 1999). Stockholder and market failure have been argued as alternatives to stakeholder theory (Heath, 2006), but are infeasible because of the adverse effects of poor decisions on the organization's external environment, that is their inability to adequately address sustaining common resources. The stakeholder approach to organizational analysis and decision making is now firmly established. It is no longer an issue of whether such an approach is appropriate, but one of how is it to be implemented (Agle, Donaldson, Freeman, Jensen, Mitchell & Wood, 2008).

Within the organization, specific issues and perceptions of ethics differ at various internal levels (Trevino, Weaver & Brown, 2008). The external environment must also be considered, bringing in concerns at the personal, organizational, social and cultural levels (Paulson, 2005). Despite the differences between concerns and issues at various levels, an integrated perspective is preferable because of the need for consistency to avoid conflicting prescriptions. In developing an integrated perspective, some have proposed that organizational ethics have two dimensions - truthfulness and relevance to larger social issues (Moorecraft, 2004). Truthfulness and honesty is an obvious and apparent part of any code of ethical behavior. Relevance to larger social issues is somewhat less familiar and obvious. Its new found importance cannot be understated. It is particularly important to address higher levels such as global, societal, and industry when establishing practices in developing countries (Raufflet, 2008). Such situations are where the tragedy of the commons is a particularly important concept.

Organizational ethics should be viewed from a perspective that recognizes internal and external stakeholders, integrates levels of analysis and recognizes larger social issues. This perspective is similar to that often adopted in corporate social responsibility (CSR) research, which concentrates primarily on environmental and ethical concerns (Lockett, Noon & Visser, 2006). In doing so, ethics must include protection of common resources. In other words, organizational ethics must support sustainability.

Three Ethical Lenses – Utilitarian, Justice and Rights

Let us examine sustainability through three classical ethical lenses – utilitarian, justice and rights. In a utilitarian approach to the tragedy of the commons, maximization and distribution are the criteria for utilization of common resources (Audi, 2007). Initially a utilitarian view might say let all 101 sheep eat. In the short run it is the most good for the most people (and sheep). In the long run it is not. Letting 101 sheep eat does not fit either sustainability as described in the earlier section. Only a long term view of maximization and distribution are consistent with sustainability. Growth would involve strategies for increasing the availability and efficiency of the resources, and a steady state goal would at very least maintain them. A utilitarian ethical base is an inappropriate in the long term if the maximization effort is based on a short term maximal use of currently available resources. Overfishing, destruction of forests and other actions that are damaging in the long term have been justified with a utilitarian argument. Unfortunately the flaw in this reasoning is not acknowledged until the damage is dramatic and perhaps irreversible. For a utilitarian perspective to be appropriate the 'most good for the most people' must be inclusive of all affected by the operations both now and in the future. The exception to this rule would be a finite resource with limited useful life.

A justice or rules (laws) view will look to some guidelines. A law, policy or some other rule must cover each contingency. In our example it might be important where this pesky sheep came from or who it belongs to, the rule might be dependent on these things. Many simulations (or 'games') have been run using various sets of rules. The finding is that dynamic common property resource games do not necessarily result in overexploitation of resources (Dutta & Sundaran, 1993). Individual, corporate and societal interests and values frequently conflict, but game theoretic approaches indicate that these interests often converge or are served by the same long term strategies (Aram, 1989). Players can design rules that maintain resources and avoid the tragedy of the commons (Faysse, 2005). The downside of an emphasis on rules, laws and regulations to deal with ethical problems might overlook the effects of the laws on corporate ethics (Michael, 2006). Organizations might have a tendency to obey the letter of the laws and forget the spirit or purpose of them. Also potential problems arise when the rule makers are 'residual claimants of the economic rents', that is they individually benefit from the privatization of the rights (Anderson & Hill, 1983).

Another problem with a legalistic view of ethics is jurisdiction. International law allows fishing fleets to stay outside of territorial waters of foreign countries and devastate their fisheries. This is legal but clearly unethical. Historically polluted waterways were a problem only if you were downstream of the factories that were polluting, and frequently the laws did not account for those effects. Air pollution in one country can result in acid rain in another country. There are many such examples.

A rights view had 100 people with the right to have one sheep each graze on the common. They might still have those rights, and the owner of 101 has no right to graze 101 on the common, or there might be some other way to divide the grazing rights dependent on where the sheep came from and who owns it. Under some situations privatizing of rights makes society no better off (Anderson & Hill, 1983), however in general, looking at resources as a global commons, the lack of clear rights leads to inefficiencies (Wijkman, 1982). Owners of rights have a vested interest in maintaining and developing the commons. Furthermore the greater good can be served because owners can influence environmental, social and governance (ESG) issues (Kiernan, 2007).

In summary, any ethical basis adopted by an organization must allow for sustainability of resources. All three classical perspectives for personal ethics can be appropriate as bases for an integrated approach to organizational ethics. The way to make them work is to assure that the tragedy of the commons is addressed by maintaining a stakeholder philosophy and recognizing larger social issues.

CONCLUSIONS

There are gaps between business ethics as presented in theory and business ethics and manifest in practice, and theorists are not adequately addressing these gaps (Bartlett, 2003). Bad management theories are working against good management practice, primarily because the theories are approached from a value neutral perspective without a sense of moral responsibility (Ghoshal, 2005). Adopting a stakeholder philosophy, recognizing larger social issues and considering sustainability as a primary ethical choice begins to bridge this gap.

For individuals, keeping their sheep on the commons does the most good, is legal, and is their right, until the 101st sheep shows up. That pesky 101st sheep! At that point it becomes a problem for the collective and individual solutions are inappropriate. However all three classical perspectives for personal ethics - utilitarian, justice and rights - can be appropriate as bases for organizational ethics. The problem of the 101st sheep is a problem of the sustainability of the commons. Any ethical basis adopted by an organization must allow for sustainability of resources. To assure that the tragedy of the commons is addressed organizations must maintain a stakeholder philosophy and recognize larger social issues regardless of their ethical philosophy.

Academics would do well to also ask how we can best address sustainability. Making an argument that sustainability is an appropriate basis for organizational ethics is just a beginning. We should consider proposing sustainability as not as something that increases costs as it often is portrayed, but as an essential practice in the long term. Sustainability can become a competitive advantage with supernormal profits as the return on sustainability practices that increase the yield or decrease the use of a resource. I suggest addressing different levels of analysis and integrating them. What are the commons and sheep in an economy, industry, company, occupation, etc. and the implications of different ethical stances at each level? What are the interactions and relationships between levels, specifically what are the effects of decisions and actions at one level on the commons and sheep at another? A stakeholder approach, recognizing larger social issues and considering sustainability will do much to bridge the gap between business education and practice, just as it would between theory and practice.

I suggest that further research concentrate on the following questions and issues: How can we make decisions and take actions that address 'sustainability' that are ethically justified and have 'sustainability' effects across levels of analysis? The general arguments that need further development and exploration are that (1) sustainability is an ethical issue, (2) what appears ethical decision that will result in sustainability at one level might create sustainability problems at another level, (3) sustainability as steady-state or growth is superior to sustainability as steady-state alone. Further research should and no doubt will uncover what the '101st sheep' is in many previously unexamined 'commons'. Recognizing the 101st sheep is the first step in sustainability.

(references available on request)

THE GREAT ABYSS? INTERNATIONAL MORAL DILEMMAS AND REASONING DIFFERENCES BETWEEN ENTREPRENEURS AND THE NONBUSINESS PUBLIC

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ABSTRACT

Of the studies that have been done about ethical decision making in the international arena, most have looked at the issues from the lens of the large multinational corporation, not from the viewpoint of the entrepreneur. Little research attention has been focused on the intersection of three areas (entrepreneurs, ethics, and international), particularly when the analysis is of reasoning at the individual founder level and a nonbusiness comparison group. This paper studies 1) how entrepreneurs (founders) reason when faced with international ethical and cultural dilemmas; and 2) what differences exist in the reasoning patterns of entrepreneurs as compared to nonbusiness adults in the general population. Findings suggest that entrepreneurs reason about moral and social issues in essentially the same way as do comparison adults in the general population when considering general ethical (nonbusiness) dilemmas. The data suggest however that both participant groups shifted their priorities when dealing in the business context. The conceptual framework used in this study is social cognitive domain theory.

INTRODUCTION

Of the studies that have been done about ethical decision making in the international arena, most have looked at the issues from the lens of the large multinational corporation (Pedigo & Marshall, 2003; Zyglidopoulos, 2002; Kolk & van Tulder, 2002; Asgary & Mitschow, 2002; DeGeorge, 1993), not from the viewpoint of the entrepreneur. Little research attention (DeGeorge, 1999; Mayo, 1991)) has been focused on the intersection of these three areas (entrepreneurs, ethics, and international), particularly when the analysis is of reasoning at the individual founder level and nonbusiness comparison group.

This "topic triangle" of *entrepreneurs,* reasoning and making decisions on *moral dilemmas*, in an *international business* environment, offers unparalleled opportunity for insights into the complex decisionmaking and ethical challenges of entrepreneurs doing business globally. This paper specifically studies the following questions: 1) How do entrepreneurs (founders) reason when faced with international ethical and cultural dilemmas? and 2) What differences exist in the reasoning patterns of entrepreneurs as compared to nonbusiness adults in the general population?

THEORETICAL FRAMEWORK

The conceptual framework used in this study is social cognitive domain theory (Turiel, 1983). The concepts developed in social cognitive psychology seem suitable as a foundation for investigating entrepreneurial-related phenomena (Mitchell, Smith, Seawright & Morse, 2000), particularly in the international realm, because of the interacting determinants (Bandura, 1991) involved in these situations such as legal and cultural conventions, pragmatic and business desire for profitability and viability in the marketplace, and universal foundations of fairness and concern for others.

Social cognitive domain theory explicitly distinguishes among the individual's concepts of cultural conventions, morality, and issues of personal discretion (Turiel, 1998). The moral and conventional domains form the foundation of this paper's analysis.

The moral domain forms a universal core set of values around issues of human welfare and justice, which are independent of social norms. The conventional domain is composed of the agreed upon uniformities in social behavior based on customs, law, and standards of society determined by the social system in which they are formed (Nucci, 2001). According to domain theory, morality and convention can overlap. When conventional norms sustaining a particular organizational structure are either in harmony or conflict with an objective focus on fairness or rights, this is labeled domain mixture.

Business decisions within the international realm inherently entail weighing the conventional norms and customary ways of doing business against the entrepreneur's own notions of what is objectively moral. This paper addresses how entrepreneurs and a nonbusiness comparison group negotiate these competing dimensions in generating business and other decisions.

METHOD

The exploration of the two research questions uses a mixed-model research agenda including 1) in-depth semi-structured interviews with founders of entrepreneurial firms doing business globally and a matched group of non-business participants (matched by age, gender, and level of education); and 2) a survey measuring importance ratings of factors employed in rendering social and moral judgments on five international ethical vignette issues. The five vignettes represent three international business ethical dilemmas and two general ethical issues (nonbusiness). The two general ethical vignettes were included to determine if participants reason differently about general ethical issues than they do for context-specific business issues.

RESULTS AND IMPLICATIONS

Findings suggest that entrepreneurs reason about moral and social issues in essentially the same way as do comparison adults in the general population when considering general ethical (nonbusiness) dilemmas. For the two general moral dilemmas (nonbusiness), the responses for both groups were essentially alike and dominated by moral domain reasoning. Unlike the predominant moral reasoning in the two general vignettes, in the business vignettes both groups reasoned using

conventional and mixed domain reasoning patterns. The data suggests that both participant groups shifted their priorities when dealing in the business context.

The similarity of reasoning patterns could have positive implications for softening the perception of business leaders as having a "credibility crisis" or as being "irresponsible stewards of other people's money and trust" (Wahlgren, 2002). Because there appeared to be no evidence of a fundamental difference in the ways that the comparison group approached social and moral issues as compared to the business group, the tendency to immediately isolate and label all business behavior as self serving and greedy may be lessened.

The implications of this seminal study may further the awareness and understanding of the difficulty of the social and moral challenges faced by entrepreneurs doing business globally. The multi-method approach taken in this study provides a more in depth understanding of the cognitive processes underlying entrepreneurs' moral cognition, often through their own words, than has been done before.

The finding that business founders' reasoning is similar to the reasoning of the general population in business and general ethical dilemmas may present another side to the misunderstandings and lack of trust which have unfolded with the attention on corporate misconduct over the last few years. One nonbusiness participant's reflections seemed representative of the public's general tone about business:

> "Purely in my opinion, nothing damns you in this country
> so completely as success in business."

It is unlikely that the similarity of results of this study's entrepreneurs and nonbusiness participants will dispel the general notion that businesspeople are self-serving and unethical. However, the research findings do lend insight to the complex and conflicting moral and social problems entrepreneurs face in the global marketplace and how they reason through them.

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COMPLYING WITH THE FAIR LABOR STANDARDS ACT (FLSA)

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ABSTRACT

Complying with the Fair Labor Standards Act (FLSA) continues to be a challenge for employers. In Fiscal Year (FY) 2008, the U.S. Depart of Labor's Wage and Hour Division (WHD) recouped back wages totaling $185,287,827 for 228,645 workers. While this amount is down from the $220,613,703 recouped in FY 2007, it still represents a 40 percent increase over the FY 2001 amount. Since FY 2001, WHD has recouped more than $1.4 billion in back wages for over two million workers (DOL News Release, 2009). In addition to the back wages recouped by the federal government, employers in a variety of industries all across the United States have over the last ten years been staggered by large settlements awarded to employees in class action litigation estimated to be as high as $319 million in 2007 and even higher in 2008 (Seyfarth Shaw (2008). The purpose of this paper is to examine the nature of the challenges employers have faced in recent years with respect to FLSA compliance and what organizations can do to facilitate compliance with the FLSA.

INTRODUCTION

Complying with the Fair Labor Standards Act (FLSA) continues to be a challenge for employers. In Fiscal Year (FY) 2008, the U.S. Depart of Labor's Wage and Hour Division (WHD) recouped back wages totaling $185,287,827 for 228,645 workers. While this amount is down from the $220,613,703 recouped in FY 2007, it still represents a 40 percent increase over the FY 2001 amount. Since FY 2001, WHD has recouped more than $1.4 billion in back wages for over two million workers (DOL News Release, 2009). The amount of back wages recouped and the number of employees receiving those wages have increased dramatically since 2001 (See Table 1).

Table 1 WHD Enforcement Statistics

	FY 2001	FY 2002	FY2003	FY2004	FY2005	FY2006	FY2007	FY2008
Back Wages	$131,954,657	$175,640,492	$212,537,554	$196,664,146	$166,005,014	$171,955,533	$220,613,703	$185,287,827
# of Emp.	216,647	263,593	342,358	288,296	241,379	246,874	341,624	228,645

Source: DOL Results Page, 2009. (# of Emp. = Number of Employees Receiving Back Wages)

In addition to the back wages recouped by the federal government, employers in a variety of industries all across the United States have over the last ten years been staggered by large settlements awarded to employees in class action litigation estimated to be as high as $319 million

in 2007 and even higher in 2008 (Seyfarth Shaw (2008). On December 23, 2008, Wal-Mart Stores Inc. announced that it was settling 63 wage and hour lawsuits in 43 states that would cost the company between $352 and $640 million "depending on the amount of claims that are submitted by class members"(Smith, 2008). Wal-Mart has been a prime target for this type of litigation in recent years and had suffered a number of adverse court decisions (Table 2).

Table 2: Recent Settlements and Jury Verdicts

Company	Issue	Amount*
Wal-Mart Stores	Variety of issues	$352-640
Wal-Mart Stores & Sam's Club (MN)	Off the clock work	$54.2
Wal-Mart Stores Inc.	Bonuses & improper overtime calculations	$33.5
Albertson's Inc	Off the clock work and denial of overtime	$53.0
IBM Corporation	Failure to pay overtime	$65.0
Staples, Inc.	Misclassification and overtime	$38.0
Family Dollar Store	Overtime - store managers	$35.0
UBS	Overtime	$89.0
Morgan Stanley	Overtime	$42.5
Electronic Arts	Overtime	$15.6
Sears, Roebuck and Co.	Overtime	$15.0
*All amounts are in millions		

Source: (Jern and Politzer, 2008) , (Smith, 2008), & (Mersol, 2008), (Holland, John M, 2007).

The purpose of this paper is to examine the nature of the challenges employers have faced in recent years with respect to FLSA compliance and what organizations can do to facilitate compliance with the FLSA.

BACKGROUND

The Fair Labor Standards Act of 1938, as amended, provides for minimum standards for both wages and overtime entitlement, and spells out administrative procedures by which covered work time must be compensated. Also included in the FLSA are provisions related to child labor, equal pay, and portal-to-portal activities (U.S. Office of Personnel Management, 2009). The FLSA covers over 130 million American workers and applies to all employees who work for employers that have an annual dollar volume of sales or business of at least $500,000. Individuals are also covered "even when there is no enterprise coverage, if their work regularly involves them in commerce between States (interstate commerce)" (Fact Sheet #14, 2009). The Wage and Hour Division was created with the enactment of the FLSA and its staff is responsible for the administration and enforcement of a wide variety of laws that "collectively cover virtually all private and State and local government employment (Wage and Hour Division, 2009).

CHALLENGES

The expanding list of FLSA compliance issues that have challenged employers is long with no let up on the horizon. Described by one prominent employment law attorney as "becoming a cottage industry" in some locations, the staggering dollar amounts being paid out in jury verdicts, settlements, and WHD back wage recoveries, are supplying the motivation (Baker, 2007). Class-action litigation has become increasingly popular with plaintiffs' attorneys and Jerry Maatman, a prominent attorney involved in workplace litigation issues, noted that "wage and hour class actions are like low-hanging fruit for plaintiffs attorneys" (Deschenaux, 2008). These challenges are being faced by a wide variety of employers all across the United States. Low-wage industries including hospitality, retailing, construction and manufacturing and high-wage industries, including financial services, technology, and communications have all been targeted (Jern and Politzer, 2008). While California has been described as "ground zero" for these types of claims, all across the country employers and management attorneys are becoming increasingly aware of increased interest in this type of litigation (Baker, 2007). Three re-occurring compliance issues identified in the literature include meal and Rest break, off the clock work claims, and misclassifying non-exempt workers as exempt.

FACILITATING FLSA COMPLIANCE

The general suggestions in the literature with respect to FLSA compliance mirror those associated with most anti-discrimination laws and regulations. Start with clearly stated and communicated compensation policy and procedures. Whether employers want to restrict or require overtime, regulate break or meal periods, or require employees to properly document hours worked, they have a great deal of latitude if they develop policies within the bounds of the FLSA and DOL Guidelines, effectively communicate them, and consistently apply them. Next, education and training of decision makers and vigilant monitoring and enforcement of policies by supervisors with respect to what is compensable time is critical. Lower level supervisors must be educated as to FLSA Basics:

- Comp-time is not an option in the private sector.
- Do not pressure employees to work off the clock work.
- Do not allow employees to volunteer to work off the clock.
- Do not ignore employees working unauthorized overtime.
- Do not assign employees work during meal periods.
- Employees can be disciplined for working unapproved overtime.

Supervisors must understand that it is their responsibility to enforce policies on overtime in a fair and consistent manner. When supervisors see unauthorized overtime being performed, they must intervene and apply appropriate discipline when necessary. The time worked must be paid for, and working unauthorized overtime must be discouraged in the future (Falcone, 2008).

One final recommendation to facilitate FLSA compliance includes auditing job classifications. The focus of these audits should be to make sure positions are accurately classified

and payroll practices including record-keeping "to ensure retention of appropriate documents to substantiate classification and payroll practices" (Jern & Politzer, 2008). The auditing suggestion is not without its pitfalls. Schreter notes, with the ever increasing number of FLSA and state wage and hour claims, many employers "have rushed to audit their compensation practices, often discovering violations. Employers then struggle to remedy any violations without prematurely alerting employees and triggering the type of lawsuit the audit was designed to prevent" (Schreter, 2008). A controversial solution to this situation advocated by Schreter is to enter into a voluntary compliance agreement with the DOL. Schreter notes two "important advantages" associated with a voluntary compliance agreement:

The DOL can negotiate a valid release of affected employees' claims. An employer cannot. The DOL will generally only seek to recover two years of back wages instead of three years and it will not seek liquidated damages, attorneys' fees or interest. In private litigation, a plaintiffs' attorney will ordinarily pursue a willful violation and three years of back wages, an equal amount in liquidated damages and attorneys' fees (Schreter, 2008).

Compliance with FLSA and the various state regulations can be a challenging expensive undertaking. There are no short cuts or quick fixes. Education and training of decisions makers and auditing of your compensation policies and procedures are essential for organizations serious about reducing their exposure to the expensive legal consequences of not complying with the FLSA.

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THE RISE OF INCIVILITY AND THE NO JERKS RULE: A CALL FOR AN EMPHASIS ON THE THREE DIMENSIONS OF COLLEGIALITY

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ABSTRACT

The literature since 2002 has indicated a rise in incivility at the workplace. The popular press has published numerous articles and books including the best selling "The No Asshole Rule" by Sutton. Employers are struggling with policies which must balance the need for freedom and diversity with the call for a civil, if not friendly, workplace. Those in Human Resource Development (HRD) are starting to offer training ideas which might help employers create or maintain a collegial workplace.

A recent article has opened the discussion on how to define collegiality and suggested that there are three dimensions within the concept. The HRD suggestions which flow from these three dimensions are given and discussed in this paper. These concrete ideas range from those achievable at the individual, group, and organizational level.

ARE ACCOUNTING MAJORS MORE ETHICAL THAN OTHER BUSINESS MAJORS?

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ABSTRACT

The AACSB calls for the inclusion of ethics in the accounting and business curriculum. The National commission on Fraudulent Financial Reporting (The Treadway Commission) calls for the inclusion of ethics in every accounting and business course. The AICPA incorporates ethics coverage in its illustrative 150-hour accounting program. Most accounting and business texts incorporate ethics components, exercises, and cases. Sarbanes-Oxley created The Accounting Oversight Board and placed additional constraints/responsibilities on public auditors and boards of directors in response to frauds such as Enron and WorldCom and increased awareness regarding ethical issues. In light of the increased emphasis on ethics in accounting education, this paper reports the results of an empirical study examining the ethical sensitivity of accounting students in relation to other business students. Accountants must adhere to a strict code of professional ethics. They must exemplify integrity and be independent in fact as well as in appearance. Questionnaire responses to ethical questions are compared for 96 business students and 147 accounting students. Results indicated significant differences in ethical perceptions by major as well as by gender. These differences relate to ethical perceptions, and do not test actions. The survey participants included a broad base of students from both public and private colleges in two different states and with widely differing demographic factors. Therefore, we believe this study to possess sufficient external validity to enable us to draw inferences for teaching ethics in accounting and business programs.