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Ishola Rufus Akintoye

Of Senses and Men's Cosmetics: Sensory Branding in Men's Cosmetics in Japan

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Abstract

This study delves into the application of Sensory & Emotional Branding in Japanese Men's cosmetics following the growing metrosexual market segment. A qualitative study was carried out to provide a generic snapshot of the application of sensory and emotional branding strategies in men's cosmetics among Japanese male consumers; their perceptions, experiences and reasons that drove their consumption decisions. The study also reflected that consumerism can develop from popular (and traditional) culture. The findings indicated that both sensory and emotional branding strategies were not fully exploited by the brands which would mean that there is plenty of room for corporations and brands to work on and develop strategies to fully capture the market fueling the disturbing growth of consumerism and commercialism.

Keywords: Sensory branding, Metrosexuality, Men's cosmetics, Japan, Emotional Branding

Introduction

Physical attractiveness is an important determinant of a person's success and fortune in life (Hatfield & Sprecher 1986, Jeffes 1998, Dimitrius & Mazzarella 2001, Patzer 2006,). Studies have even shown that babies prefer beautiful faces (Bower 1987, Etcoff 2000) whilst in children's fairy tales beauty has always been associated with good, kindness and an endless list of positive traits. The importance placed on beauty in society has without a doubt spelt success for the beauty industry.

According to the Global Facial Care report published by Datamonitor (2006), the market volume forecast in 2010 is expected to reach 2.9B units or USD\$ 22.4B; an increase of 14.6% from 2005. Dynamism in men's grooming products especially the skincare has been identified as one of the core prospect products sector (Euromonitor 2007). Men's grooming products is said will surge by 67% to \$19.5 billion between now and 2008, according to the estimates of Euromonitor international (TimeAsia 2005).

Men's consumption of personal grooming products has been attributed to the desires to create, develop and maintain identity and self-image (Mort 1988, Kellner 1992, Featherstone 1993, Thompson and Hirschman 1995). This is reflected today in the modern male movement, referred to as the metrosexual which is all about the image (Simpson 1994). The changing landscape in consumption which led to the postmodern approach has witnessed men playing a bigger role in consumerism and the consumption of 'beauty' products and services; in the pursuit of constructing their own identities and the very essence of who they are (Shields 1992, Bocock 1993). It is about attaining 'beauty' or the ideal image; which is all about emotions and senses (Lee 1999, Black 2004, Rosen and Ablaza 2006,).

Senses and emotions are cited as essential factors in successful product & service branding strategies. Successful brands are mentioned to encapsulate and exude sensory and emotional appeal, in winning the hearts and loyalty of the consumer (Schmitt and Simonson, 1997, Schmitt 1999,

Lindstrom 2005). Men's cosmetics products (化粧品) have long enjoyed success in Japan (Miller 2006), fueled by culture, societal changes and pop idols. Hence, this presents a good backdrop for conducting a research as the men have been exposed and immersed in the personal grooming sector. The question addressed in this study would be the perception and emotions of Japanese men consumers in making their purchase decisions (personal grooming products). In particular, are the consumers making purchase decisions based on sensory and emotional appeal of the products? Are there other more dominant factors in winning consumers' hearts and purses?

This work aims to establish, identify and elaborate on the effectiveness of the application of emotional and sensory branding in cosmetics with a specific focus on the Japanese young adult, metrosexual male market. The factors that influence consumption decisions are studied to derive the findings if brand choices are influenced by the sensory and emotional appeal of the brand or otherwise. This study adopted the qualitative research approach of focus group discussions to examine the drivers of consumption, consumer perceptions, experiences and emotions, and the findings proved that indicated that both sensory and emotional branding strategies were not fully exploited by the brands. This translates to further opportunities for corporations to revisit the incorporation of sensory and emotional strategies in their products.

This paper begins with a review of the main aspects of both key concepts of sensory and emotional branding. The metrosexual culture in Japan is described in the section that follows. Next, the focus group criterion and key discussion questions are discussed. This is followed by the findings and analysis that illustrate that both sensory and emotional branding strategies are in their infancy stages, raising as well the core challenges faced. In particular the core issues of societal acceptance of 'outright male vanity declaration' and the availability of product information are hurdles that this paper raised that should be addressed in achieving effective sensory and emotional branding.

The Fundamentals of Sensory and Emotional Branding

Sensory experiences and emotions are interdependent; one cannot exist without the other (Hume 1757, Murphy 1998, Gobe 2001 O'Shaughnessy and O'Shaughnessy 2003, Pooler 2003). Pooler (2003) illustrates the prevalence of both sensory and emotions experienced by consumption. He defines the simple, daily act of buying a cup of coffee has since been replaced by a complete therapeutic experience; where the customer gets an emotional lift and a sensory experience. We will first examine the basics of sensory branding followed by emotional branding.

Sensory Branding

Sensory studies in understanding consumer choices and preferences has long been undertaken by both researchers and corporations on a wide range of products; ranging from food to household items and cars (Lindstrom 2005, Peneau, Brockhoff, Hoehn, Escher and Nuessli, 2007, Prinz, De Wijk, 2007,). Sensory appeal has attributed to creating brand success, consumer relationship and loyalty (Schmitt 1999, Gobe 2001, Roberts 2004, Lindstrom 2005). According to Lindstrom (2005), brands that appeal to multiple senses will be more successful than brands that focus only on one or two.

The early works that display the awareness of sensory impact and implications can be linked to aesthetics. Aesthetics forms the foundation of sensory branding. Incorporating aesthetics and appealing to the senses of the consumer create consumer and brand loyalty, saves costs, increases productivity and affords protection from competitive attacks (Schmitt and Simonson 1997). Aesthetics, a term introduced in 1735 by German philosopher Alexander Gottlieb Baumgarten was to mean "the science of how things are known via the senses (Kivy 2004). David Hume, a Scottish philosopher propagated in *Of the Standard of Taste* (1757) that aesthetics surpassed mere senses as it ropes in individual taste and emotions. Kant's *Critique of Judgment* (1790) introduced the element of subjectivity and sensory judgments. Hence, aesthetic value is recognized as to encompass all three realms of sensory, emotional and subjectivity or the intellectual.

Various researches are extensively undertaken to delve further into the aspects of sensory and consumer choice. Music played in stores witness the increase in sales, attracts and retains more consumers (Gorn 1982, Bainbridge 1998,). Pleasant fragrances are one aspect of the physical environment that can make people feel somewhat happier Study found that shoppers exposed to pleasant odors such as perfume, cookies, coffee are not only in better moods but also likely to engage in amiable and even altruistic behavior (Knasko 1985, Baron 1998,).

Peneau, Brockhoff, Hoehn, Escher and Nuessli (2007) found that consumers evaluated texture (rather than flavor) as the main importance in determining produce freshness. In another ‘sensory related’ research using custard showed bite-size to influence perception of products thus food packaging and spoons should be manufactured to the ‘right’ bite size (Prinz, J.E., De Wijk, R.A, 2007). Color names were found to influence the propensity of purchase; where consumers reacted favorably to unusual color and flavor names as they expect marketing messages to convey useful information (Miller and Kahn 2005). According to Underhill (1999) almost all unplanned purchases are results of the shopper experiencing the product – through touch, smell, sight, taste or sound.

The modern lifestyle has witnessed the ‘aestheticisation’ of everyday life – smells and sensory appeal in our everyday lives; both products and services (Paterson 2005, Dennis, Newman, & Marsland, 2005). Mittal and Sheth (2004) used the metaphor consuming as an experience in describing how consumers consume. Sensory branding strategies have been deployed successfully across a myriad of products and services, for instance in the services sector, Singapore Airlines successfully introduced and incorporated its renowned Stefan Floridian Waters, a distinct scent which is sprayed in the cabins as well as the towels (Lindstrom 2005). P&G launched their ‘gender-specific’ toothpaste called Crest Rejuvenating Effects. The box was shimmery and had a hint of vanilla and cinnamon specifically targeted at the female consumers (Aaker,, Kumar and Day 2004). Godiva revamped its image and unveiled Art-Nouveau stores that promised customers a sensory experience with chocolate (Gobe 2001). Starbucks has definitely transformed the act of consuming coffee to a sensory and emotional experience; fusing jazzy music, the earthy, warm, relaxing colors of the interior to coffee bean packaging - smooth, straight, soft – almost a “buttery feel” (Schmitt and Simonson 1997).

Lush cosmetics creates a total sensorial experience for the consumer, right from the scents and bright colors to shapes and textures (Clegg 2006). In 2002, the Sense of Smell Institute presented its Corporate Vision award to Lancome in recognition of Lancome’s successful application of the science of aroma-chology to new product development and marketing strategies (Sense of Smell Org., 2002). ‘Origins’ acknowledges the importance of senses and it translates that belief in its mission of promoting beauty and wellness through good for you products and feel-good experiences. Clinique projected ‘total’ sensory appeal of dermatology backed skincare right from its faint green packaging (more antiseptic than minty) to the lab coat uniforms worn by the sales consultants (Israel 1985). Though the strategies adopted by these cosmetics corporations are positioned to appeal to the senses in the quest of winning consumer loyalty.

Hoch (2002) equated product experience to seduction, being more dramatic and intense than education. Herz and Schooler (2002) found that odor-evoked memories are more emotion laden as it brings the person back to the original event as compared with the similar cue presented either verbally or visually. Schwartz (1973) highlighted the apparent relationship between sensory and emotions where in the resonance model he states that aesthetic appreciation has emotional undertones. Lovemarks, the marketing technique conceived by Saatchi&Saatchi’s CEO Kevin Roberts lists sensory and emotional aspects (2004). The intricate, interdependent relationship between senses and emotions brings us to the following section about emotions and emotional branding.

Emotional Branding

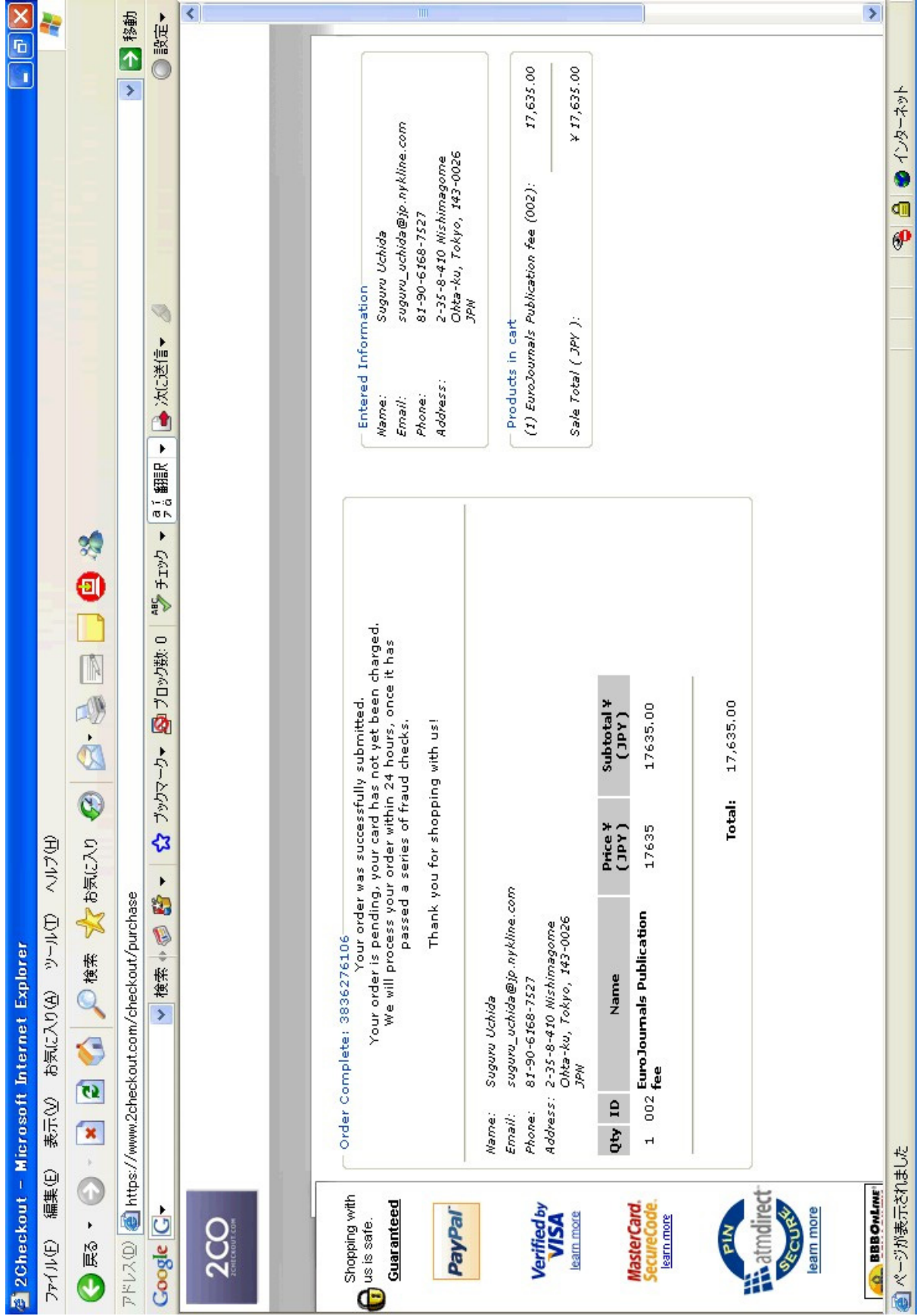
Ekman (2003) defined emotion as a process, influenced by our evolutionary and personal past, in which we sense that something important to our welfare is occurring, and a set of physiological changes and emotional behaviors begins to deal with the situation. His research has led him to uncover

emotions and facial expressions are largely universal. Ortony, Clore and Collins (1990) described emotions as valence reactions to events, agents, or objects, with their particular nature being determined by the way in which the eliciting situation is construed. The 'appraisal theory' (Lazarus 1994, Scherer, Schorr and Johnstone 2001) states that emotion results from how the individual believes the world to be, how events are believed to have come about, and what implications events are believed to have. The central tenet of appraisal theory is that emotions are elicited according to an individual's subjective interpretation or evaluation of important events or situations. While senses have the ability to evoke emotions (Cervonka 1996, Herz 1996) Emotions and feelings have been proven to influence thoughts (Frijda, Manstead and Bern 2000). The close relationship among cognition and senses and emotion forms the foundation in emotional branding.

Needs and emotions are closely related (Mittal and Sheth 2004). Various studies examining the correlation between emotions and consumption choices and decisions have been and are extensively undertaken to provide further understanding on consumer decisions and behavior (Sherman, Mathur and Smith 1997, Underhill 1999). Sherman, Mathur and Smith (1997) stated that the emotional state of the consumer as an important determinant in their purchase behaviors; pleasure was associated with the amount of money spent and consumer affinity for the store. Barlow, & Maul, (2000) indicated that the most important aspect of customer experience is emotional rather than satisfaction measured in customer satisfaction surveys. The Japanese have a holistic view of products. They view the product as a complete package; between both tangible and intangible components. The concept of kansei applies throughout. Kansei encompasses the oneness of the product and the user. It factors in the intangible that gives confidence, comfort and ease to the consumer when using any product (Herbig 1995).

Consumers are found to be emotionally involved with their purchases and feel empowered from the act of shopping (Pooler 2003). According to Underhill (1999), shopping is a means of therapy, reward, bribery and entertainment; making it an emotional and spiritual process. Lerner, Small and Loewenstein (2004) examined the impact of specific emotions and the carryover effects on economic decisions. The findings demonstrated that emotions can influence decisions even when money is at stake, as emotions can have dramatic effects on economic transactions. O'Neill and Lambert (2001) too found that emotions can influence people's reaction to the prices of products. Price would have less of an influence when consumers are experiencing positive emotions.

Figure 1:



Inevitably, emotions play a very pertinent role in marketing (Geuens and DePelsmacker 1998, Bagozzi, Gopinath and Nyer 1999, Mattila and Enz 2002, Papadatos 2006.). Papadatos (2006) illustrated the importance of establishing and building emotional connections between brands and consumers based on the example of Canada's Air Miles program. Geuens and DePelsmacker (1998) found that positive feelings, especially interest, cheerfulness, and lack of irritation, are associated with higher ad and brand recognition scores, whilst non-emotional ads lead to the least favorable affective reactions. Aaker and Stayman (1989) suggested warm appeals have a stronger impact on women than men, whereas several researchers reported more positive reactions to erotic stimuli by men than by women (Alexander and Judd 1979, Latour 1990, Latour, Pitts, and Snook-Luther 1990, Latour and Henthorne 1994). De Pelsmacker and Geuens (1996) further substantiated the findings by indicating that brands advertised by means of an erotic appeal are more recognized by men than by women whereas brands using warm (or neutral) ads gained more recognition by women. Women also showed a more positive attitude towards the brand pictured in warm and neutral advertisements. Warmth (depicted in a cozy, friendly atmosphere) is believed to improve overall advertising results (Aaker and Bruzzone 1981, Aaker, Stayman, and Hagerty 1986, Aaker and Stayman 1989). On the reverse, negative emotions experienced by the consumer can lead to negative word-of-mouth that would tarnish and damage brand reputation as word-of-mouth is a form of the social sharing of emotions (Wetzer, Zeelenberg and Pieters 2007). Hence, it is evident that emotions can affect the bottom line of the corporation. Therefore, the strategy of positively managing consumer emotions and brands is required and adopted by corporations.

Emotional branding is about tapping into the heartstrings and emotions of the consumer to create lasting bond, loyalty and relationships. Gobe (2001) defines it as a cocktail of anthropology, imagination, sensory experiences and visionary approach to change. Emotional branding brings a new layer of credibility and personality to a brand by connecting powerfully with people on a personal and holistic level; it enables brands to carry a personal dialogue with consumers on the issues which are most meaningful to them (Gobe 2001). Feelings and the emotions evoked are the basis in creating successful, smashing brands as consumers form relationships with brands, not products, not corporations (Decker 1998).

Gobe (2001) stresses that conceptualizing a brand through personalization has become a very powerful way to build brand identity. Brand personality is viewed as a crucial element as it gives the brand a set of human characteristics that would link consumer to the brand (Schmitt, and Simonson 1997, Bowlby 2000, Gobe 2001). For a brand to be effective in the service industry, it needs to make emotional connections to employees and through them, to customers (Simmons 2004, Papadatos 2006.). Emotional bonds have to be made between the brand and the people. Listening to consumers and B2B customers talk about brand experiences reveals not only the rational product attributes that impress them, but also the emotional reactions (McEwan 2005).

An array of brands has attained consumer loyalty as they have emotional bonds with the consumers. These brands evoke warmth, loyalty, friendliness and even love (Roberts 2004, Lury 2004, Lindstrom 2005). Brands such as Apple, Coca-Cola, Victoria's Secret, Mac, Vuitton, Starbucks and Godiva are examples brands that have successfully evolved from mere functional to emotional brands. As Roberts (2004) indicated that "brands are running out of juice". The need to replace the functionally driven concept of branding to meet the demands of modern consumers has led to a birth of a more emotionally defined idea of branding, called lovemarks.

The total C&T market was valued by Euromonitor at \$253.8bn in 2005 (Euromonitor 2007). Various brands flood this highly competitive and lucrative market. Japan's \$USD3 billion male cosmetics market is one of the biggest in the world, accounting for nearly one-fifth of men's cosmetics sales globally, according to market research firm Euromonitor International. It estimates the global market will reach \$25 billion by 2011 (ChinaDaily 2007). Thus, the growth of the male consumer segment presents cosmetics companies the opportunity to create successful, power brands that encapsulate emotions and sensory.

The Metrosexuality Popular Culture in Japan

Popular culture, or better known as pop culture, refers to the culture of the masses as stated by Martinez (1998). It stems from the daily lives of the majority in society. This is contrary to the image one conjures up when the word culture is mentioned – arts, superior knowledge and intellect. As such, daily aspects such as entertainment, media, music, sports and clothing are key components of popular culture. Japan has always been known as a major ‘player’ in inculcating popular culture for instance cute or better known as the ‘kawaii’ (可愛い) culture, アニメ (Anime), 漫画 (manga) and コスプレ (cosplay) (Craig 2000, Rowley, Tashiro, Dawson, and Ihlwan 2005, Craft 2005,).

The rise and popularity of metrosexuality has led the world to witness the establishing of another ‘genre’ of pop culture in Japan. Mark Simpson (1994) defined the typical metrosexual Mark Simpson (1994) defined the typical metrosexual as a man who spends resources (in terms of monetary and time) in his appearance and lifestyle. The metrosexual spends a lot of time and money in ensuring that he looks good and enjoys the finer things in life; such as enjoying being pampered in the spa. The Yano Research Institute in Tokyo reported that men's beauty care market has doubled in the past six years and now rakes in annual revenues totaling \$248 million (Tashiro 2006) (2006). According to figures compiled by the Economy, Trade & Industry Ministry, domestic sales of men's cosmetics, boosted by skincare products, are up 30% since 2001 and advanced 12% from 2005 to \$124 million (Tashiro 2006).

The use of cosmetics dates back to 10,000 BC in Egypt where they were in the forms of scented oils, dyes, paints and henna (Cohen, Kozlowski and Vienne 1998, Johnson 1999). Perez (1998) stated that in early Japan during the Heian period (794-1185), men and women both used cosmetics, textiles, perfumes, textures, colors and nature imagery to express their emotions. Male cosmetic treatment of the eyebrows has a long history, dating to at least the Heian period; where refined eyebrows are seen on many of the early Buddha statues such as the Chugu-ji in Nara (Tsuda 1985). The Heian-period classic, ‘Tale of Genji’ by Lady Murasaki described the transformation of male beauty that reflects beautiful young men or known as ‘bishonen’ (Hirota 1997). During the Tokugawa era (1600 – 1868), male actors set the fashion in clothing, hairstyle, makeup, dance and even behavior of women today; as the Kabuki like Noh were performed by only men (Perez, 1998). The Meiji era (1868-1912) witnessed the advertising of cosmetics product category include body products for both men and women such as ‘Bigan Sui’, a ‘face water’ for clearing up and beautifying the skin (Machida 1997). The mid 1990s not only saw the chapatsu (fad for brown hair) trend being a huge hit with both men and women, leading to soaring sales of hair care products, but skincare and nail-care as well (Miller 2006).

In the past as Simpson (1994) states “old-fashioned (re)productive, repressed, unmoisturized heterosexuality has been given the pink slip by consumer capitalism.....the stoic, self-denying, modest straight male didn't shop enough as he was too preoccupied with work and earning money for the family, and so he had to be replaced by a new kind of man, one less certain of his identity and much more interested in his image.” Today men have adopted a different outlook and have become part of modern consumerism as women (Davies and Bell 1991, Nixon 1992, Bocock 1993, Firat 1993) Men now look to identity construction, achieved through the style of dress and body care, image, the ‘right look’ (Bococok 1993). The consumption of products has been found to contribute to the production of desired self-image, identity and self- concept (Mort 1988, Schouten 1991, Kellner 1992, Featherstone 1993, Firat 1993, Thompson and Hirschman, 1995). The trend for Japanese men to spend time and effort in their physical looks and appearances began in the 1980s when Japanese women began to feel more empowerment after labor laws called for equality in the workplace (SkinInc, 2006). The collapse of the bubble economy in the 1990s and end of life-long job security that made Japanese men realize they should look beyond conformity. This spurred the interest in looking after and pampering themselves (Manila Times 2005).

Various industry reports reflect the increase in beauty & grooming product consumption for both men and women consumers (Intel 1995, Fuji Kezai 2006, DataMonitor 2006, Euromonitor International 2007). A myriad of factors contribute to the increase in sales for instance, changes in the

economic system (Kondo 1988, Miller 2006), peer pressure (Ono 1999) and the advancement of consumer capitalism (Simmel 1957, McCracken 1988, Firat 1993). Clammer (1997) maintained that purchasing has become central to the pursuit and experience of leisure. Japanese ladies were found to have a preference for ‘bishonen’ men (Mitsui 1993, Hirota 1997, Time Asia 2005) and by being beautiful, the men will experience a better, improved relationship with women (Tanaka 2003). This has not only propelled the sales and consumption of cosmetics and saw an increase in male beauty education but, a birth in the ‘Visual Kei’ popular culture (Miller 2006).

The ‘Visual Kei’ movement witnessed the usage of cosmetics among men and the emergence of bands and singers such as Gackt, Hide, Dir en grey and L’Arc~en~Ciel. This movement had inspired the interest in eyebrow shaping, skin care, various grooming products as well as beauty works (Shogakukan 1999). Young men in Japan became a lot more conscious of their appearance than before. The definition of well-groomed young men is changing to the point of pampering their skin and tweezing their eyebrows (Ono, 1999).

The nation has also seen the mushrooming of men’s aesthetic salons nationwide. TBC, a beauty salon for women, opened a Tokyo branch just for men in 1999 and saw sales shoot up after running a television commercial featuring British soccer hero David Beckham, whose well-known love of women’s garments has made him perhaps the world’s most famous metrosexual (Manila Times, 2005). Meanwhile, Dandy House, a men’s beauty chain offering everything from trimming eyebrows to removing body hair to weight-loss programs, plans to expand from 54 salons to 100 by 2010 (ManilaTimes, 2005). The clientele is not only the young and trendy but also Japanese corporate workers who are realizing that the classic suit and tie won’t cut it in the age of women’s empowerment (Agenda Inc, 2005).

Magazines such as Non-No, Leon and Men’s Club (the male-equivalent of Cosmopolitan, Vogue and Elle) flood the market; bookstores and convenient stores alike. Product offerings for men have grown in diversity; where hair care products were once touted as the main beauty & grooming product for men, the market now witnesses a huge shift and a diverse portfolio of offerings from skincare, nail care right to cosmetics (JeanPaul Gaultier launced Tout Beau; a men’s line of cosmetics in 2003). Cosmetic companies have aggressively launched products exclusively Pour Homme. Shiseido launched their men’s skincare brand, Shiseido Men in May 2005 and have witnessed the sales doubling beyond expectation. Leading department store Isetan renovated its men’s fashion building in Tokyo in September 2003, adding a vast section of fragrances, ointments and other toiletries. Skin Inc (2006) reported that sales for the first year surged 20 percent year on year to 37.7 billion yen (\$362.5 million). The apparent growth in the consumption of cosmetics and grooming products & services sets the backdrop in which the study is undertaken.

Study Overview and Findings

The main thrust of the study was to determine the prevalence of sensory and emotional elements in the marketing of cosmetics to men in Japan; following which whether both strategies are the main drivers that result in the act of cosmetics and personal grooming products consumption. A qualitative research method was adopted as it would provide an insight into the sensorial and emotional aspects that quantitative methods are unable to solicit. Sampling selection was made based on purposeful critical sampling strategy with participants recruited via a snowball or chain process. A total of 42 working, Japanese males within the age range of 27 – 31 (with a mean of 28.95) participated in this study. The preference for respondents who were already in the workforce was to ensure that there was sufficient spending power (versus that of college students). This would reduce the likelihood that purchase choices were made based on economic reasons alone. Out of the 42 participants, 8 were from the investment banking industry, 11 from consulting (including auditing), 15 from sales and marketing and 8 from technology fields (ie. computing, engineering). The 42 respondents were all well-groomed and are using personal grooming products (such as hairstyling goods and skincare).

Focus group interviews were conducted where the respondents formed 7 different groups (6 people per group). Focus group method was selected as they have been popular in marketing and consumer psychology in gathering data about products and services and consumer emotions (Greenbaum 1993, Skinner 1994, Templeton 1994).

Discussions were focused on asking probing questions and initiating free and open discussion and debates about men's cosmetics (color cosmetics and skincare). Open ended questions as they allowed individuals to respond without setting boundaries or providing clues and influencing the answers (Krueger and Casey 2000, Stewart, Shamdasani and Rook 2006). Laddering technique was also utilized to derive to the core of issues and emotions as it aids discovering the benefits of the products as well as the emotional connections (Bystedt 2003). Each session lasted between 2 – 3 hours was recorded (using an IC recorder) and transcribed. Observations and the discussion were also noted and recorded down during the sessions.

Questions generally looked at the driving factors that led to product selection and consumption choices as well as consumption experiences. The participants' 'feelings' and perceptions about men's vanity products were also solicited. The participants also debated on the merits of the various brands and products they were using. The observation and notes were taken on the product/brand recommendations made to each other along with the reasons (ie. product A improved my skin texture and gave me confidence, the 'coolness' factor). A fair amount of discussion time was spent by the participants sharing experiences of the experiences before and after using certain products, the reasons for the first 'cosmetics' encounter and how did they felt as well as the reactions that they received. The participants' responses and feedback guided this conversation style interview (Sayre 2001). The findings were then analyzed using the interpretative phenomenological analysis which is concerned with how participants make sense of their personal and social world (Smith 2003).

The “First Experience”

Participants shared about their 'first time' using cosmetics. There were various accounts however there were 2 dominant reasons – societal expectations and personal needs. Societal expectations gave rise to the need for men to look good and presentable in order to ascertain a better future (Hatfield and Sprecher 1986, Jeffes 1998, Patzer 2006,). Societal expectations include family and friends as well as the general society at large. Participants shared stories of how they felt pressured to look good at all times as not only was it required of them at work but also on a social level; else they do not appeal to the opposite sex. This propelled them to take the first step in 'maintaining' their appearances via personal grooming products.

“I remembered seeing all the girls going crazy over well-groomed men and superstars. It was hard getting their attention. Then, I realized to be successful I have to look good. So, I started using grooming products.” (Tanaka)

“I think everyone, like me would say that they have to start using (personal grooming products) because it is how it is for us to live in this society.” (Yuichi)

“All my friends were using.... They talked about it and asked me... so it was natural to start too.” (Ken)

“My mother asked me to do so and she did buy me some (skincare products).” (Ryu)

Personal need was another prevalent factor. Participants discussed how they faced 'troubled' areas – such as receding hairline, oily skin and acne. These 'problems' affected their self esteem and emotions as they were unhappy and were very self conscious. Hence, they started using personal grooming products that targeted their problem areas.

“I had oily skin and I wanted something to make it better.” (Kenichi)

“People said using (grooming products) would make me look better.” (Atsuya)

The need to 'look' good to boost one's self esteem overlaps with societal expectations. Society has been trained to recognize certain kinds of beauty (Miles 1999, Brand 2000). The importance placed on achieving beauty, the need to look good has created an environment where 'societal' beauty has

become the yardstick that measures individual value and success (Jeffes 1998, Atcoff 2000, Wolf 2002). Hence, this propels the individual to prioritize self-grooming; to attain ‘beauty’.

Continual Usage

Participants were identified to have continued consumption post ‘first experience’. None of the participants cited that the usage of grooming products stopped after their first consumption experience. The factors mentioned that led to continual usage can be categorized under product effectiveness. Via the laddering technique, product effectiveness was revealed to encompass both ‘visual effectiveness’ and ‘felt/perceived effectiveness’. In terms of visual effectiveness, twenty six participants actually saw that continual usage had actually addressed their ‘problem areas’ and there were improvements. As for the remaining participants, they continued usage as they identified it as the routine to ‘maintain’ their looks.

“I continued with the product because it could cure the pimples.” (Nishimura)

“I don’t see the impact but I think I can feel that my skin condition is better when I continued using.” (Hide)

One participant made a comment how he did not consider stopping as he feared the unknown. Upon making his statement, most respondents voiced their agreement in unison.

“I have never thought of stopping usage. Sometimes I wonder about the real effectiveness as I do not seem to see much difference but I don’t want to stop because it will be too scary to imagine if I stopped and my appearance gets bad.” (Koji)

Product and Brand Choice

Product choices were generally made based on perceived area of needs; such as oil control, combating dryness and hair loss; this was the main feedback. However, a small number of participants (approximately 13%) shared that their first ‘usage point’ was determined by what they received from their girlfriends and mothers. Here, the females determined the problem areas for the men and got them the appropriate products.

“I dislike oil so I started using skincare to rid the problem.” (Kenji)

“My mother gave me a set of skincare and asked me to use it.” (Koji K.)

The discussion also touched on color cosmetics. Participants basically were not aware of the popularity of color cosmetics among ‘average’ people (note: average here refers to those who are not in the entertainment industry). The opinions on men’s color cosmetics seemed to differ; as some felt they would try or use them (a small number of twelve participants) while others rejected the notion outright. Those that opposed usage cited that color cosmetics were strictly for women and using (color cosmetics) is more of a feminine act and robs one of his masculinity. The common theme that emerged from the refusal to use color cosmetics lies in the perception of masculinity. An interesting point that arose was that majority felt it was perfectly acceptable to use eyebrow kits in shaping their eyebrows, which is linked to the cultural aspects and practices of shaping eyebrows (Tsuda 1985). Here, a majority of the participants (94%) were using such kits.

“It (color cosmetics) is not acceptable. It cannot be acceptable. No man would use color cosmetics.” (Nishikawa)

“Sorry. I am not even interested in trying (color cosmetics).” (Jin)

“Defined eye-brows make me look a lot better!” (Kei)

While a handful did state that they would give color cosmetics a try. The only catch was that it would have to appear natural and post-application no one would be able to tell that they have used it.

“As long as it makes me look better but has to be natural..no funny colors.” (Akira)

“I might give it a try if I can look good...maybe colored lip care or something like that.” (Inoue)

Five main reasons were attributed to influencing or determining brand choices; namely, family/friends, convenience (availability), economic (price), brand name and media. Family/friends were pertinent when it came to the participants brand decision-making. Basically, those whose decisions were shaped by family/friends had either received the products as gifts (and has since continued using the same brand) or received recommendations from family/friends. They had not much information on the product offering available in the market and stated that they trusted the information given by their close ones.

*“My friends were using it so I asked for advice and it came highly recommended.”
(Takeshi)*

“My girlfriend insisted that I look after my skin. So, she gave me a gift set and I have been using the same brand since.” (Nobu)

An interesting factor of brand choice was simply due to convenience. This was cited by about sixteen of the participants. Similarly, insufficient information on male grooming products (other than hairstyling) as well as the lack of interest in conducting ‘research’ on the ‘differences’ between various brands (as what female consumers would generally do) have led to them buying whichever brands are conveniently available; where they can find in the drugstore/department store or convenience store. Should their ‘regular’ brand be suddenly unavailable at the drugstore, the participants stated that they would have no qualms in purchasing whatever ‘substitute’ brands are available on the shelves.

“I use this (specific brand) because it is easy to find in convenience stores..no need to take too much trouble to find it.” (Atsushi)

A majority purchased their products from drugstores and convenience stores. Half indicated the usage of such channels being attributed by convenience while the remaining participants cited price. They perceived that there was not much utility difference between an expensive and a lower priced range. This brought on a debate by others who disagreed and indicated that expensive brands did have better effect which will be discussed in the following section on product experience)

“I think a 600 yen lotion does the same job as a 5000 yen lotion. The difference is just the brand...why pay more?” (Masa)

“I am not sure if I want to pay so much yet not really see the huge difference” (Akira)

The brand name of the product definitely helped chalk-up sales. Participants cited that there was insufficient information being made available for men’s products. Hence, they relied on the brand itself as a referral of effectiveness.

*“I would just pick the product of the brand that I know is famous like Shiseido. You can’t go wrong....it is a good brand and they have been in the cosmetics industry for ages.”
(Nakamura)*

“Branded is better...sometimes I have to consider the price too but usually it is not very expensive..around 3000 yen per bottle.” (Takuya)

The influence of media in terms of generating brand loyalty has been minimal. About 2 participants referred to magalogs for recommendations while 5 participants attributed their brand choice based on celebrity endorsements.

Those who have continued using the same brand were asked if they would consider trying other brands instead. To this, twenty six participants indicated that they would not particularly seek to change brands unless the current brands were not available. Participants indicated that they would consider using a different brand if they received it as gifts, it comes recommended by friends and family or the product itself was very effective.

“I have been using the same brand for a long time and there are no problems...so no need to make changes...unless there is a new brand that is really super effective” (Taka)

“To purposely look for a new brand to try is rather a hassle. It may not suit me and I may look worse.” (Yasushi)

“I am not too sure. Maybe I would but I will wait for someone’s testimony.” (Tomohiro)

“Trying a new brand or product is risky. I don’t know if it will have any adverse effects and it will take too much time to find out the details. I don’t have much time everyday so I will stick to my current product.” (Suzuki)

“If it is recommended by my girlfriend or friends, I will try it.” (Yanagi)

Product Sensorial Experience

Product experience was crucial in determining the level of sensory branding for men’s cosmetics. The experiences were explored from a sensorial aspect. A handful of nine participants indicated that their preferred brand/product range had ‘a pleasant’ smell. They cited that the scent was the first ‘touch point’ of their product experience. The fragrance created a positive first impression. Eight participants however indicated that their first ‘smell’ experience was not as memorable as the fragrance was rather plain however, that did not deter them from using the product. The remaining participants felt that nice smelling fragrance is an ‘expected’ feature as all personal care products & toiletries have fragrances. Those that cited scent as the first touch point were also asked if the smell was distinctive or if the fragrance was just nice but not distinctive and ‘forgettable’; in identifying if the scent was a signature fragrance that consumers could link to the brand. Only two participants identified the product/brand as having a distinctive, pleasant scent while others felt it was pleasant but forgettable.

“I was surprised that the lotion had a nice, light smell..not feminine at all.” (Taro)

“The smell was nice and fresh like aftershave or bath soap.”(Koichi)

Texture was another key feature that was brought up during discussion. Product texture and skin texture post-consumption were the main themes. Participants preferred products of less oily and ‘lighter’ textures for lotions, and balms. The lathering effect for facial wash was viewed as important (Microbeads was viewed as a luxury and a big ‘plus’ as it gave the squeaky clean feeling). They voiced satisfaction from using products that fulfilled the mentioned requirements. Some participants had used moisture rich products and experienced an uncomfortable feeling of the after effect of a layer of oil.

“It lathered well and removed the oil from my face...nice, clean skin. It worked well.”

(Hirota)

“I like the natural feel like I had not applied lotion at all.” (Ota)

Product industrial design was also debated. Participants indicated that packaging only differed in colors and material (such as plastic, glass). No one touched on the ergonomics and texture of packaging. When probed further if they felt the packaging had features of added value (for instance, dispenser, design), all the participants felt that there was nothing special or noteworthy, however some responses that noted the shape of packaging was ‘convenient’ for taking with them.

“Packaging is the standard...but small and easy to take with me. Nice shade of blue is used.” (Naoki)

“It comes in normal packaging...nothing special...just like the other brands as well.” (Osaki)

“The only exterior difference between brands would be the labels and packaging...it’s like if you see Clarins Men, it is blue and white but Shiseido Men’s is white.” (Koike)

“The colors are classy and more masculine. The product I am using has nice clear plastic packaging and easy to take on trips because it is slender” (Shimizu).

Emotions Explored

When it came to the emotion aspect, all of the participants voiced that they felt better and confident post-consumption. The emotional aspects of product consumption have been positive however, when it came to brand experience, participants cited that they have not had sufficient experiences using other brands to be able to declare that they ‘love’ the brand, as Koji noted, *“It does the job but I don’t know if other brands are the better... I think they are all the same in function”*.

Discussion and Conclusion

Consumerism has not hit an all time high as there is no end in sight to the desires, wants and needs of man that continues to witness the introduction of new products, fads and trends that endlessly fuel consumption and spending (Stearns 2001, Graaf, Wann and Naylor 2002, Schor 2005). Against this backdrop the rise and popularity of the metrosexual culture has opened a new door in the creation of male consumerism and market opportunities. When in the past, men's 'hot' products have only been skewed towards cars, sports and gadgets. Today, metrosexuality adds new realms of fashion, cosmetics and services to the equation.

The findings of the study reveal that skincare has become a norm in the daily grooming ritual. The skincare range used encompassed cleanser, facial scrub, lotion (toner) and moisturizer. Sunscreen was generally only used during summer when the participants engaged in outdoor activities. The use of color cosmetics was however, currently limited more so due to social constraints as it was viewed as not a norm for men to use color cosmetics (other than celebrities). Hairstyling products ranked high in daily consumption as well, with wax being the common 'hairstyling staple'. Unlike female consumers, hair care products were not as widely used with the exception of shampoo and tonic that addressed hair loss problems. A prevalent theme that emerged from the discussions was the participants selected the types of products to use based on perceived 'problem' areas as opposed to female consumers' which is fueled not just by problem areas (Berg 2001, Begoun 2002). Most of the participants stated that they did not have the time to spend on product research,, they preferred a simpler approach – a solution for their 'problem zones'.

Participants gave various accounts providing reasons why they started using and are continuing with the usage of cosmetics (for instance, recommendations from family and friends, self realization of the need to use cosmetics). However, the underlying common thread that ran through all these was that consumption was found to have been driven by societal factors. Society has placed importance on the physical attributes; the 'prettier' or more 'handsome' a person, the higher the chances of attaining success and 'favorable treatment' in life (Jeffes 1998, Etcoff 2000, Calton 2001, Irons 2006). The consumption of cosmetics is seen as one that provides hope in achieving beauty and success, as Peiss (1998) describes the powders and pastes, "these little jars tell a rich history of women's ambition, pleasure and community." The continual reinforcement of beauty and its positive relationship with success has unconsciously spurred the consumption of cosmetics. This leads to a concern in the marketing and product messages that are sent out. The call to be more self-indulgent as a means to enjoying life and achieving self-actualization has changed not only gender roles, but has also contributed to changes in family and society dynamics at large. The using of celebrities and superstars as the spokesperson advocating metrosexuality both culture and products (such as Beckham, Brad Pitt and Kimura Takuya) have seen a rise in tween consumerism and a new growing concern of values, materialism and importance of physical appeal among the young. New marketing strategies need to ensure that the messages sent out are not viewed in negative light as inculcating a materialistic and opportunistic society.

The findings revealed that the main drivers for the participants' brand choice and preferences mainly stemmed from non-sensorial factors such as convenience or availability and word-of-mouth. In keeping the world connected at the fingertips, the global connectivity and the dependence on the internet to obtain information has helped propelled the growth of the men's grooming products. Blogs and chatrooms have become 'grassroots' products recommendations and reviews. Most respondents have referred to such sources for advice as well as to catch up on the latest, hip styles and offerings. Corporations also tapped into such sources for invaluable information – for product development, improvement and competitor information. Many corporations 'sponsor' blogs and even hire tweens, teens and young adults to test their products or as Quart (2004) states, adult "teen trendspotters" who insinuate themselves into the lives of "Influencer" teens in order to cop "youth buzz". Hence, the need to balance information sources and the processes of gaining information without exploiting the youth sector has to be given more focus.

Another factor of brand preference and choice arose during the discussions of product selection was brand names. This leads to a paradox where consumers who (are generally well aware of how brands and corporations would package and sell their products) usually view product claims with much skepticism, make purchase decisions based on the ‘promise’ and ‘hope’ advertised by the brand as well as the reputation of the brand itself.

The findings of this study contradicted the core essence of cosmetics which encompasses senses and where assumption has been that sensory branding would be at a matured level. Although the participants talked about the sensorial elements of the products, they did not identify any distinctive properties (in relation to sensorial aspects). The product consumption experience did include the sensorial aspects of smell, sight and touch with participants citing the texture (both product as well as post-consumption effects on the skin), scent and product packaging. Even though there was feedback that reflected the positive effects of the adoption of sensory branding for instance both Taro and Koichi indicated that the scents were pleasant and had enhanced the consumption process, none of the participants had attributed brand choice based on the sensorial elements. It is evident that brands have not fully exploited sensory branding in men’s cosmetics. As sensory branding is noted to be at its infancy stage, we would witness further growth and development in this area as cosmetics companies strive to win consumer loyalty and market share.

From the emotion perspective, the findings suggest that using the products indeed did boost confidence and made them happier about the way they look. Positive emotions were experienced post-consumption. However, from an emotional branding aspect, the results were fairly similar to that of sensory branding. On the whole participants did not have any ‘bond’ or a particular affinity towards the brands that they are using. The limitation lies not only in the explicit statements from the participants that they have not tried other brands and thus were not able to fully ‘appreciate’ and build ‘loyalty from emotional attachment’ with their current brands, but the findings also show that emotional branding is also at its infancy stage.

This study has also reflected the intricate relationship between culture both traditional and popular and consumption. The findings show that participants were more opened to being ‘beautiful’ owing to the ‘*bishonen*’ roots that have long existed in the Japanese culture. The incorporation of cultural aspects into sensory branding could be an area of future research. This may lead to a more effective adoption of sensory branding.

The consumption of cosmetics is built on the foundation of societal standards regarding beauty, image and presentation. Generally, the participants were inclined to using cosmetics as they wanted to fit the societal image of a well-groomed person; with flawless complexion and well-presented. Brand loyalty however has not been fully attained among this consumer base as majority would not hesitate to purchase a different brand (out of convenience and availability at the store). Sensory and emotional branding have been introduced as a strategy in cultivating consumer loyalty and creating successful brands, and has witnessed a list of success stories for a myriad of products. However, this research suggests that the incorporation of sensory and emotional branding in Japanese men’s cosmetics is at its infancy and the findings derived suggest that both senses and emotions have not been fully capitalized and milked by corporations in being the main driver of brand and product choice. This creates a level of concern where it is evident that corporations would be focusing on exploiting consumers’ emotions and senses to their benefit. Correspondingly, consumer education and awareness should be further instilled.

References

- [1] Aaker DA, Kumar V & Day G.S (2004). *Marketing Research*, 8th edition. USA:John Wiley & Sons.
- [2] Aaker DA & Bruzzone DE (1981). Viewer Perceptions of Prime-time Television Advertising. *Journal of Advertising Research*, 21, 15-23.
- [3] Aaker DA & Stayman DM (1989). What Mediates the Emotional Response to Advertising? In P. Cafferata & A. Tybout (eds.), *The Case of Warmth, Cognitive and Affective Reactions to Advertising*, Lexington, Massachusetts: Lexington Books.
- [4] Aaker D, Stayman DM & Hagerty MR (1986). Warmth in Advertising: Measurement, Impact and Sequence Effects. *Journal of Consumer Research*, 12 (March), 365-81.
- [5] Abriat, A., Barkat, S., Bensafi, M., Rouby, C., & Guillou, V. (2005), Emotional and psychological effects of fragrance in men's skin care, *International Journal of Cosmetic Science*, 27 (5), 300–300.
- [6] Alenzander MW & Judd B (1979). “Do Nudes in Ads Enhance Brand Recall.” *Journal of Advertising Research*, 18 (2), 47-50.
- [7] Bocoock R (1993). *Consumption*. London:Routledge.
- [8] Bagozzi RP, Gopinath M & Nyer PU (1999). The Role of Emotions In Marketing. *Academy of Marketing Science Journal*, 27(2), 184-206.
- [9] Bainbridge J (1998). Scenting Opportunities. *Marketing Magazine*. <http://www.brandrepublic.com/News/59887/> Accessed 16 May 2005,
- [10] Barlow J & Maul D (2000). *Emotional Value*. San Francisco: Berrett-Koehler
- [11] Baron RA (1997). Of Cookies, Coffee, and Kindness: Pleasant Odors and the Tendency to Help Strangers in a Shopping Mall. *The Aroma-Chology Review*, Vol. 6(1), 1.
- [12] Begoun P (2002). *The Beauty Bible: The Ultimate Guide to Smart Beauty*, 2nd Edition. Washington: Beginning Press
- [13] Berg R (2001) *Beauty, The New Basics*. New York: Workman Publishing.
- [14] Black P (2004). *The Beauty Industry: Gender, Culture, Pleasure*. London: Routledge.
- [15] Bower B (1987). Baby face-off: The roots of attraction. *Science News*, Vol. 131(20), 310-310.
- [16] Bowlby R (2000). *Carried Away: The Invention of Modern Shopping*. London: Faber & Faber.
- [17] Brand PZ (2000). *Beauty Matters*. Bloomington, Indiana: Indiana University Press.
- [18] Bystedt J (2003). *Moderating to the Max: A Full-Tilt Guide to Creative Insightful Focus Groups and Depth Interviews*. New York: Paramount Market Publishing.
- [19] Calton VL (2001) *You Can Be All That!: A Guide to Beauty and Success*. Highland City, FL: Rainbow Books.
- [20] Cervonka A (1996). A Sense of Place: The Role of Odor in People’s Attachment to Place. *The Aroma-Chology Review*, 5(1).
- [21] Clammer J (1997) *Contemporary Urban Japan: A Sociology of Consumption*. Oxford: Blackwell Publishers Ltd.
- [22] Clegg A (2006). Senses Cue Brand Recognition, *Business Week*. http://www.businessweek.com/innovate/content/mar2006/id20060315_501684.htm Accessed 23 April 2006.
- [23] Cohen M, Kozlowski K & Vienne V (1998). *Read My Lips: A Cultural History of Lipstick*. San Francisco: Chronicle Books.
- [24] Craft L (2005). Japanese Style Goes Pop; Tokyo becomes trailblazer for trendy fashion, culture. *The Washington Times*. <http://www.wpherald.com/storyview.php?StoryID=20050807-030608-2858> r Accessed 11 January 2006.
- [25] Craig T (2000). *Japan Pop! Inside the World of Japanese Popular Culture*. New York: M.E.Sharpe, Inc.
- [26] Datamonitor Plc. (2006). *Facial Care Industry Profile: Global*. Datamonitor Plc: London.

- [27] Davies G & Bell J (1991). The grocery shopper – is he different? *International Journal of Retail & Distribution Management*, 19(1), 25-28.
- [28] DeGaaf J, Wann D & Naylor TH (2002). *Affluenza: The All-Consuming Epidemic*. San Francisco: Berrett-Koehler Publishers.
- [29] Decker C (1998). *P&G 99*. London: Harper Collins Business.
- [30] Dennis C, Newman A & Marsland D (2005). *Objects of Desire. Consumer Behaviour in Shopping Centre Choices*. New York: Palgrave Macmillan.
- [31] Denzin N & Lincoln Y (eds.) (2000). *Handbook of Qualitative Research*, 2nd edition. Thousand Oaks, CA: Sage.
- [32] Dimitrius JE & Mazzarella M (2001). *Put Your Best Foot Forward: Make a Great Impression by Taking Control of How Others See You*. New York: Simon & Schuster
- [33] Douglas M & Isherwood B (1996). *The world of goods: Towards an anthropology of consumption.*, London: Routledge.
- [34] Ekman P (2003). *Emotions Revealed: Recognizing Faces and Feelings to Improve Communication and Emotional Life*. New York: Owl Books.
- [35] Etcoff N (2000). *Survival of the Prettiest*. USA: Anchor.
- [36] Euromonitor (2007). *Cosmetics and Toiletries – World*, London: Euromonitor International.
- [37] Featherstone M (1993). *Consumer culture and Postmodernism*. London: Sage.
- [38] Firat FA (1993). Gender and Consumption: Transcending the feminine? In Costa J(Ed.), *Gender Issues and Consumer Behavior*, Sage, London. pp. 106-126.
- [39] Frijda NH(Ed.), Manstead ASR(Ed.) & Bern S (2000). *Emotions and Beliefs: How Feelings Influence Thoughts (Studies in Emotion and Social Interaction)*. Cambridge: Cambridge University Press.
- [40] Fuji Keizai.(2006). *Marketing Handbook of Cosmetics Vol. 3*. Tokyo: Fuji Keizai.
- [41] Gobe M (2001). *Emotional Branding*. New York: Allworth Press.
- [42] Gorn G.J (1982) The Effects of Music in Advertising on Choice Behavior: A Classical Conditioning Approach. *Journal of Marketing*, Vol. 46, 94-101.
- [43] Greenbaum T (1993). *The Handbook of Focus Group Research.*, New York: Lexington books.
- [44] Geuens M & De Pelsmacker P (1998). Feelings Evoked by Warm, Erotic, Humorous or Non-Emotional print Advertisements for Alcoholic Beverages. *Journal of Consumer and Market Research*. <http://www.amsreview.org/articles/geuens01-1998.pdf> Accessed 1 June 2005.
- [45] Harris M & Johnson O (2000). *Cultural Anthropology*, 5th edition. Needham Heights, MA: Allyn and Bacon.
- [46] Hart S & Murphy J (1998) *Brands. The New Wealth Creators*. London: Macmillan Business.
- [47] Hatfield E & Sprecher S (1986). *Mirror, Mirror: The Importance of Looks In Everyday Life*. New York: University of New York Press.
- [48] Herbig P (1995). *Marketing Japanese Style*. Connecticut: Quorum Books.
- [49] Herz RS (1996). The Relationship Between Odor and Emotion in Memory. *The Aroma-Chology Review*, Vol.5(2), 1-2.
- [50] Herz RS & Schooler JW (2002). A Naturalistic Study of Autobiographical Memories Evoked by Olfactory and Visual Cues: Testing the Proustian Hypothesis. *American Journal of Psychology*, 115 (1), 21-32.
- [51] Hirota A (1997). The Tale of Genji: From Heian classic to Heian comic. *Journal of Popular Culture*, 31 (2), 29 – 68.
- [52] Hoch SJ (2002). Product Experience Is Seductive. *Journal of Consumer Research*, 29 (3), 448-454.
- [53] Hume D (2006). *Essays: Moral, Political and Literary*. New York: Cosimo Classics
- [54] Irons D (2001). *Insider Beauty*. New York: International Image Press.
- [55] Israel L (1985). *Estee Lauder*. New York: MacMillan Publishing.

- [56] Jaffes S (1998) *Appearance Is Everything: The Hidden Truth Regarding Your Appearance Discrimination*. Pittsburgh: Sterlinghouse Publisher.
- [57] Japanese Men Join Metrosexual Trend. (2006).: <http://www.skininc.com/news/1340916.html> Accessed 6 January 2006.
- [58] Japanese Men Turn To Cosmetics. (2007). http://www.chinadaily.com.cn/lifestyle/2007-08/13/content_6024492.htm Accessed 15 August 2007
- [59] Johnson R (1999). What's That Stuff? *Chemical & Engineering News*, Vol. 77 (28),31. [http://pubs.acs.org/cen/whats thatstuff/stuff/7728scit2.html](http://pubs.acs.org/cen/whats%20thatstuff/stuff/7728scit2.html) Accessed 20 July 2006
- [60] Kant I & Meredith JC (translator). (2006), *The Critique of Judgement: The Critique of Aesthetic Judgement*. New Hampshire: Digireads.com
- [61] Kellner D (1992) "Popular Culture and the construction of postmodern identities", in S Lash and J Friedman (eds). *Modernity and Identity*, Blackwell, Oxford, pp. 141-177.
- [62] Kivy P (2004) *Aesthetics*. London:Blackwell Publishing Limited.
- [63] Knasko SC (1995). Congruent and Incongruent Odors: Their effect on human approach behavior. *Compendium of Olfactory Research*, USA: Kendall Hunt Publishing.
- [64] Kondo M (1988). *88 Nen Trend ga mietakuru. (88 Trends)*. Tokyo: Kodansha.
- [65] Krueger RA & Casey MA (2000). *Focus Groups: A Practical Guide for Applied Research*, 3rd edition. Thousand Oaks, California: Sage Publications, Inc.
- [66] Latour, MS (1990). "Female Nudity in Print Advertising: An Analysis of Gender Differences in Arousal and Ad Response." *Psychology and Marketing*, 7(1), 65-81.
- [67] Latour MS & Henthorne TL (1994). "Female Nudity in Advertisements, Arousal and Response: A Parsimonious Extension." *Psychological Reports*, 75, 1683-1690.
- [68] Latour MS, Pitts RE & Snook-Luthre DC (1990). "Female Nudity, Arousal and Ad Response: An Experimental Investigation." *Journal of Advertising*, 19 (4), 51-62.
- [69] Lazarus RS (1994). *Emotion and Adaptation*. New York: Oxford University Press.
- [70] Lee H (1999) *Tao Of Beauty*. New York:Broadway.
- [71] Lerner JS, Small DA & Loewenstein G (2004). Heart Strings and Purse Strings. Carryover effects of Emotions on Economic Decisions. *Psychological Science*,15 (5), 337-341.
- [72] Lindstrom M (2005). *Brand Sense*. New York: Free Press.
- [73] Lury C (2004). *Brands: The Logos of the Global Economy*. London:Routledge.
- [74] Machida S (1997). *Jintan wa, naze nigai? (Why is Jintan bitter?)*. Tokyo: Boranteia Joho Nettowaku.
- [75] Mariampolski HY (2006). *Ethnography For Marketers. A Guide To Consumer Immersion*. Thousand Oaks: Sage Publications.
- [76] Martinez DP (1998). *The Worlds of Japanese Popular Culture*. Cambridge: Cambridge University Press
- [77] Matsui M (1993). Little girls were little boys: Displaced femininity in the representation of homosexuality in Japanese girls' comics. In S Gunew & A Yeatman, *Feminism and the Politics of Difference*, Boulder,CO:Westview Press.
- [78] Matthews B (2005). Coca Cola's Big Mistake: New Coke 20 Years Later... *Soda Pop Dreams*. http://www.sodaspectrum.com/36_newcoke.htm Accessed 16 June 2006.
- [79] Mattila AS & Enz CA (2002). The Role of Emotions in Service Encounters. *Journal of Service Research*, 4(4), 268-277.
- [80] McCracken G. (1988). *Culture and Consumption: New Approaches to the Symbolic Character of Consumer Goods and Activities*. Bloomington: Indiana University Press.
- [81] McEwan WJ (2005). *Married to The Brand*. New York: Gallup Press.
- [82] McMillan JH & Schumacher SS (1997). *Research in Education: A Conceptual Introduction*. New York: Longman.

- [83] Metrosexual Hype Continues: Japanese Beauty Industry Begins to Eye Men. (2005). <http://www.manilatimes.net/national/2005/jan/13/yehey/enter/mainent.html> Accessed 17 December 2005.
- [84] Miles MR (1999). *Plotinus on Body and Beauty: Society, Philosophy and Religion in Third-Century Rome*. Oxford: Blackwell Publishing Limited.
- [85] Miller D (1998). *A Theory of Shopping*. Cambridge: Polity Press.
- [86] Miller EG. & Kahn BE (2005). Shades of Meaning: The Effect of Color Flavor Names on Consumer Choice. *Journal of Consumer Research*, 32(1), pp. 86 – 92.
- [87] Miller L (2006). *Beauty Up. Exploring Contemporary Japanese Body Aesthetics*. Berkeley: University of California Press.
- [88] Mintel (1995). Men’s Toiletries, *Marketing Intelligence*, Mintel International Group: London.
- [89] Mirror Mirror: The Making of the Modern Male. (31 October 2005). *TimeAsia*, 39-43
- [90] Mittal B & Sheth JN (2004). *Customer Behavior: A Managerial Perspective*, 2nd Edition. Ohio:Thompson South-Western.
- [91] Mort F(1988). “Boy’s own? Masculinity, style and popular culture.” In R. Chapman and J. Rutherford (eds), *Male Order: Unwrapping Masculinity*, Lawrence and Wishart, London, 1988, pp.193-224.
- [92] O’Neill RM & Lambert DR (2001). The Emotional Side of Price. *Psychology and Marketing*, Vol. 18 (3), 217-237.
- [93] Ono Y (1999, March 11), Beautifying The Japanese Male. *Wall Street Journal*, p. B1-B8
- [94] Ortony A, Clore G.L & Collins A (1990). *The Cognitive Structure of Emotions*. Cambridge: Cambridge University Press.
- [95] O’Shaughnessy J & O’Shaughnessy NJ (2003). *The Marketing Power of Emotion*. New York: Oxford University Press.
- [96] Paterson M (2006). *Consumption and Everyday Life (The New Sociology)*. New York: Routledge.
- [97] Papadatos C (2006). The art of storytelling: how loyalty marketers can build emotional connections to their brands. *Journal of Consumer Marketing*, 23(7), 382 – 384.
- [98] Patzer G.L (2006). *The Power and Paradox of Physical Attractiveness*. Florida: Brown Walker Press.
- [99] Peiss K (1998). *Hope In A Jar: The Making of America’s Beauty Culture*. New York: Metropolitan Books.
- [100] Peneau S, Brockhoff PB, Hoehn E, Escher F & Nuessli J (2007). Relating Consumer Evaluation of Apple Freshness To Sensory and Physico-Chemical Measurements. *Journal of Sensory Studies*, 22(3), 313-335
- [101] Perez LG (1998). *The History of Japan*. Westport, Connecticut: Greenwood Press
- [102] Pooler J (2003) *Why We Shop. Emotional Rewards and Retail Strategie.*, Connecticut: Praeger.
- [103] Prinz JF & Wijk RAD (2007). Effects of Bite Size On The Sensory Properties of Vanilla Custard Desserts. *Journal of Sensory Studies*, 22 (3), 273–280.
- [104] Quart A (2004). *Branded. The Buying and Selling of Teenagers*. Cambridge, MA: Basic Books.
- [105] Roberts K (2004). *Lovemarks: The Future Beyond Brands*. New York: PowerHouse Books
- [106] Rosen AD & Ablaza VJ (2006). *Beauty in Balance*. USA: MDPress.Inc.
- [107] Rowley I, Tashiro H, Dawson C & Ihlwan M (2005). The Anime Biz. *BusinessWeek*. http://www.businessweek.com/magazine/content/05_26/b3939013.htm Accessed 29 June 2005
- [108] Sayre S (2001). *Qualitative Methods for Marketplace Research*. London: Sage Publications.
- [109] Scherer RK(Ed.), Schorr A(Ed.) & Johnstone T (2001). *Appraisal Processes in Emotion: Theory, Methods, Research*. New York: Oxford University Press.
- [110] Schmitt BH (1999). *Experiential Marketing: How to Get Customers to Sense, Feel, Think, Act, Relate*. New York: Free Press.

- [111] Schmitt B & Simonson A (1997). *Marketing Aesthetics: The Strategic Management of Brands, identity and Image*. New York: Free Press.
- [112] Schor JB (2005). *Born to Buy: The Commercialized Child and the New Consumer Culture*. New York: Scribner.
- [113] Schor JB (1999). *The Overspent American: Why We Want What We Don't Need*. New York: HarperPerennial.
- [114] Schouten J (1991) Selves in transition-symbolic consumption in personal rites of passage and identity reconstruction. *Journal of Consumer Research*, 17, 412-425.
- [115] Schwartz T (1973) *The Responsive Chord*. Garden City, New York: Doubleday.
- [116] Sense of Smell Institute To Honor Lancome, Paris. (26 August 2002), *Sense of Smell Institute*. http://www.senseofsmell.org/press/press_detail.php?id=70 Accessed 20 June 2007.
- [117] Sherman E, Mathur A & Smith RB (1997). Store Environment and Consumer Purchase Behavior: Mediating role of Consumer Emotions. *Psychology & Marketing*, 14 (4), 361-378.
- [118] Shields R (Ed.) (1992). *Lifestyle Shopping – The subject of Consumption*. Routledge, London.
- [119] Shogakukan. (1999). *Detaparu: Saishin joho, yogo jiten*. Tokyo: Shogakukan.
- [120] Silverman D (2005). *Doing Qualitative Research. A Practical Handbook*, 2nd edition. London: Sage
- [121] Simmel G. (1957). Fashion. *American Journal of Sociology*, 62 (6), 541 – 558.
- [122] Simmons J (2004). *My Sister's A Barista. How They Made Starbucks A Home From A Home*. London: CyanBooks.
- [123] Simpson M (1994, November 15), Here come the mirror men, *The Independent*: London.
- [124] Skinner S (1994). *Marketing*, 2nd edition. Boston: Houghton Mifflin Company.
- [125] Smith J (2003). *Qualitative Psychology: A Practical Guide to Research Methods*. London: Sage Publications Ltd.
- [126] Stearns PH (2001). *Consumerism In World History: The Global Transformation of Desire*. London: Routledge
- [127] Stewart DW, Shamdasani PN & Rook DW (2006). *Focus Groups: Theory and Practice (Applied Social Research Methods)*. Thousand Oaks, California: Sage Publications, Inc.
- [128] Tanaka K (2003). The Language of Japanese Men's Magazines: Young Men who Don't Want To Get Hurt. In Benwell, B.(Ed.) (2003), *Masculinity and Men's Lifestyle Magazine*, Oxford: Blackwell Publishing.
- [129] Tashiro H (2006). 'Japan Raises the Male Beauty Bar'. *Business Week*. [http://www.businessweek.com/globalbiz/content/dec2006/gb20061208_594250.htm?chan=glob](http://www.businessweek.com/globalbiz/content/dec2006/gb20061208_594250.htm?chan=glob%20biz%20asia%20today's+top+story) albiz_ asia_today's+top+story. Accessed 6 January 2007.
- [130] Templeton JF (1994). *Focus Group Revised: A Strategic Guide to Organizing, Conducting and Analyzing the Focus Group Interview*. New York: McGraw-Hill.
- [131] Thompson C & Hirschman E (1995). Understanding the socialized body: A post-structuralist analysis of consumers' self-conceptions, body images and self-care practices. *Journal of Consumer Research*, 22, 139-153.
- [132] Tsuda N (1985) *Mayu no bunkashi (A cultural history of eyebrows)*. Tokyo: Pora Bunka Kenkyukai.
- [133] Underhill P (1999). *Why We Buy. The Science of Shopping*. New York: Simon & Schuster
- [134] Walle III AH (2001). *Qualitative Research in Intelligence and Marketing: The New Strategic Convergence*. Westport, Connecticut: Quorum Books.
- [135] Wetzter I, Zeelenberg M & Pieters FGM (2007). "Never eat in that restaurant, I did!" Exploring why people engage in negative word-of-mouth communication. *Psychology & Marketing*, 24(8), 661-680.
- [136] Wolf N (2002). *The Beauty Myth: How Images of Beauty Are Used Against Women*. New York: Harper Perennial.

Socio – Economic Factors and Integrated Pest Management (IPM) Adoption as Determinants of Farmer’s Productivity in Sudan Savannah Zone of North Eastern Nigeria

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Abstract

The study was carried out on the socio-economic factors and adoption of Integrated Pest Management as determinants of farmer’s productivity in Sudan zone of Northeastern Nigeria, with the broad objective of examining the effect of socio economic and Integrated Pest Management Adoption on farmer’s productivity. Multistage random sampling was employed in the study. First, one Local Government Area in the Sudan zone was chosen for the study because of its agrarian nature. The Local Government was divided into three district out of which two villages were selected and fifteen respondents were randomly selected from each village giving a total of 90 respondents. Data for the study were collected through primary and secondary sources. Descriptive statistics and Ordinary Least squares (OLS) regression techniques were employed in the analysis. The results shows that majority (42.1%) of the respondents were between the ages of 21 – 30 years out of which 26.67% adopted IPM package. The least percentage of those that adopted the package were those that falls between the age range of 61 years and above. The results further revealed that 66.11% of the respondents obtained their source of information from friends and relatives. Farm size and farming experience had coefficients of 10840.6 and 0.83111 and were significant at 1%, indicative of major determinants of output while Educational level and IPM had positive and significant (5%) relationship with coefficients of 1604.35 and 420.479 respectively. The positive and significant coefficients indicate that farm size, farming experience; educational level and adoption of IPM are the major determinants of outputs in the Sudan Savannah zone (Chibok Local Government Area) of the Northeastern Nigeria. Based on the findings of the study, the following recommendations were made; adoption of IPM package should be encouraged for increased farm output; Provision of farm inputs; motivational facilities for extension agent to improve their effectiveness and proper education of the farmer on the alternative method of pest control.

Keywords: Integrated Pest Management, adoption, Sudan Savannah, Socio- economic factor, farmers’ productivity, Northeastern, Nigeria.

Introduction

Integrated Pest Management is using more than one method of pest control at the sametime, with the aim of targeting the entire pest population, and reduce the pest population below economic threshold

level, supplement natural control and give maximum long-term, reliable, cheap and least objectionable protection. It is meant to alleviate pest problem in general and have long-term effect with minimum harmful effect on environment and non-target organism which end up in managing the pest population rather than eliminating them (NAS 1971, Van Emden 1976, Way and Van Emden 2000). Marrone (1994) summarized it as a set of practice to avoid economic losses from pest, while at the same time minimize the use of chemicals (pesticides) or other practices with possible detrimental effect on the environment and non-targets organisms. It is a decision support system for the selection and use of the pest control tactics, singly or harmoniously coordinated into a management strategy, based on cost/benefit analysis that take into account the interests of and impacts on producers, society, and the environment (Kogan, 1998).

Integrated Pest Management (I P M) as a concept started way back in 1950, as a reaction to uncontrolled use of chemicals, thus an ecological based approach aimed at reducing the indiscriminate use of chemicals which was later applied in agriculture to minimum or non use of chemicals to control harmful pest (Shaib *et al.*, 1997). Luna and Hose (1990) stated that using crop management system to reduce build up of pest population is an important component of Integrated Pest Management (IPM) programmes, and crop rotation is one of the best way to avoid pest. Rotation with cover crops, grain, and vegetables using different crop families help reduce the build up of insects, diseases and weeds in the farms (Burth and Frecier, 1996). The greater the differences between plant in rotation the more effective they are in suppressing pest populations (Wintersten and Highly, 1993).

However, the loss of agricultural produce due to pest is a problem as old as agricultural practice itself. It is estimated that between 5% and 40% of crops are lost each year to insect, weed and plant disease (MANR 1990). Integrated Pest Management (IPM) was said to be less cost effective and if adopted increase crop output (Thomas and Waage 1990, Bishop 2001, Sindal 2000)

The adoption of Integrated Pest Management (IPM) package, however, has not really been explained and explored, which lead to this research in the study area selected. Agriculture is a business-oriented field and it requires capital for the operation. Effort made to improve Nigeria agriculture through various government programme and policies with pest control being one of the major concern to farmers have not received adequate attention in the study area thus necessitated this research. Neither has agricultural production in the country justified the huge amount of money expended on it (Maxwell and Chen 1995). However no concerted effort have been geared towards assessing the effect of this package (IPM) with respect to its laid down objective by the researchers in the study area.

The broad objective was to examine the socio –economic and Integrated Pest Management adoption as the determinants of farmer's productivity in Sudan Savannah Zone (Chibok Local Government Area) of Northeastern Nigeria and specifically to: examine socio-economic characteristic of farmers in the study; identify the various component of integrated pest management in the study area; examine the effect of Socio- economic and Integrated Pest Management practices on the return of farmers in the study Area.

Methodology

The Study Area

The study area is Chibok Local Government Area of Northeastern Nigeria. It is located between latitude 10°30' – 11°51'N and longitude 11°50' – 12°35'E. It has an area of 3000 km². The area is mountainous in terrain with height of about 750 – 800m above sea level and the topographical nature of the area makes the people practice terrace farming to provide enough land for agricultural production.

About 95% of the populations are engaged in rain fed agriculture which involved the cultivation of arable crops like sorghum, maize, rice, cowpea, cotton, groundnut and peppers. The soils

around the study area has Eutrophic brown colour which are obtained from the base rock parent material, thus provide the soil with high inorganic content and with well drained soil texture.

Sampling procedure and data Collection

Multi stage random sampling was employed in the study. By dividing the Local Government Area into three (3) Districts, Garu, Mbalala and Kautikari. Out of the three Districts, two villages were selected at random and 15 respondents were randomly selected from each village, giving a total of 90 respondents. Primary and secondary sources of data were used for the study where the primary source was through structured questionnaire and secondary source was from journals, bulletins etc.

Analytical Technique

For the analysis, descriptive statistics and Ordinary Least Squares (OLS) regression technique were used in which descriptive statistics were used to capture the first and second objectives while, Ordinary least Square (OLS) regression technique was used to capture only objective three. Explicitly, the model was specified as follows:

$$Y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4 + b_5x_5 + d + u$$

Where:

Y= Output in 100kg bag {Returns(Q.P)}

x₁ = Age of the respondents

x₂ = Farm size

x₃ = family size

x₄ = Educational level

x₅ = farming experience

d = Dummy variable (Yes (1) for those that practice IPM and No (0) for otherwise)

u = Random error term

a = constant

x₁ x₅ = Independent variables

b₁.....b₅ = coefficients

The coefficients of the independent variables are expected to bear positive and significant signs, indicative of positive relationship between the dependent (output) and independent variables (farm size, farming experience, family size etc.).

Results and Discussion

Socio-Economic Characteristic of the Farmer

The socio-economic characteristics of the farmers, which include age, family size, educational level, gender and farm size are presented in Tables 1

Table 1: Socio-economic distribution of farmers that adopted IPM and those that did not adopt IPM

Socio-economic Variables	Adopted IPM		Not Adopted		Total	Percentage
	Freg.	Percentage	Freg.	Percentage		
Age						
21-30	24	26.67	13	14.44	37	41.11
31- 40	18	20	11	12.2	29	32.22
41- 50	11	12.22	5	5.56	16	17.78
51-60	5	5.56	2	2.22	7	7.78
61 and above	1	1.11	0	0	1	1.11
Total	59	65.55	31	34.44	90	100
Family size						
1-10	47	52.22	21	23.33	68	75.55
11-15	12	13.33	10	11.11	22	24.44
Total	59	65.55	31	34.44	90	100
Educational level						
Quaranic	3	3.33	7	7.78	10	11.11
Primary	20	22.22	8	8.89	28	31.11
Secondary	17	18.89	2	2.22	19	21.11
ND/NCE	8	8.89	2	2.22	10	11.11
HND/Degree	9	10.00	0	0	2	2.22
Non formal	9	10.00	12	13.33	21	23.33
Total	59	65.55	31	34.44	90	100
Gender						
Male	40	44.44	21	23.33	61	67.77
Female	19	21.22	10	11.11	22	32.22
Total	59	65.55	31	34.44	83	100
Farm size						
1-3ha	14	15.55	7	7.78	21	23.33
4-6ha	11	12.22	10	11.11	21	23.33
7-9ha	34	37.78	14	15.55	48	35.33
Total	59	65.55	31	34.44	90	100

Source: Field survey, 2006.

Table 1 shows that 41.11% of the farmers were between the ages of 20 – 30 years out of which 26.67% practiced IPM while 14.44 percent did not adopt the IPM package. Thirty two percent (32.22%) of the sampled population were between the ages of 31 – 40 where 20% practiced IPM. However 17.78% of the farmers who had age between 41-50 years, had only 12.22 percent adopted IPM, while 5.56 percent did not. Those between the ages from 51- 60 had only 5.56% practiced IPM, while, 2.22 percent did not. This implies that the majority of the farmers who were in their middle age had high level of new innovative acceptability as indicated by their level of adoption. This is in agreement with the findings of Jibowo (1980) who reported that younger farmers have higher adoption behaviour than the older counter parts due to their vigour and interest.

For family size 75.6% had family size of 1- 10 out of which 52.22% practiced Integrated Pest Management system and 23.33% did not. The remaining 24.4% had family size of 11-15 members out of which 23.1% of farmers practiced IPM while 11.11% of them did not. The implication is that family labour may be readily available among the farmers to carry out farming activities, rather than venturing into new innovations.

Eleven point eleven (11.11%) percent 5.5% of the farmers had Quaranic education out of which 3.33% adopted IPM practice, 31.11% percent had primary school certificate with only 22.22% of them adopted the package while 8.89 percent did not. Furthermore 21.11 percent had secondary education out of which 18.89 percent adopted IPM and 2.22 percent did not while 11.11 percent were ND/NCE holders of which only 8.9 percent adopted the package while 2.22% did not. Also 2.2 percent had HND/Degree certificate and all adopted. While 23.33% had non-formal education of which 10% had adopted the package. This implies that those with educational background (Western) are more flexible

and willing to accept new innovations more readily than those without. It concludes that, education is the bedrock to the nations self-sufficiency in agricultural production and development.

The results revealed that 67.77 percent of farmers were male, with 44.44 percent adopting the IPM, while 23.33 percent of this did not. However 32.22 percent represent the female farmers and with 21.11 percent of them adopted the IPM, while 11.11 percent did not. The implication of this finding is that men actively participate in farming than women and proportionately adopted the IPM package than women.

The result also revealed that 23.33% of the respondents had farm size of 1-3 ha out of which 15.55% practiced IPM, while 23.33% who cultivated farm size of 4-6 ha had 12.22% that practiced integrated Pest Management system. The highest percentage of 53.33 of the respondents had farm size of 7 – 9 ha with 37.78% adopting the package. It can be deduce from the result that the larger the farm size, the higher the probability of accepting and practicing the Integrated Pest Management system.

Method of pest control

The method of pest control used or adopted by farmers is presented in the Table 2

Table 2: method of Pest control

Method of Control	Frequency	Percentage*
Cultural	44	48.89
Chemical	19	21.11
Bio/cultural	4	4.44
IPM	29	32.22
Bio/chemical	1	1.11
Chemical/cultural	33	36.67

Source: Field survey, 2006 * Multiple response exist thus > 100%

The result of the finding in Table 2 revealed that 36.7 percent of the sampled farmers used chemicals and 44.89% used cultural control while 32.2% and 21.1% Used IPM and chemical control respectively. The lowest percentage (1.11%) was bio- chemical control, followed by biological/cultural control 4.4%.

Sources information for farmers

Table 3: Source of information

Source of information	Frequency	Percentage *
Friends and Relatives	55	66.11
Mass media	35	38.9
Extension agent	14	4.4
Others	4	4.5

Source: Field survey, 2006 * Multiple response exist thus > 100%

The results (Table 3) show that 66.11 percent of the sampled farmers obtained information through friends and relatives, while 38.9 percent of the farmers got their information from mass media. However, 4.4 percent obtained information from extension agents and only 4.5 through other sources.

Effect of socio-economic characteristics and IPM on Output

The effect of socio-economic and Integrated Pest Management on the output is presented in Table 4

Table 4: Regression estimates of output against socio-economic variable and the use of IPM for selected crops (maize, sorghum, cowpea and groundnut)

Variables	Coefficients	T-Ratio	R ²
Age	-279.802 ^{NS} (170.785)	-1.64	0.96
Farm Size	108406* (1165.87)	9.3	
Family size	-170.533 ^{NS} (329.31)	-0.52	
Educational level	1604.35** (759.279)	2.11	
Farming experience	0.83111* (0.06826)	12.18	
Use of IPM	420.479** (171.53)	2.45	

Source: Field Survey, 2006.

* Significant at 1%; ** Significant at 5%; NS = Not Significant

The regression estimates revealed that farm size and farming experience had positive and significant coefficients of 10841.6 and 0.83111 respectively. The positive and significant coefficients indicate that farm size and farming experience are significantly (1%) influenced the level of output. Educational level and use of Integrated Pest Management had coefficients of 1604.35 and 420.479 (significant at 5%) are also other determinants of productivity in the study area. Age and family size had negative and insignificant coefficients which is contrary to expectation, suggesting that age seems to have negative attitudes towards new innovation acceptability, while family size seems to provide enough labour, hence care free attitudes towards accepting any new innovation being introduced. The significant and positive coefficient of the use of IPM concurred with Rodriguez (2004) who observed that in Bolivia, project among Aymara communities improved the living condition of poor peasants by increasing crop yields using IPM practices and at the same time restored and improved pasturelands. Additionally, it allowed a stronger participation of women in livestock activities, thus increasing their influence in the decision –making process within the family (Brawn *et al.*, 2000).

Conclusion and Recommendations

In conclusion the socio-economic characteristics such as age and family size have little or no impact on farmer's productivity. The IPM and other socio economic factors like farm size and educational level have largely contributed to the increase in output in the study area

Based on the findings of the study, the following recommendations were made; adoption of IPM package should be encouraged for increased farm output; Provision of farm inputs; motivational facilities should be provided for extension agent to improve their effectiveness and proper sensitization education of the farmers on any new technological package should be intensified.

References

- [1] Bishop, C. (2001). Integrated Pest Management consideration for success in developing countries, in *Integrated Pest Management for tropical root and tuber crops IITA* Pp. 9 – 14.
- [2] Brawn, M.A., Thiele, G. and Fernandez, M. (2000). Farmer field schools and local agricultural research committees: complementary platforms for integrated decision- making in sustainable agriculture. Sustainable Agriculture and Rural Livelihood Programme Agricultural Research and Extension Network. Network paper 105, 20 pp.
- [3] Burth, U. and Frecier, B. (1996). The development of the concept of integrated plant protection, *Plant Research and Development*, 43:7 – 15.
- [4] Hahn, S.K. and Caveness, F.E. (1996). *Integrated Pest Management*, First Printing
- [5] Jibowo, A. A. (1980). Adoption of 56 variety of Rice in Ife Division of Oyo State, Nigeria. *Ife Journal of Agricultural Research*, 2 (2):113.
- [6] Kogan, M. (1998). Integrated pest Management: historical perspectives and contemporary developments. *Annu. Rev. Entomol*, 43: 243-270
- [7] Luna, J.M and. Honse, G.J. (1990). Pest Management in sustainable agricultural system In: C.A. Edward., R. Lal., P. Madden., R.H. Miller and G. Honse (Eds.), *Sustainable Agricultural System soil and water Conservation Society*, Ankeny IA.
- [8] MANR (1990). Annual Report, Ministry of Agric and Natural Resources Borno State Nigeria
- [9] Marrone, P.G. (1994). Present and future use of the *Bacillus thuringiensis* in Integrated Pest Management system an industrial perspective. *Biocontrol science and Technology* 4: 512-526
- [10] Malena, C. (1994). Gender issue in Integrated Pest Management in African Agriculture NRI – Socio-economic series 5.
- [11] Maxwell, T. W. and Chen, M.B. (1995). Future research priorities, in international plant protection, focus on Rice *Journal Agriculture and Rural Development*, 2: 28.
- [12] NAS (1971). Insect Pest Management and control. Principles of plant Animal pest Control. Vol. 3 Washington, DC USA.
- [13] Shaib, V.M.R. Smith R Vanden B. and Hagen, K.S. (1997). The Integrated Control Concept, *Hill Gardis*. 29: 81 –101.
- [14] Rodriguez, L.C. and Niemeyer, H.M. (2004). Integrated pest management, semiochemicals and microbial pest-control agents in Latin American agriculture, paper presented at the workshop on Semiochemicals and microbial management antagonists: their role in integrated pest management in Latin America, held at CATIE, Costa Rica, March 22-26.
- [15] Sindal, Y. (2000). Integrated Pest Management theory and practice, *Journal of Applied and Experimental Entomology*, 49:59 – 70.
- [16] Taylor, A. and Francis, W. (1993). *Tropical Pest Management* Vol. 32 No. 1 Taylor and Francis Printer London, New York, Philadelphia, Pp. 31 –36.
- [17] Thomas, M. and Waage, A. (1996). Integrated Pest Management, In: M. Thomas and A Waage (Eds.), *Integrated biological control and Host Plant Resistance Breeding* CTA, the Netherland, Pp 5 –8
- [18] Van –Emden, H.F. (1976). *Pest Control and Its Ecology*. Institute of Biology’s Studies in Biology No.50. Department of Agriculture and Horticulture and Zoology. University of Reading. UK. Edward Arnold Ltd
- [19] Way, M.J. and Van Emden, H.F. (2000). Integrated pest management in practice –pathways towards successful application. *Crop production*, 19:81-103
- [20] Wintersteen W.K. and Highly, L.G. (1993). Advance IPM system in Corn and Beans, In: A.R. Leslie and G.W. Cuperu (Eds.), *Successful Implementation of Integrated Pest Management for Agricultural Crops*. Lewis Publishers, Pp. 9- 32.
- [21] Wardiaw M. L. (2004). Pest of the garden and small farm, University of California State Wide IPM Project Publication, 33: 32, Pp. 193 – 196.

Crime Reasons from the Eyes of Juvenile Offenders: A Study Conducted in a Detention Center in a Capital City, 2002

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Abstract

This paper discusses the reasons behind juvenile crime from the viewpoints of 69 male juvenile offenders on the basis of the findings of the research conducted in a detention center in a capital city in 2002. In addition to those reasons, the research aimed to find out their future expectations. The ultimate aim of this qualitative research was to provide realistic, applicable and sustainable suggestions for prevention and protection of children and adolescents both before and after delinquency.

Keywords: Juvenile delinquency, reasons of crime, detention center, future expectations of juvenile offenders, children's rights

Introduction

“Childhood” was invisible in the middle ages, and it became a social category in the 20th century. Today, children are accepted as subjects who have social rights by the U.N. Convention on Rights of Child. Despite such an acceptance, there is a group of children who are excluded and obscured by the society; they are seen as sources of various problems; and from whom the society tries to avoid contact. These children are frequently called as the children pushed to crime, street children, and drug addicted children, etc. Such a point of view stigmatizes and provides the basis for the prejudices of society against these children. “Juvenile offenders” and “conditions that pushed the children to crime” are the phenomena discussed by many social scientists, so one has to provide an interdisciplinary point of view while studying these concepts.

It is obvious that the phenomenon of juvenile offence cannot be explained by one system; today, it is commonly accepted in the literature that juvenile offence has a structure which includes different systems constituting the phenomenon (Seydlitz and Jenkins 1998, Angenent and de Man 1996, Uluğtekin 1991). From this perspective, the focus of studies shifts from the child and the pathology of the child to various systems at different levels from micro to macro systems. These systems imply both micro and mezzo systems such as children, families, school, work life, and peer groups; and macro systems such as child protection policies and other socio-economic policies of the state.

The present study aims to investigate the phenomenon of juvenile offence from the eyes of the juvenile offender; and to provide findings about how these juveniles evaluate their own behaviors, the causality relations that they build while perceiving themselves, and their future expectations. The primary goal of the study is, thus, to make all actors who take part -directly or indirectly- in the world of these children question themselves by knowing the different attitudes and conditions of these juveniles. The second goal of this study is to provide a framework for reflective questioning of new emerging policies and their implementation.

Methodology

Although it is a very sensitive issue, almost all of the studies about juvenile offenders in Turkey are conducted within the positivist paradigm with quantitative methods. This study, which investigates reasons of the juvenile delinquency through the eyes of the juvenile offenders, is one of the few qualitative studies that have been conducted in the country.

This study was conducted by using methods of participatory research. Finn (1994) explains participatory research by three key concepts, which differentiate it from traditional approaches: human-centeredness, focus on power relations, and praxis. This approach is human centered because it suggests a process of critical questioning that reveals experiences and necessities of the oppressed person, and is based on the information given by her (Brown 1985). Participatory research is about power relations in the construction of rituals and meanings of reality, language, and truth (Foucault 1973). Participatory research contributes to strengthen people by increasing critical awareness and disseminating knowledge, which is suppressed by dominant information systems. At the same time, participatory research is about praxis (Lather 1986, Maguire 1987). It calls attention for the inseparability of the critical consciousness about theory, practice, and personal-political dialect. Participatory research is based on the openly mentioned political positioning and values and change processes, which contribute to the transformation of injustice and inequality to social justice, democracy and the emergence of contemporary socio-cultural structures (Sohng 1995).

Participatory research requires cooperation of both the researcher and the subjects. Ideally, such a research process is empowering. Because: 1) It makes isolated people focus upon common problems and necessities, 2) It values their experiences as the source of understanding, 3) It uses information and experiences of research as an additional information, 4) It constructs a context for weaknesses and problems which are “personally” perceived before, 5) It bridges personal experiences and political facts (Sohng 1995). The result coming from this activity is living information that could be transformed into action. Participatory research reflects an aim-based learning by doing a transformable pedagogy (Dewey 1938, Mead 1934, Freire 1974, Shor 1992, Akşit-T. 1998).

There are various methods used in the participatory research (Saraç 2001). Making interviews with the children is sometimes very difficult. But, making the children tell about something by painting and/or writing makes the process of data collection easier, as researcher gets the data which are closer to the truth (validity)(Saraç and Akşit-T. 2005).

Two authors of the article planned this research together; data were collected and analyzed by the first author of the study under the supervision of the second author. Before the collection of data, the researcher visited children in their dormitories, with the presence of a social worker on duty in a detention center. Seven dormitories were visited and short conversations were carried out with the children. So, developing sympathy between the researcher and the children facilitated the participation of the children in the study. Then, the research study was explained and asked their consent to join a research group. In October of 2002, data collection process was started with the children who accepted to participate in the study in the detention center. Paper and pencil were provided to them and they were asked to write the answers to these two questions with sincerity:

1. “Why are you here in the detention center?”
2. “What will you do from now on?”

The aim of this inquiry was to provide an opportunity for the children to evaluate their own lives with different perspectives. How are their life conditions? What are the characteristics of the social and cultural structure of the family they live in; and which factors determine or facilitate the formation of these conditions? Which words and values do the children use while expressing their lives and living conditions? Do they have any plans about their future? What are their expectations for the future? What are the conditions of having or not having future plans? What are their explanations about the reasons behind these pessimistic or optimistic approaches?

59 of total 69 boys taking place in this study came from the inner Ankara (the capital city of Turkey); others from various districts of Ankara and other cities.

During the study, the researcher experienced some important ethical problems. One of them was that she could not find any opportunity of being alone with the participants in data collection process. In a study like this, it is absolutely important to be alone with the children without any disturbance by an officer who represents the institution. However, the manager of the detention center demanded that a social worker would join the data collection process in order to provide security. Another problem was that the study was not conducted within the dormitories children live in because children had to sit so closely in the first dormitory as writing their answers. To prevent negative effects of the problem of place, children were taken to classrooms as groups consisting of 8-9 people and they were left alone to write their answers.

The researcher introduced herself to every group and guaranteed that this research would not affect the trial processes. In every group, there were one or two children who were illiterate; so, the researcher and the social worker helped them write. It was noticeable in every group without exception that children tried to look at each other's paper and finish writing as quickly as possible. Another important observation was on their behaviors: They got bored especially while they were asked to answer the question why they were in the detention center. However, they seemed comfortable when they were asked about their future plans; it was obvious that the participants liked to think about their future and to share their plans. During the data collection, average period of time to answer the first question was about one hour, and the second one took fifteen minutes on average.

The executor officers took all children to the place. Children were told that they would not have to participate if they did not want. Hereupon, two children did not want and refused to participate in the study.

Every text written by the children in the framework of these two questions was matched with some characteristics of them, such as place of birth, living place (address), type of the crime, etc. Afterwards, two academicians from Hacettepe University School of Social Work evaluated written answers. In the following section, findings of the study will be presented and discussed. The statements of the children were quoted and specified with their ages and crimes.

Findings and Discussion

In the first subsection, some characteristics of the participants will be presented. Second subsection will be devoted to children's expressions on the reasons that pushed them into crime and their future expectations.

I. Some Characteristics of Participants

It was observed that most of the children live in slum areas of the capital city. Few of them declared that they lived in streets. In this context, it could be said that poverty is the most important macro reason to cause criminal activity among children.

In the literature about juvenile delinquency, the activity of offence is examined as a product of "challenging" the established authority, rejection of adult values and experience, which are the most distinctive characteristics of adolescence period. In this regard, it makes sense to examine the types of crime by children's ages (Please see Table 1):

Table 1: Types of Crime by Age (N: 69, 2002)

Type of Crime	Ages										Total	
	18		17		16		15		14			
	No	%	No	%	No	%	No	%	No	%	No	%
Robbery – Extortion Looting	3	50.2	29	78.3	12	70.5	7	87.5	2	66.6	53	74.6
Injuring	1	16.6	2	5.4	1	6.0	-	-	1	33.3	5	7.1
Sexual Crime	1	16.6	4	10.9	-	-	-	-	-	-	5	7.1
Homicide	-	-	2	5.4	2	11.1	-	-	-	-	4	5.6
Others (Glue- Sniffing and trafficking, Hold out against Police, Militancy, Drunkenness)	1	16.6	-	-	2	11.1	1	12.5	-	-	4	5.6
Total	6	100.0	37	100.0	17	100.0	8	100.0	3	100.0	71*	100.0

In the detention center, the group of children who are 17 years old was the largest one, whereas the group of children who are 14 years old was the smallest one. This could be explained by the fact that children less than 15 years old could be arrested only in the case of homicide; and that other kinds of crime resulted mostly in being tried without being arrested.

Among types of crime, robbery is in the first rank. Crimes like injuring, sexual crime, and homicide follow robbery. These data are compatible with the government's data of juvenile offense (SIS 2001).

II. Participants' Explanations and Expectations

In this section, children's own expressions and views about reasons of being pushed into delinquency and their life plans after leaving detention center will be presented and discussed.

Most of the children have begun to answer by writing what their crime was. Others have begun by talking about the case in which they were taken into custody before being arrested. Especially children who are tried for the crimes of robbery and extortion have written about what they have done comfortably; on the other hand, it is interesting to observe that almost all of the children committed sexual crime stated that they were defamed and they never wrote anything about the name of their crime.

It was observed that the expressions of children who are firstly judged with crime are different from the statements of children who are thought to commit more than one offence. Children who continuously commit crime have used different terminology such as "*babe*", "*individual*", etc.

A. Reasons of Being Pushed into Crime from the Viewpoints of Children

Children expressed that they had difficulty in answering this question. One of them put forward his emotions with these sentences: "This question is very difficult to answer; couldn't you find another question to ask?" When they could not write, they were requested to think about "reasons that caused their entering to detention center" and to write what they think at that moment. It was highlighted that it was important to write their own stories correctly; if they wrote lies and wrong things, others would have wrong impressions about them.

At the end of the study, the reasons that pushed the children to offense were categorized as family, economical problems, place of residence, peer groups, conditions of workplace and substance abuse. Undoubtedly, "school" is one of the most important institutions affecting the process of socialization of the child. However, not to talk about school life seems to mean that school has no place or has no importance for their lives.

Reasons of being pushed to offence are grouped within the context of expressions of participants and they are being discussed below one by one:

* This number is more than total informant number as the children who committed crimes accounted more than once.

Family: Children have expressed that they left their homes and later joined friend groups which were committed to crime because of some family reasons such as problems in the family, death of the father and marriage of mother to another man, separation of parents, domestic violence and disobedience to their parents.

Explanations of juvenile offence were focused on family mainly in the last century. Till 1980's, the main theme in the explanations was loyalty of adolescences to their families. In 1980's, some researchers found that some factors relating to family have effects on delinquency (Seydlitz and Jenkins 1998:54). In addition to that, it was determined that refusal of a child by his family affects criminal behavior more than loyalty to family. In recent studies, it was seen that family factors and effects of these factors on delinquency are complex and they were classified in various ways by researchers. Within these classifications, there were some dimensions like refusal of a child by the family, forms of discipline, learning from family, domestic violence, characteristics of relationship with one of the parents (Seydlitz and Jenkins 1998: 54).

Children whose domestic ties are weak and experience problems with their families could be alienated from their families. This alienation causes two kinds of behavior: Escape and abstention (Angenent and Man 1996: 96). In the behavior of escape, child tries to live away from home. The behavior of abstention could appear as passive, active and reactive. In the behavior of passive abstention, child withdraws from what is going on in his environment and his family; he begins to be in-ward looking and behaves inharmoniously. In the behavior of active abstention, child tries to improve life condition for himself and family life by joining to the world of adults. This state could cause the child to tend to alcohol, drug abuse and gambling. He has sex with someone, goes away from home. At the same time child could behave destructively, tending to sexual attacks. Reactive behavior goes directly towards parents. Child tries to make trouble and feels ashamed of family (Angenent and de Man 1996: 96).

An informant child (16 years of age, crime type was theft) said that he was pushed to offence because his parents did not care for him and left him alone. He expresses the connection between his condition of being arrested and his family by saying:

“Why am I here? Firstly, it is because of theft. Secondly, I am abandoned. Even cats and dogs protect their babies. Why some parents do not behave like this, why children become victims of their five minutes pleasures?”

Separation of parents appears as an important factor in the formation of criminal activities since it creates emotional problems for children. A child (15, theft) expressed the effect of his family for his tendency to crime as:

“Why did we do these? Firstly, I did not go home, that's why I joined to a friend group. Previously I had a good life and I had a good job. Later, my mother left my father and my conditions have changed. I stole this and that. At the end, what have I got? Nothing!”

Forms of exploitation and discipline in the families which are expressed above become model for the child for his life. The modeling of tendency to crime of one of family members for child was discussed under the concept of “inter-generational transfer” (Angenent and de Man 1996: 111). According to this view, the behavior of crime is transferred traditionally in some families and it passes from one generation to another. As a consequence, child becomes a ring of the circle of exploitation, so of the circle of crime.

Expressions of a child (18, theft) were interesting:

“I came to Ankara because my family oppressed me. This is because; I came here to run away from my father's beatings and abuses.”

Place of residence: Particularly in theft and injuring, dwelling is a very effective factor. A child (18, injuring by dagger) stated the effect of his place of residence to his tendency to crime with these words:

“I was victimized by my friends. If you ask why, because I have no friends with good nature, I had bad friends. The reason of this is my place of residence.”

Another child (16, sexual crime) wrote that:

“My place of residence was a dirty place in a very bad district. My friends were also not good. I understood lately that my end would not be good because of alcohol and cigarette.”

Peer Groups: Studies about children pushed to crime show that child tends more to his peer group in the period of adolescence in which child tries to gain his independence by leaving his family and searches for his identity. The literature of crime stresses the importance of these friends and peer groups for these children. Many research on this issue point out negative effects of peer group over children due to decreasing effect of family over child (Uluğtekin 1991:47). Peer group, which is one of the most important contexts in the search for identity, is an environment in which personal norm and values and especially loyalty gain importance. Peer groups could pressure child towards crime. As summarized by Angenent and de Man (1996:140) many researchers expressed that these pressures could be effective mainly in early period of adolescence, relating to alcohol or drug abuse, and sexual abuses. In his study, Türkeri (1995:64) found out that 80 percent of peer groups of children had habit of smoking, 30 percent of them had habit of alcohol abuse, 5 percent of them had habit of thinner sniffing and 18 percent of them had habit of cutting their arms by razor. These results are in line with the findings of Baykara-Acar (2004) and Cankurtaran-Öntaş (2004). Angenent and de Man (1996:140), state that these oppressions could be experienced at early period of adolescence, and they could cause alcohol or drug abuse or sexual abuses. Studies on adolescents (Seydlitz and Jenkins 1998:65 and Delikara 2001:154) showed that loyalty and dependence on peer group gradually increased after the age of 14 and reached its peak level at age of 17. Delikara (2001:154) stated that children at age 17 were more loyal to friends who had divergent behaviors as compared to other age groups.

An informant (17, armed usurpation) stated the effect of friend group with these words:

“I am here because I joined to my friend environment because I did not want to be away from my friends.”

Another one at the same age and with the same crime declared the effect of friend groups:

“Why did I usurp? Because my friend did, if we did not do, he complained. So, we had to do.” (5)

A statement of a child (18, usurpation) was interesting:

“I and my friends did this for pleasure and for money.”

Another child (18, injuring with dagger) wrote these meaningful sentences:

“I am victim of my friends. If you ask why, I would say that it is because they are bad people.”

Declaration of another child (18, theft) also draws attention to another issue:

“By envying my friends, I was part of theft by committing some crimes that are not accepted by society. I mean, I thought that they had everything, why I did not have, than I have met with some other friends and stole.....later in the jail I met with new friends who committed different crimes. We learned how to commit different crimes from each other, such as how to steal car, and to open cash safe and etc.”

Another one (17, theft) explained one of the reasons:

“One of the reasons is to have a bad friend environment.”

A child (16, murdering) stated the effect of friend:

“Why did I become like this? Maybe foolish! It is because of my friends.”

Workplace Conditions: An important part of children came to Ankara for working by leaving their schools or hometowns. When they began to experience problems with the boss of workplace, either they quitted work or the employer dismissed them. This situation causes to live on the streets and provides the possibility to join friend groups that commit crimes. A child (18, theft) wrote these:

“I have worked in a paper collector in Ankara. In that year another company named Çöpsan began to work at the region where we had worked before, and we have found so little papers. One day, I have collected few papers. And my employer has beaten me; he

fired me and did not give my money. Because of this, I decided to steal but I stole because of my bad condition.”

The expression of an informant (14, injuring by a cutter) was:

“When my sister and I were selling flowers in Sakarya Street, one substance abuser tried to get our money. He threatened us with a knife when we did not give him our money. So we have beaten him.”

Substance Abuse: Most of the participants stated that especially before committing crime, they used substances like alcohol, thinner and bally. This expression of a child (14, usurpation) seems very important:

“...after that, I began to use this kind of addictive drugs (such as hashish, pills and thinner) and began to destroy my environment. I began to cut myself, then I did not know myself and I found myself here.” (7)

Economic Problems: Globalization as the new world order causes economical, political and socio-cultural changes in all over the world. By the globalization, poverty gradually increases and delinquency, one of the important results of this social problem, shows itself more and more in the world and in Turkey. Özdek (2002:1) thinks that the new world order is characterized with poverty and violence. Torczyner stressed negative effects of globalization especially on the disadvantaged countries and groups (2001:125-126). Inequalities created by globalization with income distribution were stressed. With globalization, more importance was given to the economical and market privileges rather than social and cultural necessities. It is also displayed that globalization increases poverty, and war and violence become more threatening for poor groups than other parts of the society. In the regions where lower classes live, there are hopelessness, anger and alienation. This is flying quickly away from delinquency and delving into political science.

In most of the studies on delinquency of children and adolescents, it was seen that delinquent children usually came from the families, which had low incomes (Türkeri 1995; Kıcalıoğlu 1988). Low economic level is not a reason in itself for delinquency but it provides opportunity for a crime-tended environment (Hancı 2002: 241; Angenent and de Man 1996: 173). It is observed that children committing crime had to work in early ages due to income level of their families. In this situation, it can be said that another important factor is role models in family. Some studies from Turkey show that education level in this kind of families is low; they give priority and value to have a job instead of receiving education (Türkeri 1995; Kıcalıoğlu 1988). This case creates a context of negative conditions: namely, not to receive education because of any reason (actively or passively) could cause children work in the streets or in informal sectors under heavy conditions; and these conditions could cause abuse (mostly bodily) of them by different actors.

Working at early ages of childhood is more common in less developed or developing countries. Again, in a study on street children in Turkey displayed that these children worked for short periods and they frequently changed their jobs (Acar 2000).

Working of children who could not enjoy their childhood by insufficient nutrition and care in their workplaces is another point to be stressed. Here, it is important to mention a research, titled “The Value of the Child in Turkey” (Kağıtçıbaşı 1981). According to the findings of this research, in families with lower socio-economic level, child has a high economic value; as socio-economic level increases, child’s psychological value also increases. It is obvious that children pushed to crime have a big economical value for their families. It is obvious that his taking responsibility like an adult by working at early ages causes him not to meet the need for play of the childhood period (Uluğtekin 1991).

Results of the studies from Turkey and the world overlap with each other in terms of some important issues/points. For example, when looking at the crime types for children, it is seen that crimes against properties have a higher level; children tended to crime generally come from families with lower socio-economical level (Türkeri 1995; Hancı 2002; Uluğtekin 1991; Croall 1998:99). In another research, lower socio-economical level was stated as not only unique reason of delinquency but

also a mean to prepare an environment for crime-tendency (Hanci 2002:241). Especially, it was stressed that not to meet necessities of a person during childhood and situation of half-famine causes crime. So it is important to develop policies and programs to prevent poverty for preventing child delinquency.

A part of children who answered to the questions showed that they began to work by leaving school because of economical problems. Not to have a father and/or unemployment in the family were also important problems. A child (17, car theft) wrote that:

“I began to work after fifth class of primary school because my family was not in a good condition.”

Another one (17, theft) declared that he committed burglary because of economical reasons:

“I needed money. I did not work in any where, so theft was seen easy for me; it was also difficult to ask for money from my family.”

Other Reasons: In addition to the reasons mentioned above, there are some other reasons such as “living on streets”, “adventure”, “adolescent insanity”, and “affectation”. A child (16, usurpation of cellular phone) established relations between crime tendency and period of adolescent as such:

“Why did I adventure impulsively? Because I acted without thinking at a period in which youth cause to speed our blood. Because I did not know that I reached to this stage.”

“To have experience due to polices’ bad procedure” is another reason mostly pointed out. A statement of a child (15, armed usurpation) was interesting:

“Why am I here? Because of the police. Why am I here? Because I have been beaten by police.”

Also reasons like “desire to make money without working” and “not knowing punishment as a result of one’s behavior” could be other important ones.

When looking wholly at the reasons for crime tendency from the viewpoint of children, in other words, when evaluating all answers coming from data collection, it is thought that an important part of children ask the question of “why am I here?” to themselves even before they began to work, they examined their status or at least they began to examine the conditions. Especially children arrested for theft told the reasons for their being pushed for the crime by a chain developing ring by ring. Being children of poor families and, at the same time, being in unreliable relationships in families prevent receiving good education. Children left school began to work and after a while left their homes. In this process, it is declared that they lived with their friend groups and this condition caused crime. Additional effects of all these systems, the belief of “rich is valuable and it is possible to be rich without working” is especially the most effective reason for the crime of theft. While there are no other social life alternatives for children, there will be no choice than to continue this vicious circle. A child (15, usurpation) expressed this situation with these worlds:

“In my opinion, at first, family, environment and friends are primary reasons. Family, because: being of irrelevant, careless and thoughtlessness. The reason is something, which is created by social environment: Desire to imitate vagrants. Psychology of “they have, but I don’t.” Influence of the friends who do not plan their futures and get used to live free.”

B. Children’s Future Expectations

This question was comfortable for children. Thoughts of the children about their future were generally positive, although they were stigmatized negatively by the society. Generally, children emphasized that they would not commit crime after detention center and wanted to establish a new life. Approaches of children who have a life plan are divided into two: positive and negative. On the other hand, there were other children who have no life plans. Answers of these three groups are discussed and presented below: About two thirds of children were hopeful for the future.

Optimistic Children: Children in this group have a life scheme in which they will make real within the frame of traditional approach of society for a boy. This contains working in a “good and clean

workplace”, to care for his family, to be in the army and to marry with a “suitable girl”. In this ordering, there are many children who wrote that they would rest first after the detention center. So many children declared his desire for a rest with sentences like this one:

“After detention center, I will go to village and will have peace of mind.” (18, detained by force)

The “desire for rest” is about especially insecure attribute of detention center in nights and their experiences of spiritual fatigue in this process. At the same time, almost all of them stated that they would cut relations with their friends that committed crime together. Thoughts of some children about this issue were very interesting.

“My family will be my unique friend, because I was cheated by my friends.” (17, theft)

“I will rearrange my friend environment; I will not speak with my old friends.” (16, car theft)

Almost all of the children, who left their families in the process of tending to crime, want to go back to their families:

“After I finish my punishment, I will not leave my family certainly.” (17, theft)

“By God’s grace, after exiting here, I learned that nothing is more valuable than mother, father, brother, sister.” (15, theft)

Themes of obeying and desire not to bedeviling their families are important in this group.

“I want to obey my parents, I will not give them pain and I will always be with them.” (17, stealing/snatching usurpation)

This return contains the decision to care for their families and brothers:

“I will aid my family; I will not cause any trouble for them.” (17, usurpation)

Only eight children in this group expressed that they want to continue their education. There was a statement below that could be an example for this view:

“If I have a chance for my education, I will continue with my school. If I become free in the short run, I will attend to school; if I become free in the long run, I will work.” (18, theft)

It is also an interesting finding that a part of children talked about homeland affection when answering this question:

“I love my country and my family.” (17, theft)

Another expression by the participants is worth to be highlighted: They were very fatalistic about their discharge from the center. They usually began their answers with these words: *“If I exit by God’s grace.”*

“By God’s grace, I have trial next Friday, at 25th day of this month. If I become free by God’s grace.” (16, theft)

Children without any future plans: There are participants who expressed that they are stigmatized by the society, so they do not know what they could do. An informant (17, theft) declared his hopelessness by the following statement:

“I do not know what I will do?”

Pessimistic Children: Almost all of the children, who are not hopeful for their futures, were the ones who thought that they had no future because they were stigmatized by the society:

“..... Past crime is a life block. I think I will not have a good future.” (16, theft)

As mentioned before, children who were arrested because of sexual crime had pessimistic approaches to their future. Some of the participants thought negatively about their future expressed desire for revenge against peoples who caused their tendency to crime before detention center or who did injustice. Writings of a child (17, ravish and murdering) were striking:

“I will go to my friend after detention center as there is nothing. I will recover nine years. I have gone through hardship, he should go also. Hereafter, I know that I will not be useful for others and myself. What will I do? God, help me!”

Another one (17, usurpation, detention and ravish) wrote this:

“I will not have any expectations from life after detention center. Because all people are against us and we will live with a black blemish over our forehead.”

Conclusion and Suggestions

In this paper, reasons for juvenile crime from the view points of 69 male juvenile offenders were presented on the basis of the findings of a research, which was conducted in a detention center in a capital city in 2002. In addition to the present crime reasons, it was aimed to find out their future expectations. The ultimate aim of this qualitative research was to provide realistic, applicable and sustainable suggestions for prevention and protection of children and adolescents both before and after delinquency.

“It is impossible to develop effective prevention programs without understanding the reasons behind juvenile involvement in criminal activity. Different approaches are used in scientific and practical literature on juvenile crime and violence to define and explain young people’s delinquent behavior. To criminologists, juvenile delinquency encompasses all public wrongdoings committed by young people between the ages of 12 and 20. Sociologists view the concept more broadly, believing that it covers a multitude of different violations of legal and social norms, from minor offences to serious crimes, committed by juveniles. Included under the umbrella of juvenile delinquency are status offences, so called because they are closely connected with the age status of an offender; a particular action or behavior is considered a violation of the law only if it is committed by a juvenile (examples include truancy and running away). In an attempt to explain the theoretical underpinnings of delinquency, sociologists associate the specifics of youth behavior with the home, family, neighborhood, peers and many other variables that together or separately influence the formation of young people’s social environment.” (UN 2003, p. 190-1)

During present research, it was surprising to observe the statements of the informant children who wrote the crime reasons as if they had conducted scientific research. According to them family, place of dwelling, economic status, pressure of peer groups, substance abuse and conditions of workplace were the most frequent reasons reported for having been pushed to crime.

Generally speaking, juvenile delinquency has come out by the negative effects of changing conditions and characteristics of social, economic and cultural development by urbanization and modernization. Socio-economic instability is directly linked to unemployment and low incomes among such groups, which can make it easier to involve in the delinquent activities by the young. Delinquent behavior depends also on the changing cultural conditions and usually occurs in social settings in which the norms for acceptable behavior have broken down in an anomic way.

According to the findings of the research, usurpation/theft was the most common crime by the children in detention center. This case might be closely linked with their membership to the oppressed part of the society. The combination of the characteristics of adolescence period with economic, social and cultural structures of the communities, which they were living in, provided them a crime-based environment; almost, they were condemned to tend to be guilty. Here, at this point, existence of social services within the society that will prevent this tendency to crime has a vital importance.

Generally speaking, in Turkey -as in the other parts of the world- many of arrested/convicted children who are off springs of the parents who live in stigmatized groups of the societies. Unfortunately, we are suddenly aware of them when they cause harm for the society; and trail them as detainee with a punishment oriented approach. Although Turkey has signed the Convention on the Rights of the Child in 1990, social services towards children socialized under these conditions are not sufficient and efficient.

When the informant children were asked about their future expectations, “living with their beloved families after detention center” and “having a clean job and a marriage” were the hopeful answers among optimistic ones. On the other hand, some of the children were pessimistic about the future because of stigmatization by the society. Both groups should be taken into consideration, and

possible programs to improve their conditions should be planned separately. Particularly the second one has a risk of recurrence.

It is very important to remember that generally, a crime prevention system will be effective only if (a) the contents and framework of prevention efforts are clearly defined and the functional opportunities of all agencies included in that system are appropriately utilized; (b) all of the subjects and targets of prevention work (including adolescents themselves and their relations in different spheres of society) are covered and the specific characteristics of each are taken into consideration; and (c) the mechanisms of administration, control and coordination for this type of prevention work have been developed (UN 2003).

Taking into consideration of the research results with an assumption that the juvenile offenders were victims at the same time, many suggestions could be developed. The following are some suggestions with priority for Turkey:

1. It should be whole society's responsibility: First of all, various groups of the society should be aware of the different dimensions and importance of the problem and internalize the philosophy of the Convention on the Rights of the Child and act properly and sincerely, immediately! Effective awareness raising is only possible through responsible media. It should be realized that child who has the rights as a requirement of the approach of modern childhood is not only a member of his family, at the same time; all society and government have responsibilities for him too. Consciousness of having responsibility of other members of the society towards children tending to crime should be created. The most important issue is “fostering responsible citizenship” for all and at every stage of life.
2. Social approaches should be preferred rather than judicial ones for controlling juvenile delinquency. Particularly, early-phase intervention represents the best approach to preventing juvenile delinquency. Without any discrimination, special services and support projects towards children who are the members of particular groups, so are under risk, should be fostered as soon as possible.
 - Unemployment as a result of neo-liberal policies is the most important problem for these children and their families. Consequences of these economic-policies should be taken into consideration and government should plan realistic social interventions. In this sense, insurance of unemployment and provision of new employment opportunities by teaching new skills to the unemployed ones should be taken into consideration.
 - Community centers especially in slum areas of the cities should be operated effectively and should be suitable for their goals and services for keeping adolescents from breaking the law.
 - Training activities should be carried out and all of the parents should be provided with the information on “good parenting”.
3. It is essential to develop a justice system for children, which is separated from adults.
 - The children and youths who enter the juvenile justice system are treated differently from adults through out every phase, including prevention, early intervention, diversion, detention, probation, residential care, incarceration and post-release care. Without an effective and responsive screening, assessment, treatment, and aftercare protocol, children progressively move through stages of delinquency development and ongoing adult criminal behavior (NASW).
 - Work laws should be made properly; employer would not engage or fire these children arbitrarily. The laws regarding to the employment of young children should be much more detailed and improved according to the principals of the Convention on the Rights of the Child; and the laws should determine work conditions.
 - Policies that will be developed by a new approach for protecting children should be formulated. To do this, a restructuring of all related departments of the educational, juridical, social welfare, etc. systems will be required. In that kind of a restructuring, social

welfare system might play a central role to establish a networking system for children under risk. So it could be possible to follow up and intervene for referring the children to other services within the society on time, in terms of prevention and protection before and after delinquency.

4. It is essential to raise consciousness of service givers about the problem. There are many people who provide service to children, delinquent or not, such as psychologists, psychiatrists, social workers, polices, and others.
 - An effective social work system should be operated together with education system to prevent dropout of children till the age 18. The teachers, as key persons, should be trained to follow up the children and notice their problems with their families as early as possible in school and to provide services to children and their families as well.
 - About substance abuse, effective service models should be fostered. Besides, the professionals who will work with children tending to crime should have in-service training about drug addiction and treatment.
 - Treatment work should be carried out with children tending to crime by a multidisciplinary team. Special programs for children committing sexual crimes should be improved.
 - Frequent in-training programs should be actualized for the policies that are working in detention centers. These programs have to include various modules such as child psychology, child rights, and child needs, etc.
 - All of the parties should be aware of the importance of preventing youth delinquency and reintegrating young offenders into society.

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We are very grateful to the children who shared sincerely their painful experiences in the past and pessimistic/optimistic expectations for the future. They helped us understand an aspect of life, which we were not aware of it before. Indeed they showed us the real world -which we make all together- in the mirror. It was traumatic even to study their realities from their own tongues with their own worlds, however it was very enlightening. We thank them all with our best wishes. We also thank Dr. Yüksel Baykara-Acar and Dr. Filiz Demiröz for their support in data evaluating stage.

References

- [1] Acar, H. (2000) “Çocuk Hakları Sözleşmesinde Yer Alan Kimi Haklar Açısından Sokakta ve Hizmet Sektöründe Çalışan Çocuklar” (U.N. Convention on Rights of the Children and the State of Street Children/Children who Works for the Service Sector). Unpublished Master Thesis Dissertation. Hacettepe University, Institute of Social Sciences, Master Program for Social Work. Ankara.
- [2] Akşit, B. (1998) “A rapid assessment methodology in migration research”, *Türkiye’de İç Göç*. (Immigration in Turkey) Turkish Foundation of Economical and Social History Publication. İstanbul.
- [3] Angenent, H. and Anton M. (1996) *Background Factors of Juvenile Delinquency*. Peter Lang Publishing, Inc. New York.
- [4] Baykara, A. Y. (2004) “Cinsel Suçtan Hükümlü Çocuklarla Grup Çalışması: Ankara Çocuk İslahevi Örneği” (Group Work with Juvenile Sex Offenders: Ankara Reformatory). Unpublished Ph.D. Thesis Dissertation, Hacettepe University, Institute of Social Sciences, Doctorate Program for Social Work. Ankara.
- [5] Brown, L. D. (1985) "People-centered development and participatory research", *Harvard Educational Review*. 55 (1), 69-75.
- [6] Cankurtaran-Öntaş, Ö. (2004) “Çocuk Hakları ve Sosyal Hizmetin Güçlendirme Yaklaşımı Bağlamında Suça Yönelen Çocuk-Polis İlişkisi” (Relationships between Juvenile Offenders and Police: An Approach on Children Rights and Empowerment through Social Work). Unpublished Ph.D. Thesis Dissertation. Hacettepe University, Institute of Social Sciences, Doctorate Program for Social Work. Ankara.
- [7] Croall, H. (1998) *Crime and Society in Britain*. Addison Wesley Longman Inc., London and New York.
- [8] Delikara, İ. E. (2001) “Ergenlerin Akran İlişkileri ile Suç Kabul Edilen Davranışlar Arasındaki İlişkinin İncelenmesi” (Adolescent’s Peer Groups and their Delinquent Behaviors: A comparative study) in *First National Child and Crime Symposium I: Reasons and Prevention Studies: Papers, 29-30 March 2001*. p. 147-161.
- [9] Dewey, J. (1938) *Logic: The Theory of Inquiry*. New York: Henry Holt.
- [10] Finn, J. (1994) "The promise of participatory research" *Journal of Progressive Human Services*, 5 (2), 25-42.
- [11] Foucault, M. (1973) *The order of things: An archaeology of the human sciences*. New York: Vintage Books.
- [12] Freire, P. (1974) *Pedagogy of the Oppressed*. New York: Seabury Prep.
- [13] Hancı, H. (2002) “Çocuk ve Ergen Suçluluğu” *Adli Tıp ve Adli Bilimler*. (“Child and Adolescent Offences” *Forensic Medicine and Forensic Science*. First Edition. Ankara. p. 237-263.
- [14] Kağıtçıbaşı, Ç. (1981) *Çocuğun Değeri* (Value of Child). Boğaziçi University Faculty of Administration Sciences Publication.
- [15] Kıcalıoğlu, M. (1988). “Suçlu Çocukların Toplum Kazandırılması: Ankara İslahevi Örneği” (“Social Inclusion of Juvenile Offenders: Example of Ankara Reformatory). Unpublished Thesis Dissertation. The Public Administration Institute for Turkey and the Middle East, Master Program in Public Administration. Ankara.
- [16] Lather, P. (1986) "Research as praxis" *Harvard Educational Review*, 56 (3): 257-277.
- [17] Mead, G. H. (1934) *Mind, Self and Society*. Chicago: University of Chicago Prep.
- [18] Maguire, P. (1987) *Doing participatory research: A feminist approach*. Amherst, MA: University of Massachusetts.
- [19] National Association of Social Workers (NASW, 2003). *Juvenile Delinquency World Youth Report, 2003*, pp. 189-211.

- [20] Özdek, Y. (2000) “Küreselleşme Sürecinde Ceza Politikalarındaki Dönüşümler” (“Transition of Punishment Policies in the process of Globalization”) *Amme İdaresi Dergisi*. 33, December, p. 21-48.
- [21] Saraç, S. (2001) “Sosyal Araştırmalarda Katılımlı Araştırma Yönteminin Kullanılabilirliği ve Katkıları: Sokakta Çalışan/Yaşayan Çocuklara Yönelik Katılımlı Eylem Araştırması Örneğiyle”, (“Contributions of Qualitative Research Methods to Social Sciences: The Example of an action research on street children), Unpublished Master Thesis Dissertation. Devlet İstatistik Enstitüsü (State Institute of Statistics). Ankara. p. 128.
- [22] Saraç, S. ve Akşit B. (2005) “Nicel Araştırmaların Nitel Araştırmalarla Desteklenmesinin Önemi” (Importance of contribution of qualitative research to quantitative research), paper presented to 14. Statistical Research Symposium. 5 May, Ankara
- [23] State Institute of Statistics (SIS) (2001) *T.C. Başbakanlık Devlet İstatistik Enstitüsü Güvenlik Birimi'ne Gelen veya getirilen çocuk istatistikleri: 27 İl. (Statistic of Children in Security Unit: 27 Provinces)*
- [24] Shor, I. (1992) *Empowering education: Critical teaching for social change*. Chicago: University of Chicago Prep.
- [25] Sohng, S. S. L. (1995) “Participatory Research and Community Organizing” A working paper presented at The New Social Movement and Community Organizing Conference, University of Washington, Seattle, WA. November 1-3.
- [26] Seydlitz, R. ve Jenkins, P. (1998) ”The Influence of Families, Friends, Schools, and Community on Delinquent Behavior” *Delinquent Violent Youth: Theory and Interventions*. (Ed. T. P. Gullotta, G. R. Adams ve R. Montemayor). Sage Publications, London. p.53-98.
- [27] Torczyner, J. (2001) “Globalization, Inadequacy, and Peace Building: What Social Work Do?” *Social Work and Globalization*. p. 123-145.
- [28] Türkeri, S. S. (1995) “Çocuk İslahevleri ve Çocuk Cezaevindeki Çocukların Suç İşleme Nedenleri Açısından İncelenmesi”. (“Investigations in Recogniton of causes of Delinquent Behaviors of Juvenile Offenders in Dormitory and Detention Center”). Unpublished Master Thesis Dissertation, Ankara University, Social Sciences Institute, Educational Administration and Planning Department, Unpublished Master Thesis, Ankara.
- [29] Uluğtekin, S. (1976) “Çocuk Yetiştirme Yöntemleri Açısından Anababa Çocuk İlişkileri: Anababa Davranışlarıyla Çocuğun Saldırganlık ve Bağımlılık Eğilimi Arasındaki İlişkilerin Araştırılması” (“Relations Between Parent and Child: Investigation of Relations Between Parent's Behaviors and Tendency of Dependency and Aggressiveness of the Child”) Unpublished Ph. D. Thesis Dissertation, Ankara University Faculty of Education. Ankara.
- [30] Uluğtekin, S. (1991) *Hükümlü Çocuk ve Yeniden Toplumsallaşma. (Convicted Juvenile Offenders and Resocialization)*. Bizim Büro. Ankara.
- [31] Uluğtekin, S. (1994) *Çocuk Mahkemeleri ve Sosyal İnceleme Raporları. (Juvenile Courts and Social inquiry Reports)* Bizim Büro. Ankara.
- [32] UN (2003) Juvenile Delinquency, World Youth Report (<http://www.un.org/esa/socdev/unyin/documents/ch07.pdf#search='juvenile%20delinquency'>) (25 September, 2006)

Fiscal Policy and Economic Growth in Sub-Saharan Africa: An Empirical Investigation

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Abstract

During the last thirty years, empirical studies devoted to the analysis of economic growth vectors most often omit to take taxation into account. Now, the challenge linked to putting fiscal policies in place is to adopt good (effective) measures according to prevailing circumstances. Normally, the government seeks to adopt fiscal policies that will entail sustained economic growth, while avoiding to aggravate inflation and poverty. This omission of fiscal policy is surprising insofar as Africa countries in recent years, have implemented reforms to reduce distortions stemming from taxation. The objective of this paper is to fill this gap with analysis of the impact of fiscal policy on growth, using pooled time-series data. We arrived at the results that, in general, the tax ratio (i.e. total tax revenue (GDP) is a vector of minor importance in growth, and that growth is not favourably affected by the share of tax revenue levied on foreign trade in the aggregate revenues of the States.

Keywords: Taxation, Growth, Poverty Sub-Saharan Africa (SSA)

1. Introduction

Developing countries and notably those of Sub-Saharan Africa (SSA) have witnessed both internal and external imbalances entailing chronic budgetary deficits from the late 1970-78 period to the early 1980-89 period. The implementation of different reforms is the consequence of this financial crisis that Sub-Saharan countries experienced. Through the changes brought to bear on budgetary policy, the objectives of these reforms were to increase public revenues and to reduce tax-generating distortion, has relieving the level of poverty.

Tax reform very often lies at the center of gravity of economic reforms, and remains once of the major problems faced by the management of public finance. For more several decades, an influential current of thought has tended to reconsider the stakes and importance of the State (Hayek, 1945; Barro, 1991; Bibi, 2004; Alesina et al, 2002; Naser et al., 2005). However, market failures, the need for a supply of public goods, and the necessity for reducing poverty or inequalities in Africa still justify strong action by the State, and hence substantial public tax levies.

In spite of the abundant theoretical literature devoted to the impacts of taxation on growth, and poverty, few empirical analyses, have drawn their effects, whereas the States still continue to levy considerable resources, 25% of GDP for developed countries and less than 20% of GDP in developing countries (Burgess and Stern, 1993), and these levies generate distortions. This situation is all the more surprising since the reforms implemented were intended to reduce these distortions, notably those caused by the taxation of foreign trade. Sub-Saharan Africa cannot escape from this reform.

The resumption of taxation impact analysis through endogenous growth models and through the introduction of often ignored variables (i.e. institutional, sociological and political variables) strengthen the paradox of the lack of applied research devoted to the effects of taxation on growth and poverty. Thus, the fundamental objective of this paper is to fill this gap by notably taking into account the distortions generated by the taxation of international trade. After the examination of the results of existing analytic works, we will seek, using a large sample of Sub-Saharan countries, to estimate the impacts of taxation on growth by means of a regression run with pooled time-series data. The paper is organized as follows: in the second section, we present a synthesis of the literature on tax reform experiences and growth. The third section is devoted to the methodology and econometric estimation. Finally, the fourth section will conclude the study.

2. Literature Review and Analysis of Tax System in Sub-Saharan Africa

A rich literature exists on tax reform experiences in Africa and across the world. Differences in the results observed in these countries are mainly due to the structural differences inherent in these economies.

2.1. Taxation and Growth through the Literature: An Ambiguous Impact

Economic theory justifies tax levies by the State through the sovereign function the State must assume: the allocation function (public goods financing), the redistribution function (ensuring social security, justice and stability), and the stabilization function (facilitation of employment, price stability and economic growth)

To achieve macroeconomic objectives (i.e. full employment and economic growth), Keynesians are concerned with determining an optimal tax rate, whereas the neo-classical school centers on the determination of an optimal tax structure. For both schools of thought as regards taxation a tax becomes an instrumental variable of economic policy. Through the tax multiplier, this variable must serve to attain macroeconomic full-employment equilibrium. The optimal tax rate is then determined by the degree of State interventionism. For the neo-classical school, optimal taxation does not cause distortion in the behavior of private agents when Pareto optimality conditions obtain. Their objective is to determine a tax which generates as few disturbances as possible in market mechanism (tax neutrality and optimality). According to Bassolet (1993), citing Shirazi et al., (1991), the fundamental objective of tax reforms must be the enlargement of the tax base to increase tax yields and to achieve fiscal justice, i.e. to achieve a distribution of the tax burden based on the ability to pay of each citizen. A use in tax revenues may be simultaneously derived from tax base enlargement or from a transformation of the tax structure (i.e. discretionary changes) designed by the government.

For Adam Smith (1777), cited by Gouttefarde (1999) and Brun, Chambas et al., (2000), “taxes can hinder the industry of the people and divert them from taking up certain branches of trade it labor which could provide employment and the means of subsistence to a great number of people. Thus, while on the one hand, it forces the people to pay, on the other hand, it reduces or perhaps eliminates some of the sources that could easily enable the people to do it”. Consequently, most of the economists who have focused their research on penalize economic growth.

The expected effects of taxation on growth vary as a function of the theoretical framework retained (i.e. neo-classical or endogenous growth models), the production factor on which the tax is levied (i.e. taxes on capital or labor), of production techniques and the process of human capital accumulation.

Following Solow’s (1956) neo-classical growth model with an exogenous saving rate, authors such as Sato (1967), Krzy zaniak (1967), and Feldstein (1974), have analysed the impact of taxation on growth. Likewise, Judd (1985), Chamley (1986), and Ramsey, 1928), use endogenous growth models with saving rates. It emerges from these models that taxation impacts on the economic growth rate

during the transitory phase and on the income level on the poor and non poor during the phase of steady-state growth.

Thus, the taxation of the income of capital, which is comparable to a reduction in the net interest rate, may change the allocation of resources between present and future consumption. Its influence, which can be broken down into an inter temporal substitution effect unfavourable to saving, and into an income effect favourable to saving, is ambiguous. The sum of these effects has a definite sign if the elasticity of the inter temporal substitution effect is high; which empirical analyses tend to refute (Hall, 1988; Brun, Chambas et al., 2000).

According to new growth theories, taxation impacts on the supply of labor and on technical progress, endogenous growth factors that depend on the behavior of economic agents (Romer, 1986; Lucas, 1988; Aghion et al, 1992; Aghion et al, 2004; Ngongang, 2007), and which determine the steady-state growth rate. Taxation exerts an influence not only on the transitory growth rate, but also on the long-term growth rate. Thus, the taxation of labor income affects the allocation of time between work and leisure. According to Lucas and Rapping, (1969), and Chan (1999), when after-tax wage income is temporarily quite low, the amount of labor supplied tends to fall (inter temporal substitution effect), for economic agents who anticipate a rise in wage will temporarily increase their leisure time. But, a lower wage impoverishes its earner, hence a reduction in labor demand (income effect). A permanent increase in taxes generates income effects that stimulate the supply of labor. By reducing the after-tax interest rate, taxation encourages households to supply less labor, for the value of income derived from present labor relative to future labor has fallen. These results are accepted with reserve, for, according to Ball (1990), the supply of labor is mainly determined by factors other than inter temporal substitution behavior.

The taxation of income impacts on human capital accumulation. A permanent rise in taxes on labor income reduces the opportunity cost of the time spent on training whereas it reduces the returns on human capital investment. The effect is therefore ambiguous; however, according to Trostel (1993), human capital accumulation depends, not only on the time spent to this activity, but also on the inputs whose opportunity costs are not reduced by a rise in taxes on labor. In this case, the return on human capital investment might exceed the opportunity cost effect: the taxation of labor may rather be a factor of minor importance in human capital accumulation, and hence in (in lower) economic growth.

In the Aghion-Howitt (1992) model, expenditures on research and development constitute an essential factor (vector) in technical progress, and hence in economic growth. In developed countries particularly, expenditures on research and development benefit from a specific tax status which changes the relative costs structures in the favor.

Actually, as maintained by Brun, Chambas et al., (1992), these theoretical analyses permit to capture the different impacts of taxation on growth, but they do not identify their overall meaning. Different authors have attempted to fill this gap by means of empirical analyses.

Thus, Landaw (1986) explains economic growth in the case of developing countries during the 1960-1990 periods, by taking account of the share of tax revenues in GDP. However, he finds that this variable is not significant. Koester and Kormendi (1989) conclude from an analysis of more than 60 countries for the 1970-1990 period, that average tax rates do not affect growth if their endogenous nature and their link with GDP per head are not taken into account, but that marginal tax rates reduce economic activity when their effects is controlled by average tax rates. Other authors such as Levine and Renelt (1992), and Kouassi et al., (1996), evaluate the impact of taxes on trade, companies, and individuals, as well as social levies. But, when the impacts of the rate of investment are taken into account, these variables significantly reduce the growth rate. According to Engen et al., (1992) and Newman (1988), the main impact of taxation is converged through a reallocation between the sectors subjected to taxes and those that are tax-exempt. Easterly and Roberlo (1993) use time and cross section series and arrive at results of little significance. With that end in mind, there could exist a correlation between the level of development, the bigness of the economy, and the tax structure that would make it difficult to highlight the characteristic effects of taxation. Miller et al., (1993), Brun et

al., (2000) using pooled data analysis on a sample of countries find that the impacts of a rise in taxation depend on the nature of financed public expenditures. Generally speaking, econometric analyses do not always result in a positive effect of taxation on growth and poverty, but they seldom show a negative effect. In spite of everything, reform does not seem to give satisfaction to reformists, and still less so to those persons liable for taxes and who are concern by taxes.

3. Methodological Framework and Econometric Analysis

The first objective a tax regime in a given country is obviously to collect the revenues necessary to finance public expenditures. To that end, the approach to use is to reconcile the role of distortions that link taxation with growth to permit an analytical and econometric framework.

3.1. Methodological Framework

In this sub-section, we will test the impacts of diverse tax distortions on economic growth, and we will attempt to highlight this influence using pooled time series. The statistical model to be estimated is given in the following form, with (t) as the time subscript.

$$G_t = a_0 + a_1 FISC_t + a_2 COM_t + a_3 OUVE_t + a_4 COPDT_t + a_5 INF_t + a_6 GUER_t + a_7 TEM_t + a_8 LPIB_t + a_9 SCOE_t + \xi_t$$

For $t = 1, 2, \dots, n$;

And where,

G_t = economic growth rate;

$FISC_t$ = average overall tax rate given by the ratio of total tax revenues to GDP;

COM_t = share of tax revenues in total public revenues;

$COPDT_t$ = share of public consumption expenditures in total expenditures;

INF_t = rate of inflation;

$OUVE_t$ = rate of trade openness defined as the sum of exports and imports over GDP;

$GUER_t$ = war damages per head;

$LogPIB_t$ = nominal physical capital stock;

$SCOE_t$ = nominal human capital;

TEM_t = temporal dummy variable to take account of the international environment;

$a_0, a_1, a_2, a_3, a_4, a_5, a_6, a_7, a_8, a_9$ = model parameters or regression coefficient;

ξ_t = error term

n = number of observations.

The estimation of the growth function will be carried out following the instrumental variable method, beginning of the period variables, lagged variables, and exogenous variables. However, the tax system here has a specific purpose that must be highlighted.

A tax system generally aims at a certain number of specific objectives during its elaboration and implementation. Some previous works have integrated the effects of diverse tax distortions on growth, poverty, and in particular the negative effects of effective tax rates. However, they neglect the specific role of the taxation on international trade whose negative effect on growth is well known (Brun et al., 2000; Burgess and Stern, 1993). Consequently, while following Barro's (1991) framework generally used by researchers, we have integrated this effect into the analysis with a sample of 22 countries of Sub-Saharan African according to data availability. For each country, we have two observations corresponding to the 1985-1995 and 1995 and 2005 periods.

We assume furthermore that tax distortions impact on the regular steady of each economy. These distortions are captured by with the help of two indicators, and the level of tax levies, for an

increase in the latter generates additional distortions and the share of taxes on international trade, insofar as this form of taxation usually increase the dispersion of effective protection rates. In the context of Barro's conditional convergence hypothesis that tax levy may impact on the velocity of convergence, insofar as it may reduce the absorptive capacity of new technologies. The spread of these technologies is converged through direct foreign investment. Now, the latter is probably hindered by excessive taxation (Barro and Sala-I-Martin, 1996). The existence of an optimal taxation level for growth is indispensable.

However, it would be desirable to integrate effective marginal tax rates if they are known in different countries. Some methods help to evaluate them, but they require additional information on individual incomes which are very unavailable in developing countries (Barro and Sahasakal 1993). In the countries considered, the lack of statistics also does not permit to apply the method of Koester and Kormendi (1989), which consist of regressing the yield of each tax on its tax base, the coefficient obtained being assimilated to a marginal rate. The instability of coefficients during the reform period obviously constitutes an additional obstacle (Easterly and Robelo, 1990). Thus, according to Landow (1986) and Levine and Renelt (1992), tax distortion impacts are also captured from an overall average tax rate (*FISC*), evaluated as the ratio of total public tax revenues to GDP. Public finance statistics are drawn from the IMF financial statistics and from country governments. Data on GDP derive from the World Bank Tables (2003), whereas the other data are a synthesis of World Bank statistics (2000-2004).

The share of taxes on international trade in public revenues might negatively affect growth. The trade openness rate (*OUVE*), defined as the sum of exports and imports relative to GDP, is introduced in the model as a control variable, in order to capture the impacts of taxes on the composition and not the level of trade, a level which is a function of structural variables. Its integration helps moreover to capture its effect on growth: it implies a reallocation of factors that correspond more to comparative advantages, increases competition on the markets the sizes of which rises. Trade openness also facilitates the access of enterprises to intermediary goods or to new production techniques whose quality is better. It also increases domestic savings if the private saving rate is higher in the trade able goods sector (Guillaumont, 1985; Kormendi, 1993; Mathfield, 2003)

Low growth may occur due to gaps between the efficiency of private and public expenditures. This effect should be different according to whether it is a question of current capital expenditures (Barro, 1991; Blanchard 1995), which the fact of taking account of the public expenditures structure through the share of public consumption in total expenditures (*COPDT*).

Inflation (*INF*) generates relative prices distortions which are responsible for inefficient resource allocation, and a variability in relative prices which increases the risk of decisions. It also involves redistributive effects by transferring the resources of money holders to the State. If public expenditures thus financed have a low efficiency relative to private expenditures, there results a negative impact on growth.

A variable of political instability indicating the probability of a threat on property rights is introduced in the model: the assessment of war damages per head (*GUER*) was already taken in account in Easterly and Robelo (1993).

A temporal or dummy variable taking account of the international environment (*TEM*), integrates changes in the international situation between the two sub-periods 1985-1995 and 1995 and 2005.

In addition to these control variables, the analysis integrates the following state variables:

- The nominal physical stock of capital, proxied by the initial log of real GDP per head (*LPIB*), its expected sign is negative in neo-classical models owing to the hypothesis of decreasing returns;
- The nominal human capital is captured by the nominal secondary schooling rate (*SCOSE*); its expected sign is that which in neo-classical models makes up the difference between physical capital and human capital, and it is positive because it is possible to observe for a small stock of

physical capital, a negative relationships between the GDP growth rate per head and the ratio of physical capital relative to human capital.

3.2. Econometric Analysis

In this sub-section, the instrumental variable method allows to remedy several obstacles. Explanatory variables such as GDP the schooling rate of the initial period are observed with a measurement error. Moreover, Sub-Saharan Africa countries are sensitive to disturbances such as fluctuations in agricultural product prices in regions where nominal income is low and openness ratios high so that disturbances are, in consequence, correlated with explanatory variables. Lastly the growth rate impacts on certain explanatory variables, and the same thing holds true for the inflation rate and notably for fiscal variables.

The instruments used in this study are the initial period variables (I.e. population, urbanization role, imports and exports rates), lagged (or initial) variables (i.e. real GDP, schooling rate, degree of openness, investment rate), and the most recent exogenous variables available (i.e. war damages agricultural exports rate 1*). The t-ratios are adjusted using the White method to check out whether the time-series are identically and independently distributed.

Table 1: Results of Econometric Estimation

	Equation (1)	Equation (2)	Equation (3)	Equation (4)
Constance	11,78****	18,56***	11,98****	15,28****
LPIB	- 0,86*	-1,56**	- 0,95**	-1,27***
OUVE	0,02****	0,02****	0,02***	0,02****
INF	- 0,02**	-0,02*	- 0,02**	-0,02**
SCOSE	0,03***	0,03***	0,03***	0,04****
COPDT				0,21
GEUR			-62,44*	-60,25*
TEMP	- 3,15****	-3,13****	-1,99****	1,92****
FISC	- 0,07***	-0,22	-0,08***	-0,06**
FISC*LPIB		0,04		
FISCA2		- 0,001		
COM	- 0,07**	- 0,07**	-0,07**	-0,07***
R ² ajusté	0,26	0,26	0,27	0,27
JB	0,83	0,35	0,92	1,51
Reset	1,33	1,39	1,72	1,15
LM	0,27	0,28	1,58	0,61
Chow I	1,32	1,20	0,99	1,49
Chow II	1,70*	1,09	1,64*	1,57

Note: ****, ***, **, * = significant respectively at the 1%, 5%, 10%, 15% level

The robustness of equations is evaluated using four Reset tests (i.e. Jarque and Bera; Breusch and Godfrey; Chow). The Reset statistic checks out the efficiency (i.e. pertinence) of the functional form (F-test). The Jarque and Bera statistic tests the normality of residuals. The Breusch and Godfrey statistic tests the serial correlation of residuals (x^2), and the Chow² (F-test), the stability of coefficient by considering as break point, GDP per head (Chow I and the average tax rate (Chow II).

3.3. Interpretation of the Results

Examination of equation (1) and Table 1 above shows, all things remaining the equal elsewhere, that the tax rate and the share of taxes on trade in public revenues are determinants minor importance to growth, with regression coefficients of -0.08 and -0.06 , respectively. The intensity or degree of openness simulates growth contrary to the inflation rate with regression coefficients of 0.01 and -0.01 , respectively). The temporal dummy variable has a negative sign, the international environment during the study period being unfavourable to growth in these countries. State variables have the expected

signs. Generally speaking, the conditional convergence hypothesis is not rejected insofar as the log of real GDP per head at the onset of the period is negative; once the differences between steady states are controlled. In connection with the statistic and econometric theory, the positive sign attached to the schooling rate conforms and is valid. The Hausman test permits to reject the use of ordinary least squares at the % significance level.

According to Equation (2) Table 1(column 2), the impact of taxation on the velocity of convergence, given by the log of the beginning of the period GDP per head multiplied by the tax rate (FISC x LPIB), is rejected. By testing a significant threshold (or doorstep) effect once the squared of the tax rate (FISC²) is introduced in the same equation, this hypothesis is rejected again. Moreover, by introducing the political variable, Equation (3) Table 1 (column 3), is different and becomes significant at the 15% significance level.

Finally, the impacts of the structure of public expenditures are tested, using the share of expenditures on education, health, and defence in total expenditures Equation (4) table 1 (column 4). This variable is not significant. Thus, the composition of public expenditures does not highlight its impact on growth but rather on the impacts of poverty reduction. The taxation impacts on growth are not necessarily transmitted by the nature of financed expenditures.

4. Conclusion

The purpose of this paper was to estimate the impact of taxation on economic growth and poverty. Using Barro's analytic framework, we included in our model, the tax revenues derived from the taxation of international trade, a factor that has been neglected in the recent literature of the last decade, to capture the impact of this variable on growth and poverty. An econometric analysis with pooled cross-section data on Sub-Saharan Africa countries highlights the harmful influence of entry or excise taxation mainly on foreign trade, a major characteristic of developing countries, and notably of African countries. Then, the econometric analysis also reveals a negative impact of the tax ratio on growth.

The econometric results arrived at strengthen the need for regulating fiscal policies aiming at increasingly minimizing the negative impact of taxes on growth and standards of living. To that end, it is undoubtedly opportune to facilitate the implementation, for instance, of taxes which generate the lowest modifications in the relative prices of goods and services. As concerns Sub-Saharan Africa countries, the existence of pure economic rent derived (or emanated) from price distortions, explains the opposition to reforms whose implementation often difficult due to constraints linked to living standards and regional development. We must still wait for the implementation of the so-called "third generation reforms" to see whether most economies find the path of growth again, for one of the remarkable impacts of reforms today is a greater integration of countries into economic zones and poverty relief.

References

- [1] Adam, C.S., D.L. Bevan, and G. Chambas, 2000. *Exchange Rate Regimes and Revenue Performance in Sub-Saharan Africa*, IMF Staff Papers, January.
- [2] Adam, S. 1977. *Recherche sur la mesure et les causes de la richesse des nations*, Paris, Ed. française Guillaumin, 18-43.
- [3] Aghion, P. et P. Huwitt, 1992. *A model of Growth through creative Destruction*, *Econometrica*, 60, P. 323-350.
- [4] Aghion, P. et B. A.De Aghion, 2004. Croissance endogène et réduction de la pauvreté, *Revue économie internationale*, Vol. 4, n0 100, PP 24-38.
- [5] Aka, B.F. 2001. *Ajustement fiscal, inégalité, pauvreté et bien-être en Cote d'Ivoire: analyse à l'aide d'un modèle EGC*, AREC Paper, 15, p.
- [6] Alesina, A et S. Ardague, R. Perotti et F. Schiantarelli, 2002. Fiscal Policy, Profits, and Investment, *American Economic Review*, 92, 3, 571-589.
- [7] Ball, I. 1990. Intertemporal Substitution and Constraints on Labour Supply: Evidence from Panel Data, *Economic Inequity*, 28, p. 706-723.
- [8] Barro, R. J. 1990. Government spending in a Simple Model of Endogenous Growth, *Journal of political Economy*, 98, P.103-125.
- [9] Barro, R. J. 1991. Economy Growth in a Cross Section of Countries, *Quarterly Journal of Economics*, 106, p. 407-444.
- [10] Barro, R. J. et C. Sahasakul, 1983. Measuring the Marginal Tax Rate from the Individual Income Tax, *Journal of Business*, 56, p. 419-452.
- [11] Barro, R. J. et X. Sala-i-Martin, 1996. *La croissance économique*, Paris, Ediscience International.
- [12] Bassolet, B. 1993. *Programme de stabilisation et rendement fiscal: le cas du Sénégal*, CEDRES-ETUDES, Ouagadougou.
- [13] BEAC. 2006. *Rapport annuel*, BEAC
- [14] Bibi, S and J. Y. Duclos, 2004. *Poverty- Decreasing Indirect Tax Reforms: Evidence from Tunisia*, C R CIRPEE, Laval.
- [15] Blanchard, D.J. 1995. Debt, Deficit and Finite Horizon, *Journal of Political Economy*, Vol. n° 7. PP. 223-247.
- [16] Bruggess, R. et N. Stern, 1993. Taxation and Development, *Journal of economic literature*, 31, p. 762-830.
- [17] Brun, J. F, G. Chambas et J.L. Combes, 2000. Politique fiscale et croissance? *Revue d'économie de développement*, 2, p. 117-125.
- [18] Chamley, C. 1986. *Optional Taxation of Capital Income in General Equilibrium with Infinite Lives*, *Econometrica*, 54, p. 607-623.
- [19] Chan, N., M. Ghosh, and J. Whalley, 1999. *Evaluating Tax reform in Vietnam Using General Equilibrium Methods*, n°9906, University of Western Ontario, Department of Economics, Working Papers, UWO.
- [20] Easterly, W. C. et S. Rebelo, 1993. Fiscal policy and Economic Growth: an Empirical Investigation, *Journal of Monetary Economics*, 32. p. 417-458.
- [21] Engen, E. et J.Skinmer, 1992. Fiscal policy and Growth, *Working Paper*, 4223, NBER.
- [22] Feldstein, M. 1974. Tax Incidence in a Growth Economy with Variable Labor Supply, *Quarterly Journal of Economics*, 88, p. 551-573.
- [23] Gouttefarde, C. 1999. *La croissance économique dans les théories d'Adam Smith, de David Ricard et de Thomas Robert Malthus*
- [24] Guillaumont, P. 1985. *Economie de développement*, 3 Tome. Paris, PUF.
- [25] Hall, R. 1988. Intertemporal Substitution in Consumption, *Journal of Political Economy*, 96, P. 339-357.
- [26] Hayek, F.A. 1945. *La route de la servitude*, Paris, Editions Médicis.

- [27] INS 2006. *Le Cameroun en chiffre*, MINEFI
- [28] Judd, K. 1985. Redistributive Taxation in a Simple Perfect Foresight Model, *Journal of Public Economics*, 28, p. 59-83.
- [29] Koester R. et R. Kormandi, 1989. Taxation, Aggregate Activity and Economic Growth: Cross-Country Evidence on Some Supply-Side Hypotheses, *Economic Inequity*, 27, p.367-366.
- [30] Kormendi, R. 1983. Fiscal Policy and Aggregate Demand, *The American Economic review*, Vol. 73, n° 5. PP. 994-1010.
- [31] Kouassi, E. 1996. *Effets de l'inflation sur les variables fiscales ivoiriennes: une étude économique*, Document de recherche cinquante deux, AREC, Nairobi.
- [32] Kouassy, O. et B. Bohoun, 1996. *Conséquences et limitations de la politique fiscale récente en Côte d'Ivoire*, Document de recherche cinquante deux, AREC, Nairobi.
- [33] Krzyzaniak, M. 1967. The Long Run Burden of a General Tax on Profits in a Neo- Classical World, *Journal of Public Finance*, 22, p. 472-491.
- [34] Landau, D. 1986. Government and Economic Growth in the Less Developed Countries: An empirical Study for 1060-1980, *Economic Development and Cultural Change*, 1, p. 35-75.
- [35] Levine, R. et D. Renelt, 1992. A Sensitivity Analysis of Cross-Country Growth Regressions, *American Economic Review*, 82, p. 942-963.
- [36] Lucas, R.E. 1988. On the Mechanics of Economic Development, *Journal of Monetary Economics*, 32, p. 3-42.
- [37] Lucas, R.E. et L. Rapping, 1969. Real Wages, Employment and Inflation, *Journal of Political Economy*, 77, P. 721-754.
- [38] Mathfield, D. 2003. An Analysis of Ricardien Equivalence. In Biannual ESSA Conference, summer set West Cape Town, 17-19 Th, and September, 2003.
- [39] Miller, S. M. et F. S. Russek, 1993. Fiscal Structures and Economic Growth: International Evidence, Western Economic Association Meetings in Lake Tahoe.
- [40] Newman, K.K. 1998. Tax Reform and Revenue Productivity in Ghana, Research paper Seventy four AREC.
- [41] Nasser, A T., J L Combes et P. Plane. 2005. *Les effets non- linéaires de la politique budgétaire: le cas de l'union économique et monétaire Ouest africaine*, CERDI- UMR- CNRS.
- [42] Ngongang, E. 2007. The Impact of Public Deficit on Private Savings: The Case of the Central African and Monetary Community (CAEMC) countries, *Journal of Sustainable Development in Africa*, Vol 9, n01, 2007, PP. 37-56.
- [43] Romer, P. 1986. Increasing Returns and long Run Growth, *Journal of Political Economy*, 94, p. 1002-1037.
- [44] Sato, K. 1956. Taxation and Neoclassical Growth, *Public Finance*, 22, p. 346-370.
- [45] Shirazi, J.K. et Q. Shah, 1991. Les réformes fiscales dans les pays en développement, *Revue Finances et Développement*.
- [46] Solow, R. 1993. A Contribution to the Theory of Economic Growth. *Quarterly journal of Economics*, 70, p. 65-90.
- [47] Tabi, A. J. et J.N. Atabongawung, 2004. *La répartition du poids fiscal des taxes à la consommation avant et après la réforme fiscale: le cas du Cameroun*. Final Report AREC
- [48] Trostel, P.A. 1993. The Effect of Taxation on Human Capital, *Journal of Political Economy*, 101, p. 327-350.
- [49] World Bank. 2003. *Annual Report*, World Bank.

Note

1. The impacts of the structure of public expenditures were tested using the share of expenditures devoted to education, health and defense in total expenditures. This variable is not significant.
2. Chow test show the stability of the coefficients.

The Impact of Post-Matriculation Examination Screening on Reported Cases of Examination Malpractice in a Nigerian University: A Preliminary Analysis

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Introduction

The study reported here came from a preliminary assessment of research data collected about three major faculties in a Nigerian University. Examination malpractice constitutes a major problem in Nigeria educational system (Alutu, 1999; Onyechere, 1996). Over the last two decades the question of how best to improve school learning and hence achievement of students in our schools has gained considerable prominence just as almost everyone believes that the standards of education has fallen drastically. While legislation against examination malpractice and punishment both at the education institutional level and larger society has risen dramatically during the period, it has not been apparent that examination malpractice has fallen a bit, much less significantly (Denga, 2003). This potential paradox has led persons both in education institutions and in general society to ask if further legislation or punishments are warranted and whether intensifying such actions are likely to result in malpractice-free examination environment. Unfortunately, it has not been possible to determine in realistic terms the relationship between institutional admission policies and the rate of examination malpractice. The study attempts to partially close this gap by assessing the relationship between a recent phenomenon in our educational system – policy on post-matriculation examination screening, and the level of examination malpractice. Although research is limited on the influence that post-matriculation examination screening has on universities' examination practices. As a result of the large proportion of examination malpractices in our institutions of learning, policy makers and the general public have a very strong interest in ensuring that maximum attention is deplored on a result based accountability paradigm that not only mandates that intervention be successful but holistic and cost effective. Because of this, many research studies on examination malpractice have focused on clearly identifiable outcomes cultism, stress, anxiety, paucity of invigilators, failure of teachers to cover the syllabus, desires to pass at all cost, etc (Onotume, 1992). Policy makers and education practitioners have used these outcomes as their evidence for mandating intervention modalities. While these outcomes may have the aces in the scourge of examination malpractice, the fact remains that the modes of admission remain a solid avenue for quality assurance. When an intellectually inferior student is brought into the school through the proverbial back door, two delicate balances would have been inadvertently altered. First is the issue of ethics, moral and personal integrity which a young person is expected to demonstrate in a teaching and learning situation such as a school system. When a young person is introduced into a school system under unethical or unscrupulous conditions, the message being communicated is that everything is possible if one has the proper connections. Most unfortunately, in such a dangerous arrangement, those whom the student respects most are often involved, at times, at the reluctance of the student to be. The highly respected others could be the parents, uncle, the officials of the examination agency or the school, the teacher or the head of schools. In the most pathetic cases, the religious organization to which the person belongs may be neck deep in these underhand arrangements. Just imagine the contradictions which such a situation presents the young and growing individual. The result includes some of the factors which are often quoted as the cause of examination malpractice, for example cultism. Rather than being a cause of examination malpractice, it is controlled

by the same low ethical standard which controls examination malpractice. Examination malpractice derives from the same low ethical background which provides support for cultism and several other malaises which are prevalent in our educational system. The second problem indicated by the scenario under discuss, is the introduction into the educational systems persons that ought to do other things to their ultimate benefit. Again, the situation creates a condition of desperation in the student such that every effort is directed at cutting corners and looking for any opportunity to cheat. Since the student is not intellectually competent to be where he is, he would continue an endless search for loopholes within the system that provides an unfair advantage at any cost. Usually, it takes two or more to tangle; he would eventually find a willing horse probably with a low level of ethical standard among examination officials, co-students, teachers and any other person associated with the processing of the examination. As one can see from these lines, when an intellectually inferior student is brought into the school through the proverbial back door, it goes a very long way to undermine the traditional checks and balances that are normally sacrosanct and for which good educational institutions are revered.

Question to be answered

Given that a significant amount of empirical evidence indicates that inadequate intellectual endowment constitute an important factor in cases of examination malpractice, this study focuses on a less investigated but equally important and related recent phenomenon in our efforts to strengthen the quality of our tertiary education system; *the post-matriculation examination screening exercise (PUME)*. An additional layer of screening exercise was recently instituted by several universities to checkmate the overwhelming incidence of examination malpractice in the conventional Joint Admission and Matriculation (JAMB) Examinations across the country. There has been conflicting response to this development from various stakeholders. While the majority of those in the Universities are favourably disposed, those in the JAMB and quite a significant number of legislators in the national assembly are vehemently against the programme. In spite of this contradictory response from stakeholders, the University of Benin is one of the first to have completely embraced the programme with the relevant mandate from its governing council. The programme which began in earnest in 2004/05 academic year has a considerably large support in the university community. The commencement of the PUME in this university provides a great opportunity to evaluate the impact of an improved selection process on the level of examination malpractice, the basis for this position has been sanctioned earlier. Essentially, improved selection process ensures the selection of brighter students, students with superior intellectual endowment as against the charade of admitting impostors who had probably hired a surrogate to do their bidding in the traditional selection examination. The question which this research sought to answer is; *what is the impact of an improved selection process (PUME) on the level of examination malpractice in a Nigerian University?* Available evidence indicates that that PUME entry classes, those admitted with PUME, are intellectually superior to their counterparts who were admitted without the PUME as evinced by superior grades when compared with those students who were admitted without the PUME requirements. If this is found to be true, then one of the ways to reduce examination malpractice in Nigeria is to pay special attention to selection process. It would seem that this would be a relatively easy and cost effective way of reducing examination malpractice in universities while at the same time strengthening and improving intellectual pool within the university system.

Population and sample

The level of reported examination malpractice cases in three Faculties were compared across one hundred level students for those who were admitted with the PUME (pume classes) and those who were admitted without the PUME (pre-pume classes) retrospectively. Thus the sampling unit constitute these three Faculties.

Procedures

The number of examination malpractice cases was routinely retrieved from files in the respective faculties. The study was conducted in three stages; the reported cases of examination malpractice for one hundred level students in the three faculties during the 2005/06 were compared with those of their counterpart the year before PUME was introduced. Secondly, the reported cases of the one hundred level pume class were compared with the 3 random-year average for one hundred level students of pre-pume classes. Thirdly, the reported cases of the one hundred level pume class were compared with the average of all other classes for the 2005/06 academic year. For each of these samples, an Examination Malpractice Index (EMI) was generated to normalize the reported cases and make comparison possible. The EMI was generated by simply taking the quotient of the reported cases and then attenuated by 1000 units.

Result

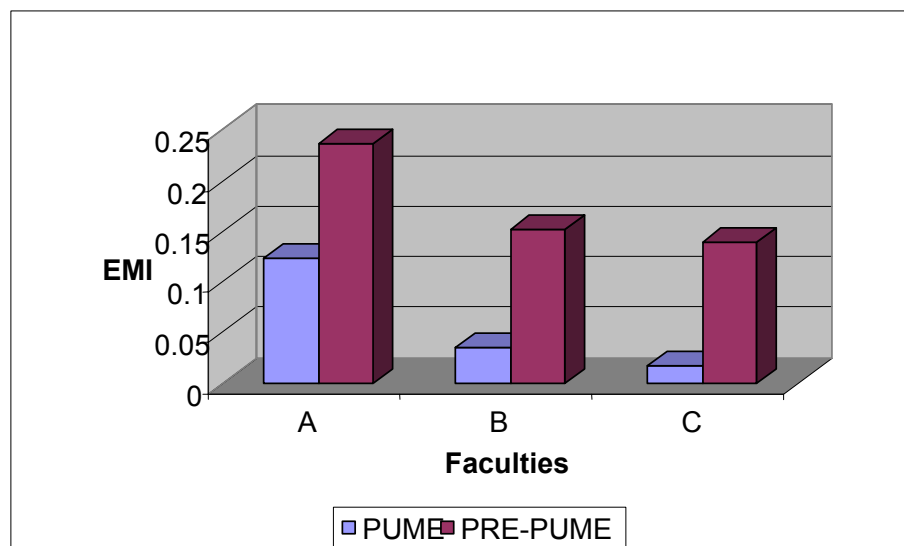
The first result deals with the comparison of 100 level pume class with their pre-pume counterparts, table 1 shows the EMI for the three faculties.

Table 1: EMI for 100 level, PUME and Pre-PUME

	PUME	Pre-PUME
Faculty A	.123	.237
Faculty B	.034	.122
Faculty C	.017	.138

As can be easily seen from the table, the reported examination malpractice index in the pre-pume 100 level group far exceeds the pume group, 0.123, 0.034 and 0.017 for the pume group as against 0.237, 0.122 and .138 for the pre-pume group. Figure 1 provides a graphic interpretation of the data generated in the three faculties as a way of further comparing and accentuating the influence of the PUME in reported cases of examination malpractice in the various faculties. The second analysis deals the comparison of the EMI of 100 level PUME group and a 3-year running average of 100 level pre-pume classes across the three faculties, again as seen on table 2, the result is highly consistent with the those obtained in the first analysis discussed above.

Figure 1: Examination malpractice index for PUME and PRE-PUME CLASSES



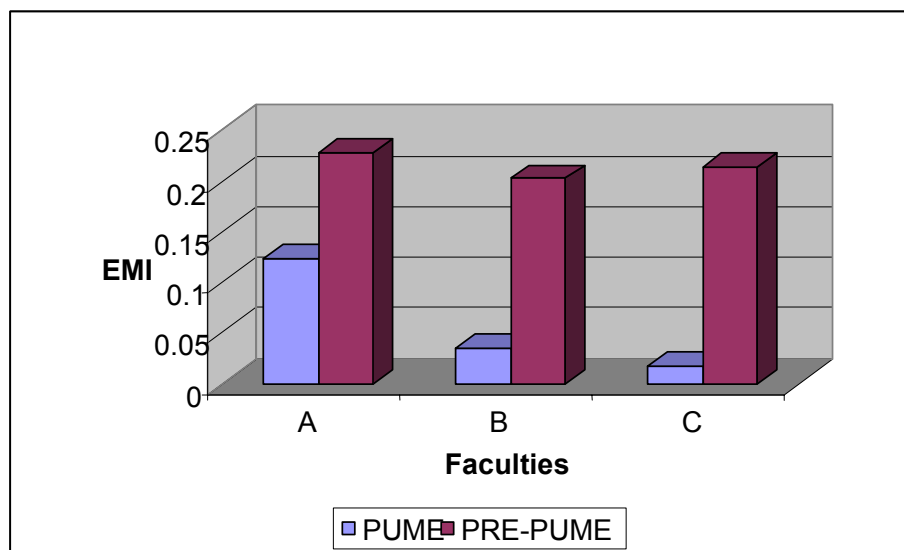
As with the earlier result, faculty A has the highest EMI for the pre-pume group among the three, indicating that it has the highest number of reported cases of examination malpractice for this group of students. For this faculty we have, 0.227 EMI against 0.123 for the PUME group. Faculty B has 0.202 against 0.034 for those admitted with PUME and finally, an EMI of 0.244 for faculty C as against 0.017 for those who came in through PUME.

Table 2: EMI for 100 level PUME and Pre-PUME 3-year average

	PUME	Pre-PUME
Faculty A	.123	.227
Faculty B	.034	.102
Faculty C	.017	.244

A further analysis of these data tends to show a differential impact of PUME among the three faculties. Faculty C seems to have been more impacted than the other two faculties. The reasons for this are not clearly discernable but may be related to how effectively the PUME exercise is able to improve the selection process into the various faculties. Obviously, the desperation to gain entry into various degree programmes in the university cannot be said to be equal. The desperation to enter such highly competitive programmes, as accounting or business administration may engender the tendency to get-in at all cost with little or no consideration of ethical implications. Secondly, the distribution of such programmes is highly faculty specific, such that the relative impact of any improved selection process would have a radically different impact in one faculty than the other. This probably explains the situation that we have here. The third and final analysis considered the relative influence of PUME by comparing of the EMI for PUME students (100 level) against that reported by faculties for all other levels of Pre-PUME students across all the three faculties, these are 200, 300 and 400 levels. The obtained result is not different from those obtained in the two earlier analyses. As has been the case in the earlier analysis, faculty A maintain the lead in reported cases of examination malpractice. For this analysis, we have .230, .168 and .152 for pre-PUME classes and .123, .034 and .152 for the PUME group.

Figure 2: EMI for pume 100 level and pre-pume 3-year average



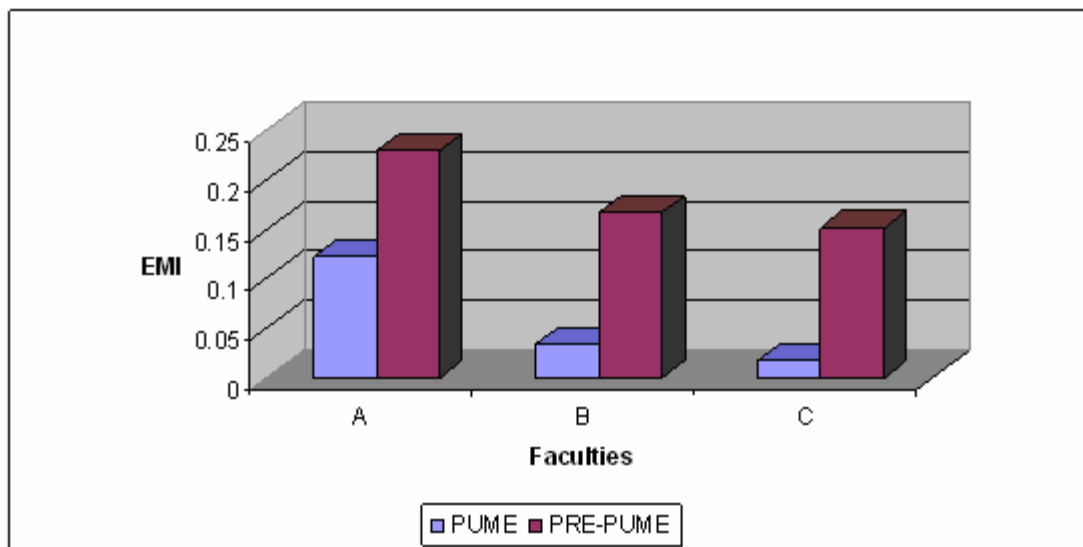
The straight forward interpretation of this result that again, as in previous analysis the EMI of the Pume group is far lower than that of the Pre PUME group. Table 3 present data generated from the consideration of data for this analysis.

Table 3: EMI for 100 level PUME and all other classes Pre-PUME

	PUME	Pre-PUME
Faculty A	.123	.230
Faculty B	.034	.168
Faculty C	.017	.152

Fig 3 further graphically shed more light on the findings. Fig. 3 is consistent with previous analysis and illustrate that reported cases of examination malpractice is more predominant with groups who entered the University prior to the introduction of PUME. Education has always emphasized the acquisition of relevant skills and knowledge at practically all levels. In the particular case of tertiary learning institutions, the would-be student is expected to have acquired relevant knowledge and skills that would enable him or her function at optimum level. In a situation where this simple understanding is frustrated though examination malpractice, teaching, learning and evaluation becomes essentially arbitrary.

Figure 3: EMI for PUME 100 level, and pre-pume all classes



Conclusion

The data collected in this study tend to suggest that we can reduce the problem of examination malpractice at least in the universities through a straight forward, highly objective and qualitative selection processes. It seems to the researchers that the PUME as defined and executed by some universities in the country meets the mark and should be encouraged. It seems to have a definite and a reassuring positive impact on examination malpractice, a situation that tends to threaten the very foundation of our education system.

Recommendation

Data collected and analyzed in this study points to one thing, that we can stem the rising tide of examination malpractice through an objective and transparent admission process. The universities having an understandably serious interest in the quality and integrity of their certificates can be trusted to have a final say in the process of admission by evolving a transparent post-JAMB examinations screening exercise to help remove those who might have beaten JAMB through a well orchestrated

examination malpractice syndicate. Every university in Nigeria should be encouraged to evolve a post-JAMB examination screening exercise.

References

- [1] Alutu, A. N. G. (1999). University students' attitudes to examination: malpractices. Implication for counselling. *Counseling*, 17(2):120-128
- [2] Denga, D. I. (1983). Examinations cheating behaviours among Nigerian secondary school youth: implications for counseling. *Journal on Education and development*, 3(2)
- [3] Onotume, S. O. (1992). Critic of examination malpractice in Nigerian secondary and tertiary institutions, typologies, techniques and student collaborators. Proceedings of the national workshop on examination malpractice. Benin City: University of Benin press
- [4] Onyechere, I. (1996). Examination ethics. Lagos: Potomac books

Managing Employees' Career Progression: A Strategic Lever in Human Resource Development

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Abstract

Managing and planning for employees' career progression is often touted as a strategic lever for developing individual capabilities associated with human resource development (HRD) in organisations. Nonetheless, many organisations still lack a well-defined career planning process or fail to apply it consistently. The purpose of this paper is to describe the provision of career planning, training programmes and career progression evaluation as a strategic lever in HRD. The methods used for determining these factors in employees' career progression are questionnaire surveys and interviews with human resource managers in manufacturing firms in Malaysia. Firms may need to understand that a comprehensive career planning and development process is a philosophy to be embraced by individuals as well as by organisations, and are recommended to design and implement the process effectively in order to achieve the objectives and goals of human resource development in manufacturing firms. This is because the career planning process is a tool to help employees examine their careers, evaluate their training and learning and enhance and re-evaluate the relevance of their professional and managerial skills in a work environment that values rapid change and adaptation as well as valuing the importance of retaining human capital.

Keywords: Career progression, career planning, HRD, manufacturing firms

Introduction

The survival of an organisation in this dynamic and competitive environment depends on how it capitalises on its human resources. Indeed, organisations are realizing that the main source of competitive advantage in this global economy is to develop their human resources and provide them with new knowledge, skills and abilities (Poole & Jenkins, 1997; Low, 1998; O'Connell, 1999; Streumer et al, 1999; Harrison, 2000; Gardiner et al, 2001; Harrison & Kessels, 2004). However, in this globalised era, investing in human capital by providing knowledge, skills and abilities may not be sufficient. Employees' career planning and progression has to be effectively managed in order to support the strategic implementation of HRD.

In this new work environment, individual employees are beginning to be responsible for managing their own careers, mobility is often lateral and uncertainty abounds for employers (Aryee & Debrah, 1992 & 1993; Aryee et al, 1993; Lloyd, 2002; Swanson & Holton III, 2001). It follows from

this assumption that the responsibility for managing employees' career progression lies both with individuals and with the organisation that employs them. This notion suggests that managing employees' career progression is a joint responsibility in which both parties are expected to share various obligations in managing career progression, rather than it being the sole responsibility of one or the other. The assumption underlying this notion and supported by theorists is that employees' career effectiveness will be greater when their career progression is being managed by the employing organisations and the employees carry out their respective career management roles in supporting the progression (Burack, 1990 and Walker, 1989). Hence, there is a need to examine the employing organisations' management of employees' career progression. Specifically, this paper aims to examine the existence of employees' career planning, training programmes provided for progression and career progression evaluation in manufacturing firms in Malaysia.

Literature Review

Career Planning and Development

Managing career development is a tool by which organisations can endeavour to increase employees' productivity and improve employees' attitudes toward work. In addition, career development is an accepted HRD strategy, and is known to be a more systematic method of reducing performance problems for both employees and managers (Gilley et al, 2002). Indeed, it has been reported that one of the key purposes of HRD is to provide training to enhance future capabilities, known as career development, rather than to improve current abilities and skills (Marsick & Watkins, 1994; Desimone et al, 2002; Gilley, Egglund & Gilley, 2002). Moreover, career development has been suggested to focus on change and employees' transitions towards enhancement (Osipow & Fitzgerald, 1996; Iles, 1996; Harrison, 2000).

As part of the HRD strategy, Noe (1986) argued that as well as increasing employees' motivation and morale and reducing performance problems, systematically planning and developing employees' career progression can reduce the inappropriate use of resources allocated for T&D. On this basis, Gilley et al. (2002) suggested that employees' career enhancement can be developed through job posting systems, mentoring programmes, and also sending employees to career development seminars and workshops. However, do employers actually take up these strategies? Unfortunately, even though the importance of planning and developing employees' career progression has been emphasised as a critical function of HRD (Harrison, 2000; Swanson & Holton III, 2001; Gilley et al, 2002), researchers have criticised the fact that planned and formalised career development and institutionalised career and succession planning systems to boost effectiveness, efficiency and productivity are virtually non-existent in most organisations (Khan & Charles-Soverall, 1993; Tregaskis & Dany, 1996). It has been indicated in the literature that most employers would rather recruit new employees externally than allow internal mobility (see, for example, Tregaskis & Dany, 1996; Lloyd, 2002). For instance, in large high-skilled sectors in the UK, such as the aerospace engineering industries, Lloyd (2002) claimed that because of organisations losing the traditional paths for career development, many employees were found to be relatively low-skilled and unprepared to face competition in the external market despite working in high skill sector. However, this may be an exceptional case, as some researchers have argued that despite employers' preference for recruiting new employees, there is an exponential emphasis on retaining skilled employees and allowing internal mobility within organisations because of the increasing demand for skilled employees (Vanderbroek, 1992; Garavan et al, 2002).

There is certainly evidence that organisations tend to lack clear career path systems for employees' career development (Budhwar et al, 2002; Heraty & Morley, 1994), and because of this deficiency, career progression occurs largely as a result of individual employees' perseverance, rather than through career developmental training from within the company (Aryee & Debrah, 1992 & 1993; Aryee et al, 1993; Lloyd, 2002; Swanson & Holton III, 2001). On the contrary, it has been argued that

if organisations have clear career path systems, they are only used for consultation and recruitment purposes (Budhwar et al, 2002), as they may not be sufficiently well structured to assist employees' career growth and advancement (Cho et al, 1999).

Methodology

The data for this study were obtained from a mixed methodology combining both a questionnaire survey and interviews with HR managers who manage employees' career progression. Questionnaires were sent to the whole population of 2,135 manufacturing companies registered with the Federation of Malaysian Manufacturers and 50 face-to-face interviews were conducted covering all five regions of Malaysia.

The mixed-method concurrent triangulation strategy was used due to its ability to corroborate, confirm and cross-validate data findings. Out of the total 2,135 questionnaires sent out, 365 responses were returned after three stages of delivery: postal, electronic mail and hand delivery. In the qualitative method, HR managers were initially sent a letter inviting them to participate, and upon acceptance, an appointment was made to conduct the interview. A semi-structured questionnaire was used as a guide in an attempt to corroborate and confirm the questionnaire survey findings and also to gain further insights into the subject matter. The questionnaire data were analysed statistically and the interview data were analysed according to themes and categories. This combination of qualitative and quantitative methods produced rich and valid information.

Findings and Discussion

Long Term Human Resource Planning

For the purpose of this study, employees' long-term developmental planning was analysed according to the size of firms, which were categorised into large-scale industries (LSIs) and small and medium industries (SMIs). Employees' long-term developmental planning was obviously different between the LSIs and the small SMIs ($p=.000$). The SMIs were observed to *never* formulate any plans for their employees' career development (mean=1.22), whereas the larger industries were slightly more proactive in this regard, as indicated by a mean score of 1.88 (rarely). However, there was no statistically significant difference between the SMIs' and LSIs' planning for employees' long-term development ($p=.000$). This is supported by the interview findings, such as the following comments:

"We do not have career planning and development for our employees. Usually, if there is a vacant position in our organisation, we take in new people. It saves us the time, money and manpower that would be needed for training internal workers for promotion...."

(HR & Administration Manager; Concrete & Cement; SMI)

"I can say that we do plan for our employees' career progression but not very much. We can be very choosy about our staff...." (HR Manager, Food and Beverage; LSI)

The above statement supports the evidence from the survey that formal planning for employees' career development was rare almost to the point of non-existence. This may not be surprising, as formal career development plans are also a rarity and are practically absent in most organisations, as reported by previous studies, for example, Khan & Charles-Soverall, (1993); Tregaskis & Dany, (1996).

Table 1: Comparison of Means and Independent Sample T-test for Career Development

	Organisation Size					
	SMI (N=213)		LSI (N=152)		t-test	
	Mean	SD	Mean	SD	t	p
Long-term human resource planning	1.22	.479	1.87	1.13	-6.724	.000
Career progression programmes	1.18	.419	1.83	1.05	-6.429	.000
Career progressions appraisals	1.34	.745	2.25	1.43	-7.219	.000

1). 5-Very Frequent, 4-Frequent, 3-Sometimes, 2-Rarely, 1-Never

2). Significant at .001 level

Career Progression Programmes

Given the scarcity of career planning, the notion of employees being provided with career developmental programmes was also predicted to be a rarity. It has been suggested by Gilley et al. (2002) that methods such as job posting systems, mentoring programs, career development seminars and workshops can be used in enhancing and developing employees' career paths. However, it appears from the current data that career development programmes such as job posting (mean=1.88), mentoring (mean=1.78), seminars and workshops (mean=1.84) are rarely implemented in the larger industries. These programmes were hardly initiated at all in the SMIs (mean scores between 1.18 and 1.23). The extent to which career development programmes were being executed in the SMIs and LSIs was significantly different ($p=.000$), with these programmes being non-existent in the SMIs and rarely put into practice by the larger industries. This can be seen from several interview quotations, as below:

“As far as I can remember, since I joined this company three years ago, I haven't had any opportunity to attend that kind of training (career development seminars or workshops). I have gone to other types of training, such as teambuilding, motivation and stress management programmes, but nothing related to career development. The same goes for our employees” (HR Manager, Machinery and Transport Equipment Industry; SMI)

“Our company is concerned with employees' career progression. Right now, we have a succession planning programme in place for our middle-level managers to eventually succeed their superiors. Sometimes, we also send our employees to training programmes related to their career development, but not very often, as the succession planning programme or mentoring is sufficient.they only have to understand and have the ability to take over their superior's job function in his/her absence...” (HR Director, Food, Beverage and Edible Oils Industry; LSI)

Table 2: Comparison of Means and Independent Sample T-test for Career Progression Programmes

	Organisation Size					
	SMI (N=213)		LSI (N=152)		t-test	
	Mean	SD	Mean	SD	t	p
Job postings	1.18	0.47	1.88	1.12		.000
Mentoring	1.23	0.55	1.78	1.04		.000
Seminar and workshops	1.20	0.41	1.84	1.20		.000

1). 5-Very Frequent, 4-Frequent, 3-Sometimes, 2-Rarely, 1-Never

2). Significant at .001 level

Career Progression Evaluations

Conversely, it was observed that performance appraisals were transformed into career developmental evaluation only rarely in the LSIs (mean=2.25) and never in the SMIs (mean=1.34). The proposition that very few companies in the SMIs performed formal and regular performance appraisals corroborates the finding that performance appraisals were never transformed into developmental evaluations. Thus, this suggests that the HRD practitioners lacked a sense of responsibility for

providing their employees with career development opportunities and were not thinking of long-term development, but more of short-term developmental activities. This has also been confirmed by the lack of long-term HRD plans (Haslinda, 2006). However, HRD practitioners' lack of long-term developmental foresight may lead to high employee turnover rates. At the same time, the notion that employing new employees may be cheaper than upgrading existing employees is in evidence, but this proposition may not be true, as employers might end up training both internal and external replacements rather than saving on training costs. Nonetheless, despite employers' preference for recruiting new employees, there is an increasing emphasis on retaining existing skilled employees, as highly skilled workers are currently in high demand (Vanderbroek, 1992; Tregaskis & Dany, 1996; Garavan, Morley, Gunnigle & McGuire, 2002). Nevertheless, previous studies have corroborated the fact that most organisations do not have clear career development systems (Budhwar, Al-Yamadi & Debrah, 2002; Swanson & Holton III, 2001). Career progression occurs largely as a result of individual employee perseverance (Aryee & Debrah, 1992 & 1993; Aryee, Debrah & Yue, 1993) rather than through career developmental training from their companies (Lloyd, 2002).

Conclusion

This study has shown that the presence of employees' career planning and development in organisations largely depends on the size of firms: larger industries do, to some extent, plan for their employees' career development and provide training to achieve the identified goals. This may be due to the notion that employees' career progression and prospects in the larger industries have a strategic direction. Indeed, previous studies have shown that larger manufacturing industries do implement strategic HRD practices to a certain extent, as compared to smaller industries (Haslinda, et al., 2007; Osman-Gani and Tan, 2000; Hill and Stewart, 2000).

The literature has indicated that managing employees' career progression is the responsibility of both individuals and their employers (Aryee & Debrah, 1992 & 1993; Aryee, Debrah & Yue, 1993; Haywood, 1993). However, employers or employing firms have certain responsibilities to provide opportunities to employees in the career development process. In this sense, employers may provide training, mentoring and/or job postings and may provide advice or assistance on career decision-making, such as advice or counselling regarding the firms' human resource strategies. However, as the findings of this study suggests, career progression in SMIs is largely the responsibility of the individual, in contrast to LSIs. Therefore, the phenomenon of high rates of labour mobility and the notion of poaching are eminent, particularly in the SMIs (Hill & Stewart, 2000; Hill, 2004). On the other extreme, the notion that career planning and development is only for large firms is evident. Nevertheless, firms should understand that a comprehensive career planning and development process is a philosophy to be embraced by individuals as well as organisations, and should design and implement the process effectively in order to achieve the objectives and goals of human resource development. This is because the career planning process is a tool to help employees to examine their careers, evaluate their training and learning and enhance and re-evaluate the relevance of their professional and managerial skills in a work environment that values rapid change and adaptation and the importance of retaining human capital.

In conclusion, it has been shown that managing employees' career progression in manufacturing firms in Malaysia is the responsibility of each individual employee rather than employers, immediate supervisors or HR managers. This suggests that the management of employees' career progression in manufacturing firms in Malaysia is not associated with a strategic HRD framework and is not part of the HRD policies in organisations. This is not an uncommon phenomenon, as planning individual career progression is generally seen as the responsibility of the employees. However in the strategic framework of HRD, this phenomenon is not cost-effective. In addition, the notion of hiring, training and retaining skilled and knowledgeable employees may be

difficult and challenging for employers. Nevertheless, it is important to plan and manage employees' career progression rather than leaving it to individual employees.

Limitations and Recommendations for Further Research

The first limitation of this study is that it is confined to the manufacturing sector in Malaysia and its findings cannot be generalised to other sectors. The lack of empirical literature on employees' career planning and development in Malaysia means that there is no existing literature on the same issue in Malaysia to corroborate these findings. Secondly, as this research is part of a larger study examining HRD activities and practices in the manufacturing companies in Malaysia, there are limitations related to the rigour of researching employees' career planning and development. Hence, the limited and information available is not sufficient to provide a complete understanding of employees' career planning and development in the manufacturing firms.

This study merely examines the fundamental basis of the management of employees' career progression as part of the human resource development strategy. Therefore, it is recommended that further research be undertaken to study the overall management of employees' career progression from both the individual and the employer's perspective.

References

- [1] Aryee, S. & Debrah, Y.S. (1992) Career planning: An examination of individual, non-work and work determinants. International Journal of Human Resource Management, 3 (1): pp. 85-104
- [2] Aryee, S. & Debrah, Y.S. (1993) A cross-cultural application of a career planning model. Journal of Organisational Behaviour, 14 (2): pp. 119-127
- [3] Aryee, S., Debrah, Y.S. & Yue, W.C. (1993) An investigation of ingratiation as a career management strategy: Evidence from Singapore. International Journal of Human Resource Management, 4 (1): pp. 191-212
- [4] Budhwar, P.S., Al-Yahmadi, S. and Debrah, Y. (2002) Human resource development in the Sultanate of Oman. International Journal of Training and Development, 6 (3): pp.198
- [5] Burack, E.H., (1990) Why All the Confusion about Career Planning?, Human Resource Management, 16: pp. 21-33.
- [6] Cho, Y., Park, H.Y. and Stacey, W. (1999) Training in changing Korea. Training and Development, 53 (5): pp. 98
- [7] Desimone, R.L., Werner, J.M. and Harris, D.M.(2002) Human Resource Development. (3rd ed) Orlando, Harcourt College Publishers
- [8] Garavan, T.N.; Morley, M.; Gunnigle, P. and McGuire, D. (2002). Human resource development and workplace learning: Emerging theoretical perspectives and organizational practices. Journal of European Industrial Training, 26 (2-4): pp. 60-71.
- [9] Gardiner, P, Leat, M. and Sadler-Smith, E. (2001) Learning in organisations: HR implications and considerations. Human Resource Development International, 4 (3): pp. 391-405
- [10] Gilley, J.W., Egglund, S.A. and Gilley, A.M. (2002) Principles of Human Resource Development. (2nd ed) Cambridge, Perseus Publishing
- [11] Harrison, R. (2000) Employee Development. (2nd ed) London, Institute of Personnel and Development
- [12] Harrison, R. and Kessels, J. (2004) Human Resource Development in a Knowledge Economy: An Organisational View. New York: Palgrave MacMillan
- [13] Haslinda Abdullah, Raduan Che Rose and Naresh Kumar (2007). Human Resource Development Practices in Malaysia: A Case of Manufacturing Industries. European Journal of Social Sciences, 5(2): 37-52
- [14] Haywood, B.G. (1993) Career planning and development. Hospital Materiel Management Quarterly. 14 (4): pp.42-49
- [15] Heraty, N. and Morley, M. (1994) Human resource development in Ireland-position, practices and power. Administration, 42 (3): pp. 299-319
- [16] Hill, R and Stewart, J. (2000) Human resource development in Small Organisations: Journal of European Industrial Training. Bradford. 24 (2-4): pp. 105
- [17] Hill, R. (2004) Why HRD in small organisations may have become a neglected field of study. In Stewart, J. and Beaver, G. (2004) HRD in Small Organisations: Research and Practice. London, New York: Routledge
- [18] Iles, P. (1996) International HRD in Stewart, J. and McGoldrick, J. Human Resource Development: Perspectives, Strategies and Practice. Harrow, England: Prentice Hall
- [19] Khan, J. and Soverall, W.C. (1993) Human resource development in the public sector: A developing country experience. International Journal of Public Sector Management, 6 (1): pp. 48-58
- [20] Lloyd, C. (2002) Training and development deficiencies in ‘high skill’ sectors. Human Resource Management Journal, 12 (2): pp. 64-81
- [21] Low, L (1998) Human resource development in the Asia-Pacific. Asian-Pacific Economic Literature, 12 (1): pp. 27-40
- [22] Marsick, V. and Watkins, K. (1993) Sculpting the Learning Organization: Lessons in the Art and Science of Systematic Change. Thousand Oaks, CA: Sage Publications

- [23] Noe, R. A. (1986). Trainees' attributes and attitudes: Neglected influences on training effectiveness. Academy of Management Review, 11 (4): pp. 736-749.
- [24] O'Connell, J. (1999) HR's Next Challenge: Harnessing Individualism. HR Focus, pp.7-8
- [25] Osipow, S.H. and Fitzgerald, L.F. (1996) Theories of Career Development (4th ed) Boston: Allyn and Bacon
- [26] Osman-Gani, A.A.M. and Tan, W.L (2000) Training and development in Singapore. International Journal of Training and Development, 4 (4): pp. 305-323
- [27] Poole, M. and Jenkins, G. (1997) Developments in human resource management and manufacturing in modern Britain. International Journal of Human Resource Management, 8 (6): pp. 841-856
- [28] Streumer, J., Van Der Klink, V. and Van De Brink, K. (1999) The future of HRD. International Journal of Lifelong Education, 18 (4): pp. 259-274
- [29] Swanson, R. A. and Holton, III, E. F. (2001) Foundations of Human Resource Development. San Francisco: Berrett-Koehler Publishers Inc.
- [30] Tregaskis, O. and Dany, F. (1996) A comparison of HRD in France and the UK. Journal of European Industrial Training, 20 (1): pp. 20-30
- [31] Vanderbroek, P. (1992) Long-term human resource development in multinational organisations. Sloan Management Review, pp. 95-99
- [32] Walker, J.W., (1989) Does Career Planning Rock the Boat?. Human Resource Management, 17: pp. 2-17.

Managing Talented Employees: A Study of Leading Corporations in Europe

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Abstract

The study aims to investigate strategy, process, and current situations of managing high potential or talented employees of three leading corporations in Europe. Eighteen key informants were participated in the study. The findings revealed that every company in the study agrees that having talented employees helps them drive competitiveness but it is difficult to acquire this kind of people because the war for talent in the same industries is fierce, whilst at the same time, the booming of some industries such as telecommunication, automobile, and financial industries is catching talented graduates and employees from them as well. The eight-step approach was suggested by the study which were (1) creating awareness of benefit of having talented employees among leader; (2) initiating a concept of talent centric organization; (3) researching organization's talent demand for middle to long-term operation; (4) strategic talent recruitment; (5) creating obvious career path for both new and current talents; (6) to provide coaching and mentoring; (7) evaluating those behaviors and rewarding leaders for coaching and mentoring activities with talented employees; (8) measuring the effectiveness of the coaching and mentoring. Another suggestion would be meeting with the Chief Executive Officer (CEO) and top executives of a firm. These leaders are perfect role models as they are the ones who have made it from junior positions to senior positions. New and current talented employees can see that an organization has rewarded employees for loyalty.

Keywords: Talented Employee, European Corporation, Career Development

1. Introduction

Recent theoretical works on business strategy have indicated that firm competitive advantage could be generated from firm human resources (HR) (Kaynak, 2006; Winter, 2003). According to the resource-based view (Barney, 1998); the firm could develop sustained competitive advantage through creating value in a manner that is rare and difficult for competitors to imitate. Traditional sources of competitive advantage, such as natural resources, technology and economics of scale have become increasingly easy to imitate (Connor, 2007). The concept of HR as a strategic asset has implications for this issue. HR is an invisible asset that creates value when it is embedded in operational system in a

manner that enhances firm ability to deal with a turbulent environment (Winter, 2003). One of the most critical challenges for any organization is finding, recruiting, and retaining talented individuals (Kirkland, 2007). In the next decade, a diminishing pool of qualified candidates for key positions will make talent management even more essential to business success. According to a Manpower survey released in October of 2006, which gathered data from companies representing 33,000 employers from 23 countries, companies worldwide are having trouble filling positions. Forty percent of the employers surveyed reported problems in filling positions because of a lack of talent in their labor markets (Manpower Inc., 2006). As early as 1997 McKinsey & Company coined the term “war for talent” to describe the projected challenges facing employers in finding skilled candidates (Michaels et al., 2001). Effective talent management becomes even more important with the forthcoming talent shortage as many experienced leaders approach retirement. Globally, fewer and fewer managers and professionals are ready to fill these leadership roles, and companies worldwide find themselves competing for a smaller pool of talent. Businesses must have the ability to identify the most talented individuals, provide them with the necessary training and experiences, and retain valuable employees long term (McCauley & Wakefield, 2006).

Economic benefits of talent management are demonstrated both at individual and corporate levels. At an individual level, “ ‘A’ players,” or the best 10-15 percent performers of an organization, display improvements in their performance output, ranging from 19 to 120 percent, depending on complexity of a job (Hunter, Schmidt, & Judiesch, 1990). At the corporate level, companies doing the best job of managing their talent also deliver better results for shareholders. An often-cited study by Mark Huselid (Huselid, 1995) shows that a standard deviation increase in high-performance talent management practices is associated with enormous economic return. These selected companies, in the top 15 percent of all those in the study in terms of their use of high performance talent management practices, were associated with the following financial advantages: a 7 percent decrease in turnover; an increase of \$3,800 in profits per employee; US\$27,000 in sales per employee; and an increase of US\$18,600 in market value per employee. However, managing talent can not be completed within a quarter or a year because it involves integrated planning and is not merely the responsibility of the human resources department but other factors are included in managing talent. Even though talent management is difficult and time consuming but it is very rewarding (Heinen & O’Neill, 2004). Consequently, this study aims to investigate process of managing talented employees within European companies, two Germans and one Swiss, in order to present current situations and propose a strategic method for Thai strategic human resource specialists. Additionally, this study also intends to fill a gap of human resource management and talent management studies in Thailand. Even though talent management has been a popular issue in today’s human resource management issues but there are not many practical case studies regarding talent management published and discussed in any scholarly national journals especially a European case study. Thus, this empirical study should prove to be valuable for both Thai practitioners and scholars in the field of human resource management.

2. Objectives of the Study

The main objective of the study was to examine the importance, the process and the present situation of managing talented employees in European hi-tech corporations.

3. Importance/Benefits of the Study

The study should assist employers in recruiting, developing, and retaining high potential or talented employees by improving their human resource management process learned from this case study. An improvement should result in longer job tenure among talented employees and contribute further to the prosperity of an organization.

4. Literature Review

4.1. Talent management: Business need in the 21st Century

The term talent management is being used to describe sound and integrated human resources practices with the objectives of attracting and retaining the right individuals, for the right positions, at the right time. Organizations are run by people, and the talent of these people will determine the organizations' success, so, talent management is management's main priority (Michaels et al., 2002). Today's businesses face increased global competition, shifting markets, and unforeseen events. No wonder they are finding it more difficult than ever to attract, develop, and retain the skilled workers they need (McCauley & Wakefield, 2006). Hans Stråberg, chief executive of Elextrolux, said "In our highly competitive industry, having the right people in the right positions is the way to ensure that we seize our opportunities and that people perform at their best because we believe that actively managing and developing our talent - that is, our people and all their abilities and skills - is a prerequisite for success; we have made talent management a strategic priority and part of our daily work," (Pollitt, 2004, p.23). Global talent management is also an organizational development solution that supports the Hong Kong Shanghai Bank Corporation (HSBC) vision to be the world's leading financial services company. To help accomplish this, Hong Kong Shanghai Bank Corporation (HSBC) implemented a global talent management process as one stream of a people strategy aimed at attracting, motivating, and retaining the very best. At Hong Kong Shanghai Bank Corporation (HSBC) global business strategy needed aligned people and talent management strategies. The first step was to identify the senior business manager talent pool, including both general managers and world-class specialists. The next steps were to expand the talent pool beyond a senior business manager level, implement development programs for future leaders according to levels of experience and seniority in an organization, and ensure the company had a customized solution to retain our talent through the employee value proposition (Gakovic & Yardley, 2007).

Despite the great sums of money companies dedicate to talent management systems, many still struggle to fill key positions-limiting their potential for growth in a process. Virtually all human resource executives in a 2005 survey of 40 companies around the world said that their pipeline of high-potential employees was insufficient to fill strategic management roles. The survey revealed two primary reasons for this. First, the formal procedures for identifying and developing next-generation leaders have fallen out of sync with what companies need to grow or expand into new markets. To save money, for example, some firms have eliminated positions that would expose high-potential employees to a broad range of problems, thus sacrificing future development opportunities that would far outweigh any initial savings from the job cuts. Second, HR executives often have trouble keeping top leaders' attention on talent issues, despite those leaders' vigorous assertions that obtaining and keeping the best people is a major priority (Ready & Conger, 2007). In the last decade, corporate America has been having trouble filling key positions at all levels. The rapid pace of economic development is squeezing the labor market. Securing and holding on to talent is more important than ever for several reasons, including: (1) the knowledge economy; (2) hypercompetition; and (3) employee mobility. A survey shows that executives do not know some of the most basic and most important facts about their companies' talent. Companies regularly mismanage talent development tasks. An employee value proposition can help management attract and retain the talent they need (Cliffe, 1998).

4.2. Managing talent

Talents are the above average giftedness towards a task through which an employee creates added value in his or her work. Individuals own those talents. It is only an individual person (male or female) that can decide to invest his or her talents and to develop them. It is on the job that individuals can value the merit of their talents (Schoemaker, 1994, 2003). Companies view ability to manage talent effectively as a strategic priority increasingly. Yet research finds that senior executives largely blame themselves and their business line managers for failing to give the issue enough time and attention.

Executives also believe that insular silo thinking and a lack of collaboration across an organization remain considerable handicaps. Moreover, executives who think that their companies' succession planning efforts are deficient do not, on balance, see talent-management processes and systems as a chief problem. Results of research suggest that obstacles preventing talent-management programs from delivering business value are all too human. Nearly half of executives interviewed expressed concern that the senior leadership of their organizations does not align talent management strategies with business strategies (Guthridge, Komm, & Lawson, 2006).

However, McCauley and Wakefield (2006) pointed out that talent-management processes include workforce planning, talent gap analysis, recruiting, staffing, education and development, retention, talent reviews, succession planning, and evaluation. To drive performance, deal with an increasingly rapid pace of change, and create sustainable success, a company must integrate and align these processes with its business strategies. By assessing available talent and placing the right people in their best roles, organizations can survive and thrive in today's increasingly competitive markets. Effective talent management becomes even more important with the forthcoming talent shortage as many experienced leaders approach retirement. Internationally, fewer and fewer managers and professionals are ready to fill these leadership roles, and companies worldwide find themselves competing for a smaller pool of talent. Businesses must have the ability to identify the most talented individuals, provide them with the necessary training and experiences, and retain valuable employee long term (William, 2000; Michaels et al., 2001). With human resource (HR) focusing on hiring, training, and succession planning, talent management is traditionally an HR responsibility but this is a misunderstanding about talent management. Michaels et al. (2001) studied 27 companies during 5 years. The study demonstrated that the majority of these companies still believed people are the human resources department's responsibility and managers make do with the talent pool they inherit. Sandler (2003) shared this belief that human resource is still the main manager of the organization's talent. In contrast, Michaels et al. (2001) argued that the human resource department cannot do the job by itself. To be successful, talent management requires full participation of the organization's leaders. "HR can't do the job alone. In short, more effective talent management is not about better HR processes; it's about a different mindset" (Michaels et al, 2001, p.11).

Today's top companies, however, know that a single department's potential effectiveness is limited; the key to a successful program lies with the cooperation of all departments, with all managers across the breadth of their operations. Every manager, no matter what level, plays a role in strengthening an organization's overall talent. For example, line managers who are accountable for getting work done are also accountable for developing the people they manage and are fundamental to making overall talent management work.

4.3. Recruiting talent

Identifying and attracting qualified candidates helps companies to select people who not only possess the skills that are needed but also demonstrate the attitude, personality traits, and behavior that ensure organizational fit and promote commitment (Hannay & Northam, 2000). After determining needs of an organization, high-performance companies develop a profile of the ideal candidate, aiming to hire only the top 10 to 15 percent of the available talent (Hale, 1998). When a selection process begins, success factors identified for a job can provide a basis for an interviewing strategy that will assess the candidate's organizational fit (Garger, 1999). One of the strategies that can be used to determine a level of success is to incorporate behavioral-based questions that are designed to elicit examples from candidates about their work history and how they behaved in previous job situations. Another significant strategy of ensuring the best fit is through competency-based management which can be described as the organization understanding its needs and who best fits with the organizations and then aiming to deliver the right outcomes by determining the valued behaviors. As a selection tool, this strategy helps with recruitment of employees who possess the requisite skills and behavior and to identify the long-term high potential employees (Hale, 1998).

4.4. Motivating talent

Motivation can be regarded as the necessary drive or energy towards achievement of some goals (Analoui, 1999). Motivation can also be compared to an engine and steering wheel of a car because at the center of a concept of motivation are the energy, the direction, the drive or the factors influencing a person's behavior (Gage & Berliner, 1992; Wiley, 1995; Amstrong, 2001; Eccles & Wigfield, 2002). Initiatives to improve job performance by increasing employee motivation may fail if there is a weak link between performance and employee efforts. Two types of motivation are commonly identified: intrinsic and extrinsic motivation. Intrinsic motivation is an internal driver, and extrinsic motivation is an environmental incentive, reward and challenges. Intrinsic motivation means a person is engaged in some activity for its own sake because it is satisfying and no reward is expected (Kinman & Kinman, 2001). When someone has high intrinsic motivation, this person's feelings are closely related to how well he or she performs. (Hackman & Oldham, 1980). To motivate talent the intrinsic motivation such as career planning and development is one of effective factors (Melymuka, 2007).

From a HR perspective, career planning and development focused on ensuring an alignment of individual career planning and organization career management processes to achieve an optimal match of individual and organizational needs (Summers, 1999). One of the issues facing organizations is an ability to foster a workforce that creates organizational capabilities. Many human resource development academicians and practitioners (Abbasi & Hollman, 2000; Bolch, 2000; Covey, 2000; Fleming, Coffman, & Harter, 2005; Gooley, 2001) have suggested and used training and development as a means of accomplishing this critical task. A study conducted by Hale (1998) listed training and development as one of the top five most effective retention strategies. Employees are more committed to employers who are more committed to employees' long-term career development Dessler (1999, 2000). A rationale behind this thinking is employees come to organizations with certain needs, desires, skills, and so forth and expect to find a work environment where they can utilize their abilities and satisfy many of their basic needs. Therefore, failing to provide for these basic needs, the commitment level tends to diminish and it increases the likelihood of the employees choosing to leave an organization.

Additionally, coaching is also one aspect of career development that can motivate talent effectively. Since the organization's success aligns in the talent knowledge of its people and for organizations to survive, they must develop current and future leaders (Blotch, 1995). Coaching has enormous benefits for both individuals and organizations. The potential implication for an organization that successfully employs an effective coaching strategy includes increased employee retention and satisfaction, enhanced motivation, morale, commitment and respect, improved organizational performance, communication and team effectiveness, and leveraged learning and creativity at lower costs. For individuals, coaching can, retain, renew, and retain valued employees (Whitworth, Kimsey-House, & Sandahl, 1998; Bowerman & Collins, 1999; Hargrove, 2000; Morris, 2000; Redshaw, 2000; Crane, 2001). "As a result of coaching, high performer are less likely to leave an organization and leaders become more engaged and motivated" (Appleton, 2002, p.5).

5. Methodology

A qualitative research methodology was employed in order to achieve the objectives of the study. The author felt that it is necessary to adopt an interpretivist methodology to discover what Remenyi (1998) called 'the details of the situation to understand the reality or perhaps a reality working behind them' – the social constructionism. In accordance with his argument, it is necessary to explore the subjective meanings motivating companies' actions in their actual working environment. Two types of triangulations which were data and methodology were employed for investigating some hidden data. Data triangulation was used to make a distinction between time, space and persons concerning the phenomenon at different dates and places and from different persons, whilst at the same time,

methodological triangulation in terms of documentary analysis and in-depth interview were employed to cross check data derived from the field (Denzin, 2000).

5.1. Sample

Eighteen key informants participated in the study were employees who work at EADS, Vetter-Pharma, and Oerlikon. They were selected by using snowball technique since talent management is a very sensitive issue in target organizations. Most of samples were originally recommended by human resource managers of each firm, and then a key informant recommended another one who could be accessed conveniently. However, their names could not be revealed. The sample ages ranged from 32 to 52 years. All the key informants offered to co-operate fully with the study.

Key informants of the study could be classified into three groups: (1) human resource policy planners which were two human resource managers and one personnel development manager; (2) human resource policy implementers who were one plant manager, one department manager, one senior engineer, and three senior scientists; and (3) talented employees who were nine management trainees. Management trainees were selected as key informants because the researchers were not allowed collecting data and conducting in-depth interviews with current employees who classified by the firms as talented or high potential employees since talent management was a very sensitive issue in the target companies. However, management trainees were classified as one group of talented or high potential employees by the firms. Even though they are just new employees but requirement of the position can be applied as a talented position according to the recommendations of human resource policy planners, in addition, management trainees are also focused by top management to be outstanding employees who ready to be promoted to management positions in the near future because they are always assigned working in challenging projects, departments, and multicultural assignments. However, this study was an initial investigation, not a representative finding of the whole European corporations.

Table 1: Key informants

Organization	Position	Number
EADS	Human Resource Manager	1
	Plant Manager	1
	Department Manager	1
	Senior Engineer	1
	Management Trainees	3
Vetter	Personnel Development Manager	1
	Senior Scientist	3
	Management Trainees	3
Oerlikon	Director of Center of Excellence	1
	Management Trainees	3
	Total	18

5.2. Data collection

A semi-structured interview was the main research instrument used in data collection. Other instruments e.g. minutes of meetings, informal dialogues with participants' colleagues and company annual reports were used to triangulate data for its factual accuracy. All interviews were conducted in a private place of their choice e.g. at the participant's workplace or at a restaurant. A pilot study was carried out with a participant to attest the appropriateness of the questions in the interview. Working in accordance with an interpretivist and constructivist epistemological paradigm (Denzin & Lincoln 2000), the interview questions were framed to detect the participant's experience and outcome by story telling (Sacks, 1974) – describing some strategic issues they encountered and how they were dealt with in their organizations. The main aim was to probe participants' experience in terms of the constructs,

premises, presumptions, presuppositions and practices that drive what and how strategic decisions were made and implemented in their organizations. The questions covered participants' perceptions on strategic talent management contents, process and context (Petigrew, 1992) and their evaluation in terms of talent management program impact on organizational activities and performance. The questions did not make any reference to any model or approaches to strategic talent management to ensure that the author did not unduly influence the participants' description of their experiences and outcomes. However, before the interview began participants were informed of the tenets of strategic talent management to ensure that the experiences they described were related to issues of a talent management nature and not confined to day-to-day operational matters. All interviews were audio taped with the prior consent of the participants. Each interview lasted approximately 2 hours.

5.3. Data analysis

All interviews were analyzed individually and immediately after each interview. The aim of the analysis was to identify and cluster emergent and consistent themes or categories. The process was both inductive and deductive. The inductive process looked for consistent themes to emerge from the data (Glaser and Strauss, 1967 and Yin, 1994). A deductive approach was taken to supplement the inductive approach to ensure that the author did not over-interpret or misinterpret the data. The author's own foreshadowed theoretical constructs were used to sensitize the data. This overall iterative approach has been used successfully within an interpretive methodological paradigm to identify cluster emergent themes or categories whilst maintaining the richness of the data (Miles & Huberman, 1994).

A sample of interpretations was crosschecked by experienced academic researchers to enhance the dependability of the findings and enable a degree of confidence to be maintained about the credibility of the themes generated. This was important because many of the issues touched on were highly personal and emotive and they were related to authors in the ways that did not rely on academic discourse. It also helped to balance the author's theories-in-use and espoused theories (Argyris & Schon, 1996), a common problem experience by researchers. The overall iterative process has allowed the author to refine the themes and categories when needed. Throughout the analytical process, the practical guidelines of 'conversation' analysis were adopted (Silverman, 2001) to clarify and detect unanticipated themes (i.e. deviant-case). Attention was paid to the sequences of related talk, how participants take on certain roles identified through their talk and particular outcomes in the talk such as laughter, request for clarification, unusual tones, etc.

6. Findings

6.1. Talent management at European Aeronautic Defence and space company (EADS)

6.1.1. Corporate background

EADS is a global leader in aerospace, defence and related services. The Group includes the aircraft manufacturer Airbus, the world's largest helicopter supplier Eurocopter and EADS Astrium, the European leader in space programs from Ariane to Galileo. EADS is the major partner in the Eurofighter consortium, develops the A400M military transport aircraft, and holds a stake in the joint venture MBDA, the international leader in missile systems. The Group employs about 116,000 people at more than 70 production sites, above all in France, Germany, the UK and Spain as well as in the U.S. and Australia.

6.1.2. The need of talented people in aeronautic defence and space industries

EADS is facing a lack of talented employees with the boom of telecommunication, automotive, and financial industries. EADS is not only a manufacturer of aerospace technology but is also a manufacturer of defence or military materials. People who graduate from reputable institutes and required disciplines such as electrical engineering do not want to work in the military mission and

industry. Offering a higher salary is not the only important factor motivating talented employees working with EADS but other kinds of motivation such as career path, career development, and open communication are important factors as well. This is proved by the turnover rate of the company at merely 1% of total employees worldwide. The main reason for leaving a job is family condition, for instance, employees have to move to other countries with their husband or wife.

“Not many high potential graduates want to work for the military projects and products. So, it is difficult to find potential graduates to work with the company but to retain them is more difficult. Our company tries every way to keep talented and high potential employees with us because we know that having this people the company can grow stably and sustainably in global market,” a human resource manager said.

6.1.3. Recruitment of suitable people

At EADS interview is the only method used in the recruitment of new employees. Potential applicants are invited to interview by a HR manager, and then a head of department or a team leader. EADS does not use any assessments because there is no evidence to guarantee the test helps an applicant to be successful in his or her career. However, EADS always looks at the experience of applicants rather than their degree since experience is the most important factor leading to success in hi-tech business. Furthermore, the nature of EADS needs both talented and experienced people to work innovatively.

“We do not need any assessment to prove who fit with our company because we have never seen our poor projects and employees. Our company has high work performance and we develop innovative products constantly. We believe that interview people we can see their personality both mental and physical, moreover, we also concentrate on experiences because we need experienced employees in some hi-tech projects,” a human resource manager said.

“Working experiences are considered first when I need to need new staffs. I believe that everyone is high potential employees if he or she can pass the process of HR,” a department manager said.

6.1.4. Talent management: EADS method

At EADS “open communication” is widely encouraged. Employees have the right to communicate what they need in order to increase productivity. Thus, talented employees can demonstrate their ability, skill, and knowledge as much as they can, and then their superior will be asked to evaluate performance of subordinates. The talent management process of EADS begins from following stages:

- (1) Superiors in every department will be asked to evaluate performance and productivity of their subordinate every six month;
- (2) Superiors have totally right to judge in sending potential subordinates to the training programs organized by both the group HR department and external training programs, however, employees can also apply for any training programs but HR department will select potential people with recommendation of head of department or team manager as the first priority;

“I have to decide to send the most talented subordinate to participate any training programs. For someone who is not qualified by the department, he or she can require going but my recommendations are also important,” a department manager said.

- (3) In case of people who are very talented ones. They will be sent to the assessment center with the external examiner which is a 3-day program. Every year only 36 talented employees (from one EADS site which has approximately 6,000 employees in total) can take part in talented program. Talented employees will be trained their expertise as well as managerial skill but they will be asked the need of career growth in the future since some talented ones would only like to work at what they are good at. Since the company would like to prepare those for higher position in next one or two years;

- (4) Management appraisal, however, will be organized every 2 years. Every manager will be asked to fill in evaluation form about working knowledge, technical, managerial, social, and leadership skills of his or her subordinates. While, subordinates will be required to describe their strengths and weaknesses including experiences during 2 years. Then this information will be sent to the assessment center. HR officers will evaluate information and select talented employees and young potential staff to take part in the assessment center. Selected employees will be sent to the program called “management development circle star”. Employees who take part in this program will be trained both in the job and off the job in order to prepare to be promoted in managing positions in the next two years.
- (5) As every position and employee is equally important. EADS always searches for potential employees in every department but people who can facilitate this activity best are heads of departments. However, employees can share ideas with the company by sending online recommendations and suggestions to HR department. In addition, every appraisal system always conducts online. Thus, employees can express all things without any stress.

“Online appraisal makes employees more comfortable than a paper based one because they can do an appraisal at any where and any time they want. Furthermore, online communication also helps us know what employees think freely because they can express all things without barrier especially the effect of supervisor bias and so on,” a human resource manager said.

6.1.5. Motivation approach

EADS uses salary to motivate employees as well as others. EADS always offers higher salary rate than others in same area, and salary revision takes place every year. However, salary is not the most important factor motivating talented employees working with EADS. The company also uses salary scheme with offering a challenging job or responsibility to talented or potential employees. EADS believes that potential people want to develop themselves from the job they do. Challenging responsibility will be offered to those who demonstrate good working performance with the recommendation of their supervisors. Challenging jobs mean more responsibilities and more salaries. At EADS, the salary level is divided into 17 levels. Employees, who are assigned to work in additional challenging jobs, will be paid salary in higher level.

“I decided to work with EADS because I earn higher salary than my friends and I can show my competence constantly,” a management trainee said.

Additionally, characteristics of products are important factors influencing talented people working with EADS because all products need long-term development. EADS invests in research and development to develop and create new innovation in aeronautic defence and space industry. Besides challenging jobs employees will also have chance to take part in research and develop. Employees are encouraged to do on the job research under the guidance of their superior which is the crucial mechanism to motivate talented and potential people working with the company. These are proved by the turnover rate, less than 2% in 2006. Moreover, working in some specific areas such as telecommunication department employees can get challenging jobs every three or four month because projects are launched to develop new telecommunication technology that changes every day.

For scientists and graduates who are really needed for the company, EADS usually invites them to 1.5-year trainee program. They will be assigned to work in challenging projects in both national and international offices. Besides a mentoring system will be organized and assigned in order to accompany and socialize trainees. Trainees will also be rotated into 3 work areas according to their desires and competences. After 1.5 year those will be placed in the most suitable position later on.

“There are three reasons why people living with EADS. Firstly, we pay very well compare to other companies in southern Germany. We cannot reveal the reason why we know we pay very well but we know. Secondly, people like their works as I said we always offer challenging to employees. They can develop themselves all times. We try to

make jobs like a part of their life that they can enjoy with it. Finally, people like to live in this area, southern Germany, people satisfy atmosphere, the lake (Lake of Constance), and wonderful nature. The major reason of leaving is family reason because their partners, boyfriend or girlfriend, have to move to another area or country they have got job there they leave to live together,” a human resource manager said.

6.2. Talent management at Vetter-Pharma

6.2.1. Corporate background

Vetter is a pharmaceutical company which has specialized in the manufacture of aseptically pre-filled injection systems. Headquarters are located in Ravensburg, southern Germany, and has approximately 1,800 employees. All production plants are FDA approved with total capacity up to 300 million production units per year.

6.2.2 The need of talented employees and recruiting process

As Vetter is a leading world expert in the aseptic filling of liquid and lyophilized drugs. Tasks are very complex that require everyone to have the relevant knowledge and experiences. Acquiring people who fit with the need and corporate competencies is not easy in the world of global competition. Talented people are desired by every multinational corporation particularly potential pharmacists, and scientist. Even Vetter is a pharmaceutical company but Vetter does not merely concentrate on scientists and pharmacists because another position such as business management is also the important factor leading to global competitiveness. Human resource department usually plan to acquire potential graduates in all disciplines but in the global dynamic today Vetter has to discover many motivating methods showing them how advantages to work with the company. As having potential or talented employees is the important thing but managing them is more difficulty. Thus, Vetter has always place high value on teamwork, and always concentrates on recruitment of new employees to fit with organizational goal and strategy.

“Today many people apply for jobs here but we really need people who be proficient in their field of study and can work as a good team member, at the same time we know others also want this people, so, it is not easy for us to acquire them. For current employees, however, team work is the important factor that can help us to retain high potential employees because working as team members encourage the exchange of ideas which they can develop their competences continually. Besides we can realize employees’ interaction with others, projects, jobs, and the company because we can investigate facts from colleagues in case of problems, and then we can solve crisis as quick as possible. Finally, we do not loss our valuable resources,” a personnel development manager, said.

Corporate goal and strategy are strictly employed in the Vetter recruitment process. Application screening is a first process as well as others but working experience and letter of intention are always focused. Potential candidates are merely invited to the interviews that are differently organized according to position applied. New employees will be trained and work in a department for three months, and then will be rotated to another. At the end of the third month, new employees and their heads of teams or departments will be required to fill in questionnaires. The boss of teams or department will be asked to evaluate new employees in 3 areas; (1) professional skill; (2) potential skill; and (3) personal skill. While, the new employee will be asked to evaluate himself or herself and what learnt during 3 months including attitude toward jobs, projects, department, company, and problems and barriers at workplace. Probation is 6 months. During probation, employees will be assigned individual projects and mentors that are persons who give recommendations and comments to them. At Vetter, a mentor system is the important factor that influences the success of new employees as a mentor is a key corporate agent that assists the process of corporate culture socialization. In

addition, a mentor is also a key factor that helps a new employee effectively and smoothly works as a team member.

6.2.3. Career path and development: approaches of motivation

Vetter acknowledges that every employee needs to be promoted and succeeded in his or her career. As Vetter is a hi-tech company that consists of scientists, experts, specialists, and administration and management people. It is difficult to motivate these talented people with the company even Vetter offers salary higher than others in average. Thus, career path is creating as the crucial motivating factor. Management and expert career paths are considering as a tool of talented-employees motivation by the company management team. The reason is someone wishes to grow and prefers to perform a job that fit with his or her competence and does not want to work in another position, for example, some pharmaceutical experts would like to work and grow in their career path rather than to be promoted in managing positions. Moreover, individual characteristics is also employed as a factor in structuring a career path at Vetter, for example, some scientists do not like to speak in public, so, if they are promoted to positions that have to communicate with public, it is risk to lose them.

Career development is one of motivating approaches that Vetter uses to maintain its talented employees. Every employee will be notified the training program that is organized by the Vetter personnel development department. Employees can be trained in the program but seats are limited. Participation will be allowed according to recommendation of head of team or department that employees are working in. The crucial developmental method is sending potential employees to Vetter campus. Vetter Campus is built on the mission and guiding principles of the company. It is therefore an important tool in the pursuit of goal-oriented and lasting personal and organizational achievements. Vetter campus sharpens employees' skills in entrepreneurial and strategic performance, process-oriented thinking, and pragmatic and trust-based co-operation. Vetter Campus provides specific development programs that ranging from the company level to the individual areas, departments, teams and persons. All programs aim to implement strategic goals and improve processes and cooperation among employees. Specialist and experts both inside and outside company are invited as lecturers that are not merely run instructions but they responsible for workshop and case study as well. Reasons of establishment Vetter campus are (1) customizing training programs to fit with the need of the company; (2) it is flexible for employees in some specific areas; (3) reducing cost of training for efficient and effective budget spending.

Annual training program design, however, always effectively and circumspectly plan by the personnel development department in cooperation with other related department as well as the executive management team that is rarely found in another company. The executive management team is involved because all training programs must be matched with goal, vision, mission, and strategy of the company both short and long term. Vetter Training program is not a traditional activity as well as general training management concept of another one.

“Our company does not organize the training program because it always organizes every year as well as tradition. We want the training program that fits with our goal, vision, and business strategy particularly the need of new technology that needs more skills and new abilities. The training program usually supervises by executives who plan the corporate strategy,” a personnel manager said.

Vetter secures effectiveness and efficiency of the training by interview of employees who participate in the activities. Participants will be requested to express and describe what they have learnt, and then information will be evaluated by the personnel development department later on. If employees are not completely trained concerning required knowledge or practices, the personnel development department has responsibility of developing programs fulfilling the gap. In conclude career development program is one factor motivating specialists and experts living with Vetter since

they can be improved and developed themselves constantly, whilst, career path encourages clear vision about the future life which is desired by everyone.

6.2.4. Performance evaluation and potential searching

Employees require assessing themselves as regards their strengths and weaknesses every year as well as medical checking. The structured questionnaire is required an employee ranking his or her ability, competence, attitude toward jobs, projects, department, and company including problems, and barriers at workplace. An employee can demonstrate all things that he or she needs to be done. While, a supervisor will also be required to evaluate an employee about professional, practical or technical, personal, leadership, and social skills. A supervisor or a department manager is the key successful factor of performance evaluation and potential searching process because he or she realizes and sees an employee every day. A supervisor would be a person who knows an employee best. However, in order to avoid bias of performance evaluation, three to four supervisors including a human resource staff have to discuss about self evaluation of an employee and the questionnaire evaluated by a supervisor for searching a solution.

However, some methods are also employed in order to find a potential employee, for example, a self-administrated project that has not a project manager or leader. Team members have to search and communicate with other people and departments for cooperation leading to project achievement. Even it is difficult for new employees but they have to endeavor to do so. This situation usually organizes in order to find potential team or project leaders. Since cooperative and problem solving skills are the required characteristic of leaders at Vetter.

6.3. Talent management at Oerlikon

6.3.1. Corporate background

Oerlikon is a globally leading company in the field of thin film, vacuum and precision technology. Based on these core competencies, Oerlikon develops production systems, components, and services for high-technology products. The corporate culture of Oerlikon is based upon the four core values of teamwork, integrity, excellence and innovation. Everyone at Oerlikon is committed to outstanding performance – each and every day. Mutual respect and cooperation are essential parts of corporate culture. This environment enables employees to exchange knowledge and experiences while effectively utilizing synergies between business units.

6.3.2. Trainee programs: the source of talented employees

Oerlikon trainee program is employed to acquire talented employees and top arrange them with suitable jobs. 12-15 candidates are anticipated and accepted into this program, and there were 800 applicants from all over the world in 2005 ranging from bachelors to doctorates. Oerlikon Global Trainee Program is ambitious 15-month international program that intends to develop qualified graduates to become excellent global managers. Every year, talented graduates start a high tech career at Oerlikon. This program will enable those working in a multi-cultural environment that increasingly crosses geographical and organizational boundaries.

The Global Oerlikon Trainee Program is tailored to graduates with a technical, economical background or social sciences. The aim of that program is to learn more about the personal strengths and interests and how they best match within the worldwide Oerlikon businesses. During the course of the Trainee Program trainees will learn more about the different opportunities Oerlikon has to offer and step by step get a clearer picture of the final position. This program gives trainees the chance to gain insight within and beyond trainees' field of expertise without being specialized to one specific field of application.

Oerlikon places great emphasis on building competency of candidates in leading projects and become a vital player of effective and innovative teams - through training on the job, off the job, mentoring, coaching, and training workshops. At the first day trainees are directly involved in

company activities through their work on projects for different business units across the Oerlikon organization. Three fast track trainee programs to high-tech leadership at Oerlikon are formulated by the management executive team in order to motivate talented people to work with the company. The fast track trainee programs are as follows:

- A) Global trainee program: this program is tailored to graduates with a technical or an economics background. The aim is to learn more about the personal strengths and interests and how they best match the worldwide Oerlikon businesses. In both national and international project assignments trainees will learn more about the different opportunities the company has to offer. This program gives trainees the chance to gain insight within and beyond field of expertise without being specialized to one specific field of application. With training on and off the job trainees will grow into the final position that follows the trainee program;
- B) Trainee program finance: this program is developed for graduates with a background in economics and strong interest in finance. Being assigned to challenging projects trainees will get a deep insight into the different fields of application within the finance department. The stages will be developed in accordance to trainees interests and may cover treasury, tax, accountancy, controlling, and risk management. In addition, working in international projects also encourages trainees' intercultural competencies. However, with this training on the job and additional off the job activities trainees will grow into the final position while getting to realize other relevant disciplines;
- C) Trainee program human resource: graduates with economics or social science background and a concentration on human researches management are addressed with this trainee program. Project assignments in recruiting, people development, personal marketing, compensation and benefits, and change management will be assigned and enhanced trainees' professional competencies. Trainees will get to know the company different business fields and locations and thus create a wide spanning network for their further career. However, additional training, off the job training, is also assigned that will improve trainees' interpersonal and project management skills and assist them to grow into the final position within the global human researches team.

6.3.3. Recruitment of talent workforce

As the global trainee program of Oerlikon offers much opportunity for graduates around the world, so, there are more than 800 graduates who apply for the program. Online application is utilized as a recruiting instrument as it consumes less screening and working time. Online application can be submitted since February to July every year. Screening of application always begins in August and finish by the end of September as the trainee program always annually kick off in October, for example, there were 800 applications submitted to Oerlikon. Applications were screened and reviewed from 800 to 500 to 200 to 50 respectively. 50 applicants were invited to the Oerlikon Assessment Center at Pfäffikon, Switzerland. They were required to conduct assessment tests such as aptitude and attitude tests as well as personality, leadership, managerial, language, interpersonal communication and presentation skills. The test covers all corporate needs because the company would like candidates who fit with the competencies and corporate culture that base on four basic values: (1) teamwork, (2) integrity, (3) excellence, and (4) innovation. The final decision will be judged by the management executives or appointed teams. There were just 10-12 graduates who passed the selecting process in 2006.

“This is the only one full day. The applicants will be tested every skills that fit with the Oerlikon competencies. We always look at personality, attitude, and communicational skills rather than educational background because we believe that everyone has sound knowledge and graduates from reputable universities. So, what we need is a person who fit with our core competencies and culture. We want talented people who can work as

good team members because this is the core culture of our company,” the director of Center of Excellence said.

6.3.4. Oerlikon trainee program process

A) Trainee program kick off: Within 15 months trainees will be assigned to different project assignments, the so called "stages". In each stage trainees work on their main project self responsibly. A coach is a direct supervisor who integrates a trainee into his or her team and answers project related questions. Additionally the work on team project with the other Global Trainees is part of each stage. Both virtually through internal meeting platforms and live during the off the job trainings trainees can exchange information and manage the team project. Off the job trainings top of trainees profile and prepare them for key positions within the Oerlikon group at the end of the Trainee Program.

At the first stage, a trainee will be invited to an introduction week at the Oerlikon headquarters in Pfäffikon, Switzerland. On this occasion a trainee will have the chance to meet the other trainees, the senior management team and a mentor. A mentor will accompany a trainee during the whole program, and possibly, his or her whole career. During the introduction week a trainee will learn a lot about the Oerlikon products and technologies, to visit some production sites and get an insight into the company culture. Additionally, the team project will be kicked off and an outdoor event will bring the trainee team closer together. Then a trainee will start a career at Oerlikon with the first project assignment.

- B) Project assignments- the different stages: In each stage a trainee will work on a relevant project in one of the Oerlikon Business Units. Depending on a trainee's personal focus there are various opportunities. A trainee will be able to start working on a project within the field of expertise. In a later stage a trainee can be involved in a project that goes beyond his or her expertise in order to broaden his or her horizon and get an overview of the whole picture. The advantage of Oerlikon Trainee Program is a trainee active contribution in designing his or her own career. The flexibility the company asks from a trainee in changing projects several times a trainee can return by reacting flexibly on interests and needs within 15-month program.
- C) International assignments: Since Oerlikon is a global player, most projects are international. So, to enlarge a trainee's intercultural competencies even further, at least one stage should be in an international location. As Oerlikon is located in over 35 countries, there are a lot of opportunities to contribute to a project abroad. A trainee will have the opportunity to extend his or her experience on an intercultural level and learn how a dynamic, global high tech company really works. Depending on a trainee educational background and personal interests the focus of the Trainee Program may be in engineering, natural sciences, business administration (finance, human resource, business development, and marketing), and social sciences.
- D) Final presentation: All trainees are required the conduct a presentation regarding their assignments both national and international jobs to board of management. This activity requires trainees demonstrating all abilities and talents as professionals. Final decision will be judged by the board of management and related people particularly experts in project areas.

6.3.5. Talent driving mechanism

A) Training on the job: From the beginning trainee are involved in “designing your own career”. Depending on trainee interests and ambitions they can work on projects in the area of assigned expertise or also expand insights into different fields of application. However, trainee ambitions need to match the Oerlikon business demands in order to create a win win situation. Besides a major project, trainee will be assigned to a team project together with the other trainees spanning the length of the program. The Trainee task is to resolve an actual business or process challenge. Working in a global team will teach trainees to manage international projects while bringing trainees together with Oerlikon key players around the world.

- B) Training off the job: The training “off-the-job” involves group workshops for all trainees together as well as individual training modules depending on personal needs. To prepare trainees for a career in high tech, trainees will be trained in topics as Project Management, Conflict Management, Change Management, Communication and Teambuilding. A feedback meeting after each stage with coach and corporate HR always organizes in order to reflect strengths and enables trainees to develop their individual training plan. This training, trainee skills can be improved and new areas of expertise can be acquired. However, the objective of off the job training is to allow trainees a maximum amount of freedom to shape their own career since each trainee can set up an individual training plan that guides them to their final placement at the end of the Global Trainee Program.
- C) Mentoring & Coaching: Mentoring and coaching are one of the important personnel development instruments that Oerlikon utilizes to enhance talent of employees and to socialize corporate culture. A mentor is a member of the Oerlikon management that to accompany trainees throughout the Trainee Program. A mentor provides experienced advice and objective opinions to help trainees see things within the bigger picture, outline different opportunities, and open valuable networks for trainees’ career path. While coaching guide the trainee through each of the Global Trainee Program stages. A coach is a supervisor during a stage. He or she supports trainees in the daily work, monitors the project because trainees will be assigned to and reviews the project objectives at the end of the stage. As an experienced technology and/or business management professional, a coach accompanies trainees through their project and other work issues, such as the Oerlikon company culture, rules and regulations.

7. Conclusions

The investigation of German and Swiss companies in three industries: (1) aeronautic, defence, and space; (2) pharmaceuticals; and (3) film, vacuum and precision technology can be concluded into three major areas: (1) the need of talented people; (2) the recruitment and tools; and (3) talent development and management approaches.

Firstly, regarding the need of talented people, every company in the study agrees that having talented employees helps them drive competitiveness but it is difficult to acquire this kind of people since the recruiting competition of talented people in the same industries is fierce, besides, the booming of some industries such as telecommunication, automobile, and financial industries is catching talented graduates and employees from them as well. Thus, talent management is an urgent agenda in today’s human resource management and also a sensitive issue at this moment.

Secondly, in recruiting process, some talented campaigns such as global trainee program and management cycle star program have been created in order to motivate talented graduates to join the companies and to motivate existing potential or talented employees dedicating and engaging more with the firms. The tools of recruitment are online application, screening of applications, interview, invitation to assessment center, presentation of managerial and language skills, personality, attitude toward the companies, job, and society. The recruiting process aims to search talented people who fit with the core competencies and corporate culture. All interviewed corporations pointed that personality and interpersonal skills are more important than educational background because they believe that every candidate is to be proficient in a specific science, so, what talented candidate must have is personality that matches the companies’ culture especially characteristics of working as good team members. A management trainee program is also considered as one of significant instrument of recruitment. Since the firms can socialize young talented employees by using various means such as assigning them to work in a multicultural team or intercultural site. Multicultural and intercultural management skills are strongly required by all studied firms because they are multinational corporations. This is to respond a question that “why all studied firms do emphasize on interpersonal skills rather than educational background.”

For internal recruitment, talented or high potential employees are searched by self assessment and supervisor assessment methods. Most interviewed companies offer the chance of speaking out to employees which can be called “open communication” in terms of online and interpersonal communication. Open communication aims to reduce stress and increase employee participation according to the concept of corporate governance. However, employees are merely allowed to discuss with their superiors; speaking with outsiders is prohibited and considered as an unethical behavior. Base on a concept of open communication, the firms always organize annual discussion in order to evaluate employee’s performance because the firms believe that leaders in all level such as team, project, division, and department managers are the important factor in searching talented employees at workplaces as they work with and see employees every day. So, they should know the nature of subordinate best. Whilst at the same time, subordinates also need to evaluate themselves about knowledge, technical skills, attitude toward job, leadership, social and interpersonal skills as well as strengths and weaknesses. In order to avoid bias, 360 degree evaluation and online assessment are usually applied for performance appraisal. Online assessment is applied because it is simple and to generate high confidential to assessors; random login names and passwords are distributed to assessors (superior, colleague, subordinate) randomly. A result of 360 degree evaluation is always brought to make any decision. At least three senior managers from related departments including one human resource specialist are required to make a decision on promotion or transfer of a high potential employee because the firms would like to make sure that he or she is a high potential employee who has talents and skills fit with an organizational competency. For managerial positions, an autonomous project is normally organized in order to search for a high potential leader. A team will be formed but is not assigned a team leader all members have equal power and responsibility. A person who can lead a team to attain an ultimate goal should have good interpersonal and decision making skills, be motivate people, and systematic thinking. Many talented ones are promoted to higher positions by using this method according to the findings of the study.

Lastly, talent development and management, the explicit career path and development are utilized as the motivating tool by all interviewed companies. Wealth is not only one factor that motivates employees working with the companies. Lifestyle and career advancement are the important factors for talented graduates and employees as well. Therefore, the explicit career path and development play significant position in managing talented employees. Career path can be divided into two paths which are management and expert because some experts such as engineers, scientists, pharmacists, and so on demand growing in their specialization and do not want working in managerial positions. So, the explicit career path and development can effectively motivate them to engage and to dedicate all capabilities and resources to works, projects, and the companies. Challenging jobs and responsibilities are also applied in the managing process besides explicit career path because the challenges are desired by all talented employees and can always motivate them continuously. Due to the companies realize that high potential employees need to prove their competence constantly, hence, the challenges in terms of responsibility of high impact project together with an explicit career path are normally offered. This approach is proved by practices of the companies in the study as the successful method for motivating talented employees that affects the low rate of turnover.

8. Discussions

This study intended to investigate the importance, the process and the present situation of managing talented employees in European corporations. The study found that managing talented employees is a very important issue for organizations at the moment. This is supported by, McCauley and Wakefield (2006), which indicated that today’s businesses face increased global competition, shifting markets, and unforeseen events, so, they are finding it more difficult than ever to attract, develop, and retain the skilled workers they need. The present study revealed that to ensure long-term prosperity firms should customized solution to attract, develop, and retain their talented people. The finding supports the work

done by Gakovic and Yardley (2007), who found that global business strategy needs aligned people and talent management strategies. At a recruiting stage, interview was founded as the main strategy for the recruitment of talented employees because all firms in the study believe that personality and interpersonal skills are more important than educational background as every candidate is considered to be proficient in a specific science, so, what a talented candidate must possess is personality that matches the company's culture. This finding is supported by Hale (1998) which found that one of the strategies that can be used to determine a level of success in recruiting high performers is to incorporate behavioral-based questions that are designed to elicit examples from candidates about their work history and how they behaved in previous job situations. When talented employees were hired by the firms, obvious career path and career development were employed as significant instruments for motivating and retaining high potential ones. This finding is supported by the research done by Dasseler (1999), who found that employees are more committed to employers who are more committed to employees' long-term career development because employees come to firms with certain needs, desires, skills, and so forth and expect to find a work environment where they can utilize their abilities and satisfy many of their basic needs. Another point is the study found that coaching was also one of important tools for retaining talented employees. The finding is supported by Appleton (2002) who points out that coaching can retain valued employees and high performers are less likely to leave an organization if a coaching program is implemented effectively.

9. Implications

Based on the result of the study, the following implications deduced for talent employees. Firstly, it is clear that to recruit talents who fit organizational culture, strategy, and competency; educational competence, rich educational background is not sufficient. Interpersonal communication and multicultural and intercultural management skills are also important factors that influence long-term competitiveness of an organization because a collaborative team is a main management concept in today's business. Secondly, an explicit career path and development are considered as two of most significant factors for motivating and retaining talented people. Finally, coaching is a crucial tool in the development of talented employees because it involves the socializing process of corporate culture and organizational learning.

An eight-step approach could be implemented. The first stage could be creating awareness of benefit of having talented employees among leaders because managing talent cannot be implemented effectively without supporting of organization's leaders. The second stage could be initiating a concept of talent centric organization which is an organization's core competency is built on talents of its employees. The third stage could be researching organization's talent demand for middle to long-term operation. The fourth stage could be strategic talent recruitment. The recruitment of talented employees could be divided into two levels: (1) internal talent recruitment which is a process that current employees should be assessed and identified their talents and a relationship between required technical skills for jobs and their talents; (2) external talent recruitment which is a process for attracting and selecting talented candidates who fit with organizational competency, and strategy. The selecting strategy could not be focused on candidate's profile only but also interpersonal and multicultural skills, because hi-profile candidates may not be people who fit with organizational culture and core competency. The fifth stage could be creating obvious career path for both new and current talents. The path could be divided into management and expert paths in order to respond different needs of talented employees and motive as well as retain them. The sixth stage could be providing coaching and mentoring. Leaders at all levels need to master these techniques as they could be the key to increasing the commitment of talented employees both newcomers and current ones. The concept of mentoring should be instituted as one of the required competencies that leaders, managers, and supervisors must have. Organizations do not necessarily have to institutionalize coaching and mentoring programs but rather ensure that managers practice them. The seventh stage could be evaluating those behaviors and

rewarding leaders for coaching and mentoring activities with talented employees. This stage could encourage transference of knowledge and technical skills required for jobs, in addition, it could also promote commitment and socialization of organizational culture to talented employees. The eighth stage is to measure the effectiveness of the coaching and mentoring i.e. turnover among of talented or new potential employees during the first year. This would provide valuable evidence to the management team as to whether the program is making an impact and should continue to get importance and support. However, a point to recruit, develop, and retain talented employees is to ensure that these talented people are likely to experience coaching and mentoring a leader who can coach and be a role model or run a risk of losing them. Another suggestion would be meeting with the Chief Executive Officer (CEO) and top executives of a firm. These leaders are perfect role models as they are the ones who have made it from junior positions to senior positions. New and current talented employees can see that an organization has rewarded employees for loyalty.

10. Limitations of the Study

Firstly, Talent management is a sensitive issue of corporations participated in the study; hence, a quantitative research could not be conducted in parallel with a qualitative one. Secondly, number of key informants is limited by language barrier because German dialect is widely spoken in southern Germany where is the area of sample organizations are located in. Finally, to contact with a German company usually takes long time for an approval of data collection. Moreover, a research period during March to July is a summer session, thus, German companies in the south always close for regional and national holidays. This condition affects timetable of data collection as well as accessible difficulty of key informants.

11. Suggestions for Future Study

- A quantitative research should be conducted in parallel with a qualitative one.
- Fluent German ability should be considered as the important factor for research in central Europe.
- A research plan should be flexible because it is difficult to conduct a research in German corporations especially an investigation into talent management.
- Talented employees as well as ones in a trainee management program in different offices and branches should be investigated concerning their attitude toward a company, barriers of career path and development, and so on.
- Members of a board of management or corporate policy makers should be interviewed in order to investigate current situation and trend of managing talent in a company.
- An exit interview should be employed in order to investigate leaving reasons of a person or a talent who leaves a company. Snowball technique can be considered as one of excellent strategic research instruments for difficult accessible data, since a talent management is a sensitive issue in German companies.

References

- [1] Abbasi, S. & Hollman, K. 2000, 'Turnover: the real bottom-line', *Public Personnel Management*, vol. 23, no. 3, pp. 19-28.
- [2] Analoui, F. 1999, 'What motivates senior manager? The case of Romania', *Journal of Managerial Psychology*, vol. 15, no. 4, pp. 324-340.
- [3] Appleton, J. 2002, 'Coaching process meets development needs of three types of leaders', *The Right Communique*, vol. 7, no. 1, pp. 3-5.
- [4] Armstrong, M. 2001, *A Handbook of Human Resources Management Practice (8th ed.)*, Milford: Kogan Page, US.
- [5] Argyris, C., & Schon, D. A. 1996, *Organisational Learning 2, Theory, Method and Practice*, Addison-Wesley, New York.
- [6] Barney, J. B., & Wright, P. M. 1998, 'On becoming a strategic partner: the role of human resources in gaining competitive advantage', *Human Resource Management*, vol. 37, no. 1, pp. 31-46.
- [7] Blotch, S. 1995, 'Coaching tomorrow's top managers', *Executive Development*, vol. 8, no. 5, pp. 20-22.
- [8] Bolch, M. 2000, 'The changing face of the workforce', *Bill Communications*, vol. 37, no. 12, pp. 73-78.
- [9] Bowerman, J., & Collins, G. 1999, 'The coaching network: A program for individual and organizational development', *Journal of Workplace Learning: Employee Counselling Today*, vol. 11, no. 8, pp. 291-297.
- [10] Cliffe, S. 1998, 'Human resources: Winning the war for talent', *Harvard Business Review*, vol. 76, no. 5, pp. 18-19.
- [11] Connor, T. 2007, 'Market orientation and performance', *Strategic Management Journal*, vol. 28, no. 9, pp. 957-966.
- [12] Covey, S. R. 2000, 'Teaching Organizations', *Executive Excellence*, vol. 17, no. 3, pp. 20-28.
- [13] Crane, T. G. 2001, *The heart of coaching: using transformational coaching to create a high-performance culture*, FTA Press, San Diego, CA.
- [14] Denzin, N. K., & Lincoln, Y. S. 2000, *The Handbook of Qualitative Research*, SAGE, Thousand Oaks, CA.
- [15] Desseler, G. 1999, 'How to earn your employees' commitment', *Academy of Management Executive*, vol. 13, no. 2, pp. 58-67.
- [16] Desseler, G. 2000, *Human Resource Management (8 ed.)*, Prentice Hall, NJ.
- [17] Eccles, J. S., & Wigfield, A. 2002, 'Motivational beliefs, values, and goals', *Annual reviews of Psychology*, vol. 53, pp. 109-132.
- [18] Frank, F. D., & Taylor, C. R. 2004, 'Talent Management: Trends that will shape the future', *HR. Human Resource Planning*, vol. 27, no. 1, pp. 33-41.
- [19] Gage, M. N. L., & Berliner, D. 1992, *Educational psychology*, Houghton, Boston, MA.
- [20] Gakovic, A., & Yardley, K. 2007, 'Global Talent Management at HSBC', *Organization Development Journal*, vol. 25, no. 2, pp. 201-205.
- [21] Glaser, B., & Strauss, A. 1967, *The Discovery of Grounded Theory*, Aldine, Chicago.
- [22] Gooley, T. B. 2001, 'How to keep good people', *Logistics Management and distribution report*, vol. 40, no. 1, pp. 55-60.
- [23] Grager, E. 1999, 'Holding on to high performers: A strategic approach to retention', *Compensation and Benefit Management*, vol. 15, no. 4, pp. 10-17.
- [24] Guthridge, M., Komm, A. B., & Lawson, E. 2006, 'The people problem in talent management', *The McKinsey Quarterly*, vol. 2, pp. 6-12.
- [25] Hackman, J. R., & Oldham, G. R. 1980, *Work redesign*. Addison-Wesley, Reading, MA.
- [26] Hale, J. 1998, 'Strategic Rewards: Keeping your best talent from walking out the door', *Compensation and Benefit Management*, vol.14, no. 3, pp. 39-50.

- [27] Hargrove, R. 1999, *Masterful coaching: Extraordinary result by impacting people and the way they think and work together*, Jossey-Bass/Pfeiffer, San Francisco.
- [28] Heinen, J. S., & O'Neill, C. 2004, 'Managing talent to maximize performance'. *Employment Relations Today*, vol. 31, no. 2, pp. 67-82.
- [29] Hunter, J. E., Schmidt, F. L., & Judiesch, M. K. 1990, 'Individual differences in output variability as a function of job complexity', *Journal of Applied Psychology*, vol. 75, no. 1, pp. 28-42.
- [30] Huselid, M. A. 1995, 'The impact of human resource management practices on turnover, productivity, and corporate financial performance', *Academy of Management Journal*, vol. 38, pp. 635-6372.
- [31] Kaynak, H. 2006, 'Measuring organisational effectiveness and business performance in firms implementing total quality management', *International Journal of Manufacturing Technology and Management*, vol. 8, no. 4, pp. 355-369.
- [32] Kinman, G., & Kinman, R. 2001, 'The role of motivation to learn in management education', *Journal of Workplace Learning*, vol. 13, no. 4, pp. 132-143.
- [33] Kirkland, S. 2007, 'If You Build It, They Will Stay: Leadership Development in the American Cancer Society', *Organization Development Journal*, vol. 25, no. 2, pp. 77-80.
- [34] Lake, S. 2000, 'Low-cost strategies for employee retention', *Compensation and Benefits Review*, vol. 32, no. 4, pp. 65-72.
- [35] Manpower Inc. October 2006, 'Talent Shortage Survey Results', Full results available at: <http://www.manpower.com/mpcom/content.jsp?articleid=388>
- [36] McCauley, C., & Wakefield, M. 2006, 'Talent Management in the 21st Century: Help Your Company Find, Develop, and Keep its Strongest Workers', *The Journal for Quality and Participation*, vol. 29, no. 4, pp. 4-8.
- [37] Melymuka, K. 2007, 'How to Build a Talent Factory', *Computerworld*, vol. 41, no. 24, pp. 30-46.
- [38] Michaels, E., Handfield-Jones, H., & Axelrod, B. 2001, *The war for talent*, Harvard Business School Publishing, Boston.
- [39] Miles, M. B., & Huberman, A. M. 1994, *Qualitative Data Analysis (2nd edition)*, SAGE, Thousand Oaks, CA.
- [40] Morris, T. W. 2000, 'Coaching: Reberth of an age-old remedy', *AFP Exchange*, vol. 20, no. 3, pp. 34-39.
- [41] Petigrew, A. M. 1992, 'The characters and significance of strategy process research', *Strategic Management Journal*, vol. 13, pp. 5-16.
- [42] Pollitt, D. 2004, 'Talent management puts the shine on Electrolux', *Human Resource Management International Digest*, vol. 12, no. 5, pp. 23-35.
- [43] Ready, D. A., & Conger, J. A. 2007, 'Make Your Company a talent factory', *Harvard Business Review*, vol. 85, no. 6, pp. 68-77.
- [44] Redshaw, B. 2000, 'Do we really understand coaching? How can we make it work better?', *Industrial and Commercial Training*, vol. 32, no. 3, pp. 106-109.
- [45] Remenyi, D. 1998, in Remenyi, D., Williams, B., Money, A. & Swartz, E. 1998, *Doing Research in Business and Management: An Introduction to Process and Method*, Sage, London.
- [46] Sacks, H. 1974, 'On analyzability of stories by children', in Turner, R. (eds), *Ethnomethodology*, Penguin, Harmondsworth.
- [47] Sandler, S. 2003, 'The changing face of talent management', *HR Focus*, vol. 80, no. 5, pp. 1-4.
- [48] Silverman, D. 2001, *Interpreting Qualitative Data, Methods of Analysing, Talk, Text and Interaction*, SAGE, London.
- [49] Summers, J. 1999, 'How to broaden your career management program', *HR Focus*, vol. 76, no. 6, pp. 6-13.

- [50] Whitworth, L., Kimsey-House, H., & Sandahl, P. 1998, *Co-active coaching: New skills for coaching people toward success in work and life*, Davies-Black Publishing, Palo Alto, CA.
- [51] Wiley, C. 1995, 'What motivates employees according to over 40 years of motivation surveys', *International Journal of Manpower*, vol. 18, no. 3, pp. 263–280.
- [52] Williams, M. 2000, *The war for talent: Getting the best from the best*, CIPD House, London.
- [53] Winter, S. G. 2003, 'Understanding dynamic capabilities', *Strategic Management Journal*, vol. 24, no. 10, pp. 991-995.
- [54] Yin, R. K. 1994, *Case Study Research: Design and Methods (2nd edition)*, SAGE, Thousand Oaks, CA.

The Utilising of Students as Presenters of a Social Group Work Programme to High School Learners

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Abstract

This article reports on a group work programme presented by third year social work students at two high schools in the Potchefstroom area of the North-West Province of South Africa, involving 108 learners between the ages of 13 and 14 years old. The main aim of the group work was to provide life skills training in order to improve the way the group members feel and think about certain aspects in their lives. The students wrote comprehensive reports on the sessions and they received weekly supervision during the course of the group work. The effectiveness of the programme was measured by means of the single-system. Measuring scales were completed before and after the implementation of the programme. The data analysis showed that the learners' attitudes, beliefs and level of knowledge on certain aspects had improved. It could thus be concluded that this type of group work was beneficial to both students and learners.

Keywords: High School Learners, Programme, Social Group Work, Students.

Introduction

The complexity of modern society has a significant influence on adolescents, which makes it difficult for them to cope with physical, emotional and social demands made upon them. In the successful transformation from childhood to adulthood, the adolescent needs to accomplish many tasks, master physical and psychological skills, gain knowledge, establish relationships, develop an accepted value system and overcome problems. However, appropriate guidance can make their task easier. For this reason social work could be utilised to help them deal with life's everyday challenges.

As part of their practical training for social work, third year students at the North-West University (Potchefstroom Campus) are required to present group work programmes to groups. Therefore it was decided that the students would present life skills programmes to groups of adolescents. The student was someone the learners could identify with, and who had sufficient knowledge and training to guide the discussions, provide correct information and influence them to enhance good behaviour and change undesired behaviour.

This research project was based on a literature study and an empirical study. The available literature on group work with learners focused mostly on South African studies as these took into account the diversity of the different population groups (Becker, 2005; Rakoma, 2000; Strydom, 2002; Van Tonder, 1994). These references were used as a basis for developing a group work programme.

The students received weekly supervision from their lecturers and were guided through the various stages of the programme step by step. The students were also given manuals with information on group work and topics.

In this article, the aim and objectives and the research methodology will first receive attention. Thereafter the classification of groups, the administrative aspects and the social group work process as it was manifested in this study will be discussed. The focus of the article will be on the content of the programme presented by the group workers and on the way in which it affected the group members' attitudes and beliefs regarding certain aspects in their lives.

Aim and Objectives

The aim of the research was to investigate the utilisation of students as presenters of a social group work programme to high school learners.

The research had the following objectives:

- To give a summary of group work as it was manifested in the study
- To develop and present a group work programme on life skills
- To evaluate the effectiveness of the programme

Research Methodology

The design of this study was of an exploratory nature (Babbie, 2007:88-89; Neuman, 2003:29-30). Although much research has been done on social group work, there is limited literature on the utilisation of students as presenters of group work programmes to learners.

This study used the mixed methodology paradigm, mostly quantitative, but also qualitative (Creswell, 2003, 208-209). The quantitative data was collected first by means of the single system, and then the qualitative data was collected by means of an evaluation questionnaire.

Thirteen social work students who managed groups at two high schools in Potchefstroom, South Africa, involving 108 learners between 13 and 14 years old were used in this study. Inferential statistical analysis could not be used because this was an available sample for both students and learners (Strydom, 2005:202) and not a random sample. Therefore Cohen's values were calculated to determine effect sizes to see whether the programme made any practical impact (Cohen, 1988:20-27).

In order to evaluate the effectiveness of the programme, measuring scales had to be chosen to suite the purpose of the study. After studying applicable scales from the WALMYR Assessment Scales Package (Bloom, Fisher & Orme, 1999:218-225), measuring instruments used in the Social Work Skills Workbook (Cournoyer, 1996:25-40) and scales used in other research studies, the researchers found that the scales were not suitable. They designed their own evaluation scales based on similar research undertaken with groups of students (Strydom & Strydom, 2006:311-313) and a group of caregivers (Strydom & Wessels, 2006:12-13). In this manner the validity and reliability of the scale was improved (Royse, 2004: 125-130). The members of the groups were subjected to measuring by the single-system during the first group meeting. The group work programme was then presented to the members. According to Royse (2004:69-96) and Strydom (2005:144-146) the essence of the single-system is the repetitive measurement of the problem. A following measurement took place at the final meeting, and the two measurements were compared. In other words, the A-B-A-procedure was used.

It was required from the group workers to keep accurate field notes on any observations, diagnoses and planning made during the sessions. They had to write complete reports after every session. They also completed questionnaires. This information was used to complement the quantitative results of the survey.

Classification of Groups

Social group work may be understood as a series of activities carried out by the worker during the life of a group. It entails the deliberate use of intervention strategies and group processes to accomplish individual, group, and community goals using the value base and ethical practice principles of the social work profession. Therefore group worker's interventions, according to Toseland and Rivas (2005:12), should be guided by the developmental needs of individual members and the group as a whole.

Because there are a number of different groups that can be used by social workers, it is important to distinguish what type of group the high school learners formed. The groups could firstly be regarded as formed groups, because the members came together through the intervention of the researcher and guidance teachers of the schools. In the second place the groups could be classified as treatment groups, because the members were bonded by their need to know more about life skills; communication was open and confidential; the level of disclosure was high on the grounds that they had common characteristics and concerns; while the success of the group depended on members' satisfaction.

Finally the groups could be seen as growth-oriented, because they focused on promoting the physical, psychological and social well-being of the learners. There were, however, traces of support elements in so far as the group members encouraged and supported one another in the accomplishing of goals; traces of educational elements, in so far as the learners were taught various skills, as well as traces of social elements, which referred to the learning of socially accepted behaviour patterns (Du Preez, 1986:60-67; Preston-Shoot, 1987:11-17; Toseland & Rivas, 1998:13-28).

Administrative Aspects of Group Work

In the composing of the group, the worker chooses members according to their needs and the requirements of the group as a whole. Learners were selected who were homogeneous with regard to age, grade and background. The learners were between 13 and 14 years old and in grade 8 and 9. These similarities lead to a great degree of cohesion (Corey & Corey, 2002:107). They were heterogeneous with regard to gender and culture. Most of the groups contained members of different genders and races.

The size of the group depends on the purpose and type of group. The group should be small enough to allow it to accomplish its tasks, yet large enough to permit members to have a satisfying experience (Garvin, 1997:66; Gazda, Ginter & Horne, 2001:291; Northen, 1988:129). Because the students were inexperienced group workers, they felt more comfortable to manage groups consisting of four to eleven members. The smaller group also provided an atmosphere of intimacy for the discussion of personal and private matters, such as substance abuse and the relationship with the opposite sex. In the smaller group, the members received ample opportunity to practise skills and to perform role-play and other simulating activities.

During the planning process, the worker should determine whether the group should be open or closed to new members. The students preferred closed groups because it was important for the learners to attend all the sessions to benefit from the programme. Greater cohesiveness and co-operation among members could also be ensured, because during each session they shared their thoughts and opinions and were able to move together through the various stages of the group work process (Du Preez, 1980:122).

Duration of the group should be related to the purpose of the group and the particular needs and capacities of the members (Northen, 1988:140). It is preferable that meetings take place at the same time in order to avoid confusion and to increase the attendance rate. In educational settings, terms or semesters are natural division points that must be considered when composing groups. All of the groups were short-term, meaning that they met for a period of less than three months (Garvin, 1997:70). The eight group meetings were fitted into the second term, so that smooth transition from

one group phase to the next could be assured (Strydom, 2002:100). The groups met once a week at a set day of the week. Most meetings were scheduled during a school period, while five groups had their meetings in the evening.

The time allowed for the duration of meetings should be based on the time required for an opening, to enable the work to be completed and an ending period (Northen, 1988:143; Preston-Shoot, 1987:43). Most groups met for one hour to provide enough time for refreshments, scripture reading, ice-breakers, group discussions, role-plays and other group activities.

The group should have a permanent meeting place as this facilitates the group members' sense of group identity and continuity (Northen, 1988:144). Each group had their own venue, either a classroom, sitting room or outside. The classrooms and sitting rooms were ideal for the showing of videos and big posters, but were too large to create a cosy atmosphere. While outside meetings were more intimate and informal, electrical appliances were not available and privacy could not always be guaranteed. The groups sat on chairs or on the floor in a circle to maximise communication.

The Social Group Work Process

It takes time for a collection of people to develop into a group that becomes an instrument through which its members may achieve positive gains. As a group develops, differences occur in the behaviour of the members and in the structure and functioning of the group. Although change in any group is a continuous, dynamic process, it is useful to think of a group as moving through a number of phases or stages in a life cycle. The identification of phases in a group's development enables a worker to ascertain where a group is in its development and what needs to be done to help it move forward toward the achievement of its aims and goals (Northen, 1988:173). The group work process has a vertical and a horizontal approach, which respectively comprise the components and the phases. The components include motivation, structuring, climate, norms, control, cohesion, relationships and programme planning, while the phases include the preparation, beginning, exploration, utilisation and termination phases (Du Preez, 1986:131; Gazda, Ginter & Horne, 2001:50-52; Jacobs, Masson & Harville, 2002:29-31; Toseland & Rivas, 2005:88-93).

The following table gives a generalised summary of the group work process as it was manifested in this research study:

Table 1: Summary of the group work process

	Preparation Phase I Joint Interview	Beginning Phase Session 1 and 2	Exploration Phase Session 3	Utilisation Phase Session 4 – 7	Termination Phase Session 8
Motivation	The guidance teacher and student asked the learners to become group members. The learners had the opportunity to explore their reservations before deciding whether to join.	Members were prepared to become involved after they learned about the content of the programme and the purpose of the group.	Members were prepared to continue, because they felt that the worker and the members were interested in them and that they could benefit from the group experience.	Members were prepared to go into action and change their attitudes and behaviour.	Members were encouraged to maintain improvements in their lives.
Structuring	Members were informed about the nature of group work. Practical arrangements such as the place and time were made.	The purpose of the group and the functioning thereof was discussed. Each member had the opportunity to identify own goals. Members were asked what their expectations of the group were and it was written down. A group work contract was drawn up.	Practical arrangements were finalised and each member received a copy of the programme, specifying dates and topics.	Members and the worker shared responsibility for the functioning of the group.	The programme was evaluated. Members were asked whether their expectations had been met. Future perspectives received attention.
Climate	Members were filled with anxiety, fear and expectations.	The climate was tense because members were uncertain of what was expected of them.	The atmosphere was more relaxed as members accepted each other and started working together.	The atmosphere was characterised by harmony, which included congeniality, fellowship, friendship and co-operation. Members were prepared to talk about their personal problems.	Members were ambivalent because they were glad about the aims that they achieved, but sad because they had to terminate.
Norms	Members were informed that the group was based on Christian values.	The group spoke about the accepted norms and values of the community and the group.	Members started to recognise the accepted norms of the community and the group, and made them their own.	Members acted according to the group norms and ostracised those who did not conform.	Members were encouraged to conform to the accepted norms and live accordingly.
Control	Members accepted the authority of the worker.	The group workers were in control of the groups, because members were uncertain and reserved.	Control was more formal and the worker was responsible for the functioning of the group.	Control was shared by the worker and the members. It was more informal as members accepted their own responsibility.	Control was informal, and members encouraged each other to persevere with the changes in behaviour.
Cohesion		Members were unattached individuals.	Members realised their commonalities, interdependency and mutual	Cohesion was strong and members talked more about 'we' and 'us'. They	Members were again unattached and were ready to live their own lives.

Relationships	A relationship between the worker and each member started to develop.	Members were inclined to direct their communications to the worker.	responsibility. They started to move closer to each other. They were willing to share things. Members started to communicate more with each other as they explored the situation. They became less dependent on the worker.	protected each other from outside influences.	
Programme planning	Members were informed about the purpose of the group and the proposed content of the programme.	The worker helped the members to plan the programme by giving suggestions.	Members were prepared to become involved in the planning of sessions.	Members worked together to achieve goals. While the communication among members increased, it decreased between members and the worker. Members were prepared to give their full co-operation and support for the implementation of the programme.	The relationships in the group was positive, but members realised that they had to terminate. The programme was evaluated and the members gave suggestions for alterations and changes to the programme. The success of the programme was measured.

The Programme

Goals of the programme

The programme strives to prepare pupils to deal effectively with physical, emotional and social demands that will be made upon them throughout life, as individuals and as members of families and communities. It comprises the teaching of knowledge and skills that will facilitate the development of the following:

- A positive self-esteem, including self-knowledge and self-assertion.
- Meaningful relationships and open communication networks.
- Successful handling of conflict.
- An ability to take well-considered and responsible decisions in relationships with the opposite sex.
- Avoidance of substance abuse.
- A thorough knowledge base of the nature of HIV/AIDS, including prevention methods.

Important rules for group workers

It was important that the group workers received training while they presented the programme. In view of the use of small groups to implement the programme, the observance of the following rules were regarded as important:

- There should be a climate of respect, trust and acknowledgement of the differences between people.
- The group worker should take time to establish good relationships in the group.
- The group worker should remember that each member has individual needs and problems.
- The group members should feel safe to express themselves freely and to explore ideas without the fear of criticism and reprisal.
- The group members have the right to expect that what they say will remain confidential.
- The group worker must be well prepared and well organised.
- The sessions should be more in the form of discussions than of lectures. The sessions regarding information on HIV/AIDS and substance abuse have much factual knowledge, and group workers should use posters, pamphlets, photocopies of the important facts which can be handed out, videos and other visual materials to convey the information.
- The group worker should not tell the group members what to do; they should be allowed to make up their own minds.
- The group worker should involve the members by asking them to do certain chores, such as reading from the Bible, summarising, writing on the posters or serving refreshments.
- During the sessions the group worker should refer to the aims of the session as well as to the aims of the programme.
- At the beginning of each session, there should be Bible reading, an ice breaker and a summary of the previous session to refresh the minds of the students.
- At the end of each session a summary and evaluation of the session, as well as planning for the following session should take place.
- Refreshments should be provided at each session.

An overview of the programme

The following table gives an outline of the topics discussed, with an indication of the programme media and content of the meeting:

Table 2: An overview of the programme

Sessions Topic	Programme Media	Content
1. Orientation	Group discussion Completing measuring scales Signing contracts Choosing a group name	Getting to know each other Goals of group work Importance of teamwork Administrative aspects
2. Self-esteem	Group discussion Drawing an eco-map Collage	Self-examination Enhancement of self-esteem Developing leadership qualities
3. Communication	Group discussion Demonstration	Effective communication Learn interpersonal skills
4. Handling of conflict	Group discussion Scenarios	How to handle conflict
5. Relationship with the opposite sex	Group discussion Scenarios Role-play	Difference between genders Dangers of early sex
6. Substance abuse	Group discussion Pictures Samples of drugs	Description of drugs Danger of substance abuse
7. Knowledge on HIV/AIDS	Group discussion Video Photos Posters Pamphlets Role-play	Description of HIV/AIDS Stages of infection Modes of transmission
8. Closing session	Group discussion Completing questionnaires Certificates Farewell party	Summary Evaluation

Content of the programme

Following is a more detailed description of the content of the different sessions:

Session One: Orientation

The members introduced themselves and name tags were written. Identifying particulars of the members were taken and the register marked. The members completed questionnaires. They were then asked what they expected from the group, and their thoughts and expectations were written down on a clip-board. The aims and content of the programme was discussed so that any uncertainties could be sorted out. The group decided where, when and how often the group sessions should occur.

The group members had to sign group work contracts during the first meeting. A group work contract is a form of explicit agreement between the group worker and the members, and designed to clarify the position, needs and expectations of all those involved. (Corey, 2000:367). The group work contract, which was signed by the members and the group workers, included aspects such as commitment, confidentiality, participation and respect for one another.

Session Two: Self-esteem

The group discussed the importance of knowing oneself (Robertson & Simons, 1989:135). The members drew an eco-map (Cournoyer, 1996:43) and made a collage of their current situation. Referring to the eco-map and collage, they spoke about their likes and dislikes, their strengths and weaknesses. Every group member had to say how he/she would like to be in the near future.

The group discussed the meaning of self-esteem, referring to the difference between a low and a healthy self-esteem. Factors, such as physical appearance, intelligence, background and friendship

that influence self-esteem, were discussed. Ways in which the self-esteem could be improved, were discussed (Strydom, 2002:216-220). The group worker explained the difference between passive, self-assertive and aggressive behaviour, and encouraged the members to be self-assertive (Cournoyer, 1996:38). Leadership qualities were discussed and the members were asked to evaluate their own leadership qualities (Keech, 1987:13).

Session Three: Communication

The members played the game of ‘telephone’ to illustrate communication. The group discussed effective and ineffective means of communication (Wessels, 2003:155-161). The best ways of talking and listening were discussed (Hopson & Scally, 1984:94-95; Kroon, 2000:253). Every member had to demonstrate his/her skills in communication with a partner. To illustrate their observation skills, two members had to sit back to back while writing down what each other’s clothes and accessories looked like. Feed-back was given.

Session Four: Handling conflict and stress

The group members thought about different conflict situations which occurred in their lives. The different conflict styles were then discussed, namely to ignore the problem; to react tit for tat; the win-lose situation and the win-win situation. (Zastrow, 2006:165-169). The first three styles were not ideal, as there was an absence of good communication, which could lead to feelings of anger and depression. The win-win situation was then discussed with emphasis on listening, the ‘I’ message, giving both parties time to talk, evaluating strengths and weaknesses of the solutions and implementing the best solution.

The group was given a few case studies where conflict situations were present and instructed to practise the win-win situation.

Session Five: Relationship with the opposite sex

For the session, the groups were divided into girls and boys. The two groups discussed separately what they like and dislike in the opposite sex and then gave feedback to the whole group. The group then discussed the differences between girls and boys on a physical, emotional and social level. Role-play was used to act out the different parts.

The group discussed the dangers of early sexual experiences, using a few scenarios. Scenarios ranged from stories where a girl feels guilty after having sex, where a girl falls pregnant to where a boy has sex while under the influence of alcohol.

Session six: Substance abuse

The group worker supplied information on drugs commonly used and showed pictures and samples of drugs (Van Heerden, 2006:101-111). The worker talked about the effects of substance abuse. These included aggressiveness, depression, accidents, and deterioration in relationships and in personal appearance. The group paid attention to the causes of substance abuse, such as the availability of drugs, unhappy family circumstances and peer pressure.

The group discussed ways to prevent substance abuse. Open communication, education, anti-drug campaigns, and the development of a solid value system are some of the strategies. Lastly the group spoke about the best action to take when you know that someone is abusing substances.

Session Seven: Knowledge on HIV/AIDS

The group watched a video and saw posters to gain information on HIV/AIDS. The group discussed the mode of transmission and ways of preventing the spreading of HIV/AIDS. The worker informed them on the treatment of HIV/AIDS. Pamphlets were handed out to illustrate the seriousness of the topic.

The learners did a role-play to demonstrate the prejudices people hold against people living with HIV. The learners were encouraged to develop attitudes of non-discrimination towards people living with AIDS.

Session Eight: Closing session

Every member completed the questionnaire for the after-measurement. The most important elements of every session were summarised and evaluated. It had to be determined whether the members' expectations were met. Certificates and photographs were handed out. A farewell party was enjoyed.

Evaluation of the Programme

Programme evaluation is primarily concerned with assessing the effectiveness of programmes in attaining their formal goals. The two types of questionnaires, which were completed by the learners, will now be discussed.

Measurement by the single system

This measuring scale was designed to ascertain the way the pupils felt and thought about certain aspects in their lives, which the programme had addressed. The measuring scale contained 43 questions and was divided into six sections, which corresponded with the contents of the six sessions. The sections were self-esteem, communication, handling of conflict, relationship with the opposite sex, substance abuse and knowledge on HIV/AIDS.

The Likert format is associated with a question format that is frequently used in contemporary survey questionnaires (Rubin & Babbie, 2001:230). Utilising this format, the respondents in the research study were presented with statements in the questionnaire and then asked to answer according to a five-point scale. The scale could be seen as follows:

1 = Strongly agree; 2 = Agree; 3 = Neutral; 4 = Disagree; 5 = Strongly disagree.

In order to insure consistency in the measurement of the respondents' attitudes and beliefs, the values of the scale had to be reversed in some instances. The numbers of the questions that had to have a reverse score were mentioned at the bottom of the questionnaire. The scale for these questions could be seen as follows: 1 = 5; 2 = 4; 3 = 3; 4 = 2; 5 = 1.

The reverse scores were attributed to the concerned questions and the scores of all the responses were added. In other words, each respondent was assigned an overall score that represented the summation of the scores he received for responses to the individual items. A lower score during the after measurement indicated an improvement.

The natural measurement to consider when interpreting any differences is called the standardised difference. In other words, it is the difference between the two means divided by the standard deviation. Let μ_1 and μ_2 represent the means of two populations, while σ represents the standard deviation. The standard difference (δ) is as follows:

$$\delta = \frac{\mu_1 - \mu_2}{\sigma}$$

or

$$\delta = \frac{Mean_a - Mean_b}{Max(Std_a, Std_b)}$$

This value (δ) is also known as the effect size of the difference in population means. Cohen (1988) and Steyn (1999:3) provide the following guidelines for the interpretation of the results:

- $\delta = 0,2$: small effect, which means that if it was new research, the experiment or research study should rather be repeated in order to make sure that there is an effect. In other research such a result would not be considered as significant.
- $\delta = 0,5$: medium effect, which can be observed and can indicate a significance. A better planned experiment or research study may provide a more significant result.

- $\delta > 0,8$: large effect, which means that the results are significant and of practical value. Remember that δ can also be negative as $\mu_1 < \mu_2$. Therefore the guidelines apply to the absolute value of δ .

According to Strydom (2005:144-146) the information that is obtained by means of the single system, should be presented in the form of tables and graphs. The results of the measuring scales will be presented by means of a table.

Table 3: Mean measurement of the group members' attitudes, beliefs and level of knowledge on certain life skills

Topic	Time	Mean	Standard Deviation	δ value
Self-esteem	Before	2.85	0.44	0.59 *
	After	2.59	0.44	
Communication	Before	2.75	0.61	0.77 *
	After	2.28	0.53	
Handling of conflict	Before	2.35	0.52	0.62 *
	After	2.03	0.47	
Relationship with opposite sex	Before	2.13	0.62	0.53 *
	After	1.80	0.49	
Substance abuse	Before	2.35	0.49	0.33
	After	2.19	0.47	
Knowledge on HIV/AIDS	Before	2.04	0.55	0.20
	After	1.93	0.40	

** Large effect
* Medium effect

Considering that a lower score during the after measurement indicates an improvement, it is obvious that the pupils' attitudes, beliefs and level of knowledge in all the measured areas changed for the better. The improvements were, however, not to a great extent. This could be expected as the group members on the whole did not experience serious problems and the groups were more growth orientated than therapeutic. Strydom (1990:294) also found in her research with adolescent girls that there was an improvement, but also to a small extent, in the girls' attitudes and beliefs in certain areas after the presentation of a programme. The reason being that the first measurements, in the absence of major problems, were already low. Thus, there was little room for improvement.

From the table it is obvious that the learners had improved to a medium effect on their self-esteem, communication skills, handling of conflict and their relationship with the opposite sex. The improvement in the self-esteem can be attributed to the fact that throughout the programme emphasis was placed on the importance of a positive and healthy self-esteem to deal with issues. The group workers also went to a lot of trouble to involve each member in the group discussions, role-plays, scenarios and demonstrations. During the sessions on communication and handling of conflict, the group members had the opportunity to learn and practise new skills. The discussion on the relationship with the opposite sex helped the members to understand each other better, and to act accordingly.

The learners' attitudes and knowledge regarding substance abuse and HIV/AIDS improved to a lesser degree. The small improvement in these two areas could be expected, as the learners had already received education from their schools on the two topics. It appears as if the members' knowledge regarding HIV/AIDS is relatively good, but this could be misleading because it still leaves a wide margin of ignorance.

In analysing the results of the research study, the researcher should determine whether it was really the independent variable (the programme) that was responsible for the change in the dependent variable (attitudes of learners) (Bloom & Fischer, 1982:18). In this research study the researcher had to make sure that there were no external factors present that could influence the dependent variable. For this reason the group members were homogeneous with regard to age; the group leaders received the

same training; a similar programme was presented in each group; the learners did not participate in any other programmes, and the questionnaires were completed under similar conditions.

Measurement by means of an evaluation questionnaire

At the last session, the group members were asked to evaluate the programme according to the following questions:

- What did you learn from the programme?
I learned to accept myself and feel more confident
I am not shy anymore
I learned to talk and listen to people.
I learned to communicate better with people.
I learned to handle conflict.
I learned to observe better.
I was able to develop my leadership skills.
I learned to work in a team
I understand the opposite sex better
I received information on substance abuse and HIV/AIDS.
- What were the positive aspects of the programme?
The refreshments at the end of the session were a bonus.
The student was very kind
I enjoyed the session
- What were the negative aspects of the programme?
I would have liked more sessions

Report writing

The group workers had to write a report after each session, in which the following aspects were reported on: preparation of worker, beginning, utilisation and termination phases, evaluation of the session, evaluation of individual members, evaluation of worker and planning for the next meeting.

This was for training purposes as well as to determine the positive and negative aspects of the session in order to make improvements.

Discussion

According to the results of the single system measurement as well as the evaluation questionnaire, all the goals of the programme were met. The group process provided the learners the opportunity to work as a team, and to share their needs and problems. Meaningful relationships were established. The programme promoted a sense of personal competence. The session on self-esteem helped the learners to identify their strengths and weaknesses, and feel good about themselves. Role-play and the discussions on case studies helped them to communicate better. They are now able to handle conflict situations as they were taught techniques in this regard.

The session on the relationship with the opposite sex gave them more confidence as they now know what to expect from one another. They were taught to take well-considered and responsible decisions in this type of relationship. They were also helped to improve the required knowledge base as they received information on substance abuse and HIV/AIDS. This knowledge helps them to take informed decisions and to avoid pitfalls.

Recommendations

The following recommendations can be suggested:

- Third year social work students should continue with group work at schools as it holds benefits in for both students and pupils.
- The students should be well trained to present the programme.
- A variety of teaching aids should be utilised to make the programme interesting.
- In order for the life skills training to be more beneficial, group members should be younger. Eleven and 12 year old learners are already confronted with problems, such as substance abuse, sexual relationships and HIV/AIDS.

References

- [1] BABBIE, E. 2007. The practice of social research. Toronto: Wadsworth.
- [2] BECKER, L. 2005. Working with groups. Cape Town, South Africa: Oxford University Press.
- [3] BLOOM, M & FISCHER, J. 1982. Evaluating practice: guidelines for the accountable professional. New Jersey: Prentice-Hall.
- [4] BLOOM, M., FISCHER, J. & ORME, J. G. 1999. Evaluating practice: guidelines for the accountable professional. London: Allyn & Bacon.
- [5] COHEN, J. 1988. Statistical power analysis for the behavioural sciences. Hillside, New Jersey: Erlbaum.
- [6] COREY, G. 2000. Theory and practice of group counselling. Pacific Grove: Brooks/Cole.
- [7] COREY, M.S. & COREY, G. 2002. Groups: process and practice. Pacific Grove: Brooks/Cole.
- [8] COURNOYER, B. 1996. The social work skills work book. Boston: Brooks/Cole Publishing Company.
- [9] CRESWELL, J.W. 2003. Research design: qualitative, quantitative and mixed methods approaches. Thousand Oaks: SAGE Publications.
- [10] DU PREEZ, M.S.E. 1980. Maatskaplike groepwerk: teorie en praktyk. [Social group work: theory and practice.] Johannesburg, South Africa: Keartland Press.
- [11] DU PREEZ, M.S.E. 1986. Maatskaplike groepwerk: teorie en praktyk. [Social group work: theory and practice.] Johannesburg, South Africa: Keartland Press.
- [12] GARVIN, C. D. 1997. Contemporary group work. London: Allyn & Bacon.
- [13] GAZDA, G.M., GINTER, E.J. & HORNE, A.M. 2001. Group counselling and group psychotherapy: theory and application. London: Allyn & Bacon.
- [14] HOPKSON, B. & SCALLY, M. 1984. Lifeskills teaching programmes. No 1. Leeds: Leeds University Printing Services.
- [15] JACOBS, E.E., MASSON, R.L. & HARVILLE, R.L. 2002. Group counselling: strategies and skills. Pacific Grove: Brooks/Cole.
- [16] KEECH, R. 1987. Education for living: a programme for developing self-knowledge and personal relationships. Johannesburg, South Africa: Divaris Stein Publishers.
- [17] KROON, S. 2000. Die ontwikkeling van entrepreneursgerigte ouerskapvaardighede: die taak van die maatskaplike werker. [The development of entrepreneurial parenting skills: the task of the social worker.] Potchefstroom: PU for CHE. (Thesis-PhD.) 309p.
- [18] NEUMAN, W. L. 2003. Social research methods: qualitative and quantitative approaches. London: Allyn & Bacon.
- [19] NORTHEN, H. 1988. Social work with groups. New York: Columbia University Press.
- [20] PRESTON-SHOOT, M. 1987. Effective group work. London: Mac Millan press.
- [21] RAKOMA, L.R.M. 2000. An investigation into the knowledge and attitudes of the community towards people living with HIV/AIDS. Mmabatho: University of North West. (MA (SW)-Dissertation.) 190p.
- [22] ROBERTSON, J.F. & SIMONS, R. L. 1989. Family factors, self-esteem and adolescent depression. *Journal of Marriage and the Family*, 51(1):125-138.
- [23] ROYSE, D. 2004. Research methods in Social Work. Pacific Grove: Brookes/Cole.

- [24] RUBEN, A. & BABBIE, E. 2001. Research methods for social work. Boston:Books/Cole Publishing Company.
- [25] STRYDOM, C. 1990. Die gebruikmaking van maatskaplike groepwerk in die uitbouing van die adolessente dogter se selfbeeld. [The utilisation of social group work in the enhancement of the adolescent daughter's self-image.] Potchefstroom: Potchefstroom University for CHE. (MA-Dissertation.) 325p.
- [26] STRYDOM, C. 2002. Evaluation of an HIV/AIDS programme for students a tertiary institution with emphasis on peer group involvement. Potchefstroom:PU for CHE. (Thesis-PhD.) 421p.
- [27] STRYDOM, C. & WESSELS, C.C. 2006. A group work programme to support and empower non-professional caregivers of people living with AIDS. *Health SA Gesondheid*. 11(4): 3-21.
- [28] STRYDOM, H. 2005. Single-system design. (In De Vos, A.S., Strydom, H., Fouché, C.B. & Delpont, C.S.L. Eds Research at grass roots: for the social sciences and human service professions. Pretoria, South Africa: van Schaik Publishers. p. 144-156.)
- [29] STRYDOM, H. 2005. Sampling and sampling methods. (In De Vos, A.S., Strydom, H., Fouché, C.B. & Delpont, C.S.L. Eds Research at grass roots: for the social sciences and human service professions. Pretoria, South Africa: van Schaik Publishers. p. 192-203.)
- [30] STRYDOM, H. & STRYDOM, C. The development of an HIV/AIDS prevention programme for undergraduate students. *The Social Work Practitioner-Researcher*, 18(3):298-316.
- [31] TOSELAND, R.W. & RIVAS, R.F. 1998. Group work practice. Massachusetts: Allyn & Bacon.
- [32] TOSELAND, R.W. & RIVAS, R.F. 2005. An introduction to group work practice. Massachusetts: Allyn & Bacon.
- [33] VAN HEERDEN, E. 2006. Life skills: my journey, my destiny. Pretoria, South Africa: Van Schaik Publishers.
- [34] VAN TONDER, J. F. 1994. Die rol van die skoolmaatskaplike werker in lewensopvoeding. [The role of the school social worker in lifeskills education.] Potchefstroom: PU for CHE. (MA-Dissertation.) 325p.
- [35] WESSELS, CC 2003: Die opstel en evaluering van 'n maatskaplikewerk-bemagtigingsprogram vir gesinne van MIV-positiewe/VIGS-pasiënte. (The development and evaluation of a social work empowerment programme for families of HIV-positive/AIDS patients.) Potchefstroom Campus. (Thesis - PhD.)
- [36] ZASTROW, C.H. 2006. Social work with groups: a comprehensive workbook. Belmont: Thomson Brooks/Cole.

Necessity of the Enterprise Risk Management for Airline Management: ANP-Based Approach

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Abstract

Airlines are exposed to risk which may effect operations, customers, corporate value, security and safety. Risk can also be introduced to an enterprise through air transportation industry-based and organization-based changes each of which may also bring changes in the type of risk. These present and raising risks main reason of growing importance of enterprise risk management (ERM) implementation in the airlines. ERM becomes focus point in the successful airlines across the world. This interest should be airlines in the Turkey if they want to be in the hard airline market conditions. This study aims at the introducing to four aspects of ERM implementation: benefits, opportunities, risks and costs that call attention to the ERM implementation in the airlines as managerial approach at the Turkey. Airline manager's consideration will enhance and increase about importance of ERM by this study. Analytic Network Process (ANP) is used as a qualitative technique for ERM implementation decision at airline management.

Keywords: Airline Management; Analytic Network Process; Enterprise Risk Management

1. Introduction

As the dynamics of the air transportation market, business environment and changes in regulatory requirements for airlines increase in their complexity, it becomes harder to plot the right course for continued success. The abilities to identify and to adapt to changes are key success factors for the leaders of tomorrow. In the light of this, airlines are driven more than ever by the desire to protect their reputation and manage their risks effectively. ERM is provides a framework for airline management to deal effectively with uncertainty and associated risk and opportunity, thereby enhancing its capacity to build value. ERM does not operate in isolation in a corporation, but rather is an enabler of the management process (Kucuk Yilmaz, 2008).

Deregulation of air markets, combined with some other factors, has contributed to the growth and also volatility of demand in aviation markets. Additionally, the existence of a more competitive environment has also changed the industry, airlines and airports need to be more efficient in order to survive in the market. The capacity is rapid change by volatility. In general terms, it is the average year-to-year variation in traffic. Greater volatility of traffic means greater risk. If the clientele for an airport is uncertain, so are the revenues. The exact relationship between traffic and revenues depends on the current agreements with airlines and other users. The overall effect is nevertheless clear. Greater risk means higher costs of capital, higher interest charges (R. de Neufville and J. Barber, 2001).

Air transportation is a key strategic asset in that it provides access to markets and thereby enables the economic development of nations and regions (Bruno and Clarke, 2003).The airline industry has been through more structural changes in the past decade than most. The airline industry

faces a number of risks in today's climate. Airlines are operates in a very competitive environment. Airlines face substantial strategic, financial, operational and hazard risks.

Airlines are exposed to the risk of catastrophic loss. Airlines are operates to the highest standards of safety and security and are work closely with all the relevant authorities to ensure that customer safety is paramount at all times. The airline industry is characterized by low profit margins and high fixed costs. The air transport business is sensitive to both cyclical and seasonal changes. Competition in the sector is intense and the decline in average ticket prices has been considerable due to over-capacity and the changed market situation (Kucuk Yilmaz, 2008).

The Airline Risk Management Survey 2005 was launched with the aim of gaining a better understanding of the issues and trends within airline risk management and to establish some industry benchmarks against which airlines can measure and monitor their own performance. For research breaking new ground among the airlines, the response rate was positive [degrees] 51 airlines took part, accounting for 41% of the world's top 200 airlines by total revenue (Airline Business, 2006). The study shows that risk management has a high profile within airline businesses: not only do two-thirds of airlines have a company-wide risk management strategy, which, on average looks just over three years into the future, overall responsibility for risk is taken at boardroom level in 75% of airlines, with the chief executive's office making the decision whether to avoid, retain or transfer risk in 45% of airlines.

Mercer Management Consulting analyzed aviation industry risks for the 10-year period from April 1991 to April 2001. The primary risks facing the industry fall into four categories: hazard, strategic, financial and operational. Overall, failure to manage these risks resulted in the evaporation of \$46 billion in shareholder value. Interestingly, hazard events, including safety, liability and war, were the least likely to result in value loss. Strategic and financial risks were much more prevalent, accounting for nearly 75% of value loss events during the period (Zea, 2002).

The study is deal with solving “is ERM important to airline management and should ERM apply in the airline?” main problem. In this study, ERM effects are determined and listed in the 4 main categories as benefits, opportunities, costs and risks. They are ANP merits. ANP-based approach is selected to problem solving in this study. ANP is considered appropriate decision making tool for the ERM implementation decision. In recent years, there has been an increase in the use of ANP in multi-criteria decision-making problems. In the selection of a provider, the criteria are of both the types, subjective and objective. These criteria also have some interdependencies, which cannot be captured by the popular AHP method. Therefore, instead of using the commonly used AHP approach for solving such types of problems, I recommend the use of an ANP-based model for the decision making of ERM implementation in the air transportation. Prior case studies: Lufthansa, Continental, Delta, ANA, JetBlue, Finnair and SilverJet ERM practices are considered for the determination of ERM importance to airline management beside literature review and research. Also, many interviews are achieved with airline managers in Turkey.

The factors of ERM importance are not independent of each other, and moreover, there may even be a relationship among some factors. In this study, importance of ERM and its implementation decision is solved using the analytical network process (ANP), which allows measurement of dependency among ERM factors. At the same time, the ANP method is used in order to determine the factor weights of the dependency or independency and their effects on the selection of an alternative strategy.

This article divided into three sections. The following section describes with research problem and the proposed ANP model application. Also, determined criteria are given in this section. The performed ANP model is explicitly given in this section. In this section, the results, their interpretation and the implementation of the decision are presented. The overall conclusion is given in the last section.

2. Research Methodology

In this study ANP serves as the decision analysis tool and we implemented it using Super Decisions, a sophisticated and user friendly software that implements ANP (Saaty, 2001a). ANP makes it possible to deal systematically with the interactions and dependencies among the factors in a decision system (Bayazit and Carpak, 2007).

Criteria of the research were based on the results of literature search and analysis of guidelines published by various organizations about ERM framework. Firstly, in this section, I mention the ANP methodology and considered criteria of the effecting to decision making of ERM implementation. The importance of ERM implementation decision to organization explained that dividing into four main groups such as benefits, opportunities, costs and risks. The reason of this division is shaping according to the BOCR approach in the ANP. Detailed and holistic assessment is made by these criteria about demonstration to importance of ERM. These criteria are used in application of the proposed ANP model.

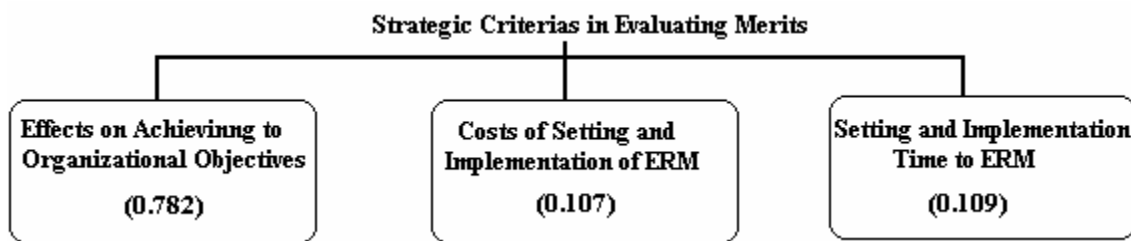
The study's problem is very complicated since it is include "importance of ERM and ERM implementation decision to airline management". Also interrelations exist to between determined factors in this decision. They are included many qualitative measures. For these reasons ANP is selected as methodology of this study. ANP model is defined 4 steps in this study. They are;

- i Definition of strategic criteria and determining of B, O, C R weighing
- ii Determining criteria to BOCR and performing pair-wise comparisons
- iii Determining alternatives and calculation of it's weighing
- iv Providing of final priorities

The ANP-based framework seems to be suitable to identify the relative importance of different factors on ERM implementation, since there is feedback and dependence among them. In this part of study, I used the ANP decision model (ANP software, 2007).

Step i. Definition of strategic criteria and determining of "B, O, C, R" weighing (BOCR weight development): The strategic criteria I used to determine the

Figure 1: BOCR merit criteria



priorities of the BOCR merits are shown in Figure 1.

These weights are obtained by using the Rating approach of AHP (Saaty, 2001). The strategic criteria are costs of setting and implementation of ERM, setting and implementation time to ERM, and effects on achieving to organizational objectives. These are the main criteria needed when a company makes a decision about implementing ERM. They are weighting as following rating:

- Costs of setting and implementation of ERM: 0.107
- Setting and implementation time to ERM: 0.109
- Effects on achieving to organizational objectives: 0.782

The four merits of: benefits, opportunities, costs, and risks were rated according to five intensities (very high, high, medium, very low, low) listed below along with their priorities. The BOCR priority calculations are summarized in Table-1 are used in the main top-level structure to synthesize results.

Table 1: Priority ratings for the merits: benefits, opportunities, costs and risks

	Priorities	Cost of Setting and Implementation of ERM 0.107880	Setting and Implementation Time to ERM 0.109803	Effects on achieving to organizational objectives 0.782317
Benefits	0.419635	very low	very low	very high
Opportunities	0.278885	low	low	high
Costs	0.171645	very high	very high	very low
Risks	0.129835	high	high	very low

Step ii. Determining criteria to BOCR and performing pair-wise comparisons (Model construction): The overall objective of this ANP model is to evaluate the ultimate relative importance of different factors that impact the implementation of ERM. The factors that will be used to evaluate the alternatives were developed earlier in the paper. Two alternatives, “ERM is important to airlines and airlines should apply ERM” and “ERM is not important to airline and airlines should not apply ERM” are determined and will be evaluated according to these factors. There are four feedback networks—one for each of four general controlling factors (the merits of the decision): benefits, opportunities, costs, and risks. First, the factors listed above that affect ERM implementation are classified into benefits, opportunities, costs, and risks. Then they are grouped into clusters in the networks under their respective merits. The clusters in the all merits network are: strategic, operational and financial benefits. There is an alternatives cluster in every network. A graphical summary of the overall ANP model is shown in Fig.-2.

Step iii. Determining alternatives and calculation of its weighing (Formulating the interdependencies and performing pair-wise comparisons between clusters/factors): I then formulated interrelationships among all the factors. The question asked when formulating these relationships was: With respect to a specific factor, which of a pair of factors influences it more? To establish the interdependencies in the networks, pairwise comparisons among all the factors are conducted and these relationships are evaluated. The next step is to weigh the clusters.

All cluster each in model (B, O, C and R) connected with alternatives cluster. So, any factors are not connected the other factors in other clusters. The cluster matrix for the benefits network is derived making pairwise comparisons of the clusters. For example, the cluster of financial effects the cluster of operational (0, 25);. The cluster of strategic affects the cluster of financial (0, 50). The cluster of alternatives is influenced by all the clusters.

Step iv. Providing of final priorities (Constructing supermatrix and obtaining the overall outcome): Table 2., 3. and 4. is illustrated of unweighted, weighted and limit supermatrix of the factors. Table 3 shows the pair-wise comparisons of the factors. The weighted supermatrix (Table-3) is obtained by weighting the blocks in the unweighted supermatrix by the corresponding priority from the cluster matrix. Table 4 shows limit matrix of model application results. The entries of the weighted supermatrix itself give the direct influence of any one factor on any other factor. The weighted supermatrix has some zeros indicating no interaction. Table 5 shows the stable and global priorities of all the factors. From it the priorities of all the factors and alternatives are extracted and normalized.

Figure 2: Proposed ANP Model

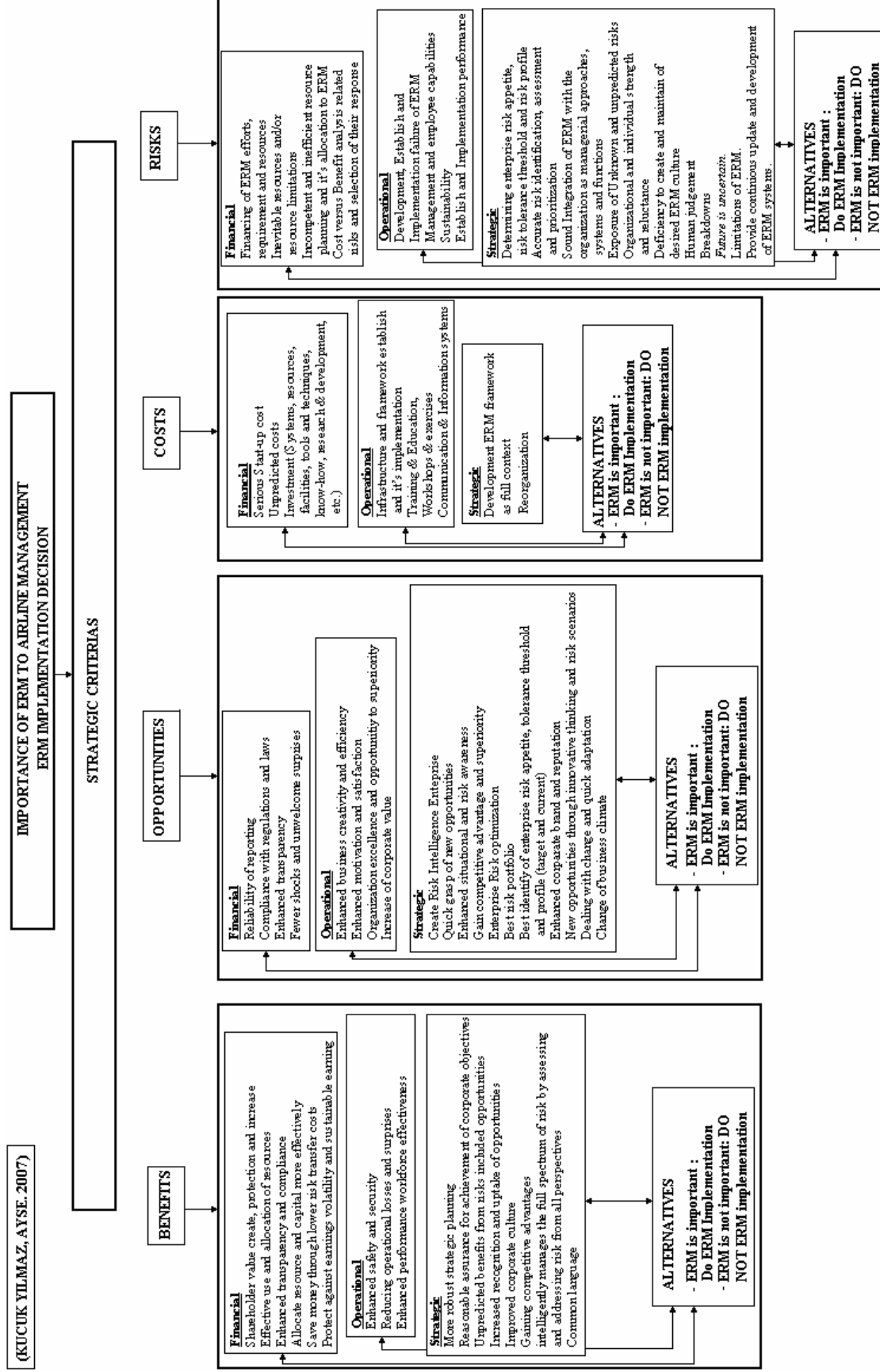


Table 6: Final Ratings Table






Graphic	Ratings Alternatives	Total	Ideal	Normal	Ranking
	Benefits	0.8144	1.0000	0.4196	1
	Costs	0.3331	0.4090	0.1716	3
	Opportunities	0.5413	0.6646	0.2789	2
	Risks	0.2520	0.3094	0.1298	4

Table 7: Overall Results

Name	Graphic	Ideals	Normals	Raw
Do not Implementation of ERM		-0.302580	-0.232293	-0.193213
Implementation of ERM		1.000000	0.767707	0.638551

3. Conclusion

The paper is presented a method for applying ANP in “determination of ERM importance and decision-making of ERM implementation at airline management” problem. In this paper, I have developed a framework based on ANP to identify the degree of impact of factors affecting ERM implementation decision. I used the ANP for decision making with dependence and feedback based on four major factors as mapped to Saaty’s benefits, costs, opportunities, risk (BOCR) model. ANP is a new methodology that incorporates feedback and interdependent relationships among decision attributes and alternatives. It leads to fresh insights about issues.

Based on the model I found that in airlines, “importance of ERM and decision for implementing ERM” were 76.7% favorable as opposed to “ERM is not important and decision of not implementing ERM”. This article is contributed to the field of ERM research in two important ways. Firstly, there is given the conflicting results on importance of ERM implementation as its benefits, opportunities, costs and risks. I am provided additional evidence of regarding this problem by case studies: ERM implementation samples from airlines. Second, this analysis is provides a better understanding of the source of potential value from ERM by airline. Also, ANP based approach is used in field of ERM. The study results are showed that ERM is very important for airline management. Therefore, Airline managers should apply to ERM in their management system. ERM implementation helps for airline managers to discover their own abilities, to become better at controlling their future and becoming more self-assured. If airline managers are unwilling to take risks, they will never realize their potential for self-fulfillment and self-realization.

This research contributes to both ERM knowledge and ANP implementation in this field. From ERM perspective I propose an ANP-based framework for assessing the impact of different factors on ERM implementation. ANP is capable of dealing with all kinds of feedback and dependence when modeling a complex decision environment. ANP deals with uncertainty and complexity and provides insights that other, more traditional methods could miss.

References

- [1] ANP software program (2007). [Online] Available: http://www.superdecisions.com/anp_intro.php3 (February 2007)
- [2] Bayazit, O. & Karpak, B. (2007). An analytical network process-based framework for successful total quality management (TQM): An assessment of Turkish manufacturing industry readiness. *Int. J. Production Economics*, 105, 79–96.
- [3] Kucuk Yilmaz, Ayse (2008). Airport Enterprise Risk Management Model: A Study on Business Management and Airline Management, VDM Verlag (January 30, 2008)
- [4] Miller, B., & Clarke, J., (2003). Options in air transportation infrastructure development. *AIAA's 3rd Annual Aviation Technology, Integration, and Operations (ATIO) Tech* (17-19 November 2003), Denver, Colorado, the American Institute of Aeronautics and Astronautics
- [5] Neufville, R. de & Barber, J. (2001). Deregulation induced volatility of airport traffic. [Online] Available: http://ardent.mit.edu/airports/ASP_papers/volatility%20of%20airport%20traffic.PDF (March 29, 2007)
- [6] Saaty, T.L. (2001). Decision making with dependence and feedback: the analytic network process, *RWS Publications*, Pittsburgh, 23-25
- [7] Zea, Michael. Is Airline Risk Manageable, *Airline Business*, V. 18, No. 4 (APR. 2002), P. 68-70: ILL.

The Use of the Bar Industry as an Accelerator for HIV/AIDS Spread in Tanzania

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Abstract

Some factors related to the organizational set up of the bar industry were studied in selected urban areas in Tanzania. The bar organizational set up was studied so as to establish whether there is any relationship between the bar organizational structure and HIV/AIDS incidence. This was done by researching into the bars of three selected urban areas of Dar es Salaam, Mbeya and Zanzibar. Mbeya was selected because it is one of the most affected areas and it borders Zambia to the south. Dar es Salaam city was selected because it is a commercial city with quite a high rate of infection and Zanzibar was taken as a control with low rates compared to Dar es salaam and Mbeya. Analysis showed that the sampled bar owners prefer to employ women bar maids who can attract customers. It was further shown that some bars owners employ bar maids who are too young to be employed. Coupled with the low rates of remuneration by the bar owners, bar maids do have sex with other men and sometimes without a condom for money. This being the case, the present bar organization can therefore be regarded as a source of HIV/AIDS prevalence.

Keywords: Bars, bar owners, bar maids, condom use, several sex partners, HIV/AIDS

Introduction

Bar industry contributes substantially to the economy in Tanzania. This contribution is attributable mainly to by the bar maids who are the major servers of beer in pubs and local bars. In 2005, for example it was estimated that there were over 4000 bars in Dar es Salaam alone (<http://www.ippedia.com/ipp/observer/2005/07/10/44063.htm>). On the assumption of a conservative average of 8 bar attendants/bar maids per bar, the Dar es Salaam bar sector alone, presently provides employment and sustainable income to more than 100,000 Tanzanians, mainly women. This figure does not include the bar owners themselves, the meat roasters, soup makers and servers and the chips and egg friers, who usually provide complementary services to the bars.

An increase in alcohol production coupled with advertisements efforts in promoting alcohol consumption is likely to lead to a rise in alcohol consumption. The increase in alcohol production does not emanate from beer manufacturing companies only but also from local brewing companies such as *chibuku* (millet brew) and *tikisa* (maize grain brew) and from private brewers of local alcoholic drinks such as *mbege* (sorghum like brew) among the *Chagga* (the natives of Kilimanjaro), *komoni* (a form of grain brew), and the overspread *gongo* or *changaa* which is an illegally distilled gin.

As for the organized brewers of beer, *chibuku* and *tikisa*, there must be a source channel for the consumer. The source channel can be a pub, a *pombe* (alcohol) shop or local bar. In the case of local alcoholic drinks, the source channel is a local bar, *pombe* shop or private hideouts for drinks such as *gongo* or *changaa*. The joints are hereby termed hideouts because this type of alcohol is illegally marketed.

In all these situations, bar maids are used as distributors to the customers who consume the merchandise. Although bar maids contribute substantially to the economy, their profession is one of the most despised in Tanzania. The job of being a bar maid also befalls with a lot of risks. Bar maids are regarded as one of the persons most infected with HIV/AIDS. What is the role of bars/pubs in making the bar maids one of the persons at the highest risk in contracting and spreading HIV thus increasing the national HIV/AIDS prevalence? This paper is aimed at analyzing this.

Bar Industry as a Governmental Revenue Generator

Whereas over-indulgence in drink is a factor in crime, injury and illness, alcohol is also a potentially lucrative source of tax revenue. Alcohol industry has become one of the major generators of government income through taxation. One reason alcohol taxes have played an important role in many developing countries is simply because they provide a good “tax handle”-the importation, production, and consumption of alcohol beverages are reasonably identifiable and reachable by the tax administration.

In Tanzania for example the source channel which are the various breweries are easily identifiable so that taxation can easily be made at the source. The sources are the various brewers such as Serengeti, Tanzania breweries Ltd and so on. Similarly for the local brews, the sources are the *Chibuku and Tikisa* brewers. However for the local brews which are not factory made, it is difficult to keep their track for taxation.

In 1997 for example, alcohol contributed \$ 85 million as tax revenue which was about 10% of all central government revenues whereas in 1999 alcohol accounted for 7 % of total tax revenue (http://www.ias.org.uk/theglobe/97_issue2/zimbabwe.htm). Alcohol taxes are perceived as relatively good revenue producers because consumption of alcohol is relatively “price-inelastic” so that the consumption of alcohol does not change much even if prices increase over reasonable ranges.

All in all, whether factory produced beer or local brew, production of alcohol is for commercial purposes and the contribution of alcohol industry to economic development and employment can not be underestimated. To make the business more lucrative, the bar owners employ bar maids to save the drinks. It is the bar organizational structure this paper needs to address and analyze how the bar organizational set up is associated with HIV/AIDS prevalence.

Bar Industry Expansion and HIV/AIDS Prevalence

According to D. Mung’ong’o (Business Times, Nov 4th, 1994:15) there were about 300 beer selling bars in 1976 which rose to about 3000 in 1994 in Dar es Salaam. It can be seen that an increase in the number of beer outlets goes hand in with the number of bar maids and also the rate of HIV/AIDS infection. For example in 1976 there was no known case of HIV/AIDS since the first person was diagnosed in 1983. In 1995 there were 81498 known cases (NACP,1995) and the rate was increasing annually. This issue of regarding bar maids as the most vulnerable group was also reported in one of the famous newspapers (MTANZANIA March 18th, 1999) which reported that half of the bar maids were HIV positive. Another newspaper (Kombora of Jan 14th –20th 2000) reported that bar maids and prostitutes were in danger of being wiped out by AIDS. This newspaper should have added in its report that the bar maids were in danger of being wiped out not only themselves, but together with their clients and sub-clients. Another newspaper (SAKATA first issue of October 2000) reported that an HIV positive man from Kurasini in Dar es Salaam who was deliberately going with bar maids had been spotted out. Bar owners keep on employing bar maids (may be unchecked) of their choice may be with a hidden agenda such as employing young and attractive bar maids who can attract customers. So clearly it can be seen that the present system of bar organization breeds bar maids who as it stands are at the highest risk of contaminating/spreading HIV/AIDS. The higher the rate of infection among the

bar maids, the higher the HIV/AIDS prevalence rates because the bar maids will automatically transmit the disease to the people they run with.

Multinational companies also invest in producing alcoholic beverages locally. According to the WHO, commercial production of beer grew by more than 50% between 1975 and 1980 in 46 countries, 42 of them being developing countries, with the bulk of the produce consumed locally (Heise, 1991). When it comes to the bar industry itself, in Europe a bar maid is respected.

Why is it that bar maids in Western World are respected whereas the ones in Tanzania are not? In fact some of us who had the privilege to visit the Western world at one time were cautioned not to regard the bar maids as easy catch, the notion we had carried with us from home, contrary to which one could be liable for prosecution. The STRAITS TIMES newspaper of Singapore of February 23rd, 2001 p.22 carried an article showing how Europe was acting to shield youth from liquor advertisements. In that article, aggressive marketing was blamed for a deadly rise in underage drinking. As such 51 countries adopted a resolution to prevent such targeting of the youth. They directed the alcohol industry to promote its products more responsibly. Critics dismissed the notion of industry self-regulation as absurd. They noted that the fight was against the most powerful industry, after armaments in the world. Whereas cigarette advertisements usually portray the ill hazards of smoking by warning users the dangers of smoking cigarettes, alcohol advertisements never portray ill effects of alcohol in the advertisements. Advertisements lead to deception, characteristic of alcoholic trade, which cloak the wisdom of using alcohol to solve other ills. No advertisements warn the dangers of misusing alcohol neither do we see advertisements equating alcohol with other ills if the bar industry is not properly organized. In Europe, there is no correlation between alcohol consumption and HIV/AIDS prevalence whereas in Africa there is as shown in Table 1 for South Africa below.

Table 1: Consumption of Beer, Wine and Distilled Spirits (2003) and HIV Prevalence Rates (%) 2005 for selected countries

Country	Beer	Wine	Spirits	Total LPA**	HIV Prevalence
UK	101.5	20.1	1.8	9.6	0.2
Germany	117.5	23.6	2.0	10.2	0.1
USA	81.8	9.5*	1.9*	6.8	0.6
Finland	80.2	26.3	2.1	7.9	0.1
Netherlands	78.7	19.6	1.5	7.9	0.2
France	35.5	48.5	2.4*	9.3	0.4
Mexico	46.9*	0.2*	0.7*	3.1	0.3
South Africa	56.0*	8.6	0.8	4.6	18.8

*Consumption data estimated from production data

** Total litres of pure alcohol per drinking – age person

Source: World Advertising Research Center, World Drink Trends 2005 at <http://www.britannica.com/eb/table?tocId=9390287> and <http://hivinsite.ucsf.edu/Insite?page=country>.

Authorities have been praying for people to change habits through songs and advertisements to contain the spread of HIV/AIDS but statistics show that there is no significant reduction in the rates of HIV/AIDS spread (Akarro,2000; NACP,1995).

Without the emphasis of alcohol by the society through various advertisements and if the management of these beer outlets were at the forefront in humanizing bar maids profession, the status of bar maids would probably be different and perhaps the rates of HIV/AIDS would not have been that high. Alcohol control policies are, however, either absent or largely ignored. In Kenya, Mexico, South Africa and Tanzania for example alcohol use is actively promoted in sports and in the media whereas the ill effects of alcohol including those who give the service is never given any impetus.

Data and Methods

Data used in this study were obtained from a survey conducted in three locations of Tanzania namely Dar es Salaam, Mbeya and Zanzibar. A list of bars in Dar es Salaam, Mbeya and Zanzibar were selected by a sampling procedure. The city of Dar es Salaam was selected because it is the largest commercial city in the country, with the largest proportion of bars. It is also one of the areas with the highest rates of HIV/AIDS infection (NACP, 1995). Mbeya was selected because it is also one of the most affected areas and also it is bordering Zambia to the north.. Zanzibar town was selected because it is the capital of Zanzibar and it is a town with a low rate of HIV/AIDS infections which could be regarded as a control for our research. This selection somewhat took into account the cultural diversity of the areas so as to facilitate identification of any cultural beliefs that may be linked with alcohol consumption. Data collected were on average samples proportional to population sizes of the selected towns. A sample of 250 bars were selected from Dar es Salaam, 100 bars in Mbeya and 60 bars in Zanzibar. So the total number of bars selected was 410. The bars selected were both traditional bars selling traditional alcohol and medium to large bars selling factory made alcohol. This is because the bar maids behavior in both these types of bars were assumed similar. The selection of research areas of Dar es Salaam city and the other towns followed the administrative structure in Tanzania. The focus of analysis was a bar owner. The sampling design was a TWO stage sampling procedure. The first stage involved getting a list of all licensed bars. Such a list could be obtained from trade offices of the three municipalities of Kinondoni, Ilala and Temeke in the case of Dar es Salaam and from respective municipalities in the case of other selected towns. Such a list could be organized under the various wards. A systematic sample of bars was then selected to take into account the number of bars in each ward within the sample. The second stage involved sampling bar owners within the selected bars by use of simple random sampling in combination with judgmental sampling. For a detailed description of see Akarro (2007).

The focus of the analysis was the bar owner and to some extent the bar maid. Questions related to why the bar proprietor had decided setting up bars, the type of workers they preferred, the wage rate offered, problems they encounter, the time of operation and other emoluments offered to the workers were asked.

Results and Discussion

The background on the type of bars from Table 2 shows that out of a sample of 410 bars, 14.6%, 61% and 24.4% of bars researched were from Zanzibar, Dar es Salaam and Mbeya respectively. Out of these bars, it was found that 78.8% were beer bars (modern bars) and 21.2% were local bars as shown in Table 2.

Table 2: Location and Type of the bar Cross-tabulation

			Type of the bar		Total
			Beer pub	Local brew pub	
Name of Location under study	Zanzibar	Count % of Total	39 9.5%	21 5.1%	60 14.6%
	Dar es Salaam	Count % of Total	215 52.4%	35 8.5%	250 61.0%
	Mbeya	Count % of Total	69 16.8%	31 7.6%	100 24.4%
Total		Count % of Total	323 78.8%	87 21.2%	410 100.0%

The distribution for Zanzibar bars being smaller than other areas(14.6%) and also the proportion of the local bars being moderately small (9.5% and 5.1% for beer bars and local bars respectively).

As for the number of the bar owners, Table 3 below shows that 78.5% (322) of the owners were males while 21.5 % (88) were females. An interesting pattern shown is that owners birth place as shown in Table 3. Table 3 shows that only 3.2 % owners were born in Zanzibar while 12.2% were born in Dar es Salaam and 20% were born in Mbeya. This is a reflection of cultural diversity for Zanzibar whose residents are mostly Moslems who are not supposed to engage in bar business. A small percentage of those in the trade is a reflection of the few who do not observe the Islamic norms or is a reflection of the non Moslems who are in the beer trade.

Table 3: Owner's gender & birth place Cross-tabulation

			Owner's birth place				Total
			Zabzibar	Dar es Salaam	Mbeya	Other Region	
Owner's gender	Male	Count % of Total	9 2.2%	29 7.1%	47 11.5%	237 57.8%	322 78.5%
	Female	Count % of Total	4 1.0%	21 5.1%	35 8.5%	28 6.8%	88 21.5%
Total		Count % of Total	13 3.2%	50 12.2%	82 20.0%	265 64.6%	410 100.0%

The motivation for one to start a bar business can be analyzed by looking into factors purporting to the establishment of bars. These are factors such as why a bar business and type of workers preferred. These factors are important in determining the motives and the ways by which the bar business can be humanly organized. Table 4, 5 and 6 gave the results below.

Table 4: Why did you go for beer business?

		Frequency	Percent	Valid Percent	Cunulative Percent
Valid	Easy	162	39.5	39.5	39.5
	Good paying	224	54.6	54.6	94.1
	No ohter alternative	24	5.9	5.9	100.0
	Total	410	100.0	100.0	

Table 5: Type of workers preferred

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Women	410	100.0	100.0	100.0

Table 6: If women preferred, what is the objective

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Old women who are obedient	38	9.3	9.3	9.3
	Yound women who can attract customers	372	90.7	90.7	100.0
	Total	410	100.0	100.0	

The main reason for the establishment of bars as seen in Table 4 is that they both very easy to establish and the returns are rewarding. The workers preferred are women in totality as reflected in Table 6. The motive for employing women is not humane in a sense that the objective is to have women who can attract customers as seen in Table 6.

This is further evidenced by ages at which some of these bar maids get employed.

As for the ages of bar maids, most of them are young to meet bar owners aspiration of employing bar maids who can attract customers. There were as young as 10-14 years old bar maids with a median age of 20-24.

Table 8: Age of the woman/girl

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10-14 years	226	8.0	8.0	8.0
	15-19 years	616	21.8	21.8	29.9
	20-24 years	1618	57.4	57.4	87.2
	25-29 years	343	12.2	12.2	99.4
	30-39 years	17	.6	.6	100.0
	Total	2820	100.0	100.0	

From Table 8 above, we notice that 99.4% of bar maids were less than 30 years old. This is in line with findings by Mbonile and Lihawa (1995) that bar maids have to be young to attract customers.

Furthermore the wage rate given to these women is hardly disclosed by the bar owner but Akarro (2007) has shown the distribution of wage rate among bar maids to be as shown in Table 9 below.

Table 9: Wage rate per month

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 10 thousand	10	.4	.4	.4
	10-15 thousand	2487	88.2	88.2	88.5
	16-20 thousand	148	5.2	5.2	93.8
	21-30 thousand	145	5.1	5.1	98.9
	Over 30 thousand	30	1.1	1.1	100.0
	Total	2820	100.0	100.0	

Note: 1 US \$ is approximately equivalent to 1000 Tanzanian shillings

From Table 9, the majority of bar maids get 10-15 thousand shillings per month (88.2%). The same bar maids support their relatives. It is these women (bar maids) whom we are interested in analyzing in terms of their characteristics as far as HIV/AIDS transmission is concerned. This will give light as to how should the bars be organized and how the bar maid profession should be harmonized. Because of the low rates of remuneration coupled with other responsibilities at the household level, bar maids do have sex with other men for money and if given more money, a bar maid can have sex without using a condom. Bar maids can in certain occasions be forced to have sex with their clients or even the bar owners themselves failure in which one might lose her job. This is in line with findings by Mbonile (1996) who observed that bar maids experience sexual abuse at the most intolerable rate (Mbonile; 1996) both by the customers and the bar owners. This sort of abuse is not common to Tanzanian bar maid alone, but it seems as a common scene among bar maids in Sub Sahara Africa. According to the National Aids Control Council of Kenya for example barmaids in Kenya are classified alongside prostitutes and homosexuals as a high risk group. Often they have to battle with sexual advances from their customers or their bosses. “If you resist or if you abuse the customer, the manager will definitely sack you,” one bar hostess said (<http://news.bbc.co.uk/2/hi/africa/4783631.stm>). This phenomenon is also prevalent in Tanzania. Given the undisclosed rate of remuneration, and the hardies of the work place, bar maids supplement their incomes by exposing themselves to high risk behaviour. In certain cases, a bar maid can negotiate for a sex without condom if one is willing to pay more (Akarro, 2007). Coupled with the influence of alcohol, bar maids are in danger of having sex with all sorts of people without using a condom (Stockade 1996, Akarro, 2007). No wonder then that they keep on being reported in all sorts of papers

and media that they are classified in the high risk group. But all these is due to a mismanagement in the bar organizational structure.

Conclusion

This study has shown that it is very easy and financially lucrative to own a bar. The bar owners are the major employers of bar maids. They employ the bar maids with the agenda of attracting customers. If bar maids do not please the customers, they run into danger of losing their employment. There are bar maids who are as young as 15 years who by the labor laws of the International community should not be employed.

Due to the inherent nature of work, bar maids do have sex with several men and they sometimes have sex without a condom. I say inherent because while in Europe, bar owners employ bar maids just as it is done in Tanzania, bar maids in Europe are respected and they are regarded as important players in the generation of revenue for their governments. So as it stands, bar maids in Tanzania are in danger of spreading the deadly HIV/AIDS virus. Coupled with the introduction of ARV, a drug that gives strength to the infected, the HIV/AIDS is very likely to spread at an accelerated level because bar maids do have sex indiscriminately with all sorts of men including married men. This implies that while the discovery of ARV is an omen, very strict measures including thorough counseling and may be oath taken not to deliberately spread the virus (otherwise legal measures instituted) should be enforced before the administration of the drugs to the infected.

Recommendations

Establishment of bars should be made difficult so as to limit having too many bars.

While the importance of breweries can not be undermined as a government income generator, bar owners should be encouraged to establish groceries rather than bars so that those who are interested in beer can just buy their merchandise and take it with them.

There should be a deliberate move to encourage establishment of hotels and not pubs. The government could take the example of Japan whereby pubs are regarded as eating places and not places for one to be intoxicated.

However, a good number of bars are local bars which deal with local brew, and sometimes deal with illicit alcohol or alcohol containing harmful ingredients. These local bars employ bar maids as well and risk behaviour is also noted among the bar maids. The government should use media and may be apply models such as **Theory of Diffusion of Innovation** (proposed by for example Kegeles) for behaviour change to help bar maids change their risk behaviour.

Employment of employees who are under age should be prohibited. In particular there should be a deliberate move to have more attendants who are men on the assumption that women will not follow the male attendants because our culture discourages such behaviour. Realizing that bar maids profession contributes to the economy, there should be campaigns to humanize the profession as it has been done in developed countries such as UK, Germany, Ireland and so on.

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References

- [1] Akarro (2007): Factors influencing the sexual behaviour of bar maids in Tanzania and their relations with HIV/AIDS spread in Tanzania.
- [2] Akarro,R. 2000. Advertising – Media Selection in HIV/AIDS Spread. A case study of Dar es salaam Region. Research Report, Faculty of Arts and Social Sciences, University of Dar es salaam.
- [3] D. Mungongo (Business Times, Nov 4th, 1994:15)
- [4] Heise, L.1991. Trouble Brewing: Alcohol in the Third World. World Watch Vol. 4 No.4. 1991.
- [5] <http://www.ias.org.uk/theglobe/97issue2/zimbabwe.htm>: Conference surveys
- [6] <http://news.bbc.co.uk/2/hi/africa/4783631.stm>
- [7] <http://www.ippmedia.com/ipp/observer/2005/07/10/44063.html>.): Beer Bars, Local Brew, Biggest Employer in Tanzania - Survey
- [8] Kegeles S.D; Hays R.B; Coates T.J. 1996: The M-Powerment project: A community – level HIV prevention intervention for young gay men. American Journal of Public Health, 86:1129-1136.
- [9] Mbonile, M.J.1996. The Determinants of Migration in Tanzania. The case of Makete District. University of Dar es Salaam Institute of Resource Assessment, New Series, Paper 96.
- [10] Mbonile, M.J. and Lihawa,H.A.1996. Rural – Urban Migration in Tanzania. A case of Dar es Salaam. UTAFITI (New Series) Vol.3 No.2,1996.J.of Faculty of Arts and Social Sciences, University of Dar es Salaam.
- [11] National AIDS Control Programme (NACP) 1995. HIV/AIDS Surveillance. Ministry of Health, Report No. 10.Tanzania mainland, 1995.
- [12] Stockade, J. 1996. The Threat of HIV, Coping with Condoms in LSE magazine, Winter, 1996.
- [13] UNAIDS at <http://hivinsite.ucsf.edu/Insite? page=country>
- [14] World Drink Trends 2005 at <http://www.britannica.com/eb/table?tocId=9390287> WHO-GENEVA: Alcohol use and sexual risk behaviour: A cross- cultural study in eight countries at http://www.who.int/substance_abuse/publications/alcohol_sexual_risk_crosscultural.pdf

Effect of Graphic Calculator on Performance and Mathematical Thinking among Malaysian Mathematics Secondary School Children

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Abstract

The use of technology tools has been encouraged to enhance students understanding in learning mathematics. Numerous studies in many developed countries have shown positive impact on using graphic calculator (GC) in the classroom and in examination. In this study, the effects between conventional strategies and graphing calculator strategies have been compared. The effects are viewed from the performance in secondary mathematics and mathematical thinking process (based on Paas Mental Effort Rating Scale, 2004). The mean overall test performance for the graphic calculator group was 15.54 (SD = 3.14) meanwhile the mean overall test performance for conventional group was 13.03 (SD = 3.65). Independent samples t-test results showed that there was a significant difference in mean test performance between GC group and conventional group, ($t(87) = -3.45, p < 0.05$). Further, planned comparison test showed that mean overall test performance of GC group was significantly higher from those of conventional group, ($F(1,87) = 11.919, p < 0.05$). However, the use of graphic calculator induced higher mathematical thinking process as compared to learning conventionally. These findings indicated that the use of graphing calculator have an impact on both mathematical thinking process and performance as compared to conventional teaching strategy. Hence, these findings provide evidences for improving the teaching approach.

Introduction

The rapid progress of technology has very much influenced the process and product of teaching and learning mathematics. To date, mathematics reform worldwide has encouraged the use of hand-held technologies such as graphics calculator and mathematic software in the teaching and learning of this subject. The choice of graphic calculator is motivated mainly by its availability and accessibility to almost all students in the classrooms (Kissane, 2000) since it is handy and is not as costly as the other technological tools such as personal computers, notebooks, electronic board to mention a few. However, its use in secondary classrooms is not well understood, universally accepted, nor well documented. Research findings on the use of the graphic calculators were not conclusive and explanatory on the effects of its use in mathematics classrooms. Graham and Thomas (2000) and Doerr and Zangor (2000), have indicated positive impact on using graphic calculator in the classrooms at all level. On the other hand, Norris (1995) and Penkow (1995) reported that there is no significant differential effect between conventional teaching and use of using graphic calculators.

In Malaysia, the Ministry of Education has introduced the use of graphic calculator in mathematics classroom in the early 1990s. In addition, mathematics teachers were given training on the use and integration of graphic calculator in teaching mathematics at the secondary level. However, the use of graphic calculator in mathematics classrooms has been minimal (Muhd. Khairilitov, 2003) and in many cases it has not been utilized at all. This lack of initiative among mathematics teachers may be due to several factors namely, lack of confidence in using it, focus on passive learning rather than active learning, skills in integrating the use of the graphic calculator. Hence much has to be explored and investigated in order to maximize the investment made by the Ministry and for the enhancement of mathematics performance among secondary students. Thus, there is a need to further research in this area especially in the context of Malaysian secondary school.

Effects of Technological Tools on Learning

Studies had showed that using technologies such as graphing calculator have a positive impact in various aspect of students' learning. Durham (2000) reviewed the research evidence on the impact of graphing calculator in instruction at all level of mathematics. He cited that positives benefits were indicated in various field of mathematics such as algebra, trigonometry, calculus and statistic. From the above review, Dunham deduce that student who used graphing calculator display better understanding of function and graph concepts, improve problem solving and score higher on algebra and calculus skill test. He also noted that several studies indicate graphing technology may benefits for some special population, and positive changes in classroom dynamic and pedagogy. Burill et al. (2002) found that student who used hand held graphing calculator learned implicitly or explicitly of what they were taught. Moreover, students who used graphing calculator technologies have better understandings of function, of solving algebra problems in applied context, and of interpreting graphs than those who did not use the technology. They also found that there is no significant difference found between students using graphing technology and those who did not use the technology in procedural skills.

In addition studies on effects of technology have also focus on mathematical thinking processes among learners. Horton, Storm & Leonard (2004) carried out a 3-week study to determine if graphing calculator can help students improve their mathematical skills in solving linear equations. Findings revealed that experimental group showed a significant gain on every problem. Horton et al. (2004) indicate that graphing calculator help students to master the process of solving linear equations which expand s the potential benefits of the graphing calculator.

Cognitive load theory has been used as the foundation in investigating the effects of technology on mathematical thinking skill. Cognitive load is a multidimensional construct that represent the load which performing a particular task imposes on the cognitive system (Paas dan Van Merriënboer 1994; Sweller et al., 1998). It has a causal dimension reflecting the interaction between task and learner characteristic and an assessment dimension reflecting the measurable concepts of mental load, mental effort, and performance. Mental load refers to the aspect of cognitive load that originates from the

interactions between task and subject characteristics (Paas and Van Merriënboer 1994; Sweller et al., 1998; Paas et al 2003b). Paas dan Van Merriënboer (1994) state that mental load can be determined on the basis of our current knowledge about task and subject characteristic. Mental effort is the aspect of cognitive load that refers to amount of cognitive capacity or resources which is actually allocated to accommodate the demands imposed by the task (Paas and Van Merriënboer 1994; Sweller et al 1998; Paas et al 2003b). Mental effort is measured while participants are working on task (Paas et al., 2003a).

Therefore, there is a need to investigate the effectiveness of the graphic calculator strategy as compared to the conventional instructional strategy in teaching and learning of mathematics to provide answers for this growing concern.

Objective

The purpose of this study is to investigate the effects of graphic calculator usage on performance and mathematical thinking process in mathematics learning among Form Four secondary school students. Specifically, the objectives of this study are:

- i. To compare students' mathematical performance between graphing calculator group and the conventional instructional group.
- ii. To compare students' mathematical thinking process between graphing calculator group and the conventional instructional group.

Methodology

Design of the Study

Experimental design was used for this study with students selected at random to be assign to two groups. The experimental group underwent learning using graphing calculator technology while the control group underwent learning using conventional instructional strategy. Four phases were conducted: 1) Introduction to graphic calculator, 2) Introduction to Quadratic Functions, 3) Integrated teaching and learning using graphic calculator, 4) testing using Achievement Test and the Paas Mental Effort Rating Scale to measure mathematical thinking processes of students. The data were analyzed using independent t-tests and post-hoc analyses.

Population and Sample of the Study

The target population of this study was Form Four students in National Secondary School in Malaysia. The samples selected for this study were Form Four students from two schools. The students were brought to the university to participate in the learning sessions. They were assigned to two groups, namely the graphic calculator and conventional groups. The total number of students in the graphic calculator group was 42 students whilst the conventional group was 47 students.

Materials

Four phases were conducted. In the first phase, the treatment groups were first introduced to the use of graphic calculator. Each student in GC group was provided with one graphing calculator each. In this phase, the students were required to explore and get familiar with the graphing calculator buttons and its functions. The conventional group followed teaching and learning session the traditional teacher-centred approach.

Then in second phase, students were introduced to the basic concept of the Quadratic Functions topic and mathematical problem solving sessions. During the teaching and learning phase, students were given assessment questions to evaluate extent of short term learning. At the end of the learning or treatment session, students were required to sit for an achievement test and solved problems given without using GC. To measure mathematical thinking processes of the students (also called mental

load), students were required to state their mental effort used for each question they answered in assessment and achievement test. This measurement was based on Paas’s Mental Effort Rating Scale.

Instruments

The Paas (1992) Mental Effort Rating Scale were used to measure mathematical thinking processes by using the perceived mental effort expended in solving problems during experiments in test sheets. It has 9- point symmetrical Likert scale measurement on which subject rates their mental effort used in performing a particular problem solving task. It was introduced by Pass (1992) and Pass and Van Merrenboer (1994). The numerical values and labels assigned ranged from 1: very low mental effort to 9: very high mental effort. Performance was measured using a set of test related to the topic taught. Three questions were posed which involved students to show their understanding conceptually and procedurally. The questions were categorized as conventional problems similar to any standard examination given in the country.

Result and Discussion

Mathematical performance

Data from the post-test as shown in Table 1 indicated that there was a significant difference in scores between the two groups, $t(87) = -3.45, p < 0.05$ with mean 13.03 (SD = 3.65) for the control group and the graphic calculator group with a mean of 15.54 (SD = 3.14). The mean performance score for the graphic calculator group was found higher than the conventional group. Thus further planned comparison test was conducted. Findings showed that the mean mathematical performance of the graphing calculator group was significantly higher from those of conventional group, $(F(1,87)=11.919, p < 0.05)$. This finding indicated that the graphing calculator group had performed better in test phase than the conventional group. Hence the use of graphic calculator has shown to be effective in enhancing mathematical performance among learners.

Table 1: Independent Sample t-test between control and graphing calculator for post-test

	Group	N	M	SD	SEM	t	df	P
Mathematical Performance	Graphic Calculator	42	15.54	3.14	.48	-3.45	87	.001
	Control	47	13.03	3.65	.53			

Mathematical thinking process (mental effort)

Means and standard deviations of students’ mathematical thinking processes analysis are provided in Table 2. The mean mental effort during learning phase for the experimental group was 4.45 (SD = 1.65) meanwhile the mean mental effort during learning phase for control group was 3.79 (SD = 1.96). Independent samples t-test results showed that there was no significant difference in mean mental effort during learning phase between graphing calculator group and conventional group, $t(56) = -1.41, p > 0.05$. Planned comparison test showed that mean mental effort during learning phase of graphing calculator group was not significantly lower from those of the conventional group, $F(1, 56) = 1.973, p > 0.05$.

In addition, it was also found that the graphing calculator group had higher mean mental effort during test phase (M=4.79, SD = 1.48) meanwhile the mean mental effort during test phase for conventional group was 4.46 (SD = 1.48). Independent samples t-test analysis showed that there was no significant difference in mean mental effort during test phase between the graphing calculator group and the conventional group, $t(58) = -0.881, p > 0.05$. Further, planned comparison test showed that mean mental effort during test phase of graphing calculator group was not significantly lower from those of

conventional group, $F(1, 64) = .776, p > 0.05$. This finding indicated that the graphing calculator strategy group had invested more for mental effort than the conventional group. Hence their mathematical thinking processes incurred were higher. This finding indicated that use of the graphing calculator during the short learning session conducted may have induced higher thinking process or mental load on the students. Hence, based on the cognitive load theory, the integration of graphing calculator did not assist in reducing mental load. Therefore in terms of its efficacy, there is lack of evidence to conclude that use of graphing calculator in learning mathematics is beneficial.

Table 2: Independent samples t-test for mental effort.

Variables	Group	N	M	SD	SEM	T	df	p
Mental effort (Learning phase)	Graphing calculator	31	4.45	1.65	.296	-1.41	56	.166
	Control	27	3.79	1.96	.378			
Mental effort (Test phase)	Experiment	38	4.79	1.48	.24	-.89	64	.382
	Control	28	4.46	1.48	.28			

Conclusion

Based on this study, it can be concluded that the use of graphing calculator in learning mathematics can enhance students' performance in mathematics. However, the use of the graphing calculator could only induced higher thinking process or mental load on the students. Therefore, the use of graphing calculator there is lack of evidence to conclude that use of graphing calculator in learning mathematics is beneficial as a whole.

In conclusion, graphing calculators are excellent tools which can foster students to explore and investigate. It also can enhance student understanding and performance. However, there is a need to conduct further researches on how to implement graphing calculators in instruction so that students' mathematical understanding of graphing is enhanced and reinforced, and not require a lot of mental effort in learning mathematics.

References

- [1] Army, P. D. (1992). An Approach to Teaching a College Course in Trigonometry Using Applications and a Graphing Calculator. Unpublished doctoral dissertation, Illinois State University, USA. Dissertation Abstracts International. 52(8), 2850A.
- [2] Bennett, J. O. & Briggs, W. L. (1999). General education mathematics: New approaches for a new millennium. *The AMATYC Review*, 21 (1), 3-14.
- [3] Burrill, G., Allison, J., Breaux, G., Kastberg, S. E., Leatham, K., & Sanchez, W. B. (2002). *Handheld graphing technology in secondary mathematics: Research findings and implications for classroom practice*. Dallas, TX: Texas Instruments, Inc.
- [4] Doer, H. M. & Zangor, R. (2000). Creating meaning for and with the graphing calculator. *Educational Studies in Mathematics*. 41, 143- 163.
- [5] Dunham, P. (2000). Hand-held calculators in mathematics education: A research perspective. In E. Laughbaum (Ed.), *Hand-held technology in mathematics and science education: A collection of papers*. Columbus, Ohio: The Ohio State University.
- [6] Graham, A. T. & Thomas, M. O. J. (2000). Building a versatile understanding of algebraic variables with a graphic calculator. *Educational Studies in Mathematics*. 41(3): 265-282.
- [7] Horton, R. M., Storm, J., & Leonard, W.H. (2004). The graphing calculator as an aid to teaching algebra. *Contemporary Issues in Technology and Teacher Education*, 4(20). 152-162
- [8] Kissane, B. 2000. Technology and the curriculum: The case of the graphics calculator. In M.O.J. Thomas (Ed.) *Proceedings of TIME 2000: An International Conference on Technology in Mathematics Education* (pp 60-71) Auckland, New Zealand. (ISBN 086869-029-5)
- [9] Muhd. Khairilitov, 2003. Penggunaan kalkulator Grafik di sekolah-sekolah di Malaysia: Penerokaan dan cabaran. In Proceeding of the first National Conference on Graphing Calculator 133, Universiti Malaya, Kuala Lumpur.
- [10] Norris, C. W. (1995). The Impact of Using Graphic Calculators as an Aid for the Teaching and Learning of Precalculus in a University Setting. Unpublished doctoral dissertation, Michigan State University. Dissertation Abstracts International. 55(7), 1862A.
- [11] Paas, F. (1992). "Training strategies for attaining transfer of problem-solving skill in statistics: A cognitive-load approach". *Journal of Educational Psychology* 84: 429–434.
- [12] Paas, F., Renkl, A. & Sweller, J. (2003a). Cognitive Load Theory and Instructional Design: Recent Developments. *Educational Psychologist*, 38 (1), 1-4.
- [13] Paas, F., Touvinen, J.E., Tabbers, H and Gerven, P.W.M. (2003b). Cognitive load measurement as a means of advancing cognitive load theory. *Educational Psychologist*, 38(1), 2003.
- [14] Paas, F. & van Merriënboer, J. (1994). Variability of Worked examples and transfer of geometrical problem-solving skills: A cognitive-load approach. *Journal of Educational Psychology*, 86 (1), 122-133
- [15] Penkow, C. K. (1995). The Effects of College Students Use of Graphics Calculators on the Learning Algebraic Concepts. Unpublished doctoral dissertation. University of North Dakota. Dissertation Abstracts International, 55(12), 3774A.
- [16] Sweller, J., van Merriënboer, J. J. G., & Paas, F. (1998). Cognitive architecture and instructional design. *Educational Psychology Review*, 10,. 251–296.

Profiles and Problems of Asylum Seekers and Refugees in Turkey

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Abstract

Turkey is a country which hosts migrants from her neighbouring countries. Most of the people who seek asylum in Turkey are inhabitants of the Middle Eastern countries among which Iran and Iraq appear out to be the first ranks considering the high number of the refugees. The reasons of refugees for choosing Turkey are diverse such as social, religious, political, and economic, among which political reasons come first. For these reasons, it is assumed that asylum seekers and refugees who are to leave their own countries confront many problems as seeking asylum in a different country. Focusing on Turkey, it becomes an important matter of analysis not only to draw the profile of the asylum seekers, but also describe the problems they suffer. Based on these purposes, this study was held as a field research which was conducted between March and June of 2001 by holding face to face interviews with 506 asylum-seekers of which the majority was constituted by the Iranian and Iraqi origins. Having finished on July 2002, this study draws attention to the basic problems that the asylum seeker and refugee population in Turkey face with, and puts forth the profile of the people entering Turkey to seek asylum. In this way, it is anticipated that the facts of being an asylum-seeker and being a refugee, which are both specific types of migration, will be understood accurately and brought into the popular agenda.

Introduction

According to the Statute of the Office of the United Nations High Commissioner for Refugees enacted in 1950, a refugee is defined as a person who, “owing to a well-founded fear of being persecuted for reasons of race, religion, nationality or political opinion, is outside the country of his nationality and is unable or, owing to such fear or for reasons other than personal convenience, unwilling to avail himself of the protection of that country; or, not having a nationality and being outside the country of his former habitual residence, is unable or, owing to such fear or for reasons other than personal convenience, unwilling to return to it.” Reasons forcing individuals to migrate show diversity, and most of the time, different reasons have a combined impact on the decision of migration. It is thought important to use the concepts related to migration in order to grasp these reasons.

There are some patterns and tendencies that affect migration. These are the spatial patterns of migration; distinguishing features like age and sex; the period of the family life cycle; ethnic origin; profession and qualities; position in the labour market; and the situation of the settlement market (Owen and Green 1992:18-38). It would be wrong to discuss the issue of migration without taking these patterns and tendencies into consideration. There are certain indicators which keep pressure on both migration and the probability of migration, and these are important to understand the reasons behind migration (Rogers 1992:36-39). The population growth, economic restructuring and economic stagnation, the rise in the economic inequalities, new probabilities for flows of asylum, answers given to the public opinion polls on the intentions behind migration are all indicators to think about the probabilities of migration. However, it would be incorrect to assume everyone as the probable migrants

as soon as these indicators come into the scene. Factors like personality, family status, and migration opportunities are influential on the decision to migrate or not. The capacity of the will to migrate or participate in the temporary labour migration; rejection of asylum seekers; illegal migration; and refugees who wait for permanent solutions are the indicators which put pressure on migration. They are the indicators, which specify the regulations of the host country and pressurize the will of migration, except making concrete plans to migrate or, as in the example of asylum seeking, trying some attempts. Amongst the reasons of migration, the group of asylum seekers and refugees should be attributed a special importance.

The Outlook of the Asylum Seekers and Refugees

Reasons of migration show similarities for both migrants and asylum seekers who leave their own countries compulsorily. However, especially the migration, which results in seeking asylum, can have political, economic, warlike, environmental, and ethnic reasons. Political reasons occur during the times of pressure against opposing opinions and of human rights violations. People decide to change their places often if the governments in their policy decisions maintain an impeding attitude instead of facilitating the basic needs of education, economic self-sufficiency, and living by one's own (Ferris 1998: 26-27). Within the historical perspective, when the economical reasons are analysed, it is observed that people try to migrate when they are not able to survive because of drought, hunger, or widespread unemployment. The inadequacy of economic conditions in a country may cause people to migrate to another country. The asylum movements are also observed to have the tendency to follow the traditional routes of economic migration. Poverty and economic underdevelopment are reasons behind the asylum flows (Ferris 1998: 20-22; Hakovirta 1993: 43; Zolberg, Suhrke, Aguayo 1989: 261; Nobel 1992: 82). Reasons emerging as a result of wars have especially been some of the basic ones behind the massive shifts. The wars have direct and indirect effects both in the short and long run. During the wars, human capital of a country or a region could be seriously harmed, local food prices increase due to the scarcity of food, and the economic costs of the wars grow when merged with the debts. Furthermore, the widespread human rights violations, which are experienced during the wars, may come out to be another reason of migration (Ferris 1998: 29-31). Environmental reasons, which are related with the results of the changes in the ecology and in the environment; poverty; wars; and migration may appear out to be in the forms of natural or human made disasters, amongst which the following come first: the damage given to the natural environment, erosion including the forest damages, and the decrease in the agricultural zones. When the damage of a natural resource merges with demographic pressure and chronic poverty, it may cause political, ethnic, social and economic tensions or force people to escape, by worsening the situation and turning into conflicts (Ferris 1998: 20-22-24; Muzenda 1995: 51). Reasons resulting from ethnic conflicts are also part of the basic reasons of shift, because they lead to political exploitation. If an ethnic group is powerful and takes disproportionate advantage for itself, the conflicts increase and cause the compulsory migration of the ethnic minority group (Ferris 1998: 28-29).

There is a multiphase model related with the participants of the asylum and refugee migration based on the above reasons. According to this model,

1. First, it is needed for people to perceive that a threat comes into existence connected with a special incident, which makes them see that their own positions are at risk. This perception could be made possible by arrestment of a close person, close down of a business owned, or official statements, etc.
2. Then it is decided to escape. This decision is hard to come into practice by the asylum seekers despite the fact that they confront many threats.
3. A period of time is needed for the preparation for the escaping processes and the gathering of the resources.

4. The asylum seeker feels satisfied temporarily as escaping into a secure place, because s/he escapes and feels optimistic for her/his future.
5. Having been accepted to the camp life, the asylum seeker lives a period of dual realization. The first realization is a feeling of doing wrong as a result of leaving home, former identity and life, which also includes the feeling of guiltiness; on the other hand, the second realization is the destruction in the continuing camp life. This kind of a life and the dual realization typically create dependence, loss of control, powerful feelings of lack of interest caused by the uncertainty of the future.
6. According to Stein (1981), the anxiety created by the similarities in the camp life is replaced with the fear of a new life in a new country. This phase is related to the feelings which accompany the escape from malnutrition, harassment, sexual abuse, illness, and passiveness all forming the bad sides of the camp life.
7. This phase includes the beginning periods of life in the country where the individual is placed. The individual feels the post-arrival feelings of disharmony and lost again. The disharmony is caused by the experience of the adaptation process to the new ways of life, new traditions, a new language, new administrative processes, and the reversal of the family roles.
8. The last phase comprises the remaining periods of the asylum seeker in the resettled country. In this phase the individual is in a process of healing, and builds her life again. Moreover, the individual makes plans for a more certain future and takes risks (Boyle, Halfacree, and Robinson 1998: 191-192).

In addition to the problems asylum seekers and refugees have during these phases, the general view towards the refugees also has a role in the lives of these individuals. This is directly influenced by the ideas of governments, which assume that the migrants will abuse the asylum procedures and destroy the stability of the economy, and the concerns of the governments regarding the fake asylum applications (The Spectator 2000:7). Racism and xenophobia, the fear of foreigners, is also influential on such a situation (Miles 2000:19; Krauze 2000:5; Editorial America 1999). Shelter, food, and security are all among the basic needs of the asylum seekers and refugees (Refugees And The Environment Caring For The Future 1995:10). In most of the cases, these individuals are deported because of violating simple public rules such as absence of an identity card or delay in the asylum application (Angelis 1998:4).

In the first hand, when asylum seekers enter the territories, they happen to be in a traumatized position because of the reasons behind their escape, and if they are arrested, then raises the cultural, social, psychological, medical, and mental problems they have (Editorial America 1999). In the USA, an arrested asylum seeker is kept waiting for the interview, and must share the place with sentenced convicts or detainees (Editorial America 1998).

When the asylum and refugee applications in Turkey are concerned, it is observed that Turkey is a signatory of the 1951 Convention Relating to the Status of Refugees with a “geographical limitation.” Compatible to this convention, the 1994 Regulation has been enacted in the national legislative system. In this regulation, which shapes the implementations in the refugee system, a distinction between refugee and asylum seeker has been made. According to this regulation, *refugee* is defined as someone who “as a result of events occurring in Europe, owing to well-founded fear of being persecuted for reasons of race, religion, nationality or political opinion, is outside the country of his nationality and is unable or, owing to such fear or for reasons other than personal convenience, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence, is unable or, owing to such fear or for reasons other than personal convenience, is unwilling to return to it,” and *asylum seeker* is defined as someone who “owing to well-founded fear of being persecuted for reasons of race, religion, nationality or political opinion, is outside the country of his nationality and is unable or, owing to such fear or for reasons other than personal convenience, is unwilling to avail himself of the protection of that country; or who, not having a nationality and being outside the country of his former habitual residence, is

unable or, owing to such fear or for reasons other than personal convenience, is unwilling to return to it.” The basic distinguishing point here is on whether the individuals are of European origin or not. When the issue of asylum seekers and refugees is analyzed from Turkey’s standing, it is observed that Turkey is directly affected by the crises in her neighboring countries, which result from different reasons because of the geopolitical position of Turkey. Especially the Middle Easterners seek asylum in Turkey or make transit entries. Therefore, individuals coming from the European countries are named as “refugee” and given permission to settle in Turkey permanently; however, individuals coming from the Middle East are named as “asylum seekers” and permitted for temporary settlement until they are resettled in a third country. Although during the mass asylum flows many needs of the asylum seekers are provided in the camps in an organized manner, individual asylum seekers try to solve all of the problems they face through the period until they are resettled in a third country. Including the uncertainties asylum seekers have during the waiting period and the future concerns of the individuals in these processes, emerges a period of asylum seeking which creates disharmony and is hard to cope with. On these grounds, the answers to the following questions will try to be sought: who the asylum seekers in Turkey are and what kind of problems this group confronts.

Method

This research is the first study dealing with the Turkish case and aims not only to describe the socio-demographic characteristics of the individuals seeking asylum in Turkey, but also determine the problems that the asylum seekers and refugees face during the period of waiting to be resettled in a third country. The survey model is used in this research whose purpose is to analyze the problems of asylum seekers who come to Turkey from non-European countries during the waiting period for the resettlement in a third country. For this purpose, a questionnaire is formed by the researcher based on the literature, which aims to determine the problems of the asylum seekers and refugees. Afterwards, the questionnaire was translated into Arabic and Persian, and the ultimate form of the questionnaire has been prepared after a pilot experiment. The sample of the research was composed of the asylum seekers who came from non-European countries and sought asylum in Turkey in 2001. According to the data of the UNHCR for the year 2001, the number of the applicants who were living in different provinces of Turkey was 2658 and the total number of the asylum seekers in Turkey in 2001 was 5041 (Asylum Applications 2001: 3). However, taking the fact into consideration that these individuals live in approximately 24 different provinces of Turkey, visiting every province was proved impossible in relation to the time and financial means that the researcher had. Thus, the research group has been formed of the literate asylum seekers who applied for asylum to the UNHCR Ankara Office, came from non-European countries, and waited in Turkey. Besides the questionnaire; interviews, observations and home visits were preferred to obtain in depth data. In this way, 506 literate asylum seekers who came from non-European countries, applied for asylum to the UNHCR Ankara Office, and waited for these applications to come to a conclusion have been reached, and interviewed between 20 March 2001 and 20 June 2001.

Findings

Findings of the research are to be presented under the following headings: Findings which identify the asylum seekers and refugees, and findings which are related to the problems asylum seekers and refugees have.

Findings which identify the asylum seekers and refugees

Age

The 25-34 age group forms the %38.1 of the asylum seeker population. This group is followed by the 34-44 age group (% 28.5); 14-24 age group (% 20.8), and 45-over age group (% 12.6). The average of

the ages of the asylum seekers is 33. The findings imply that more than half (% 58.9) of the asylum seekers are above the age 34.

Sex

The majority (% 68.7) of the asylum seekers are composed of men. Women, however, constitute % 31.3 of the population. This majority of the men in the asylum-seeking group can be explained by the information that men decide to migrate by taking more risks. Moreover, men can be more independent on deciding and moving than women, and the socio cultural structures in the societies support these differences. Therefore, this majority of the men can be conceived as natural.

Marital status

When the marital status of the asylum seekers is analyzed, the married individuals are in the first rank with % 63.6. That majority is followed by the singles (% 31.8) and widowed (% 4.5).

Numbers of the children asylum seekers have

% 20 of the 280 asylum seekers with at least a child has two children. This is followed by the ones with a child (%15.2) and three children (%10.1)

Native languages asylum seekers speak

When the native languages asylum seekers speak are analyzed, it is observed that half (%50.2) of the group has Persian as the native language. Persian is followed by Arabic (%20.8) and Kurdish (17.4). According to the data provided by the UNHCR, the majority of the asylum seekers who are from non-European countries coming to Turkey are from Iran and Iraq. These data support the findings.

Countries asylum seekers come from

Iran is at the top of the countries where asylum seekers come from with %61.7. Following her, Iraq comes with %35. Other countries are Jordan, Afghanistan, Somalia, and Arabia.

Educational Backgrounds

High school graduates constitute the %42 of the asylum seekers taking the educational backgrounds into consideration. Graduates of elementary schools follow this statistic with %22.5, then university graduates comes with % 15.2, and finally college graduates come with %10.1.

Professions of the asylum seekers in their country of origin

Different classifications of professions have been analyzed. Since those classifications did not cover the whole asylum seekers population, the researcher made a classification based on the observations and findings. Self-employment is in the front rank (%25.9). Civil servants (% 21.9) and workers (%17) follow the self-employment.

Reasons behind leaving the native country

Political reasons make the % 50.5 of all the reasons behind leaving the country of origin for the asylum seekers. Religious reasons follow this with %31.5; economic reasons come with %8.2; other reasons like tribes and social reasons follow with %7.6; and reasons resulting from wars compose the %2.2 of the total. The reasons stated above tend to be in consistency with the reasons presented in the theoretical framework and with the findings of the researches. As it is underlined before, the fact that the political reasons cover more than half of the total is in line with the information that the reasons for being an asylum seeker are leaded by leaving the native country because of pressure and oppression (Ferris 1998; Hakovirta 1993; Zolberg, Suhrke, Aguayo 1989; Nobel 1992; Muzenda 1995).

Findings regarding the problems of asylum seekers

Problems on using medical services

When the problems on using medical services are listed, being unable to pay one's own share of the costs of medicine and treatment comes first with %20.6. This statistic is followed by the lack of information on how to benefit from the medical services (% 19.2); being unable to be treated free in the medical institutions that UNHCR has contract with (%16.8); being unable to tell the medical complaints because of the language gap (%16.2); being unable to have done health controls regularly (%16.2); and being unable to tell the medical complaints comfortably to a physician of the opposite sex.

How asylum seekers manage their psychological problems

The rate of the number of the asylum seekers trying to treat themselves in case of a psychological problem is %57.5. This is an important indicator of the fact that asylum seekers are unable to reach the professional psychosocial support services. The asylum seekers who live with families concluded that they were supported by their families (%23.6). Particularly, when the concerns about orientation to a new country and the results of the asylum applications are combined with the problems with daily life, it is observed that asylum seekers try to solve these problems by themselves in relation to the rise of the number of the situations that make asylum seekers feel bad. However, failing experiences to solve these problems and inability to cope with these problems can be observed, because these pressures are all related to the needs of the individual, which all necessitate professional help. This point should be prioritized when the social services for asylum seekers are planned.

The views of the asylum seekers on having financial problems

Almost all (%94.7) of the asylum seekers think that they are having economic problems. This proportion is considerably striking. It appears that the money they had when they came from their countries of origins has now run out; and because the limited help they can get is not enough and they do not have the right to work, those asylum seekers who do not have supplementary incomes experience economic hardship.

Suffering problems of orientation and social relations

The ratio of the asylum seekers stating that they are having problems of orientation and social relations is %99, and this seems to be a striking finding. Problems about orientation and establishing social contacts are related to the facts that the asylum seekers have left (may be without any chance to turn back) their own life styles and have been living in a foreign country. Moreover, these problems are also related to getting used to a new society and a new culture. These problems are related to the aspiration towards the statuses, relations, and opportunities the asylum seekers had in their country of origins, and lack in Turkey.

Table 1: Problems of Orientation and Social Relations

Individuals having problems (n=501)	Number	General %	Total %
Missing old friendship	350	69.9	6.0
Missing old house and neighborhood	335	66.9	5.8
Having problems about orientation because of the decrease in wealth	322	64.3	5.5
Having problems about orientation because of coming to a different country	320	63.9	5.5
Not to think that life will be good in the future	316	63.1	5.4
Feeling own self weak to solve problems	310	61.9	5.3
Only talking about migration in the family	299	59.7	5.1
Having problems with establishing new relationships	293	58.5	5.0
Fear of rejection of the asylum application	291	58.1	5.0
Missing country of origin and the order there	290	57.9	5.0
Having problems in expressing own self because of the lack of Turkish	288	57.5	4.9
Having cultural differences	287	57.3	4.9
Feeling alone	285	56.9	4.9
Not having any pleasure of anything	282	56.3	4.8
Having problems in understanding others because of the lack of Turkish	277	55.3	4.8
Being pessimistic about the future	177	35.3	3.0
Having the children being the most effected by the asylum process	168	33.5	2.9
Being afraid of not being able to be oriented into the third country	163	32.5	2.8
The wife/children being the most effected by the asylum process	160	31.9	2.7
Feeling own self worthless and useless	150	29.9	2.6
Not being able to talk the problems with family	143	28.5	2.5
Starting to be intolerant to other people	118	23.6	2.0
Starting to be rude to other people	104	20.8	1.8
Thinking about committing suicide	96	19.2	1.6
Total	5824	1162.5	100.0

These problems are thought to be related with the feeling of missing some elements of the old way of life being in a country which they do not know the language or the culture of. When this feeling of missing the old structures and relations merge with the negative conditions in the host country there may be seen problems for the individual in terms of not being able to be oriented to the situation. It is not hard to guess that if the individual is missing the life she left behind and if this feeling is intensive, then she will have problems in accommodating the new country she will be resettled.

The observations made and the data collected by the researcher during the home visits and individual interviews also support these findings. Some of the asylum seekers interviewed individually stated that “no other place will be as good as one’s own country; however they had to leave their country of origin because they would not stay there.” This statement implies that if these individuals had any chance to choose and if they were able to stay in their countries of origin they would choose to stay in their countries of origin and they would not need to think about the issues which are intensively missed and concerned. A female asylum seeker who has been interviewed stated that she had a good economic position in her country of origin; however what she can spend here is only the money she could bring with her and since she did not have any other income she was having many problems.

Another female asylum seeker who was waiting in Turkey without any concrete progress stated that “as the period is lengthened my fears about the future is growing and I always keep asking myself what if my application is not accepted.” This implies her concerns about the asylum application and the ambiguity about her future. Still another asylum seeking woman states her feelings of ambiguity about the processes as the following: “I feel myself hopeless, this worries me that I do not know what will happen in the future and the future is ambiguous.”

On the other hand, a male asylum seeker mentioned one of the main problems: “I am stateless, no country is accepting me as a citizen, and do you know what that means? In the end, it makes you think about committing suicide.”

A male asylum seeker, stating that all his accumulation had been lost in a moment and he is especially afraid of his child’s future, said that “I do not have an American dream; I just want to go to a

place where I will live as a human being.” With these words he was criticizing the system. The issue of uncertainty which lies behind the problems about orientation and relationships is underlined by the sentence, “the uncertainty of the future is the worst thing ever; one can not know what will happen whether good or bad.”

Findings about the expectations of the asylum seekers

The most important thing that the asylum seekers feel the need is lack of a sufficient monetary support (%68.7). This appears to be related to the fact that asylum seekers do not work. Following the expectation of a sufficient monetary support, the expectation of fulfilling the need of legal support about the issues concerning the asylum processes comes the second (%66). The most concerned issue within the waiting period in the country is what the results of the asylum application will be. It is observed that lack of information exists on the kinds of phases that will be experienced and things to be done in each phase. Counseling services regarding these problems should be provided. Another expectation, which has been stressed as a need, is the support on the language problems (%46). The lack of knowledge of the language has a peculiarity, which limits the establishment of social relationships and orientation to the society. The hardening of solving the problems of those asylum seekers, who do not know Turkish, in line with the length of the waiting period in Turkey, increases the need to know the language. The ratio of the individuals who ask for more psychological and social support is %40.5.

Conclusion and Discussion

As it is apparent in the findings, problems of the asylum seekers and refugees living in Turkey show a variety. There should be a social application system for solving the problems that asylum seekers and refugees have at the national level. As the lack of such an application system continues, the problems of asylum seekers and refugees are tried to be solved by the UNHCR and non-governmental organizations. However these projects have limited founding opportunities, and therefore, it does not seem to be a possible result of these attempts to reach all the asylum seekers and refugees in the whole country.

As an application model is formed for the asylum seekers and refugees who sought asylum in Turkey, the diversified service models should be introduced. The findings of the research revealed the need of the asylum seeker oriented psychosocial support and mental health services. The traumatic experiences of the asylum seekers and refugees during the escape from their countries of origin bring about a new period, which they have to cope with. Therefore, throughout this waiting period, not only the curing mental health services, but also the protective services should be prioritized.

The main problem grows out of the fact that the approaches towards the asylum seekers and refugees are included among the security issues of a country. The social and humanitarian dimensions of the asylum are emphasized during the period of last ten years. Because Turkey continues to have her geographical limitation, establishment of a social asylum system and a policy towards the asylum seekers and refugees have not been realized yet. The abolition of the geographical limitation and the issue of permanent settlement of the asylum seekers in Turkey have been brought up to the agenda with the European Union processes. Accepting them, Turkey has started the preparations to realize these changes. This situation can be perceived as an opportunity for the establishment of the systems, which include the suggestions for the solution of the problems. Turkey is to formulate a policy regarding these issues, and while doing these formulations, new policies should be developed in cooperation with the non-governmental organizations and implementers of different disciplines. The components of these policies not only should be the measures for meeting the priorities of the “vulnerable groups” such as women and children; but also, as the findings of the research reveals, should tend to develop a service system aiming the solution of the asylum seekers and refugees.

References

- [1] Angelis, D. F.
1998 “*Bu Benim Başıma Gelir miydi? Mülteci Sorunu Ve Uluslararası Toplumun Buna Yanıtı - Could This Ever Happen to Me? The Refugee Problem and the Response of the International Community*”. Umuda Doğru Sığınmacı Ve Göçmenlerle Dayanışma Derneği Dergisi, Yıl 2, Sayı 4 (in Turkish)
2001 Asylum Applications, UNHCR Ankara
- [2] Boyle, P., Halfacree K. ve V. Robinson.
1998 “*Exploring Contemporary Migration*” Addison Wesley Longman Limited Press İngiltere
- [3] Editorial America “*Asylum Seekers Behind Bars.*”
1998 April <<http://www.web6.infotrac.galegroup.com/itw/infomark>> 12.02.2002
- [4] Editorial. America “*The Crime Of Seeking Asylum.*”
1999 April <<http://www.web6.infotrac.galegroup.com/itw/infomark>>12.02.2002
- [5] Editorial The Spectator
2000 April “*Be My Guest-Worker.*”
- [6] Ferris, G. E.
1998 *Uprooted Refugees And Forced Migrants*, Friendship Press, New York
- [7] Hakovirta, H.
1993 “*The Global Refugee Problem: A Model And Its Application.*” *International Political Science Review*, V 14, No 1
- [8] Krauze, A.
2000 “*How We Feed Asylum Seekers.*” *New Statesman*, April
- [9] Miles, R.
2000 “*Racism*” (Çev. Sibel Yaman), Sarmal Yayınevi, İstanbul (in Turkish)
- [10] Muzenda, N. T.
1995 “*The Role Of Social And Economic Factors And Natural Disasters In Forced Population Displacement In Africa.*” *International Journal Of Refugee Law Special Issue*
- [11] Nobel, P.
1992 “*Blurred Vision In The Rich World And Violations Of Human Rights-A Critical Assessment Of The Human Rights And Refugee Linkage.*” *United Nations Bulletin Of Human Rights*, 91/1
- [12] Owen, D. ve A. Green.
1992 “*Migration Differentials Migration Patterns And Trends.*” T. Champion and T Fielding (Ed). *Migration Processes & Patterns Vol: 1 Research Progress & Prospects*, Belhaven Press, United Kingdom
- [13] UNHCR
1995 *Refugees And The Environment Caring For The Future*, Cenevre
- [14] Rogers, R.
1992 “*The Politics Of Migration In The Contemporary World.*” *International Migration Special Issue*, V 30
- [15] Zolberg, R. S. A. A. Suhrke and S. Aguayo.
1989 “*Escape From Violence: Conflict And The Refugee Crises In The Developing World.*” Oxford University Press, New York

Capital Structure Theory: A Lesson for Nigeria Listed Firms

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Abstract

The capital structure of a firm is a mixture of debt and equity employed in financing its operations. The capital structure decision is crucial for the survival of any business organization as to the maximization of returns to various stakeholders. This accounted for various theories of capital structure to explain cross-sectional variations. (Titman 1984, Rajan and Zingales 1995). This paper seek to empirically to identify the determinants of the capital structure of listed firm on the Nigerian Stock Exchange for about 5-year period, compare the performance with performance in advanced economy as found in literature with a view to determining the appropriate theory applicable to the Nigerian environment. Ordinary least square model is used to estimate the regression equation and results show positive associations between debt ratio, firm size and growth, while asset tangibility, risk, corporate tax and profitability are regularly related to debt ratio.

The results generally support the pecking order theory as demonstrated by Myers and Majhif (1984) and supported by Shyjam-Sunder and Myers (1999).

1. Introduction

Capital structure is an important component of Capital Budgeting Decision. It demonstrates the parameters faced by financial managers as they determine how best to finance capital that will hopefully enhance the value of their firms. The concept also amplifies the importance of, and provides a stronger theoretical foundation for, financial analysis in Business Policy and Strategic Management. The traditional approach is found in Modigliani and Miller's capital structure irrelevance hypothesis (Modigliani & Miller, 1958) and then build in the effects of taxes, financial distress, and agency costs until the "mainstream" model of capital structure emerges. It is a tidy approach (often referred to as the "Trade-Off Model") that is easily understood under the basic underlying tenet of optimizing value - and thus shareholder wealth - by choosing a capital structure combination which elicits the lowest possible costs of capital for the firm. Once the firm finds this optimal combination of financing sources (that is, the mix of debt and equity sources that equates the benefits of the tax shield provided by debt with the increased costs of financial distress borne by the firm's equity holders) the assumption is that every new naira/dollar/pounds of financing is raised in the same proportions of debt and equity financing. However, this approach falls short in two different and important categories: reported and observed practice (Liesz, 2001).

The conflict in theories arises because equity-holders have an incentive to invest suboptimally in very risky projects (Jensen and Meckling, 1976). In the event of an investment yielding large returns, equity-holders receive the majority of the benefits. However, in the case of the investment failing, debt-holders bear the majority of the consequences (Brander & Lewis, 1986). The need to balance gains and costs of debt financing emerged as a theory known as the Static Trade-Off theory by Myers (1984). It values the company as the value of the firm if unlevered plus the present value of the tax shield minus the present value of bankruptcy and agency costs.

A Review of Pecking Order Theory

Pecking order theory of capital structure states that firms have a preferred hierarchy for financing decisions. The highest preference is to use internal financing (retained earnings and the effects of depreciation) before resorting to any form of external funds. Internal funds incur no floatation costs and require no additional disclosure of proprietary financial information that could lead to more severe market discipline and a possible loss of competitive advantage. If a firm must use external funds, the preference is to use the following order of financing sources: debt, convertible securities, preferred stock, and common stock. (Myers, 1984) This order reflects the motivations of the financial manager to retain control of the firm (since only common stock has a “voice” in management), reduce the agency costs of equity, and avoid the seemingly inevitable negative market reaction to an announcement of a new equity issue. (Hawawini & Viallet, 1999)

Implicit in pecking order theory are two key assumptions about financial managers. The first of these is *asymmetric information*, or the likelihood that a firm’s, managers know more about financial current earnings and future growth opportunities than do outside investors. There is strong desire to keep such information proprietary. The use of internal funds precludes managers from having to make public disclosures about the company’s investment opportunities and potential profits to be realized from investing in them. The second assumption is that managers will act in the best interests of the company’s existing shareholders. The managers may even forgo a positive-NPV project if it would require the issue of new equity, since this would give much of the project’s value to new shareholders at the expense of the old. (Myers & Majluf, 1984)

Optimal Capital Structure

The concept of optimal capital structure is also expressed by Myers (1984) and Myers and Majluf (1984) based on the notion of asymmetric information. The conclusion drawn from the asymmetric information theories is that, there is a hierarchy of firms’ preferences with respect to the financing of their investments (Myers and Majluf, 1984). This “pecking order” theory suggests that firms will initially rely on internally generated funds, i.e. undistributed earnings, where there is no existence of information asymmetry, then they will turn to debt if additional funds are needed and finally they will issue equity to cover any remaining capital requirements. The order of preferences reflects the relative costs of various financing options. Myers and Majluf (1984) maintained that, firms would prefer internal sources to costly external finance. Firms that are profitable or generate high earnings are therefore expected to use less debt capital than those that do not generate high earnings.

2. The Choice of Capital Structure

Many theories try to explain why and when firms issue equity, but their predictions can only partially explain the observed behaviour. There are, in fact, various unexplained empirical puzzles. This paper proposes a new theory based on potential disagreement between investors and managers, and uses innovative empirical techniques to show that it can explain the puzzles observed. Existing theories on the choice between equity and debt are not always able to explain what firms choose to do in practice. The prevailing corporate finance paradigm offers two alternative explanations. The “trade-off theory” states that the main advantage of debt is to reduce corporate taxes, since interest can be deducted from earnings, while its main advantage is that firms with more debt may more easily fall into costly bankruptcy. Firms therefore determine an optimal level of debt trading off its advantages and disadvantages.

A number of previous empirical studies on capital structure identified firm size, asset structure, profitability, risk, growth and corporate tax as determinants of a firm’s capital structure.

2.1. Size

Larger firms tend to be more diversified and hence have lower variance of earnings, making them able to tolerate high debt ratios (Castanias, 1983; Titman and Wessels, 1988; Wald, 1999). Smaller firms on the other hand may find it relatively more costly to resolve information asymmetries with lenders, thus, may present lower debt ratios (Castanias, 1983). Another explanation for smaller firms having lower debt ratio is if the relative bankruptcy costs are an inverse function of firm size as opined by Titman and Wessels (1988) and also supported by Castanias (1983) when he states that if the fixed portion of default costs tends to be large, then marginal default cost per dollar of debt may be lower and increase more slowly for larger firms.

Several works support a positive relationship between firm size and leverage (Marsh, 1982; Friend and Lang 1988; Barton *et al*, 1989; Rajan and Zingales, 1995; Cassar and Holmes, 2003, Al Sakran, 2001; Hovakimian *et al*, 2004). Fischer *et al* (1989) however found a negative relationship between size and debt ratio.

2.2. Asset Tangibility

The degree to which the firm's assets are tangible should result in the firm having greater liquidation value (Harris and Raviv, 1991; Titman and Wessels, 1988). Bradley *et al* (1984) assert that firms that invest heavily in tangible assets tend to have higher financial leverage since they borrow at lower interest rates if their debt is secured with such assets. It is believed that, debt may be more readily used if there are durable assets to serve as collateral (Wedig *et al*, 1988). By pledging the firm's assets as collateral, the cost associated with adverse selection and moral hazards are reduced. This will result in firms that have greater liquidation value having relatively easier access to finance at lower cost, consequently, leading to higher debt or outside financing in their capital structure. Empirical evidence suggests a positive relationship consistent with theoretical argument between asset structure and leverage for large firms (Bradley *et al*, 1984; Wedig *et al*, 1988; Friend and Lang 1988; Mackie-Mason, 1990; Rajan and Zingales 1995; Shyam-Sunder and Myers 1999; Hovakimian *et al*, 2004). Kim and Sorenson (1986) however found a significant and negative coefficient between depreciation expense as a percentage of total assets and financial leverage.

2.3. Profitability

The relationship between firm profitability and capital structure can be explained in terms of the pecking order theory. According to this theory, firms prefer internal sources of finance to external sources. The order of the preference is from the one which is least sensitive (and least risky) to the one which is most sensitive (and most risky) that arise because of asymmetric information between corporate insiders and less well informed market participants (Myers 1984). By this token, profitable firms, which have access to retained profits, can rely on it as opposed to depending on outside sources (debt). Titman and Wessels (1988) and Barton *et al* (1989), agree that firms with high profit rates, all things being equal, would maintain relatively lower debt ratio since they are able to generate such funds from internal sources. Empirical evidence from previous studies seems to be consistent with the pecking order theory. Most studies found a negative relationship between profitability and capital structure (Friend and Lang, 1988; Barton *et al*, 1989; Shyam-Sunder and Myers 1999; Jordan *et al*, 1998; Mishra and Mc Conanghy, 1999; Al-Sakram 2001; Hovakimian *et al*, 2004).

2.4. Risk

The level of risk is said to be one of the primary determinants of a firm's capital structure (Kale *et al*, 1991). The tax shelter-bankruptcy cost theory of capital structure determines a firm's optimal leverage as function of business risk (Castanias, 1983). Given agency and bankruptcy costs, there are incentives for the firm not to utilize the tax benefits of 100% debt within a static environment model. The more

likely a firm will be exposed to such costs, the greater their incentive to reduce their level of debt within the capital structure of the firm.

One firm variable which impacts upon this exposure is the firm's opening risk, in that, the more volatile the firm's earnings stream, the greater the chance of the firm defaulting and being exposed to such costs. According to Johnson (1997), firms with more volatile earnings growth may experience more states where cash flows are too low for debt service. Kim and Sorensen (1986) also observed that, firms with high degree of business risk have less capacity to sustain financial risks and thus, use less debt. A number of works have indicated an inverse relationship between risk and debt ratio (Kale *et al*, 1991; Bradley *et al*, 1984; Titman and Wessel 1988; Friend and Lang 1988; Mackie-Mason 1990 Kim *et al*, 1998)

2.5. Growth

The relationship between growth and capital structure can also be explained by the pecking order hypothesis. Growing firms place a greater demand of the internally generated funds of the firm. According to Marsh (1982), firms with high growth will capture relatively higher debt ratios. There is also a relationship between the degree of previous growth and future growth. Michaelas *et al*. (1999) argue that future opportunities will be positively related and consequently the cost of financing are reduced if the firm issues short term rather than long term debt. Myers (1977) however, holds the view that firms with growth opportunities will have smaller proportion of debt in their capital structure. This is due to the fact that, conflicts between debt and equity holders are especially serious for assets that give the firm the option to undertake such growth opportunities in the future. Empirical evidence seems inconclusive. Some researchers found positive relationship between sales growth and leverage. (Kester, 1986; Titman and Wessels, 1988; Barton *et al*, 1989). Other evidence showed that higher growth firms use less debt, as such indicated negative relationship between growth and debt ratio (Kim and Sorensen, 1986; Stulz, 1990; Rajan and Zingales, 1995; Mehran, 1992 Roden and Lewellen, 1995; Al-Sakran, 2001).

2.6. Taxation

There have been numerous empirical studies of the impact of taxation on corporate financing decisions in the major industrial countries. Some are concerned directly with tax policy, for example: Auerbach (1984), Mackie-Mason (1990), Shum (1996), and Graham (1996, 1999). Mackie-Mason (1990) studied the tax effect on corporate financing decisions. The study provided evidence of substantial tax effect on the choice between debt and equity. He concluded that changes in the marginal tax rate for any firm should affect financing decisions. When already exhausted (with loss carry forwards) or with a high probability of facing a zero tax rate, a firm with high tax shield is less likely to finance with debt. The reason is that tax shields lower the effective marginal tax rate on interest deduction. Graham (2002) concluded that, in general, taxes do affect corporate financial decisions, but the magnitude of the effect is mostly "not large". On the other hand, DeAngelo and Masulis (1980) show that there are other alternative tax shield such as depreciation, research and development expenses, investment deductions, etc., that could substitute the fiscal role of debt. Empirically, this substitution effect is difficult to measure as finding and accurate proxy for tax reduction that excludes the effect of economic depreciation and expenses is tedious (Titman and Wessels, 1998).

3. Data Presentation and Analysis

The study sampled listed firms in the Nigerian Stock Exchange for about five (5) years from 2001 – 2005. About twenty (20) firms were considered having the characteristic of being listed as at 2001 and remained listed in 2005. The data used was from annual reports and accounts of these firms for the years under consideration.

The panel character of the data allows for the use of panel data methodology. Panel data involves the pooling of observations on a cross-section of units over several time periods and provides results that are simply not detectable in pure cross-sections or pure time-series studies. The panel regression equation differs from a regular time-series or cross section regression by the double subscript attached to each variable. The general form of the panel data model can be specified more compactly as:

$$Y_{it} = \alpha_i + \beta X_{it} + \epsilon_{it} \quad (1)$$

With the subscript i denoting the cross sectional dimension and t representing the time series dimension. The left-hand variable Y_{it} , represents the dependent variable in the model, which is the firm's debt ratio. X_{it} contains the set of explanatory variables in the estimation model, α_i is taken to be constant overtime t and specific to the individual cross-sectional unit i . If α_i is taken to be same across units, Ordinary Least Squares (OLS) provides a consistent and efficient estimate of α and β . The model for estimating the determinants of capital structure based on the variables discussed in section 2.1 is therefore given as follows:

$$DR_{it} = \beta_0 + \beta_1 SIZE_{it} + \beta_2 TANG_{it} + \beta_3 ROA_{it} + \beta_4 RISK_{it} + \beta_5 GROW_{it} + \beta_6 TAX_{it} + \epsilon_{it} \quad (2)$$

DR_{it} = leverage (total debt/equity + debt) for the firm i in time t

$SIZE_{it}$ = the size of the firm (log of total assets) for firm i in time t

$TANG_{it}$ = fixed tangible assets divided by total assets for firm i in time t

ROA_{it} = earnings before interest and taxes divided by total assets for firm i in time t

$RISK_{it}$ = the squared difference between the firm's profitability in time t and the mean profitability for firm i

$GROW_{it}$ = growth in sales for the firm i in time t

TAX_{it} = the ratio of tax paid to operating income for firm i in time t

ϵ = the error term

4. Results and Findings

4.1. Summary Statistics

Table 1 provides a summary of the descriptive statistics of the dependent and independent variables. This shows the average indicators of variables computed from the financial statements. The mean (median) debt ratio (measured by total debt/total capital) of the sample firms was 0.6234 (0.5800). Total debt appears to constitute more than half of the capital of the firms. This suggests that, 62.3% of total assets are financed by debt capital. Equity capital therefore represents 37.7%. Size, determined as the natural logarithm of total assets had a mean (median) of 19.7421 (19.4664). Asset tangibility had a mean of 0.4516. This indicates that, on average, fixed assets accounted for 45.16% of total assets. Profitability, given as the ratio of EBIT to total assets, registered a mean value of 0.1073 suggesting a return on assets of 10.73%. Risk is measured as the variability of EBIT and this showed a mean (median) of 0.9672 (0.6472). The mean growth (measured as growth in sales) was 0.2641. This indicates that, on average, growth rate in sales was 26.41% during the six-year period. Corporate tax rate on average was 34.75%.

Table 1: Descriptive statistics of dependent and independent variables

	Mean	Std Dev	Minimum	Median	Maximum
DR	0.6234	0.2138	0.1904	0.5800	1.1741
SIZE	19.7421	2.0658	15.7001	19.4664	24.4146
TANG	0.4516	0.2671	0.0208	0.4858	1.1367
ROA	0.1073	0.1044	-0.1307	0.0922	0.5026
RISK	0.9672	4.8314	-24.1545	0.6881	23.7436
GROW	0.2641	0.2812	-24.7636	0.2073	1.1042
TAX	0.3475	0.2403	0.0000	0.4025	0.8652

4.2. Regression Analysis

Regression analysis is used to investigate the relationship between the firm-level variables and leverage. Ordinary Least Square (OLS) regression results are presented in Table 2. The results indicate a statistically significant positive relationship between size and leverage. The results suggest that the bigger the firm, the more debt it will use. One reason is that, larger firms more diversified and hence have lower variance of earnings, making them able to tolerate high debt ratios. Lenders are more willing to lend to larger companies because they are perceived to have lower risk levels. On the other hand, smaller firms may find it relatively more costly to resolve information asymmetries with lenders, thus, may present lower debt ratios. This result is expected from financial theory.

The coefficient of asset tangibility variable is negative and significant for the panel data estimations. The results suggest that, for Nigerian firms, a higher proportion of fixed assets lead to the use of less debt financing in relative terms.

A plausible reason is that higher proportions of fixed assets denote higher operating risks therefore firms may not be want to be exposed to more risk from the use of more debt capital. Alternatively, a higher proportion of fixed assets would also suggest that a company has the required capital which may qualify it to get listed on the stock market. Since listing requirements on the Nigerian Stock Exchange include stated capital this is likely to influence the choice of equity over debt.

The regression coefficient for the effect of profitability on leverage is negative and highly statistically significant. The results, which are also consistent with previous studies show that, higher profits increase the level of internal financing. Firms that generate internal funds, generally tend to avoid gearing (debt). While profitable firms may have better access to debt finance than less profitable ones, the need for debt finance may possibly be lower for highly profitable firms if the retained earnings are sufficient to fund new investments. The findings clearly provide support for the pecking order theory that denotes that profitable firms prefer internal financing to external financing.

The negative impact of risk for the OLS estimation implies that, firms which perform below average are less leveraged. In other words, companies with high operating risk try to control total risk by limiting financial risk which is associated with debt financing. Firms with high degree of business risk have less capacity to sustain financial risks and thus, use less debt. High risk firms are also said to have low cash flow for debt service.

The results show a positive sign of growth. The sample of listed firms in this study suggests that growth is associated in a direct manner with financial leverage. If this is generally the case, then firms with high growth will require more external financing to finance their growth and therefore display higher leverage. This view is supported by previous empirical studies (Kester, 1986; and Wessels, 1988; Barton *et al*, 1989).

The empirical results in this study also show a negative relationship between corporate tax and capital structure. In Nigeria, the relationship could be attributable to the special tax rebate for listed firms. Firms that go public tend to enjoy tax reduction compared to unlisted firms. Companies have an incentive to get listed given the tax incentive they receive. Thus, a general increase in corporate tax would be associated with increasing equity capital since firms would be encouraged to go public and

enjoy the special tax rebate. This position appears to be contrary to traditional capital structure theory but may be reasonable in the Nigerian context.

Table 2: Regression Model Results

Variable	Coefficient	t-statistic	Prob
SIZE	0.0202	5.5278	0.0000
TANG	-0.6057	-20.6096	0.0000
ROA	-0.5696	-7.4059	0.0000
GROW	0.0143	-3.3064	0.0005
TAX	-0.0941	-3.1576	0.0021
R-squared	0.986828		
S.E of regression	0.127475		
F-statistic	1248.6490		
Prob(F-statistics)	0.000000		

5. Conclusion

This paper perused the determinants of Capital Structure with special reference to listed firms in Nigeria. Data from Annual Reports and Accounts of chosen firms were analysed for a period of five (5) years. Ordinary Least model was used to estimate the regression equation.

The result indicates that Capital Structure is positively related to firm's size and growth and those larger firms employ more debt capital than smaller ones. However, most of the Nigerian firms run away from debt which is consistent with the behaviour expectation under the Pecking-Order theory.

We however recommend that financial analysis and investors' adviser should educate their client on the positive impact of debt is reasonable not bringing the weighted average cost of capital above the returns expected. While it is true that internal fund may be cheaper, the consumption pattern of the entire populace in Nigeria, inflation and retention of little or nothing out of returns may financially incapacitate industries necessarily calling for Debt in the Capital Structure.

References

- [1] Akintoye I. R. (2005) “ Investment Decisions: Concepts, Analysis and Management. *Unique Educational Publisher*, Lagos, Nigeria
- [2] Al-Sakran, S. A. (2001): “Leverage Determinants in the Absence of Corporate Tax System: The Case of Non-Financial Publicly Traded Organisations in Saudi Arabia” *Managerial Finance*, 27(10/11), pp. 58-86.
- [3] Bevan, A. A. and Danbolt, J. (2004). “Testing for inconsistencies in the estimation of UK capital structure determinants” *Applied Financial Economic*, Vol, 14, No. 3, pp. 55-66.
- [4] Bhaduri S. N. (2002). “Determinants of Capital Structure Choice: a study of the Indian corporate sector”, *Applied Financial Economic*, pp. 655-665.
- [5] Brealey, R. A., Myers, S. C. and Allen, F. (2005) ‘Corporate Finance’, 8th edn, Mc Graw Hill., New York.
- [6] Cassar, G. and Holmes, S. (2003): “Capital Structure and Financing of SMEs: Australian Evidence” *Journal of Accounting and Finance*, 43, pp. 123-147.
- [7] Chirinko, R. S. and Singha, A. R. (2000). ‘Testing static trade-off against pecking order models of capital structure: A critical comment.’, *Journal of Financial Economics*, Vol. 58, pp. 417-425.
- [8] Chen J. J. (2004). ‘Determinants of Capital Structure of Chinese Listed companies’, *Journal of Business Research*, Vol. 20, No 1, pp. 83-98.
- [9] Deesomsak, S. R., Paudyal and Pescetto, G. (2004). ‘The determinants of capital structure: evidence from the Asia Pacific Region’, *Journal of Multinational Financial Management*, Vol. 14, pp. 387-405.
- [10] Frank, M. and Goyal (2003). ‘Testing the pecking order theory of capital structure’, *Journal of Financial Economics*, Vol. 67, pp. 217-248.
- [11] Gaud P., Jani E. Hoesli M, Bender A (2005). The capital structure of Swiss Companies: An empirical analysis using Dynamic Panel Data’ *European Financial Management*, Vol. 11, No 1, pp. 51-69.
- [12] Graham, J. R., 1999, “Do personal taxes affect corporate financing decisions?” *Journal of Public Economics*, 73, pp. 41-73.
- [13] Hovakimian, A., Hovakimian, G. and Tehranian, H. (2004): “Determinants of target capital structure: The case of dual debt and equity issues” *Journal of Financial Economics*, 71, pp. 517-540.
- [14] Huang, G. and Song F. M (2005). ‘The determinants of Capital Structure: Evidence from China’, *China Economic Review*, Vol. 76, pp. 323-339.
- [15] Miguel, A. and Pindado, J., (2001). ‘Determinants of capital structure: new evidence from Spanish panel data’, *Journal of Corporate Finance*, Vol. 7, pp. 77-99.
- [16] Modigliani F. and Miller M. (1963): “Corporate Income Taxes and Cost of Capital: A Correction” *American Economic Review*, 53, pp. 443-453.
- [17] Myers S. C. and Majluf, N. S. (1984): “Corporate Financing and Investment Decisions when Firms have Information that Investors do not have” *Journal of Financial Economic*, 12, pp. 187-221.
- [18] Ozkan, A. (2001), ‘Determinants of capital structure and adjustment to long run target’, *Journal of Business Finance Account*, Vol. 28, pp. 175-198.
- [19] Panno, A. (2003), ‘An empirical investigation on the determinants of capital structure: the UK and Italian experience’. *Applied Financial Economics*, Vol. 13, pp. 97-112.
- [20] Rajan R. G. and Zingales, L. (1995): What do we know about Capital Structure: Some Evidence from International Data”, *Journal of Finance*, 50, pp. 76-87.
- [21] Shyam - Sunder, L. S. and Myers S. C. (1999), “Testing Static Tradeoff Against Pecking Order Models of Capital Structure,” *Journal of Financial Economics*, Vol. 51 pp. 219-244.

- [22] Titman, S. and Wessels, R. (1988) “The Effect of Capital Structure on a Firm’s Liquidation Decisions” *Journal of Financial Economics*, 13, pp. 137-151.
- [23] Van Horne, J. C. and J. W. Wachowicz, *Fundamentals of Financial Management, 11th Edition*. Prentice-Hall Publishers, Inc., Upper Saddle River, NJ, 2001.
- [24] Wald, J. k. (1999): “How Firm Characteristics Affect Capital Structure: An International Comparison”, *Journal of Financial Research*, 22, pp. 161-187.
- [25] Walsh, E. J and Ryan, J. (1997). ‘Agency and tax explanations of security issuance decisions’, *Journal of Business Finance-Account*, Vol.24, No. 7, pp. 941-959.