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Selfie-Mania Influence on Adolescent Self-Esteem

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Abstract

Our society new where technology has touched every cell of it is becoming even more virtually from where fashion is Selfie therefore be shooting themselves, a modern trend which has involved the whole society on the plates as Instagram, Facebook, Twitter, Snapchat, etc. Art selfie is one that many people have practiced and perfected over the years, but knowing what relationship they have with this new generation of virtual relationship remains a difficult task as important as well. This study aims to explore the selfie as a reflection of low self-esteem because the mania for photographing herself, is a pathology of the syndrome in search of a stable personality. Target group of this study were middle school students "Dhaskal Todri" in Elbasan, where 100 participants aged 16-18 years from where 39 participants were males and 61 females. They were asked to fill the Rosenberg Self-Assessment Inventory (Rosenberg Self-Esteem Inventory, 1965) within ethical standards. After analysis of the data showed a positive correlation between connectivity Selfie – Self-Esteem which holds that studies to date have shown that there is a connection between the selfie mania and self-esteem. Out of the sample obtained in this study show that individuals are looking for a better image of themselves as self images contradict the image of a secure existence, through fixing a few moments as a symbol of an attempt to establish an identity consistent, full realized. The pathology of this syndrome is the search for a stable personality. Of course, we are talking about the first research on this phenomenon should probably be more careful diagnostic categorization and labeling.

Keywords: Self-esteem, selfie- mania, adolescent

Introduction

Overview of the problem of study

Each of us in one way or another is fascinated by the pictures on the fact that consists of a tow universal and this is explained very simply: just a shot we all encourage curiosity to see how we have come despite the reactions of each of us. They are subjective and are related to image internal, mental scheme that we perceived ourselves having to do with how we see ourselves and how we want others to see us. Photography is seen as a powerful means of expression, as a symbolic language to express what can not be said in words, and as a stimulator of emotions and behaviors about which often are not aware of. The first to have captured value therapeutic photography field of mental health was Hugh Diamond (1856), amateur photographer and psychiatrist at the Psychiatric Hospital Surrey County Lunatic Asylum, first using photographs of his patients as a diagnostic tool for identifying mental disorder.

Oxford dictionary (2013) defined this term as, "A photograph that one has taken of oneself, typically one taken with a smartphone or webcam and shared via social media". But before the rise of this selfie concept, smart phones or social media, the thought of taking self portraits was existed among people with using self-timers on the cameras. But the idea behind the selfie meant to be different than using a self timer, and also it should not take a longer snapping time process as self timer. Most importantly to be a selfie, photograph should be captured with a camera held at arm's length or focused at a mirror. The other version of the selfie is group selfie, where the subject of the selfie is joined or crowded or at least with one other person. It is also gaining wide popularity in the selfie culture. And now the tendency is called them as 'usie', the 'self' replaced by a collective 'us'. Anyway the whole concept is; wherever you are, whatever you are doing, with whom you

are with, taking a snapshot of yourself to express it just as quick as you can. History Before coming into photography, the earliest selfie looking painting was done by Parmigianino way back in 1524, and it was named as "Self-portrait in a Convex Mirror". In the painting, it portrays the artist himself distorted by a convex mirror which made it exactly look like a selfie. The very first self photograph or somewhat called selfie was taken by Robert Cornelius, an amateur chemist and photography enthusiast, in way back 1839, very early days of photography explorations, experimentations and inventions. Because of the slow capturing process at that time in camera's, after setting up the camera he was able to run back and sit in front of the camera decently without peeping into it. After 1900s mirror selfie technique was widely being used even it was not termed as selfie at that time. The first teenager who took a selfie was identified as Russian Grand Duchess Anastasia Nikolaevna from the last Tsar family in 1914 when she was 13 years old. She used the mirror technique to capture the photo and says about that experience like this. The 'Selfie Effect' in regular society picture of myself looking at the mirror. It was very hard as my hands were trembling. "

Selfie and Regular Life The practical usage of this term was not being widely utilized until 2010, and come into to use in day to day life just from past couple of years. The main reason behind this was the easy access to smart phones gradually among the population (Dormann, C. ; Fay, D. ; Zapf, D. ; Frese, M. (2006). Nowadays it is customary to include a built in camera on every smart phone device. And sometimes it really confuses whether the phone is having a camera option or camera is having a phone option because of the high tech photography technologies it incorporates. And this technology ensured that selfies are more and more easier to produce and share on the web, making even regular people to do photography not only just pros. It was even become trendier after the front facing camera designs were integrated into the smart phones. When the social media sites become apps for the smart phones and introduction of mobile photo sharing apps such like Instagram with incorporated photo retouching features, selfie becomes more and more familiar obsession among the society, specifically among the young generation. Because this immediate photo sharing technology supports the person to say without uttering a word; where he is now, what he is doing now, what he looks like now and most significantly to state "Hello, this is me". According to WebSta Instagram Web Viewer, usage of hashtag '#selfie' on Instagram retrieves 180, 026, 033 posts and on 14th place over top 100 tags in 2014 October.

Sociological Effects Selfie (Olsen, J. M. ; Breckler, S. J. ; Wiggins, E. C. (2008) is perhaps tending to be a greater interest for social scientists. With thorough analysis it is evident that, this becoming more fashionable predominant trend among young generation. In a more detail level it is apparent that teenage girls are more tend to capture their selfie faces when a new hairstyle, makeup or facial going on with them. Taking a selfie when on a special occasion, or else before the participation of the event, becoming a typical scenario among teen girl culture. Most notable selfies have odd angles, kissy faces or looking in a direction that is not towards the camera. In particularly mirror selfies are their habitual behavior to show off when a new outfit wears on. So it is clear that teen girl customary is still not changed from the time period of last Tsar family as we mentioned about 13 years old Anastasia before.

The trend of shooting ourselves is back in vogue, also tend to Albanian teenagers to stop this study will specifically exploring the selfie as a reflection of low self-esteem and narcissism. In fact, traditional ignores narcissism contact with others, the person itself creates an exaggerated self-image. In Greek mythology narcissus so much in love with his own image reflected in the water that spellbound with this love, lost and falling into the river where self - reflected. Network social networks can be conceived as a large mirror narcissizte, to tell others who you are as valid and able to communicate those aspects of yourself emotionally and often unrealistic, avoiding the difficulties of coping through direct contact. So anyway avoids individual real contact, directly with another, and seeking to "sell" themselves another, more perfect. It seems that social networking presents an overview and a mask at the same time. Studies show that spending more time on Facebook by posting vetëportrete narcissizte trend is increasing worldwide.

The 'Selfie Effect' in regular society it was identified that he was diagnosed with body dysmorphic disorder (BDD), also known as body dysmorphia or dysmorphic syndrome. A mental illness that causes one to sufferer and spend a lot of time worrying about their appearances. After the medical therapies, his thoughts echoed that, this selfie taking addiction was like drugs, alcohol or gambling, which is quickly spiral out of control.

If you ask a link between Selfie- Syndrome and psychopathology, this leads to criteria of addiction, mood disordered situations, obsessive thoughts, obsessive - compulsive disorder. Certainly seeing this phenomenon in this context, we are talking about research money should probably be more careful diagnostic classification and labeling.

Selfie-Mania influence on adolescent self-esteem

In the minds of individuals who like self-portraits publication there is something wrong. This is the opinion of some researchers that American Psychiatric Association in a study recently pointed out that this is explained by a wish ill to make files yourself and then you publish them on the web and this serves to compensate for the lack of confidence. The first indicator that pushes the individual to selfie is a strong will of the person to tell the world: "I'm here and I'm doing this." Studies to date have shown that there is a connection between the selfie mania and self-esteem (Mruk, C. (2006). People who make picture yourself are looking for a good image for themselves. Young people, especially teenagers, do not feel you realize and it causes a vague idea about yourself. The cause of the first is a problem of identity as opposed to a precarious existence, through fixing a few moments as a symbol of an attempt to establish an identity consistent, complete and successful. Allegations of social context require an ideal person and it brings uncertainty, which pushes toward creating a perfect image for yourself seeking to stop now. The photos are as a means to demonstrate the existence of a person. The pathology of this syndrome is the search for a stable personality. Individuals have weak personality and constantly seek confirmation through like-ve or comments to understand who they are and they're worth. Art selfie is one that many people have practiced and perfected over the years, where today more than 31 million people worldwide are constantly posting pictures of themselves, so that it has turned into a desire -obesive where already under a recent study by the Pew Research Center shows that 91% of teenagers post their images continuously in social media so compulsive. According to Pamela Rutledge Ph. D, Dean of the Faculty of Media Psychology program at the Massachusetts School is a post selfies empowering act for an image of himself alienated from where Samantha, a 19-year-old girl claimed that why it was posting so compulsive photo of themselves on social media was the satisfaction he received when taking Like and positive reviews for her image. According Dr. Weber girls who repeatedly make selfies struggle with low self-esteem. Thinking of others has been a part of identity development for more than a century of by Andrea Letamendi Ph. D, a doctor of psychology at UCLA, concluded that by posting pictures so compulsive individuals reflect low self-esteem and strengthen the influence of others on their lives. Dr. Letamendi claims that individuals who tend to have low self-esteem and are depressed are more likely to engage in making self-portraits.

Social networks (Johnson E. A. ; O'Brien K. A. (2013) have changed the way we communicate and keep in touch with friends all over the world, but also are undeniable and, unintended consequences arising from their excessive use. Well, according to the researchers, the excessive use of social networks can be associated with several psychiatric disorders, from where, according to studies conducted in 2010 at the University of York which examine the social network connection self concluded that users of social networks They tend to have narcissistic personality and low self-esteem. According to a search of Amanda Forrest of the University of California and Joanne Wood University of Waterloo, published in Psychological Science, people with low self-esteem tend, inter alia, to post pictures: they tend to criticize those who should be their friends and highlight the negative aspects.

When we do we look very attractive Selfie in most cases due to the effects of technology. Even doctors (Marsh, H. W. (1990) give Selfie alarm that reflects the lack of confidence and that many individuals are inclined towards plastic surgery according to the findings of a study that took into account the 2700 cases treated by surgeons specializing in American interventions of facial plastic surgery. Mania to photograph themselves, is a pathology of the syndrome in search of a stable personality.

Self-esteem (Branden, N. (1969) is a very broad term for how good or bad we feel about ourselves, and it can generally vary as per time. For example, if you fail a test it may be upsetting, but ultimately a grade doesn't determine who you are. People who have low self-esteem commonly have a very pessimistic outlook and are often quite self-critical, withdrawn socially, and are overwhelmed with feelings of inferiority. A person with low self-esteem may then feel better. So they rather don't focus on more important ways of changing their negative self-place importance on their looks, thinking that taking and posting selfies will help image such as self-acceptance, self-compassion, and self-respect which is undesirable.

This study is an innovation for our society in the context of clinical studies.

Definition of terms and their operationalization

Self –esteem: In sociology and psychology, self-esteem reflects a person's overall subjective emotional evaluation of his or her own worth. It is a judgment of oneself as well as an attitude toward the self. Self-esteem encompasses beliefs about oneself, (for example, "I am competent", "I am worthy"), as well as emotional states, such as triumph, despair, pride,

and shame. Smith and Mackie (2007) defined it by saying "The self-concept is what we think about the self; self-esteem, is the positive or negative evaluations of the self, as in how we feel about it. Self-esteem is attractive as a social psychological construct because researchers have conceptualized it as an influential predictor of certain outcomes, such as academic achievement, happiness, satisfaction in marriage and relationships, and criminal behaviour. Self-esteem can apply specifically to a particular dimension (for example, "I believe I am a good writer and feel happy about that") or a global extent (for example, "I believe I am a bad person, and feel bad about myself in general"). Psychologists usually regard self-esteem as an enduring personality characteristic ("trait" self-esteem), though normal, short-term variations ("state" self-esteem) also exist. Synonyms or near-synonyms of self-esteem include: self-worth, self-regard, self-respect, and self-integrity.

Selfie- mania: Selfies are photos of a person which usually consist of up-close angles of a person's face. The term selfie has become so immersed in our daily use vocabularies now, that not only has it officially entered into the Oxford English Dictionary, but "selfie" was Oxford English Dictionary's Word of the Year for 2013. It is described as when an individual holds a camera or smartphone at arm's length and takes a picture of their face. But honestly, some of these may come across as awkward. There tend to be various poses including the discrete pouting, the 'duck' face or lips pose, the funny-trying-to-be-cute face, etc.

Adolescence: Adolescence describes the teenage years between 13 and 19 and can be considered the transitional stage from childhood to adulthood. However, the physical and psychological changes that occur in adolescence can start earlier, during the preteen or "tween" years (ages 9 through 12). Adolescence can be a time of both disorientation and discovery. The transitional period can bring up issues of independence and self-identity; many adolescents and their peers face tough choices regarding schoolwork, sexuality, drugs, alcohol, and social life. Peer groups, romantic interests, and external appearance tend to naturally increase in importance for some time during a teen's journey toward adulthood.

Methodology:

The purpose and objectives of research:

To explore the correlation relationship between selfie mania and self- esteem.

This study is an innovation for our society in the context of clinical studies.

The focus of research

This research will be focused on adolescence:

By involving in the sample only the adolescents 16-18 years old .

Sample

Target group of this study were middle school students "Dhaskal Todri" in Elbasan, where 100 participants aged 16-18 years from where 39 participants were males and 61 females.

Study measuring instruments

Instruments used for evaluation Self esteem in adolescents selected for this quantitative study are:

1. Rosenberg, inventory

Self-esteem is typically assessed using self-report inventories. One of the most widely used instruments, the RSES (Rosenberg, 1965) is a 10-item self-esteem scale scores that requires participants to indicate their level of agreement with a series of statements about themselves.

Results

After analysis of the data showed a positive correlation (tab. 1) between connectivity Selfie – Self-Esteem which holds that studies to date have shown that there is a connection between the selfie mania and self-esteem. Out of the sample obtained in this study show that individuals are looking for a better image of themselves as self images contradict the image of a secure existence, through fixing a few moments as a symbol of an attempt to establish an identity consistent, full realized.

The pathology of this syndrome is the search for a stable personality. Of course we are talking about the first research on this phenomenon should probably be more careful diagnostic categorization and labeling.

Pearson Correlation Table 1. 3

Question	Valid	Missing	Pearson Correlation
1. On the whole, I am satisfied with myself.	65	0	1. 00
2. At times I think I am no good at all.	65	0	. 714**
3. I feel that I have a number of good qualities.	65	0	1. 00
4. I feel I do not have much to be proud of.	65	0	. 308*
5. I am able to do things as well as most other people.	65	0	1. 00
6. I certainly feel useless at times.	65	0	. 514**
7. I feel that I'm a person of worth, at least on an equal plane with others.	65	0	. 340**
8. I wish I could have more respect for myself.	65	0	. 592**
9. All in all, I am inclined to feel that I am a failure.	65	0	. 971**
10. I take a positive attitude toward myself.	65	0	. 243

** . Correlation is significant at the 0. 01 level (2-tailed)

* . Correlation is significant at the 0. 05 level (2-tailed)

I think "True self-esteem comes from connecting with and serving others".

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Development of a Predictive Model of Elderly Patients at Risk of Future Hospital Admission at Primary Care Centres in Valencia (Spain)

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Abstract

This paper presents the development of a new predictive model of elders at risk of suffering hospital admissions in the subsequent year in Valencia (Spain), based on primary care experts' discussions and consensus. The study involves three main stages. Firstly, Focus Group methodology with six primary care experts to design the first set of variables of the model. Subsequently, two retrospective studies to analyse the performance of the selected variables in a pilot sample (n=107) and to design the predictive model in a development sample (n=343). Data was collected from electronic medical records and consulting the professional of reference. Logistic regression analysis identified five variables as predictors of hospital admissions during the subsequent year of the development cohort: diagnosis of chronic heart diseases, chronic respiratory diseases, diabetes, presence of palliative care and number of previous visits to the hospital emergency department. A risk scoring system was developed for each patient from 0 to 1, with a cut-off point of 0.5. The model had a sensitivity of 42%, specificity of 96% and AUC of 0.764. Our predictive model identifies with moderate efficiency elderly patients at risk of suffering future hospital admissions. Additionally, this first screening could be extended through a second phase aimed to assess social variables which are very relevant in the current economic context in Spain. Further research is needed to validate these results with larger samples, and to explore their applicability in other health and social care settings.

Keywords: Risk prediction model; primary care; elderly; future hospital admissions; chronic diseases

1. Introduction

The care and management of chronic diseases – those with a long duration and generally with slow progression – is one of the big challenges that public healthcare systems are currently facing within developed countries. In Spain, chronic diseases represent around 70% of the total costs in healthcare (García-Goñi et al., 2012) and are associated with a high use of several healthcare services and resources, such as visits to general practitioners (GPs), hospital admissions, pharmacological treatments or long-term care (LTC).

The approaches to these types of diseases are complicated by the fact that most of these patients do not suffer a unique chronic condition, but they present several of them at the same time; which is known as multimorbidity. Moreover, cases of multimorbidity are strongly associated with age (e. g. Salisbury et al., 2011). For instance, a study carried out in a sample of Spanish adults shows that the group of persons aged 65 and over presented the highest prevalence of multimorbidity; concretely, 67.3% of women and 52.9% of men (Garin et al., 2014).

In this regard, elderly people do have a high number of visits to GPs at primary care centres as they suffer more chronic conditions than other groups of population (Salisbury et al., 2011). However, according to a systematic review carried out by Sinnot et al. (2013), the current model of primary care is fragmented and lacks a patient-oriented approach, which does not facilitate an efficient management or an appropriate care of chronic patients. It is necessary that the model addresses an individualized perspective with special focus in continuity care (Garcés et al., 2011). Nonetheless, the identification of the most vulnerable patients in need of a more specific and comprehensive care is not always simple, so tools or strategies are required that facilitate this task to GPs in their daily work.

The systematic use of stratification tools and prediction models can be useful and support GPs in the decision-making processes, especially regarding elderly people with multimorbidity (Orueta et al., 2013). These types of initiatives would

enable early implementation of intervention or prevention programmes to avoid adverse situations that would foster: (a) the support to GPs in the management of patients with more efficiency according to their clinical profile; and (b) savings for the system related to the use of health resources that these patients imply, such as hospital admissions.

In the current literature there is a wide number of population stratification tools aimed to identify patients at risk in accordance with different output variables; for instance, risk of frailty (Sternberg et al., 2011), individual risk of high healthcare cost (Coderch et al., 2014) or risk of suffering future hospital admissions (FHA) (Kansagara et al., 2011). Avoiding emergency hospital admissions in elderly population is a major interest for public administrations. Thus, early identification of profiles of patients at risk may facilitate the implementation of interventions to save potential costs related to healthcare utilization (Lehnert et al., 2011) and to avoid and/or decrease the functional decline and impairment of quality of life and physical and cognitive status in elderly people (Boltz et al., 2012; Merino & Cruz-Jentoft, 2012).

In previous studies, the author has implemented stratification tools – originally developed and validated in the United States (USA) – in a Spanish sample of elderly patients using electronic health information systems (EHIS) as main source of data. Results showed a moderate efficiency in the identification of elderly patients at risk of suffering FHA (Doñate-Martínez et al., 2014). In spite of that study, it meant a starting point for the application of these types of strategies in the author's context (Ródenas et al., 2014), it is important to take into consideration the limitations associated to the use and extrapolation of tools in contexts that are different to the original one. The features of each healthcare system impact on numbers related to clinical variables (e. g. visits to primary care centres or emergency departments) and, therefore, to the results derived from stratification.

Thus, the objective of this study was the development of a new predictive model of elderly patients at primary care services from the Valencian Healthcare System (Spain) according to their risk level of suffering hospital admissions in the subsequent year.

2. METHODOLOGY

2. 1. Overall study design

Design

The stratification model was developed between May 2014 and November 2015 in three main phases. In a first step, it was organized several sessions of focus groups (FG) with the participation of primary care professionals aimed to design the first set of variables for the model. In the second phase the preliminary version of the model was piloted through a retrospective cohort study in order to analyse its performance in a small sample from our study setting. Finally, based on the results of the previous step, a refined set of variables was implemented in a larger sample following a retrospective cohort design.

Setting

The study was carried out in the Comprehensive Healthcare Centre of Burjassot in Valencia (Spain), which combines primary and specialized care. In this municipality the population that was 65 years old and over were 6,905 people in 2013. The activity related to primary care in this municipality in 2012 is summarized in 90,312 visits to general medicine, 11,569 to nursing and 1,366 in social work services (AVS, 2013). The hospital of reference of this centre is the Hospital Universitario Arnau de la Ribera, which received a total of 14,338 admissions in 2013; 67. 31% out of them were urgent (AVS, 2014).

Ethical issues

The project was approved by the Ethical Committee of the Hospital Arnau de Vilanova. During all phases of the study the data collection was undertaken by primary care professionals involved and the subsequent handling and statistical analysis was carried out after removing any type of personal data. In the second and third phases informed consents were not

requested to patients as data was collected following a retrospective revision of clinical and administrative records of clinical histories.

2. 2. Stage 1 – Focus Groups: selection of variables

Participants

Six primary health care experts from different fields (general medicine, nursing and social work) – with strong experience dealing with older people, chronicity and LTC – participated in different sessions of FG.

Organization of the sessions

Five sessions of FG took place aimed to agree and design a list of potential items to be included in the stratification model of patients. Every session lasted around 90 minutes and took place in the Comprehensive Healthcare Centre of Burjassot (Valencia). Sessions were coordinated and conducted by a researcher with previous experience in stratification models. Discussions were recorded on a digital recorder – after previous agreement of experts. A second facilitator also took notes on observations, summaries and reflections derived from the discussions.

Discussions were structured, so for every session organizers prepared in advance materials and defined a goal to be achieved. After each meeting organizers analysed the content recorded and in the following session they shared main results and consensus obtained to promote experts' commitment and motivation. Table 1 specifies the protocol followed along the FG and the main goals obtained in every session. In some sessions the Nominal Group Technique (NGT) was used to achieve consensus on key points for the scheduled discussions.

Table 1. FG protocol (6 experts)

Session	Task	Objective
1	Introduction of the project, organizers and experts.	To present the objectives and tasks of the study. To establish the first contact of the working group and rapport.
2 & 3	Study of 10 clinical cases (selected by experts) with a profile characterized by: a) 65 years and over; b) multiple chronic diagnoses; c) with and without previous hospital admissions.	To draw enabling and protective variables of suffering FHA.
4	Presentation by the organizers of variables selected from the analysis of sessions 2 and 3. Assessment and prioritization by every expert of variables according to: a) their rate in the prediction of future hospital admissions; and b) relationships between variables. Share assessments and discussion.	To reach an agreement and to select the most relevant variables for the identification of patients at risk of suffering FHA.
5	Presentation by the organizers of agreed variables at session 4. Discussion to define every variable and to establish how to measure them.	To operationalize the selected variables. To detect the information sources for data collection.

2. 3. Stage 2 – Pilot cohort

In the second stage a retrospective study was carried out to identify the variables – those previously detected and designed in the first stage – with a higher contribution in the prediction of hospital admissions in the subsequent 12 months.

Target population and sample

Target population of this study were patients aged 65 years and over attended by primary care services at the Comprehensive Healthcare Centre of Burjassot.

The sample was screened and recruited through consecutive sampling from the quota of assigned patients of the six healthcare experts participating in the FG. Patients were selected from the available population which fulfilled the selection criteria on the established reference date (February 2013). Exclusion criteria for inclusion were: a) aged under 65; b) absence of data at the EHIS; c) no permanent residence in Burjassot; d) exitus; e) being institutionalized; and f) hospital admissions in the subsequent 12 months not associated to long-term diagnosis (e. g. cataract) and/or programmed admissions.

Finally, the pilot sample was composed of 107 patients, with a sampling error of 2.3% yielding a 95% confidence level.

Data collection

Data related to independent variables were collected with reference date February 2013 using several sources:

Most of the information was collected through different EHIS of the Valencian Healthcare System available for primary care professionals:

Abucasis, with information related to clinical history, diagnostic tests, medical alerts, appointments, demographic variables, etc. ;

GAIA, which registers the prescribed medications to patients through electronic prescription; and

MDS (Minimum Data Set), which registers patients' discharges and associated information (main and secondary diagnosis, clinical and/or surgical procedures, etc.).

Some information was gathered through consultation of the professional of reference (GP, nurse or social worker).

Finally, a search was carried out of hospital admissions of each patient during the subsequent 12 months at MDS. In this regard, the author knew if patients were admitted or not, the number of admissions and the length of stay in days of every admission.

Once all the data had been collected, any type of personal or identifying information was removed and was assigned a random number to each patient to preserve privacy.

Statistical analysis

The processing and statistical analysis of data collected during the whole study was done using PASW Statistics 22 software (SPSS). Firstly, descriptive analyses were made to characterize the sample according to the variables agreed through the FG. Subsequently, logistic regression analysis was conducted with the independent variables obtained in the FG to identify the most significant variables associated to FHA.

2. 4. Stage 3 – Development cohort

This third stage is also characterized by a retrospective study. In this case, on the basis of the findings of the previous phase, the objective was to develop the prediction model through an appropriate and accurate combination of the set of variables analysed in the previous stages.

Target population and sample

Target population and the exclusion criteria were the same than used in the pilot cohort (see Stage 2, at section 2. 3). The development sample was composed by 343 patients with a sampling error of 2.2% yielding a 95% confidence level. In this case, the sample was screened and recruited through quota sampling in order to distribute a representative number of patients with FHA for the subsequent logistic regression analyses.

Data collection

The set of variables included in this study was based on the results obtained in the previous stage: number of visits to emergency department (ED) at hospital, visits to ED at primary care centres, emergency visits at home and emergency phone calls to the primary care centre in the previous 12 months. Moreover, other variables that could be easily accessible from EHIS were included: sex, age and active diagnosis.

The procedure for data collection of independent and dependent variables was the same as in the previous study. However, in this case the sources employed were only EHIS (Abucasis, GAIA and MDS).

Statistical analysis

Descriptive analyses were made to characterize the sample according to the variables studied.

Logistic regression analyses were performed to identify those variables with a higher contribution for the prediction of FHA; creating a risk score from 0 to 1 to describe the estimated probability of admission in the subsequent 12 months.

From results achieved by logistic regression, a predictive risk model was developed based on adjusted odds ratios (OR). For this purpose, the author randomly divided the sample in two groups. The first one included the 80% of the sample and was used to estimate the model with a 95% of confidence; the remaining 20% of the sample was used to validate the model.

The goodness of fit of the model was evaluated by Nagelkerke R-squared and Hosmer-Lemeshow tests, which determine the proportion of variance of the dependent variable explained by the model.

The predictive accuracy of the model was assessed through sensitivity, specificity, positive predictive value (PPV), negative predictive value (NPV) and the area under the receiving operating characteristic (ROC) curve (AUC).

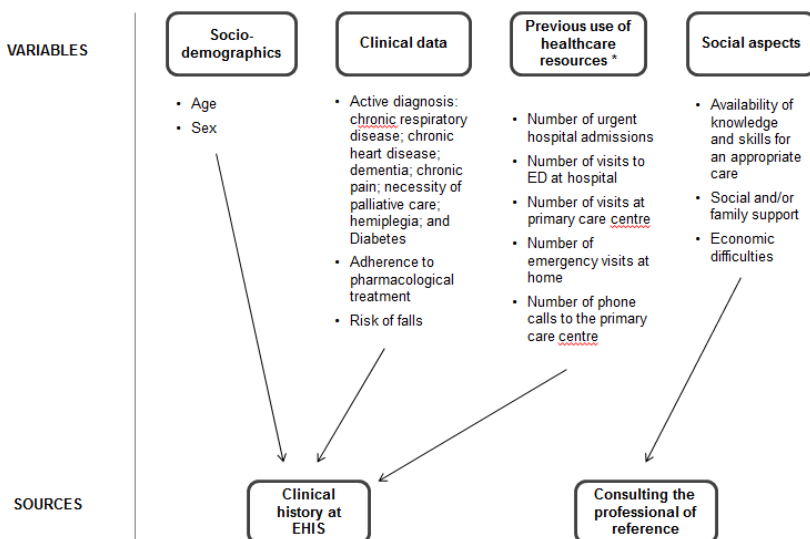
Finally, the sample was divided into two groups (low and high risk) according to scores' of the predictive model. Comparisons between both groups were made using the t-test for normally distributed continuous variables or Mann-Whitney U test for non-normally distributed continuous variables; and Chi-square tests for categorical variables.

3. RESULTS

3. 1. Stage 1 – Focus Groups: selection of variables

Six health and social care professionals from a primary care centre participated in five FG sessions. The output derived from these meetings was a list of potential variables to be tested for the development of the predictive model. Figure 1 presents these variables and the source where to find the related data.

Figure 1. Selected variables from FG for the development of the predictive model



* The use of healthcare resources is referred to the previous 12 months

3. 2. Stage 2 – Pilot cohort

Table 2 shows dataset of the sample (n= 107) in which the first proposal of variables was tested. Average age was 77. 05 ± 6 years, and most of the sample was women (67. 29%).

The most prevalent diagnoses were diabetes (39. 25%) and chronic heart conditions (31. 78%).

Out of 107 patients, 9 (8. 41%) suffered hospital admissions in the subsequent 12 months. The mean number of hospital admissions was 0. 12 ± 0. 49 and the length of stay was 7. 08 ± 6. 22 days. Most of the causes of 12-months admissions (44. 44% patients) were diagnosis derived from diabetes, as hypoglycaemia or diabetic foot.

Table 2. Characteristics of pilot sample

Variables	N = 107
Active diagnosis, n (%)	
Chronic respiratory disease	20 (18. 70)
Chronic heart disease	34 (31. 78)
Dementia	11 (10. 28)
Chronic pain	17 (15. 89)
Palliative care	4 (3. 74)
Hemiplegia	0
Diabetes	42 (39. 25)
Availability of knowledge and skills for an appropriate care, n (%)	102 (95. 33)
Adherence to pharmacological treatment, n (%)	102 (95. 33)
Risk of falls, n (%)	47 (43. 93)
Number of previous urgent hospital admissions, \bar{x} (SD)	0. 20 (0. 52)
Number of previous ED visits at hospital, \bar{x} (SD)	0. 77 (1. 37)
Number of previous visits at primary care centre, \bar{x} (SD)	1. 54 (2. 81)
Number of previous emergency visits at home, \bar{x} (SD)	2. 21 (9. 81)
Number of previous phone calls to the primary care centre, \bar{x} (SD)	0. 17 (0. 57)
Social and/or family support, n (%)	89 (83. 18)
Economic difficulties, n (%)	14 (13. 08)
Age, \bar{x} (SD)	77. 05 (6)
Sex, n (%)	
Men	35 (32. 71)
Women	72 (67. 29)

Logistic regression determined that 'number of previous visits to ED at hospital' [OR= 913. 52 ($p < 0. 064$)] and 'number of previous emergency visits at home' [OR= 0. 008, $p < 0. 092$] were the variables most associated with hospital admissions within 12 months.

3. 3. Stage 3 – Development cohort

In this last stage of the study, several logistic regression analyses were conducted including those variables that showed significance in the previous phase ('number of previous visits to ED at hospital' and 'number of previous emergency visits at home'). Other variables related to the use of primary care resources detected in the first stage were also taken into consideration but, in this case, only if they were urgent cases ('number of previous visits to ED at primary care centre' and 'number of previous emergency phone calls to the primary care centre'). Additionally, variables of 'active diagnosis', 'age' and 'sex' were included as researchers and experts from FG considered and agreed as relevant for clinical assessments and socio-demographic clusters.

Socio-demographic, clinical and use of resources data of the development sample ($n=343$) are presented in Table 3. Mean age was $75. 20 \pm 6. 89$ years and 61. 81% of the sample was women. Diabetes (36. 44%) and chronic heart conditions (29. 74%) were the most prevalent conditions.

Out of 343 patients, 99 (28. 9%) suffered hospital admissions in the subsequent 12 months. The mean number of hospital admissions was $0. 39 \pm 0. 76$ and the length of stay was $3. 76 \pm 14. 35$ days.

Table 3. Characteristics of the development sample (N= 343) and by risk categories

Variables	Total sample (n= 343)	Low risk group (0 – 0. 49) (n= 291)	High risk group (0. 5 – 1) (n= 52)	<i>p</i>
Active diagnosis, n (%)				
Chronic respiratory disease	72 (21)	53 (18. 21)	19 (36. 54)	0. 003
Chronic heart disease	102 (29. 74)	67 (23. 02)	35 (67. 31)	< 0. 001
Dementia	43 (12. 54)	32 (11)	11 (21. 15)	0. 042
Chronic pain	22 (6. 41)	18 (6. 19)	4 (7. 69)	0. 68
Palliative care	15 (4. 37)	0	15 (28. 85)	< 0. 001
Hemiplegia	6 (1. 75)	3 (1. 03)	3 (5. 77)	0. 016
Diabetes	125 (36. 44)	100 (34. 36)	25 (48. 08)	0. 058
Number of previous urgent hospital admissions, \bar{x} (SD)	0. 70 (1. 12)	0. 36 (0. 60)	2. 60 (1. 45)	< 0. 001
Number of previous ED visits at primary care centre, \bar{x} (SD)	0. 75 (1. 25)	0. 68 (1. 13)	1. 10 (1. 73)	0. 001
Number of previous emergency visits at home, \bar{x} (SD)	0. 15 (0. 52)	0. 09 (0. 40)	0. 47 (0. 90)	< 0. 001
Number of previous emergency phone calls to the primary care centre, \bar{x} (SD)	0. 09 (0. 42)	0. 04 (0. 24)	0. 40 (0. 87)	< 0. 001
Age, \bar{x} (SD)	75. 20 (6. 89)	74. 58 (6. 72)	78. 65 (6. 87)	0. 589
Sex, n (%)				
Men	131 (18. 19)	111 (38. 14)	20 (38. 46)	0. 97

Women	212 (61.81)	180 (61.86)	32 (61.54)	
Cases with 12-months hospital admissions, n (%)	99 (28.9)	57 (19.59)	42 (80.77)	< 0.001
Number of 12-months hospital admissions, \bar{x} (SD)	0.36 (0.76)	0.23 (0.54)	1.23 (1.13)	< 0.001
Length of stay in days, \bar{x} (SD)	3.76 (14.35)	1.81 (6.37)	14.69 (31.74)	< 0.001

Table 4 shows the main details of the variables being part of the predictive model. Logistic regression analysis determined that the variables presence of 'chronic respiratory disease', 'chronic heart disease' and 'palliative care', and the 'number of previous visits to ED at hospital' were statistically significant as predictors. The diagnosis of 'palliative care' was the most significant predictor with an OR of 22.53 (95% CI, 2.70 – 188.60); and the 'number of previous visits to ED at hospital' was the weakest one with an OR of 1.82 (95% CI, 1.39 – 2.37). 'Age', diagnosis of 'dementia', 'chronic pain' and 'hemiplegia', or the number of previous contacts with the primary care centre ('visits to the ED', 'emergency visits at home' or 'emergency phone calls') were not of any significant result on the regression analysis.

Table 4. Summary of variables included in the predictive model

Variables	OR	95% CI	p
Chronic respiratory disease	2.32	1.18 – 4.59	0.015
Chronic heart disease	2.10	1.13 – 3.91	0.019
Palliative care	22.53	2.70 – 188.60	0.004
Diabetes	1.94	1.06 – 3.54	0.032
Number of previous visits to ED at hospital	1.82	1.39 – 2.37	< 0.001

The percentage of variance explained by the final model was 31% (Nagelkerke's $R^2 = 0.31$). Moreover, the estimated risk showed very good agreement with the observed incidence (Hosmer-Lemeshow $\chi^2 = 1.24$, $p = 0.975$).

The model determined a risk score from 0 to 1 for each patient, classifying patients as high risk of future hospital admission at a risk score threshold of 0.5 or higher. The model had a sensitivity of 42% and specificity of 96%, and the PPV was 81% and the NPV 80%. The Figure 2 shows the ROC curve illustrating the trade-off between sensitivity and 1-specificity for the model. The AUC was 0.76.

Figure 2. ROC curve for presence or absence of future hospital admission based on risk scores derived from the predictive model

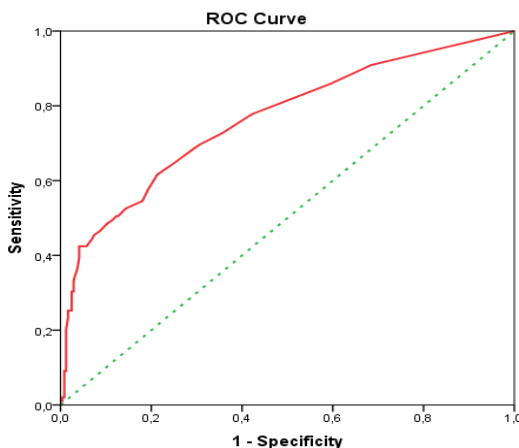


Table 3 shows baseline data on socio-demographics, health conditions and health service utilization measures, as well as data related to future hospital admissions for low- (risk scores 0-0.49) and high-risk groups (scores 0.5-1). The high-risk group (15.16% of the sample) had significantly higher prevalence of chronic diseases (with the exception of 'chronic pain') and reported higher prior emergency visits' or contacts' (both to hospital, primary care centre, at home or emergency phone calls) rates. Low- and high-risk groups did not differ in the mean age or sex rates. Table 3 also presents data from the sample on the subsequent 12 months. In this regard, the high-risk group showed a significantly higher rate and mean of FHA, as well as more days of length of stay.

4. DISCUSSION

This paper presents the development of a new prediction model to identify elderly patients at risk of hospital admission in the subsequent 12 months using routine data from EHIS from the Valencian Healthcare System. For this purpose, the author followed a combined methodological approach using both qualitative and quantitative techniques. Thus, on the basis of different sessions of FG with a panel of primary care experts the set of variables were selected that subsequently were tested and analysed in two retrospective studies aimed to assess their predictive ability on FHA.

The model incorporates five predictor variables which are associated with an increased risk of hospital admission: diagnosis of chronic heart diseases, chronic respiratory diseases, diabetes, presence of palliative care and number of previous visits to ED at hospital. These findings are close to those variables found in other studies on the general population and on elderly people. For instance, "Probability of Repeated Admission" (Pra) and "The Community Assessment Risk Screen" (CARS) tools (Boult et al., 1993; Shelton et al., 2000) include as relevant variables diagnosis of different chronic conditions (such as diabetes or heart diseases), as well as previous use of hospital resources (admissions or ED visits).

The performance of the model was good, with acceptable ability to identify patients at high risk of hospital admission which really were admitted (sensitivity of 42%) and excellent ability to identify patients at low risk which really did not suffer any admission (specificity of 96%). The accuracy detecting patients was similar to other comparable studies (e. g. Hippisley - Cox & Coupland, 2013) or even higher (Billings et al., 2006; Lyon et al., 2007; Chandra et al., 2015) with reported AUC of 0.764.

In our model, the presence of palliative care had a strong effect on the prediction of FHAs, with an OR of 22.53 ($p=0.04$). In the current literature we did not find similar prediction models or tools considering this variable as relevant. However, palliative care has shown a strong association with the risk of death in hospital or soon after discharge (Cardona-Morrell & Hillman, 2014; Cowen et al., 2014), since people receiving palliative care suffers a notable irreversible deterioration of health outcomes as well as in their quality of life.

The regression model derived a risk scoring system ranking each patient from 0 to 1, with a cut-off point of 0.5. The development sample was stratified following this threshold, so it was divided into two risk-groups. High-risk group (84.84%) differed significantly from the low-risk (15.16%) in almost all diagnosis and previous emergency visits' or contacts' measures. Moreover, high-risk patients suffered significantly more FHAs and they spent more days at hospital than low-risk individuals. These numbers support the main goal and utility that author expected with the development of this predictive model and stratification system: to help primary care professionals in decision-making processes through early detection of vulnerable patients with a higher trend to use healthcare resources and, therefore, which mean higher costs for the administration.

The final predictive model is composed by variables that can be collected automatically from EHIS. In this way, as other stratification and predictive systems available in the literature (e. g. Billings et al., 2012), the associated algorithm could be easily introduced into the health administration system of the Valencia Region. Nevertheless, experts interviewed in the FG – carried out in the framework of this study – highlighted other kind of variables that usually are not registered within EHIS of special relevance to identify vulnerable elders. These variables are: 'availability of knowledge and skills for appropriate care', 'social and/or family support' and 'economic difficulties'. Firstly, due to the long duration and irreversible nature of chronic conditions it is vital that patients are empowered and confident in the self-management of their diseases with appropriate knowledge and skills adapted to their own needs. There is evidence suggesting that self-management education improves health outcomes and can reduce hospitalizations for some kind of chronic diseases (Bodenheimer et al., 2002). Secondly, social isolation and lack of social support may have negative impact on the health and wellbeing of elderly people (Hawton et al., 2011). Moreover, according to an exploratory study (Jakobsson et al., 2011), elders with low

utilization of inpatient and outpatient care were characterized by having a larger social network or feeling less loneliness than those with higher consumption of these resources. So, it is very important that elders have some kind of social support by their circle of support (family and/or friends) or by social services from the public administration or private companies. And finally, Spain is currently facing a financial crisis which has entailed budget cuts in health; and pensioners suffer these effects through pharmaceutical and assistance co-payments (Aguilera et al., 2013). Moreover, older adults and elders have become the main source of economic support for the family due to the return of adult children to the parental home as a consequence of the lack of work opportunities and extremely high unemployment rates (Foessa & Cáritas, 2013). These issues mean that many elders do not spend part of their pension or acquisitive power to acquire prescribed pharmacological and therapeutic treatments not covered by social security (as blood glucose test trips in the case of patients with diabetes), which may affect the stability of chronic conditions' symptomatology and higher rates of hospital admissions (Fernández-Ruiz et al., 2015).

Variables discussed in the above paragraph may have a relevant potential to identify vulnerable elderly patients, especially in the current context of financial crisis in Spain. For this reason, it would be interesting to propose a 2-phase stratification system, as other methods we find in the literature (Reuben et al., 2002). The first phase would entail the calculation of the developed algorithm through the use of EHIS; and the second one, the assessment of social variables by consulting the professional of reference.

From this comprehensive evaluation and screening, professionals may implement individualized care plans, which can potentially improve quality of care and reduce costs in comparison to usual population-based guidelines (Eddy et al., 2011). In order to guarantee these care pathways respond patients' clinical and social needs the decision-making should be shared by multidisciplinary case-management teams composed by different primary care professionals, as GPs, nurses and social workers (Garcés et al., 2013; Garcés & Ródenas, 2015). According to the conclusions derived from a European Conference on Multimorbidity Policies (European Commission, 2015), these interventions should increase patient-centeredness and empowerment through a higher involvement of patients' and families in the care of their chronic conditions. Educative and training approaches should be introduced, as they are effective increasing patients' knowledge and skills, self-management of symptoms or self-efficacy (Barlow et al., 2002). Moreover, new information and communication technologies (ICTs) play a crucial role. In this line, a recent study focused on a telemonitoring programme addressed to chronic patients show that, after one-year of use, users became more aware of the importance of controlling their diseases and symptoms and improved their self-perceived health-related quality of life as well (Doñate-Martínez et al., 2016). Last but not least, continuity of care should be a common point in all care plans addressed to chronic patients – especially elders – as it is essential to guarantee quality of care over time. In this regard, higher continuity of ambulatory care has been associated with lower rates of preventable hospitalization in elderly Medicare beneficiaries (Bayliss et al., 2015).

Our study has several limitations that deserve mention. First, in spite of our study includes a large number of elders from a specific setting of Valencia (Burjassot), it is not representative of the whole elderly population in the Valencia Region. Secondly, pilot and development studies followed a retrospective design; however the use of unified EHIS enhances and guarantees the accuracy of the collected data, both independent variables and those to be predicted. Thirdly, there is an increasing interest of developing risk prediction tools aimed to detect adverse effects in a short period of time; within 30 days from a previous discharge (e. g. Fabbian et al., 2015). However, the authors' goal was to identify patients at risk allowing primary care professionals have enough time to implement the most appropriate care pathways to prevent FHAs in the following 12 months. Moreover, during this period of time it is favoured that the benefits of the established interventions are visible; recommendations to change lifestyles, introduction of new pharmacological treatments or modifications in previous ones, establishment of additional social services increasing patient quality of life, etc. And, finally, the model considered and included a limited number of predictors. It is possible that other variables could be useful as predictive factors, nevertheless we followed the opinion and consensus achieved by our panel of primary care experts, which are in line with those obtained by other authors.

Conclusions

In conclusion, our results suggest that our predictive model composed by a reduced number of variables agreed by primary care experts and collected from EHIS (automatically or manually by primary care professionals) identifies with a moderate level of efficiency elderly patients at risk of suffering FHAs. The algorithm associated to this model is intended to be introduced computationally in EHIS in order that healthcare professionals can carry out regular analysis of datasets containing specific quota to identify and alert high risk patients for further assessment of social variables and subsequent

management. So, the screening of high risk patients is just the first step of a comprehensive and patient-centred strategy to improve both the quality of life of this profile of patients and also the quality of their management at primary care centres.

Future studies are needed to validate these results with a larger sample from the Valencia Region and other regions in Spain; as well as to explore their applicability in other health and social care settings, as hospitals or nursing homes.

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The Influence of Electronic Word-of-Mouth Communication on the Behaviour of the Theatre Audience Analysed Through the Kosovo Example

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Abstract

The expansion of Internet, the development of the new information and communication technologies as well as social networks have revolutionized the social interaction as they have enabled individuals to quickly and conveniently get in touch with each other. The interaction performed online, defined as online interpersonal communication, or the Electronic word-of-mouth (eWOM), as seen in numerous research papers, impacted the consumer behaviour. This paper analyses audience behaviour when making decisions vis-à-vis cultural offers presented in social networks. Although the issue of subjectivity in relation to the offered content in these platforms is set up as a determining factor for using e-WoM and the social networks, the main results suggest that both have been used by audience as a primary source of information when deciding to visit a cultural event. Moreover social networks have been described as places where information is not headed by clientele, thus significant, customer friendly and trustworthy, despite the fact that all these information are based on subjective impressions of each social network user. The limited number of research on the impact of online communication of the theatre audience has been perceived as an obstacle, as there are no guiding direction how we should do it, and as a challenge, given that through this research we will set the baseline for future researches that will analyse the effectiveness of eWOM.

Keywords: e-WoM, social networks, Internet, Information and communication technology, costumers, theatre.

Introduction

"Audience development is not just about people who come to the arts. It's also about people who don't come."

Richard Hadley, Director, Audiences Europe Network

During the '90, Kosovo, especially Albanian population¹, has experienced media blackout; no electronic media operated in Kosovo for a decade, and the only national television, Radio Televizioni i Prishtinës² (RTP) has fulfilled information needs of only one part of the Kosovo population³. During this period Albanian print media have been closed several times, as they took the role of the only source of information⁴. As a result most of the information have been shared through the word-of-mouth (i.e., face-to-face and/or through the telephone conversations), which played a great role in all spheres of life, though its impact significantly was determined by the persuading abilities of a person conveying the message⁵. The persuasive

¹ According to the statistics comprised Albanian population represented 81.6% of Kosovo population. Enti i Statistikës së Kosovës, for more information visit the official web page of the Kosovo Agency of statistics; <http://ask.rks-gov.net/>

² Radio Television of Prishtina, or RTP, the first Albanian Radio Television of Kosovo was established in 1945 after the World War II. The broadcasting of this television program was interrupted by the violent actions of the Serbian government in 1990. By Ibrahim Berisha, *Komunikimi medial në shoqërinë postkonfliktuale*; extracted from the *Thesis Kosova*, nr. 1, 2008 https://aab-edu.net/downloads/01_2008_07_ibrah_jnaDQ.pdf

³ It has fulfilled the information needs of Serbs, who represented 9.9 % of Kosovo population and 8.5% per cent of "other nationalities" including Yugoslavs and non-declared.

⁴ Biggins, M. and J. Crayne, (2000) *Publishing in Yugoslavia's Successor States*, The Haworth Information Press, An Imprint of The Haworth Press, Inc. New York, USA; Volume 1, Numbers 2/3. Pg. 162 - 163

⁵ Krauss, R. M. (1987). The role of the listener: Addressee influences on message formulation. *Journal of Language and Social Psychology*, 6, 81-97.

significance of the word of mouth, a set of artistic proofs which are controlled by the speaker¹, has had a major impact on what people knew, felt and have done during the media blackout days in Kosovo.

Theatre survived the media blackout of nineties. The number of visitors of theatre kept on increasing regardless the fact that no marketing tools have been used in order to attract audience. We cannot document this period² as the data obtained from the official web page of the National Theatre of Kosovo³, cover only the period until 1989 when theater had over 400 premieres with about 10,000 reruns followed by over 3.3 million spectators⁴. As a result and in order to document the impact of word of mouth on theatre we had to rely on the information assembled through the interviews with artists and art critics, who conveyed the message that the word of mouth and print media played a great role in audience development, which, according to the findings of the conference "European Audiences 2020 and beyond", *is very important*⁵, should we want to maintain qualitative theatre to be resulted in the increased number of audience.

In 1999 Kosovo has been enriched with print and electronic media whereas the penetration of the Internet⁶ and the Information Communication Technology (ICT) in Kosovo slowly started its development. From being almost non-existent 16 years ago, Kosovo IT companies started offering wide range of ICT services to their customers⁷, which has transformed the communication channels from the word of mouth to computer-mediated communication⁸, a process during which people meet and develop relationships relying on typed messages, or the Electronic word-of-mouth (eWOM), as a primary mechanism of expression⁹.

The new media technology, developed to ease this communication, plays a significant role as it offers new ways to achieve efficient distribution of messages, by enabling direct and interactive communication at a very low cost¹⁰, promotion of new offers as well as advertising and enhancement of offer¹¹. Given the significance of this new way of communication, already embraced by various establishments, the cultural institutions in Kosovo, have started using these communication tools to share relevant information to the potential customers in order to increase the number of audience¹². Therefore, the e-

¹ Steinberg, S., (1999). *Persuasive Communication Skills: Public Speaking*, Cape town : Juta Co and Pvt Ltd.

² There are no data covering the period from 1990 until 1999, as the NTK, administered by the state, was closed for most of the Albanian workers, artists and the visitors .

³ <http://www.teatrikombetar.eu/?m=t&id=4>

⁴ Official web page of the National Theatre of Kosova; <http://www.teatrikombetar.info/al/perne/1/>

⁵ European Audiences: 2020 and beyond was held from 16 – 17 October 2012; Conference conclusions; http://ec.europa.eu/culture/library/reports/conference-audience_en.pdf

⁶ According to the 2013 report on Internet Penetration and Usage in Kosovo, of the Kosovo Association of Information and Communication Technology (STIKK), internet penetration across the country is comparable to global norms. Internet penetration based on users is 76.6%, and based on households is 84.8%. http://www.mfa-ks.net/repository/docs/STIKK_raport_eng_2013_short_web.pdf. According to the Internet World Statistics as of Dec 31/14, Kosovo counts 1,523,373 Internet users, whereas the penetration rate is 80.9%; <http://www.internetworldstats.com/europa2.htm>; Accessed in December 2016.

⁷ IT Barometer 2015 Kosovo; Published by The Kosovo Association of Information and Communication Technology (STIKK); http://stikk.org/fileadmin/user_upload/it_barometer_kosovo-2015_ang_1_.pdf. Last visited in December 2016.

⁸ The most interesting aspect of the advent of computer-mediated communication (CMC) is how it reveals basic elements of interpersonal communication, bringing into focus fundamental processes that occur as people meet and develop relationships relying on typed messages as the primary mechanism of expression.

<https://pdfs.semanticscholar.org/7445/be9f99267248664b1c568a096e81b741c586.pdf>

⁹ Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyper personal interaction. *Communication Research*, 23, 3–43.

¹⁰ Cockrum, J., (2011). "Free Marketing: 101 Low and No-Cost Ways to Grow Your Business, Online and Off"; Published by John Wiley & Sons, Inc., Hoboken, New Jersey, Page 97.

¹¹ Interview with Haqif Mulliqi, former Head of the Board of the National Theatre Kosovo, interviewed by Shpresë Mulliqi, 01.07.2016

¹² Hence now, all of them are open for wider public through the Internet based Web pages: National Theatre:

<http://www.teatrikombetar.eu/?m=t&id=4>, Kosovo Ballet: <http://www.baletikosoves.com/>, Ensemble "Shota": <http://www.ansamblishota.org/al/index.php?p=0>, National Gallery: <http://www.galeriakombetare.com/>, Cinematographic Centre of Kosova: www.qkk-rks.com/. The institutional accounts on social networks and in Youtube: <https://www.facebook.com/Teatri-Kombetar-i-Kosoves-525429354192045/>, <https://www.facebook.com/BaletiKombetariKosoves>, <https://www.facebook.com/pages/Filharmonia-E-Kosoves/506386249406854?fref=ts>, <https://www.facebook.com/Galeria.e.Arteve.e.Kosoves>, <https://www.facebook.com/Galeria.MKRS>, https://twitter.com/QKK_Kosova, <https://www.facebook.com/QKK-Qendra-Kinematografike-e-Kosoves-120072128088984/>.

Culture, *defined as an application of information communication technologies on the culture industry*¹, has significantly affected the operational management of cultural institutions such as theatre, as well as other fields of operation of cultural institutions.

The objective of this paper is to analyse the power of the eWoM and its impact on the audience when making decisions vis-à-vis theatre offers. With the goal to support theatre in its struggle to return the audience in theatre, the research enabled us to gather and analyse relevant information, in order to define how the visitors of the National Theatre of Kosovo use the social networks during the decision-making process.

The background of the research

National Theatre of Kosova is struggling to get its audience back as well as to motivate the new ones to become regular visitors. The persistent problem has been discussed by the management, media and the civil society but no research has been done so far to assess what triggered the audience parting from theatre nor has been looked for the ways to invite the audience. Meantime the National Theatre of Kosova is still using the traditional marketing channels like announcements, commercials and posters to reach the audience, which is getting the largest share of marketing budget, but it is less investing and doing minimum related to the online activities such as advertising on official website and eWoM supported by social networks, which according to the European Theatre Convention are getting more importance² as they are based on the need of audience for reliable and neutral information.

Based on statistics Kosovo has 1,080,038 Internet users of age 10-60, a population that is very much active on social networks. The Kosovo Association of Information and Communication Technology report specifies that,

*Emailing, Facebook, Skype and Youtube are the main services that are used in Kosovo; That 73.3% of Internet users use the Facebook service, which shows that 73.3% of 76.6% of Internet users are Facebook users – meaning that 43.6% (approximately 790000) of Kosovo's total population uses the Facebook service*³.

Having that in mind the impact of word of mouth on Kosovo culture, and based on the international researches which emphasise the fact that the emerge of new media, has made customers more engaged in finding effective and reliable way to communicate and to find information, through this research we have analysed customer's behaviour in Kosovo when searching information related to theatre events. As the information derive directly from the audience and are not provided by the theatre, the use of social networks to collect information and post them for community consumption as well as the impact of the eWoM have been evaluated, considering that these are more customer oriented information and thus better accepted⁴.

With the aim of getting relevant data we have visited three theatre performances, the most visited ones, in order to find out what motivated the audience (as it appeared that the National Theatre hasn't done more for one performance than the other). Our research has been based on the study *Digital audiences: Engagement with arts and culture online*⁵, which states that *customers search for sources of information which are easy to access, such as the online platforms, which enable visitors to share their thoughts, opinions and experiences*.⁶

¹ CULTURELINK, Network of Networks for Research and Co-operation in Cultural Development was Established by UNESCO and the Council of Europe in 1989; *eCulture: The European Perspective; Cultural Policy, Creative Industries, Information Lag*; Proceedings from the Round Table Meeting, Zagreb, 24 – 27 April 2003; Institute for International Relations, Zagreb, 2005

² Audiences for European Theatre, Study on the Status Quo of Audience Development and Audience Research in the European Theatre Convention, 2014

³ http://www.mfa-ks.net/repository/docs/STIKK_raport_eng_2013_short_web.pdf. Accessed in December 2016.

⁴ Audiences for European Theatre.

⁵ Digital audiences: Engagement with arts and culture online; Retrieved from the <http://www.aandbscotland.org.uk/documents/2012-05-28-13-11-39-10-Digital-audiences-for-arts-and-culture-november2010.pdf>

⁶ Digital audiences: Engagement with arts and culture online; Finding information about arts and culture online

When asked 'How do you go about finding new arts and culture related websites?' the vast majority (85%) selected the response 'Google': 'If you've got a computer, it's the easiest way to find out what's on' 45-65 year old 1% of respondents mentioned a range of alternative providers such as Yahoo, Ask.com and Bing. Recommendations from friends or family were the second most common route for discovering arts and culture related websites (37%), which (like Google) is consistent across all subgroups of the sample.

The relevance to the research subject

Understanding customer behaviour forms the basis for developing successful marketing strategies¹ the behaviour of the theatre audience is a field which is not analysed in Kosovo. It has been acknowledged that it contributes to the financial wellbeing of the theatre but there is still much to be done in order to understand the way customers behave² and how can be motivated by the management of the company. It is obvious that with the constant technological advancement customers are changing their behaviour patterns looking for more “customer-friendly” sources of information such as Facebook, Instagram, YouTube³ which are replacing the old-fashioned word of mouth.

We have selected National Theatre of Kosovo and individuals making decisions about the use of their available resources (time, money and effort)⁴ by considering its complexity and in order to understand customer behaviour vis-a-vis theatre. This selection has been done due to the fact that theatre product is not a simple item, goods or service of consumption, theatre is a set of activities that constitute experiences. The theatre product-the performance, cannot be verified prior to the “consumption”-watching; performance is done by people and that implies that it is not possible to obtain two products/performances alike and the *product is produced and consumed* at the very same time, in a simultaneous way. Due to all the particularities and unique characteristics of the theatre product, customers develop a special behaviour in their decision making process, which is very often conditioned by the word of mouth.

Typologies of the costumers and the complexity of audience behaviour in decision-making process

During the research process, researcher has come across the three types of customers; the *constant costumers* who visit theatre on the premiere of the performance, prior to any feedback or any information. These costumers belong to an institutionalized type of visitors who get informed by the theatre about the products, through the old, and so called well established, marketing tools such as TV ads and posters in front of the theatre.

The second type of visitors the researcher came across are *hesitant costumers*, similar to the constant customer, however this one is hesitant in making his/her decision and wishes to participate more in the process. This type of customer gets informed through the theatre but searches for additional information by getting in contact with producers or actors.

The third type of visitors the researcher came across are the *costumers who get informed through the social networks*, through the so called computer-mediated communication, which replaces the traditionally well-established communication through the word of mouth. They make their plans based on the information obtained through the eWoM.

While writing about the findings of this research we had to keep in mind the fact that results might change within months as every person goes through the changes in life, depending on which they will change from one typology to another.

Methodology of the research

According to the European Theatre Convention empirical evidence about situation and audiences of theatres in Europe so far has been rather heterogeneous.⁵ According to the ETC in a number of countries, including Kosovo, there is no such information. Hence the lack of comparable data on National Theatre of Kosovo and its audience was a major challenge when outlining new tools and measures for audience development. In the given situation we had to rely on the information obtained from the institution, which was done through the interviews. The outlined information related to the behaviour of the customers of national theatre shall serve as a point of reference.

In order to perform the study and to identify customer visiting patterns we have looked into the theatre offer: the genres of the performances and how many performances they show.⁶ According to the managerial director the total number of visitors

¹ Michael J. Papa, Tom D. Daniels, Barry K. Spiker, (2009). *Organizational Communication Approaches and Trends*-UET Press, p. 14

² Blackwell, L.D., Miniard, P.W. and Engel, J.F., (2006). *Customer behavior*. 10th ed. Mason: Thomson Business and Economics.

³ Based on the statistics of the Internet World Stats Kosovo has 860,000 Facebook users on Jun 30/16, and 45.7% penetration rate. Retrieved from the <http://www.internetworldstats.com/europa2.htm>; Accessed in December 2016.

⁴ Schiffman, L. G. and Kanuk, L. L., (2010) *Consumer behaviour*. Global Edition. London. Pearson Higher Education.

⁵ Retrieved from the Official Web page of the European Theatre Convention; <http://www.etc-cte.org/index.php>

⁶ According to the Managerial Director of National Theatre of Kosova in their repertoire they have 8 productions per annum, with 234 performances. Interview with Valdet Avdiu, former director of the National Theatre of Kosova; interviewed by Shpresë Mulliqi, 01.08.2016.

in 2015 is 17447, out of which 93 percent are inhabitants of Prishtina¹ whereas 15 percent are from the region. The interviewed persons in this research are not selected at random; they are selected on purpose in order to satisfy the focus of this study. Thus, fifty (50) persons have been selected; among each generation, people are selected by gender: 23 men and 27 women in order to create a wider perspective. In addition, the entire sample has been selected according to the completion of three criteria. Participants of the sample had to be: Frequent visitors of the theatre, active internet users and users of the internet as a main source of information when planning their visits to theatre and other cultural institutions.

Interviewed persons are of the different age groups: from 19 to 30 years (29 persons or 58%), from 31 to 41 (9 persons or 18%), from 42 to 51 (3 persons or 6%), from 52 to 61 (6 persons or 12 %) and from 62 to 72 (3 persons or 6%), as it is considered a good sample in order to get reliable information and also due to the fact that they are familiar with old marketing tools (posters, outdoor announcements, etc.) as well as with the new media, namely internet and social platforms.

In order to find the required participants, researcher has visited three performances, the most visited ones, and selected persons who fulfilled required criteria such as the costumers type, age, gender and the place they come from, which was not an easy task due to the hesitance encountered when explaining the purpose of the research. Researcher has also used the Facebook account of the National Theatre in order to find and contact people, followers of the National Theatre, for the interviews.

Results of research on the role of social networks and the development of theater customer through the eWoM

Questionnaire and the interview results suggest that eWord-of-mouth and computer mediated communications have more influence on customers than any other type of communication². The research shows that consumers do not use only the information prepared by the marketing departments, but the unbiased information that come through the Internet before making decision. These are the information distributed through the social networks, experiences shared through the eWoM, photographs, and uploaded videos. According to the results customers need to get firsthand information from reliable sources as they believe that these are non-clienteles driven information and do not imply any type of monetary refund. The research to e certain extend confirms authors saying that the eWord-of-mouth is one of the most powerful forces on the marketplace (Silverman, 2001 p. 23).

On the other hand, as we have focused our research on three generations, we have encountered some differences. Users of Internet and social networks, persons of age between 19 to 30 and 31 to 41, which represent 38% of the respondents, are the regular customers as well as active information seekers of all generations. They are experienced to search and find online information. According to the interviewees they find the information on the internet and social newtorks in several ways; some information are placed by actors, interested to let the public know that they are engaged in a theatre project, some information are placed by the director or the writer of the theatre play but most of information are placed by customers, the theatre audience. However, at this point the interviewees have also raised the questions related to the subjectivity and the credibility when information placed by those actively involved in production, though they admitted that these information are used as a valid reference for further search.

In regards to the interviewees of the age from 42 to 51, which represent 6% of respondents, they do not use social networks as frequently as the other generations. In spite of that, when deciding to go to the theatre they also are influenced by the eWoM. In this case they look for user friendly web pages and internet based media. Channel for information about the production used at large, according to the interviewees, are: YouTube 14,4 (< 5%) and Twitter 15,4 (< 5%), Facebook namely the Facebook page of the theatre 9,8 (ca. 10%) and the WoM (Partners / friends / associates / relatives 1,4 (ca. 40%).

It is interesting that the interviewees of age 52 to 61 and of the age 62 to 72 are the one that most of the information gets from the old fashioned marketing tools; they together make 18% of respondents. Information placed on social media is a reference but the first sources of information billboards and outdoor posters. Although the issue of subjectivity in relation to the offered content in these platforms is set up as a determining factor for using social networks, the main results suggest that the customers trust the eWoM when deciding to visit a cultural events as the information is not headed by clienteles,

¹ The National Theatre of Kosovo is located in Prishtina, the Capital city of Kosova.

² Herr, P. M., Kardes, F. R., and Kim, J. (1991) Effects of Word-of-Mouth and Product-Attribute Information on Persuasion: An Accessibility-Diagnosticity Perspective, *Journal of Consumer Research*, 17 (4).

thus significant, customer friendly and trustworthy, despite the fact that all these information are based on subjective impressions of each social network user.

The groups of interviewees who prefer old marketing and information tools state that certain reviews are perceived as false; therefore question of credibility must be examined.

Conclusions

eWord of Mouth spread through the social networks has an impact on the behaviour of theatre costumers. Social networks offer customers the opportunity to express themselves, share contents, ideas and experiences which other customers may use as a reference in their planning; fact which is greatly appreciated among customers due to the high needs of information which they require. The development of Internet and social networks has changed communication patterns drastically¹, though cultural institutions, in our case theatre, still allocates a large share of marketing budget on standard print advertising and the production of classical own print media like programs, theatre newspapers etc.. Parallel, the majority of cultural institutions has installed the basic channels of digital communication and is offering user friendly social media, at least Facebook, though not frequently updated.

Social networks are searched and used all along the decision-making process for cultural products and by all generations of users. However, its use varies among the different stages of the process as well as among generations. In the pre-purchase stages social media form the main source of information. Customers when searching for information are eager to read customers' experiences which are perceived as far from marketers' bias, user-friendly information, more credible and reliable and which offer a two-sided perspective. A wide number of platforms are used: forums, blogs and social networks for information hence it would be very interesting for cultural institutions to increase their presence through social media marketing strategies.

In spite of the wide use of social networks, questions concerning subjectivity and credibility might arise. Some reviews and opinions are perceived as false, therefore customers feel forced to carry out an evaluation process of the computer mediated information in order to find the truth behind those contents; this process might be time consuming and thus may persuade customers to turn less time consuming sources of information. In this point a great generational differences have been identified, while the youngest generation of users attribute more credibility and are more influenced by eWoM and the internet, other generations use internet and social media based information as complementary information rather than a determinant. In regards to the post event phase the eWoM is used for sharing personal experience whereas the social networks are used to share contents and upload information to friends' and online communities.

This study is a very first research done in order to understand correlation between the eWoM, the social networks and customer behaviour hence it should be used by the cultural institution for audience development. As Richard Hadley, the Director of the Audiences Europe Network has stated the *Audience development is not just about people who come to the arts. It's also about people who don't come.* The impact of internet and social networks confirmed by the interviewed customers implies that cultural institution should focus in developing a new communication strategy in order to attract them by providing them with the information they need and require.

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Overview of General Living Conditions of People with Disabilities in Albania

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Abstract

The aim of this study was the observation of the general situation in which there are people with disabilities in the district of Tirana. As is known, people with disabilities are one of the most vulnerable groups of society. To make a realistic assessment of the situation, we organized direct contacts with some of the persons with disabilities who have attended or recognize the center of care for disabled people.

Keywords: Overview, general, living conditions, people, disabilities, Albania

Introduction

Methodology

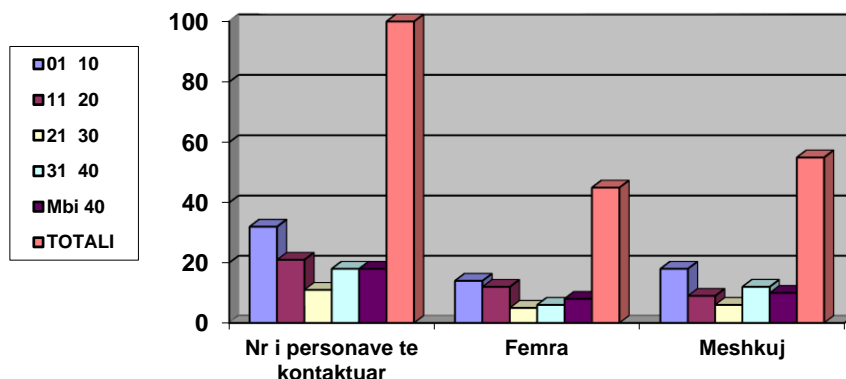
For data collection was used questionnaire method; conversation is conducted directly to the person with disability. The questionnaire contains questions involving different aspects such as:

- 1- General data: age, residence, marital status, education, the period of the show type and cause of disability, benefits from social care scheme;
- 2- The health needs of the person, the type of medical benefits, and the type of rehabilitation needed, driving the auxiliary equipment necessary for the individual, the degree of personal autonomy in daily life;
- 3- information psycho - social on services that benefit, on relations with the surrounding persons, on the way to spend their leisure time, the adequacy of public facilities and private, on the integration of their social (employment, education);
- 4- Wishes of persons with disabilities.

For this questionnaire was used a sample of 100 people, 50 adults and 50 children. From this sample, 55 were males and 45 females.

The following table shows the distribution of our sample by sex and age

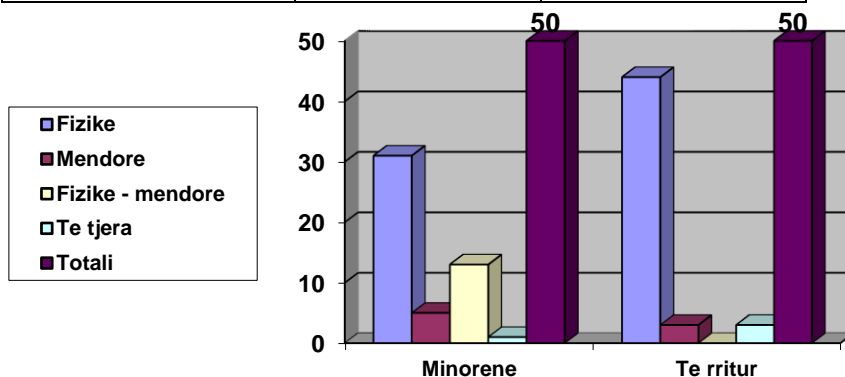
Grup moshë	Nr i personave të kontaktuar	Femra	Meshkuj
1-10	32	14	18
11-20	21	12	9
21-30	11	5	6
31-40	18	6	12
Mbi 40	18	8	10
TOTALI	100	45	55



Pathology

In the studied sample we found four types of pathology, among which, the greatest percentage of occupied physical pathologies (75%); the sample of adults are involved and the pathologies neuro-motor muscle – skeletal, while, most of the sample of children presents physical-mental disabilities associated with epilepsy (36%). We are champions of mental pathologies including three minors affected by Down syndrome. In 10% of cases it has encountered the presence of persons with disabilities in the family, especially between siblings. In 35% of cases of disability are common symptom appeared during the three years before the birth while in 31% of cases the persons interviewed have manifested most common symptom that in the moment of birth. *The following table presents the distribution of the number of sample study based on pathology*

Patologjia	Minorene	Te rritur
Fizike	31	44
Mendore	5	3
Fizike - mendore	13	0
Te tjera	1	3
Totali	50	50



Medical Services

In the study sample was ascertained that between state and individual health services lacked communication. This communication has been missing with his family. After the acute phase treatment is not advisable or any person informed of the reality of the situation which will be located. Also, few are to be given the information that we run specialized centers for subsequent treatments. Thus, mothers expect their child to develop or to walk without having to follow the sessions of physiotherapy, Logo Pedy (therapy and speech) without being integrated into those few development centers existing, state and raised by NGOs working in this field.

We have faced the same situation and to an adult who still lives with the dream that was to perform an operation abroad could be counted as once. In fact, people with disabilities should be briefed on the difficult situation in which will be located ranging from moving the bed, the care for personal hygiene, care of wounds decubitus rehabilitation to be attended and finally, the difficulties that will be faced in order to achieve its social integration.

This lack of information is due to the fact that the person falls into a serious depressive state when faced with reality. Information is one of the first services to be provided to individuals and their families. In our opinion, perhaps the time has come the involvement of social workers and psychologists in our hospital personnel structure.

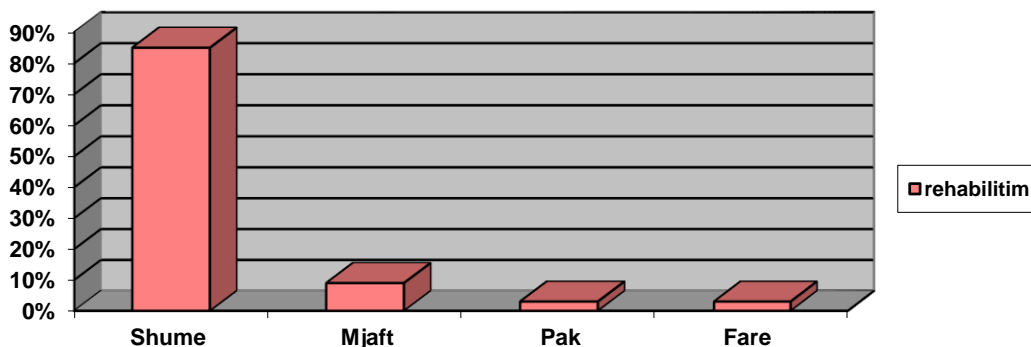
Most respondents stated that medical services are minimal and often corrupt. On the other hand, there is a lack of community knowledge and awareness raising activities on the needs of persons with disabilities, be they medical or social. As a consequence of pathology specifications significant part of persons with disabilities in need of treatment at home. About 58% of respondents in need of therapy in terms of home.

Asked what benefit medical services, 65% of respondents replied that does not benefit any public health service. This fact is also bad because it represents a non-compliance of the legislation in force according to which "persons who are in critical condition and unable to be filed in state institutions benefit service in the apartment by the family doctor and the doctor specialist for them procedures that can be performed as an outpatient and indoor conditions. " About 84% of respondents require more cooperation from employees of healthcare services.

Physiotherapy and aids

Physiotherapy service is very necessary for people with disabilities. Public structures provide this service in the acute stage pathology but this service is limited and non-continuous. Requests for such services are very high especially in young people. On the other hand, institutions that provide such services are scarce. Here, by means of a table, we presented respondents' needs for rehabilitation service.

Nevojat	Shume	Mjaft	Pak	Fare
Rehabilitim	85%	9%	3%	3%



Currently there are NGOs, and not the state, those that mainly covers rehabilitation services. Treatment of persons with disabilities in this kind of service is very necessary because it helps in increasing their personal autonomy. About 59% of respondents in need of wheelchairs and orthopedic. It would be a step really very important if the state, together with reimbursement of drugs, be able to equip the vehicles mobility and assistive these people (catheters, wheelchairs, mobility means or auxiliary accessories such as bed, the toilet, the sink, in the shower, etc). In assigning such an assessment we have given mainly people with physical pathology. In the majority of cases are NGOs working in the disability field to equip them with these tools persons with disabilities.

Education

Preschool and school integration has as main objective the development of people with disabilities in the manner of behavior, in the way of communication with the aim of social integration, and the establishment of bilateral relations with the surrounding environment. 1:10 is the ratio of children born with problems or who suffer a serious injury during birth. Of course, if not done carefully, the child's further development is hindered. State should recognize the principle of equal opportunities for elementary, secondary and higher for children, youth and adults with disabilities, in integrated contexts. The state must ensure that the education of persons with disabilities be an integral part of the state education system.

Currently, in our country there are 12 special education institutions, among which 8 are schools for children with mental retardation, 3 and 2 are day care centers are institutions for children who are disabled or have trouble hearing and eyesight. However, these institutions do not cover all the requirements of the country. In case of occurrence of a serious pathology parents prefer their children to be treated in special institutions. In the absence of the latter the only solution remains emigration abroad or moved to cities where these services are provided.

In cases less severe where children with disabilities mention only physical (disability which constitutes the greatest percentage) and children with learning difficulties, parents try to activate in regular schools. Current law does not prohibit nor does it guarantee such action. We normative provisions of public education in 1996 noted that "the integration of pupils with special hedged in the context of ordinary schools is considered a necessary contemporary process"; on the other hand, this provision does not provide any solution.

A tiny proportion of persons with disabilities manage to complete the 8-year school, but even in these cases, their participation in learning is passive. In most cases these people drop out of school only after 1-2 years of attendance because of the ordeal they experience as the teacher, label them so unethical as well as the mentality of the parents of other children. It should be mentioned that this aspect does not help at all conditions that provide the premises frequented by persons with disabilities; these facilities have not suitable conditions for these people.

Below we present the results of the sample survey on the integration of our education system:

2% integrated in preschool;

16% attend public schools, more as a listener;

2% attend special education;

2% attend secondary education;

2% attend higher education.

Employment

Regarding employment, persons with disabilities may consider as the most discriminated population. Their desire to be employed is related not only to economic needs but also social integration. It should be emphasized that the disability payments that they receive is very small in comparison with needs that they present to face everyday life. It is clear that these persons require an appropriate job for them in order to ensure a normal life and achieve a modicum of independence economic. People with disabilities want to be employed and to be integrated into civil society. Staying away those isolated working environments and this exacerbates and more psychological condition. Despite that there is a law which says that "employers are obliged to employ a person with disabilities for every 25 employees other" this law does not apply and always have people remain outside the labor market. As a result, these persons we can introduce the poorest social group in society.

As discussed above we have faced champion interviewed by us. According to our data, only:

1% of respondents working full time;

14% work part-time;

85% do not work at all.

Suitability

Most people with disabilities makes a poor social life. Causes that exclude these people from social life are numerous. Architectural obstacles that they face not allow to emerge as the built environment is not at all appropriate for them. It is the right of people with disabilities need to be employed to create opportunities, to education, to move smoothly by using the surrounding environment. But the current state of the roads, sidewalks, entrances to buildings, etc., does not ensure such a thing. In fact, there is Law No. 7889 which states: "All new public buildings must provide for the possibility to use different categories of persons with disabilities.

All natural and legal persons that develop projects for public buildings, the environment exterior of the complex, should provide conditions which take into account the interests of persons with disabilities ", but apparently, this law is not applied in practice. According to our survey, 63% of respondents encountered architectural barriers

Integration

There are few facilities in which persons with disabilities can spend time being felt useful to themselves and to society. These people are forced to exclude yourself from more important activities for their social life. so:

15% of respondents do not come at the house;

29% stand almost all the time inside;

19% are trying to actively make a living out of the house.

Asked what the reasons that they spend time at home are:

6% responded that no friends or known and that as a result of long home confinement;

19% nowhere to go;

26% face of architectural barriers that force them to stay home.

In 63% of cases the persons interviewed are obliged to come accompanied as inability does not allow them to go alone.

We have encountered many cases in which the parents are those who isolate themselves and their children at home and that hinder their integration. One of the reasons of this isolation is because parents are ashamed to expose a child with disabilities in public places, this due to the environment and mentality where we live. In fact, in our study such a fact we have encountered only in 2% of cases and this fact shows that the mentality of parents who have a child with disabilities has evolved over time. First time with a child having a shame disable. Today parents trying to activate their children so that they will be much more integrated into society.

Despite the difficult situation in which these people are they trying to do something in life to not sitting back, waiting only from others. They try and commit with all the possibilities to integrate into society. One of the ways of integration is precisely to participation in various associations, especially those that deal with the rights of persons with disabilities.

In our case, 36% of respondents are members of an association. But his good will to be part of an association of persons stated that currently do not belong to any association; 17% of respondents expressed a desire to be members of an association, mainly of an association that deals with the rights of persons with disabilities. But, on the other hand, it should be noted that the risk of being member and activist of an association are very limited due to the lack of necessary conditions that the premises must have in order to be frequented by these people.

There are very few activities that are organized for the benefit of persons with disabilities and, consequently, their days are too empty. This negatively affects their psychological state. In fact, 65% of respondents claimed to have difficulties in the organization of social life.

Regarding social relations, the majority of respondents, 79% answered that relations with others are generally good and that others understand.

We found that in 69% of cases among family members and persons with disabilities has more warmth and understanding; family is exactly what many gaps to fill disabled person faces in life. In reality, the family gives a great help on the life of persons with disabilities.

The Economy

People with disabilities are layers having major economic problems. Of course, this fact is related to their disability. Given that they are not able to do any kind of work, certainly it very difficult to provide a normal life. Financial income families of persons with disabilities are low. In most cases, the whole family lives only with a disability allowance. This is because almost always a family member is obliged to abandon the work to care for a person with disabilities. Many people eligible to benefit from the law of trusteeship, but a large part of the benefit that no "de facto" because we encounter the offices of the state bureaucracies or simply because you do not know where to turn. Benefiting from this law relatives invalids of the first group, those caring for invalid all the time and, consequently, are unable to be employed.

In terms of custody, we observed that:

70% of cases it is the mother who cares for a person with disabilities;

only 1% of cases are people that provide external assistance they needed.

On the other hand, 78% of those interviewed stated that they need economic assistance.

It should be emphasized that the situation is even more difficult in other towns and cities, because as we said in the beginning, our study sample is selected in Tirana where socio-economic level is the highest in the entire country.

In 17% of cases people with disabilities (interviewed) not receiving a disability allowance and this happens not only by the neglect of the individuals themselves, but also the indifference of state authorities, which often do not inform persons with disabilities to their rights and do not provide adequate guidance for the implementation of these rights. There are many shortcomings in the fulfillment of appropriate documentation release in KMCAP and roads to be followed in cases of non-invalidity benefit the group.

The shortcomings faced in the implementation of legislation for people with disabilities and is occasionally they do not benefit the disability group that belongs.

On the other hand it should be noted that persons receiving a disability allowance and complain that it is not at all sufficient to meet the minimum requirements if the person with disability.

Living Environment

Environment where people with disabilities live, more often, is unsuitable for them. In general, they lack the necessary comfort. Housing spaces in which they live are too small are you leaving him little opportunity to meet their needs. In general, a single room serves as bedroom and kitchen as well. In 35% of cases the house consists of only one room; 27% of them has a place sufficient to meet their requirements. Family in which persons with disabilities live, generally is a close nuclear family consisting of parents and children. This occurs in 65% of cases and only in 5% of cases the family is living in the open and some generations.

Regarding the problem of water running, we found that, in general, the water is intermittent and in 61% of cases affirmed that has running water only a few hours a day. We also encountered extreme cases in which water is absent inside the house but provided through wells. This fact is encountered only in 6% of cases. In 71% of cases found within the house and the bathroom has hot water and cold. In 6% of cases there is bathroom inside the house. This fact clearly shows the situation really difficult in which these people live and of course, exacerbates this situation and their more difficult situation.

Often when we talk about people with disabilities, people who think they are not able to care for themselves. In fact this is a very wrong idea which has begun to fight even in our country. Jane created many associations which have begun work to change this wrong mentality. We are faced with many cases in which people with disabilities have achieved notable successes. Today many young people were given the opportunity to attend various training courses in order to develop them, to show their value and manage to integrate fully into society. Their dreams and desires are the same throughout the dreams of others but, unfortunately, the opportunity to realize them is very small.

In our study, 85% of respondents said they wanted the existence of a socio-educational center-arts where they can develop their skills; On the other hand, 95% of respondents stressed the great importance of developing a personal training schools in order for them to be able to do something of value in their lives.

Conclusions

Given the above reality we are giving our opinion on what is best to be done to reach people with disabilities.

Coordination of services that can provide
prevention
diagnosis

More detailed information on the situation in which will be located
rehabilitation treatment in hospitals that
provision of medical services to families
the creation of specialized rehabilitation centers with specialized staff
establishment of community centers

Mobility device and accessory shop assistant
Intervention social-psycho-pedagogical character in preschool and school;
Flexible learning schedules and improvement of material base;
Legal guarantees for education (law exists but the solutions must also be given);
Suitability construction in the premises of preschool and school education;

The elimination of psychological mismatch between the scientific concept on development and behavior of children and the concept that educators and teachers have currently on their behavior and attitude;

Cooperation not only teachers but parents and a support and cooperation with specialists in the field of disability;

The support of school integration should be not only a teacher but by the entire collective of teaching where a special role, play school departments;

Sensitization of the public, teachers, students and government officials on the merits and advantages of the integration processes.

Municipal or other instances to provide decent jobs for people with disabilities (newsman, different windows)

The state should be as flexible in providing disability benefits

Have a broader understanding of the legislation by persons whose caregivers are entitled foster care payments

State-should enable and control the implementation of existing legislation in the field of accessibility and improving its support

State-also should help in collaboration with private business in the field of design and construction, to understand the importance of adaptability.

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Military Knowledge Transfer Mechanisms: A Passage to Academic World

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Abstract:

Knowledge Management is an important and significant segment of the Management discipline. Military units and formations could use this valuable asset in their operations. Unfortunately, the academic world could hardly address the knowledge management issues, particularly the knowledge transfers mechanisms in the military context. This paper makes an endeavour to fill up this gray area of the academic world. The exhibited knowledge transfer mechanisms show how military forces use various techniques and mechanisms to transfer knowledge between the knowledge contributors and recipients. The paper will help the business organisations borrow the military knowledge transfer mechanisms. The transfer mechanisms used in military forces presented here provide a deeper understanding of characteristics and nature of the mechanisms; Some of them are different and unique from those of the corporate/business world. Future researchers may empirically examine these mechanisms in military context.

Keywords: Knowledge Management, Knowledge Transfer Mechanisms, Military Organisations

1. Introduction

Knowledge is inseparable information in context (Galup, Dattero, and Hicks, 2002), related to action (Tiwana, 2002). It is based on some experience (Leonard and Sensiper, 1998). It is a driving force for action and a sphere of influence for professionals. Alavi and Leidner (2001, p. 109) found that, "knowledge is ...the result of cognitive processing... information is converted to knowledge once it is processed in the mind of the individuals" (p. 109), which is essential for the military forces. Knowledge Management is an essential branch and useful tool of management (Edvardsson, 2006) and military forces. In the present world knowledge management could achieve its recognition in all fields. It has a multi-dimensional approach (Chae and Bloodgood, 2006). Tacit knowledge resides inside the human brains and when it is articulated in any form (s), it converts into explicit knowledge (Nonaka and Takeuchi, 1995). Knowledge transfer is an important element of knowledge transfer process. Successful knowledge transfer demands a good vehicle between the knowledge actors. Limited literature (Hasnain, 2016a) could address the issue of knowledge transfer mechanisms in the military context. Hasnain (2016a) has identified face-to-face meetings, military exercises, training, model discussions, military exercises, training, model discussions, military exercise without troops, military logistics exercises, exercise debriefings and demonstrations as the knowledge transfer mechanisms in the military context. Though Hasnain (2016a) could bring and present numerous knowledge transfer mechanisms in the military context, but still many mechanisms remain unaddressed. Further, academic world and knowledge management gurus (Scarborough, 1995; Taiwana, 2002; Nonaka, & Takeuchi, 1995; Jasimuddin, 2007; Hensen, Nohria, & Tierney, 1999) could hardly address the issue of knowledge transfer mechanisms in the military context. This paper makes an endeavour to find out a few unaddressed knowledge transfer mechanisms in the military context.

2. A Few Knowledge Transfer Mechanisms: A Military Perspective

If transferred-knowledge is not absorbed by the recipients of knowledge, it means actually knowledge is not transferred (Davenport & Prusak, 1998). Such cases may be dangerous for the military forces. Knowledge transfer encounters numerous barriers (Hasnain, Jasimuddin and Fuller-Love, 2016). So selection of appropriate transfer mechanisms is crucial for the military forces. Knowledge transfer mechanisms are the vehicles through which knowledge is transferred between the actors (knowledge contributor and knowledge recipients). Knowledge transfer mechanism may be compared with an element (e. g. media) of the communication model formulated by Shannon and Weaver (1949), where noise may disturb the whole process.

2. 1 Drum, Bell and Flag

While describing the method of battle tactics, Sun Tzu (p. 49) informs, "the drum and bell are used, because the voice does not carry; the flag is used to assist the sight. The use of bell, drum, banner and flag to attract the united attention of eye and ear. When all are united, the strong is not left to go forward alone, the cowardly are not free to retreat unrestricted. In this way can a multitude be used. Therefore, in night fighting, beacons and drums are largely used; in day fighting, a great number of banners flags and the enemy's eyes and ears are confounded." Literature (Paul, 2009; Howell, 2003) finds, the use of flags for knowledge transfer is used beyond the military situation also. For example, in 1972, some south-east country-CPPs' (Cyclone Preparedness Centre) volunteers were trained to hoist flags and spread warnings by megaphones among the local communities (Paul, 2009; Howell, 2003). Military organisations use drums, bells and flags for ceremonial purpose also.

By means of drum, bell and flag¹, the

direction of large forces in battle is possible,

and like unto the direction of small forces – Sun Tzu

2. 2 Intelligence Agency/Corps of Intelligence

Intelligence agencies and corps of intelligence are the excellent vehicles of knowledge transfer. Many people believe, Sun Tzu (500 BC), the Chinese military strategist, is the father and generator of strategies. "Knowing oneself" and "knowing the enemy" are the two divisions of Sun Tzu's principles (Wong, Maher and Lee, 1998) demanding intelligence. In brief, "Sun Tzu places high priority on intelligence about the actual conditions of the battle, and affords it a strategically decisive role." (Dimovskiet al., 2012, p. 154). The importance of intelligence is paramount in the warfare. Collect, collate and analysis of information are the prime duties of the intelligence agencies. For instance, British "Intelligence Corps operators collect information from range of sources and evaluate, analyse, integrate and interpret this information to inform command decision making." (British Army, 2015). Citing the reference from the Bible (New King James Version, Numbers 13:18-20), Hippner (2009) informs about the importance of intelligence and Prophet Moses' techniques of using intelligence. Further, Hipper (2009) cites the quotations of Moses:

See what the land is like: whether the people who dwell in it are strong or

weak, few or many; whether the land they dwell in is good or bad;

whether the cities they inhabit are like camps or strongholds; whether the

land is rich or poor; and whether there are forests there or not.

Hippner (2009) continues by explaining "Moses is a decision maker who wants to know everything that may be relevant, as his tasking implies. He asks for reports on the economic, military, and social situation of Canaan." (p. 1). Prophet Mohammed (SM) intensively used intelligence in all the battles against the Quaishis. For example, "on the eve of the battle of Uhud, Prophet Mohammed (SM) sent two agents to scout the area around Medina and Mount Uhud and to collect as much information as they could on the Quraishi, especially the number of men deployed against him and the area they were concentrated" (Al-Asmari, 2013, p. 101). So, "the fundamentals of war planning include an assessment of one's capabilities and gathering intelligence on the enemy to determine their strengths, weaknesses, capabilities and intentions" (Keller, 2008, p. 129-30). Further, Keller (2008) continues by informing "one of the most valuable assets that the military [and businesses] covert is intelligence of their opponents [competitors]" (p. 131). In modern days many countries have their own intelligent agents. They not only act to support the military strategies and operations, they also work as knowledge transfer vehicles to the people of the world through their open accessible web-pages. For example, CIA's (The Central Intelligence Agency) web-site of the US provides huge useful information and statistics on social, political and economic conditions of the countries of the world. Academics, researchers, organisations and states may be benefitted out of this

¹ "The drum was used to beat the assembly and in the advance, the bell as a signal to halt. Flags were of two kinds, signalling flags and distinguishing banners" (The Art of War, p. 32).

vast data/knowledge displayed there. In military the local field intelligent agents/units, work like the vehicles of knowledge transfer through the act of transmitting their collected information to their respective military units/formations during peace and war times. Such information helps the decision makes the planning and decision making process easy for the commanders. However, wrong intelligence may be suicidal for any commander and his/her under commands.

2. 3 Military Corps of Signal

Signal Corps of any military is a knowledge transfer mechanism between the units/ commanders. In Britain, "Royal Signals provide military commanders with their information requirements and ability to command and control their forces. The methods used are at the forefront of modern digital military communications and information systems technology and the Corps strives to live up to its motto 'CertaCito', which freely translated means 'Swift and Sure' " (Royal Corps of Signal, 2015). So in brief, as the medium of knowledge transfer, they ensure the transfer of knowledge to the knowledge-recipients as fast as possible so that they may take decision and act as per the demands of the situations.

2. 4 Military Training Institutions/Schools

Military training schools and institutions are the excellent vehicles of knowledge transfer for all ranks in the defence services. The United States *Military Academy* at West Point and The *Royal Military Academy Sandhurst*, generally known as Sandhurst, are the two world's most prestigious military training institutions where leaders are produced. Every year many foreign countries' military cadets/personnel receive training from these institutions. Countries, usually, possessing regular military forces have their own military academies. Further, *military staff colleges/universities* conduct advance courses for the officers. In addition to military academies and staff colleges, fighting arms, corps and supporting arms have their own respective *schools and institutions* where each member of the arms and services need to undergo their respective basic and specialisation training in their respective disciplines. In addition, there is *formation and unit level training* round the year for every member of the military organisations.

3. Conclusion and Future Research

Knowledge is an indispensable asset for any organisation. It has become the life-blood for the survival and prosperity of the organisations. It is a driving force for action. Human brains are the generators of knowledge (tacit), and after that it takes various forms (explicit). Knowledge management could achieve huge attention by the academics and the business worlds. Military units and formations could also utilise this invaluable asset into their operations. Knowledge transfer is one of the crucial elements of the knowledge management process. Knowledge transfer occurs between the knowledge contributors and the knowledge recipients. For the smooth transfer of knowledge between the knowledge actors, the selection and use of an appropriate media, e. g. vehicle is paramount. Inappropriate use of such vehicles may distort the transferred knowledge, or transfer may not occur and such situation may be dangerous for all units and formations engaged with the battles. There is numerous knowledge transfer mechanisms. In ancient days, bells and flags were used intensively in the battle fields to transfer knowledge. Drums and bells were the effective means for night warfare. Flags represents the national identity and symbol of own forces' drive. In modern days, military forces use drums, bells and flags for ceremonial purpose as well. In some parts of the globe, people use megaphone and flags to warn the inhabitants about a forthcoming natural disaster. Use of intelligence is an excellent mechanism of knowledge transfer, which was intensively utilised and engaged by the ancient Generals and leaders in the war and battle-fields. Modern days, many countries possess strong intelligence agencies and military corps of intelligence. These units/formations collect, collate and disseminate information and work as excellent knowledge transfer mechanisms for the fighting and logistics elements during the peace and times. Military Corps of Signal ensures the on-time transfer of knowledge between the units/formations. Military training institutions and schools are the brilliant vehicles of knowledge transfer, where in addition to basic trainings, specialised trainings are also provided to the military personnel of the respective arms and services. Thus the trained personnel may transfer knowledge to their colleagues and subordinates.

Future researchers may empirically examine the knowledge transfer mechanisms in any military or non-military context.

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Effects of Project Cost Overruns and Schedule Delays in Sub-Saharan Africa

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Abstract

This paper provides conceptual insights on the economic impact of project cost overrun and schedule delays on infrastructure procurement in developing countries with huge infrastructure deficit in Sub-Saharan Africa. Projects cost overruns and schedule delay are a major and widespread problem in infrastructure procurement the world over. It has received a lot of attention in the recent past. However, the literature reveals that extant studies on project overruns are heavily skewed towards causative factors, with little or no attention to the effects it has on the economy as a whole. The paucity of studies on the effects of project cost overrun and schedule delay will further reinforce the imperative to reacquaint policymakers and infrastructure developers, as well as project financiers with the gravity and import of the problem for infrastructural development in particular and the wider economy in general. The study undertakes an exploratory approach drawing from a wide range of secondary information and materials obtained from policy documents, study reports and peer-reviewed articles. The findings show that cost overrun and schedule delay in infrastructure procurement can have a damaging economic effect ranging from allocative inefficiency of scarce resources, further delays, contractual disputes, claims and litigation to project failure and total abandonment. The study recommends project management capacity-building for infrastructure developers, project managers as well as a number of innovative control mechanisms such as reference class forecasting, public-private partnership and computer-aided cost estimating tools including artificial neural networks, data mining, building information modelling as well as fuzzy neural inference model, genetic algorithms, and stochastic simulation to curb the menace of the problem.

Keywords: Effects of Project Cost Overruns and Schedule Delays in Sub-Saharan Africa

Introduction

The role of infrastructure in fostering economic growth and development has been established in the growth literature (Calderon, 2008). Some studies contend that the poor state of infrastructure is one of the major impediments preventing economies in Sub-Saharan Africa from leapfrogging from their current economic status into modern industrial economies (Calderon, 2008; Yepes, Pierce, and Foster 2008). For instance, Escribano, Guasch, and Pena (2008) observed that the state of infrastructure in Sub-Saharan Africa lag the global average by 30% due to deplorable condition and massive backlogs across different countries and sectors thereby leading to loss in economic growth by 2 basis points annually. Addressing this huge infrastructural deficit would require huge capital outlay- estimated to be around US\$ 93billion - and lengthy construction periods (Escribano, Guasch, and Pena 2008). The rapid increase in population growth in SSA and the growing demand for better utility services has made the investments in infrastructure even more imperative.

Project cost overruns and schedule delays are a widespread challenge affecting infrastructure procurement world over across time, project size and type (Flyvbjerg, Holm, and Buhl, 2003; Flyvbjerg, 2005). Flyvbjerg *et al.* (2003) in their extensive study on project cost overruns and schedule delay observed over the course of 70 years that the study considered, the incidence of cost escalation had not decline and concluded that it appears no learning seemed to have taken place. Similarly, Ahiaga-Dagbui, Smith, Love and Ackermann (2015) corroborated Flyvbjerg, *et al.* (2003) by submitting that in spite of the vast attention given to cost overruns and project time delay in literature and practice, not much progress appears to have been made in terms of the reliability of initial project cost estimate and predictability of final actual cost over the years.

According to Flyvbjerg *et al.* (2003), infrastructure projects are globally estimated to have 86% probability of experiencing cost escalation with average cost overrun of 45% for rail projects, 34% for bridge projects and 20% for road projects. Similarly, Love, Edwards and Irani (2012) and Odeck (2004) also contend that cost and time overruns could sometimes average 70% and 183% over the initial stipulated estimate respectively. In another related study, Ernst & Young (2014) also reported that 64% of the infrastructures in the oil and gas industry recorded cost overruns in varying categories and in one particular instance cost overrun were as high as 59% representing cost escalation of US\$500 billion.

The high incidence and magnitude of project cost overruns and schedule delays in Sub-Saharan Africa remain unabated and only further complicates the poor infrastructural situation of the region (Flyvbjerg *et al.*, 2003). A study on Nigeria transport infrastructure project reported project overrun of averaging 14% cost escalation and time schedule delay of 188% (Omorieg and Radford, 2006). Likewise in Ghana, 75% of ground water drilling projects have been reported to have exceeded budgeted cost and time (Frimpong, Oluwoye and Crawford, 2003). In Kenya, a report on range of projects under the Constituency Development Fund indicated a 48% cost overrun and 87% time overrun (Ngacho and Das, 2013). The study also classified the projects across different sectors and found that Agricultural market projects experienced an average of 71% project overrun while industrial estate projects witnessed project overrun of 68.3% of cost and time escalation. Project overruns has a negative effect on infrastructure procurement by raising the capital-output ratio in the sector with a concomitant negative effect on the overall economy. For instance, project overruns of cost and time has been identified as the significant factor responsible for project abandonment and high incidence of contract failure (Rwelamila, Talukhaba and Ngowi, 1999; Elinwa and Buba, 2001).

A critical review of the literature on construction cost and schedule estimates reveal that a lot of emphasis has been laid on the factors causing project cost overrun and schedule delay in Sub-Saharan Africa (Mansfield, Ugwu, and Doran, 1994; Frimpong, Oluwoye and Crawford, 2003; Baloyi and Bekker, 2011) but not much has been done to highlight the consequences of project overruns and this is what this paper seeks to explore so as to exhume more seriousness on the part of project planners, contractors and policymakers on the consequences of project overruns as well as proffer policy recommendations.

The rest of the paper is organized as follows: section two reviews the extant literature on cost and schedule overruns. Section three discuss the method adopted in this study, while section four takes a brief overview of cost and schedule overruns in Sub-Saharan Africa. Sections five discuss the effects of cost overruns and schedule delay, while section six explore the control mechanisms of cost and schedule overruns. The paper concludes amid recommendations in section seven.

Literature Review on Cost and Schedule Overruns

The traditional objective of project management is the coordination of multilayered construction tasks in order to successfully procure and deliver infrastructure projects "on time, in budget and according to contract design-specification". Therefore, the iron triangular project management functions of cost, time and output performance (quality and scope) illustrated in figure 1 becomes key criteria for project control and performance evaluation (Might and Fisher, 1985; Morris and Hough, 1987; Barnes, 1988). In that sense, traditional project managers as well as engineering and procurement contractors always strive to deliver project on time and within budgets so as to avoid incidence of cost and schedule overruns in project procurement as project with overruns are often viewed as less than successful. No other study epitomized this position more than Atkinson (1999) which boldly stated that the most strategically significant measure of project failures are "time overrun", "cost overrun", and "poor quality".

Figure 1 Project management objectives



Conventionally, cost overrun is often defined as the actual turnout of costs measured as a ratio of estimated costs (Bacon and Besant-Jones, 1998; Flyvbjerg *et al.*, 2003). However, cost overrun is defined by another school of thought as the difference between actual project cost at completion and budgeted estimate at project approval after adjusting for expenditures due to cost escalation (Morrow, 2011; Love, Ahiaga-Dagbui and Irani, 2016). While Schedule overrun, sometimes called schedule slippage, is defined as the margin between actual project implementation time and the estimated project implementation duration. The implementation schedule commences from the date of project approval by the main financiers and the key decision makers, to when the project comes to full commercial operation (Ansar, Flyvbjerg, Budzier and Lunn, 2013). Several empirical evidences have shown that the probability of a project experiencing overruns increases with the size and specification complexities (Baker, *et al.*, 1974; Flyvbjerg *et al.*, 2003; Standish Group, 1994). For instance, megaprojects are by their very nature chaotic and unpredictable (Standish Group, 2004; Flyvbjerg *et al.* 2002). Similarly, special projects with high technical complexity in terms of meeting the performance specifications such as nuclear reactors, aeronautical space projects, oil and gas projects as well as thermal and hydro electrical projects are prone to high frequency and magnitude of overruns (Sovacool, Gilbert and Nugent, 2014). Project management capability and the quality of institutional environment have also been reported in some studies as critical factors in determining overruns (Baker, *et al.*, 1974; Flyvbjerg *et al.*, 2003; Cantarelli, Flyvbjerg, and Buhl, 2012). Also worthy of note, is that the use of Public-Private Partnerships in infrastructure procurement have been observed to have an inverse relationship with overruns, therefore an increase in its use would help reduce the incidence and magnitude of overruns (Blanc-Brude, Goldsmith and Väilä, 2009; Kostkaa and Anzinger, 2015; Siemiatycki, 2015)

Although several causal factors of overruns have been documented in the literature but for the purpose of this study we shall be restricting ourselves to five broad categories proposed by Baker, *et al.* 1974, Flyvbjerg, *et al.*, 2003 and Ahiaga-Dagbui and Smith

According to Flyvbjerg (2005) and Siemiatycki (2015), the factors influencing project cost over-runs and time slippages can be broadly classified into three categories: Technical issues, optimism bias issues, and Strategic deception and misrepresentation issues.

Technical Issues

Technical issues account for the most common explanations for project cost overruns and schedule delays. Common examples of technical glitches leading to project overruns comprise inaccurate forecasting and cost estimating techniques, insufficient data and poor judgments arising from lack of sufficient experience in project cost forecasting and estimation as well as the general inability to predicting the future (Flyvbjerg, Holm, and Buhl, 2002; Siemiatycki, 2015).

Optimism bias

The problem of estimation bias stemming from being overly optimistic about the prospect of a project in terms of cost and time is one of the major factors causing cost over-runs and schedule delays in infrastructure procurement. Flyvbjerg (2005) suggest this to be a more plausible cause of cost overruns and project time delays than the technical glitches, arguing that political and competitive pressures on projects incentivizes by project promoters and deemphasize costs and risks while

overemphasizing project prospects. The concept optimism bias in project cost and time estimation was inspired from the seminal work of Kahneman and Tversky (1979) on decision-making under uncertainty. They stressed that most people often suffer from planning fallacy and optimism bias in that they tend to be delusional about their prospects and thus over-exaggerate the outcome in an investment or project, while underestimating the cost.

In infrastructure project planning, it simply implies the tendency to overestimate the project completion time while underestimating the project costs and risks of the project. This is especially true for public sector infrastructure which has gained notoriety for large over-runs. According to Flyvbjerg (2005), over-optimism often arises from cognitive biases in the information processing mechanism of the human mind thereby leading to poor project forecasts and wrong estimates stemming from technical inefficiencies and systematic misrepresentation. Poor estimation and forecasting techniques as well as incomplete and unreliable data are main causes of biased estimate. Better understanding of the technicalities as well as social and political dimensions of infrastructure procurement could provide a reality check, thus reducing the incidence of optimism bias.

Strategic Deception and Misrepresentation Issues

Systematic deception and misrepresentation has been set forth by scholars and policymakers as one of the leading causative factors of project cost overruns and schedule slippage (Wachs, 1989; Flyvbjerg, Holm, and Buhl, 2002). Systematic deception and misrepresentation speaks to the possibility that project cost overruns and schedule delay may stem from a deliberate misrepresentation of facts by project planners and promoters with the sole intent to deceive. Actual project cost/benefit projections and time schedule are deliberately misrepresented by project planners and promoters in a bid to win the contract award over other competitors and to horridly commence construction. The notion of systematic misrepresentation as one of the factors causing project overruns can be traced to two theories; agency theory and the theory of strategic deception.

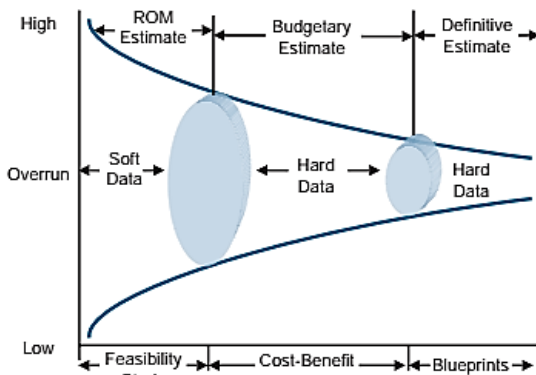
Flyvbjerg *et al.* (2004) explained that in infrastructure procurement, agency problems arise when there is separation of project sponsors (ultimately tax payers) and infrastructure procurement by a chain of intermediaries at every phase of the project comprising promoters, engineers and procurement contractors, project management consultants, municipal authorities and state ministries, departments and agencies. They argued that deception and misrepresentation can occur at every interface between the principal (project sponsors) and agents (project planners, promoters and contractors, etc.) due to number of reasons including the presence of information asymmetry, divergent self-interest, and differences in risk preferences. For instance, a desperate project contractor would want to get project approval by all means, thereby deliberately underestimate the cost of the project and exaggerate its benefits during the contract bidding process in order to make the project look attractive, while the self-interest of politicians is to rush through the project approval and commencement in time before the next election with total disregard for value for tax payers' money, etc.

Therefore, there is a strong incentive for project promoters to continuously underestimate the costs of infrastructure projects in order to make them attractive to financiers and tax payers as long as there are no punitive measures taken against such perpetrators. This can be controlled by introducing measures of accountability in infrastructure procurement whereby any party found to have deliberately deceived project sponsors and financiers is made liable for damages incurred.

Effective cost planning and forecasting is very crucial during the early stages of project life-cycle in ensuring that the project costs, quality and time schedule are within the economic limit of budgeted project expenditure. Accurate initial cost and schedule estimates are therefore very essential- as it aids project sponsors and financiers to make better informed decisions on whether or not to proceed before any shovel-on-the-ground (Hegazy, 2002; Chan, *et al.*, 2004). However, several studies on project performance have reported high incidence of cost and schedule overruns thus suggesting inefficiency in project cost estimation, planning and forecasting (Flyvbjerg *et al.*, 2003; Ahiaga-Dagbui *et al.*, 2015). Project overruns occur at any stage of project life cycle: during project planning and development phase, when project price and design is being negotiated; during project approval phase, while waiting for disbursement; during project construction procurement phase; during post-completion phase if the construction does not meet the standard quality (Siemiatycki, 2015).

However, most cost overruns usually occur at the initial phase of a project where the uses of soft data (Rough order-of-magnitude (ROM) estimates) are more prevalent. As a project progresses from the initial phase to the planning and construction phase where the use of soft data gives way to the use of hard data, the cost estimates improves in accuracy thereby reducing the range of cost overruns (Kerzner, 2013; Hegazy 2002). According to the European Commission DG XVI (1998), the basic elements that must be considered in order to ensure good project management practices as well as avoid cost overrun include: **Cost control**: entails ensuring that the infrastructure procurement guarantees value for money in terms of the project design and construction as well as ensuring that the actual cost of the project does not exceed the budget estimate; **Time control**: requires ensuring that the infrastructure procurement is executed within the stipulated schedule; **Quality control**: implies ensuring that the infrastructure procurement is executed within design-specifications in the contract and guarantees expected performance; **Change control**: entails ensuring that any necessary changes to the original engineering specification should be carried out within the official budget and must be subject to the approval of the sponsor.

Figure 2 Ranges of overruns



Source: Kerzner, 2013.

The seminal work of Baker, Murphy and Fisher (1974) is perhaps one of the pioneering studies on project cost and schedule overruns. The study which was sponsored by the US National Aeronautics and Space Administration investigated the determinants of project performance from a sample of 646 responses obtained from seasoned project managers and contractors. The study identified the certain critical success factors as necessary preconditions during the project planning and initiation phase: clearly expressed design-specifications; realistic project schedules; accurate cost estimates; avoidance of buy-ins; avoidance of over-optimism; favorable interface with the institutional environment; and conceptual clarity. The authors further identified some additional factors to be imperative for project success during the construction phase including, project management team's commitment and capability; the presence of on-site project manager; as well as adequate funding of construction to completion. Out of these factors, accurate initial cost estimates, realistic schedule amongst other factors as being directly related to both project success and failure. In other words, the accurate forecast of project cost and schedule amongst others or the lack thereof are necessary but insufficient factors in determining the probability of success or failure of a project. Therefore, the authors decided to expand the focus of the study to include the phenomenon of cost and schedule overruns in what is to become a pioneering inquiry on project overruns. The study also arrived at the following conclusion with respect to project overruns; cost overruns were highly correlated with the size and complexity of the project as well as the degree of difficulty in meeting project technical specifications; poor cost estimates leading to a significant percentage variance in the actual cost to budget; lack of appropriate project control systems and lack of stakeholder engagement in project decision-making; in most instances schedule difficulties and concomitant schedule overruns were identified as the primary cause of cost overruns; overruns does not imply lack of success as the study found many instances of overruns in projects that were considered successful.

Methodology

This paper is entirely an exploratory qualitative study therefore a wide range of theoretical and empirical literature as well as secondary information were obtained from policy documents, study reports from reputable organizations such as the World Bank, African Development Bank, the Standish Group, Ernest & Young, etc. and peer reviewed articles to provide conceptual insights on the phenomenon of infrastructure project overruns in Sub-Saharan Africa. Most of the articles reviewed in this paper are empirical studies that employed data on cost and schedule overruns obtained from practical project observation or experience.

Overview of Project cost and schedule delay in Sub-Saharan Africa

The link between the quality of institutional governance and efficient and sustainable infrastructure procurement has been well documented (OED, 1996; Kenny, 2007). Studies have shown that countries with more strong institutional governance frameworks and stakeholder inclusiveness tend to experience lower risks of cost overruns and ultimately more success in project procurement than countries with weaker regulatory governance (Ansar, Flyvbjerg, Budzier and Lunn, 2013). This view has been corroborated in a World Bank's Operations Evaluation Department report (OED,1996). The study evaluated 117 World Bank sponsored infrastructure projects in sub-Saharan Africa completed between 1992 and 1997 valued at US\$4. 2 billion. The performance of the projects was considered to be below the average as 58 percent of projects outcomes were classified as satisfactory, and only 18 percent were considered sustainable.

Infrastructure project procurement performance in Sub-Saharan Africa was found to be severely constrained by weak institutions, inadequate project management capability, and poor project design as well as a high degree of uncertainty regarding the operations and maintenance of the new facilities by the host government or community.

Ansar, Flyvbjerg, Budzier and Lunn, (2013) also suggest that another reason developing countries such as those in Sub-Saharan Africa are more prone to a greater frequency and magnitude of project overrun is inflation and currency exchange, arguing that foreign currency exchange volatility which is so prevalent in developing countries can severely impact project cost due to the high dependence on foreign goods for project materials. Indeed, inflationary pressures and its concomitant impact on local currency devaluation is a common theme in infrastructure procurement overruns in Sub-Saharan Africa. For instance, the Tanzam Highway Rehabilitation project in Tanzania which experienced a cost overrun of 54% and a schedule overrun of 50 months attributed the cause of the overrun to a number factors including depreciation of local currency due to a spike in inflation as well as delay in cash disbursement (AfDB's OPEV, 2004).

Further compounding the issue of foreign dependence is the extensive use of foreign labour and expatriates as project consultants as well as the award of the contracts to foreign engineering procurement and construction companies due to comparative lack of experienced local project management team, thereby potentially increasing the cost of labour due to the high cost of foreign labourers. This position has been verified in Meredith (2005). The study observed that across the region there was an almost precarious dependence on foreign expertise up to a point where Nigeria Airlines was essentially managed by KLM and Nigerian Railways run by Rail India.

Flyvbjerg *et. al.*, 2003 observed that cost underestimation is more pronounced amongst developing countries than in North America and Europe especially on transportation projects. Similarly, AfDB's OPEV (1997) reported cost underestimation and delay in funds disbursement to be the main factors attributed to 42 percent cost overruns which amounted to 10 billion CFA. F and corresponding 20 months' schedule delay on a Gabonese road maintenance project executed between 1992 and 1993.

In the same vein, the World Commission on Dams (2000) reported huge overruns in dam procurement arising from underestimation of project cost and schedule in most developing countries, with countries in Sub-Saharan Africa registering the highest underperformance. Take for instance, the case of the rehabilitation of Inga 1 and 2 dam projects in Congo DRC which recorded a huge cost overruns amounting to US \$ 1. 1 billion far and above the initial estimate of US\$ 250 million due to mismanagement and delays in project execution. Worse still, Inga 1 and 2 not been able to operate at the estimated full capacity of 860 MW since inception, only operating on an average less than 40% (55 MW) of the proposed capacity (International Rivers' Programme for infrastructure Development Africa Report, 2016).

Another recurring source of overrun in infrastructure procurement in Sub-Saharan Africa, especially for independent power projects is contractual disputes and arbitration (Gratwick, Ghanadan and Eberhard, 2007; Eberhard and Gratwick, 2012). The 100 MW diesel-power project procured by the Independent Power Tanzania Limited (IPTL), which was completed in 1998 but only started operations in 2002 due to delay stemming from disputes over construction cost and related capacity

payments as well as allegations of corruption, is a good example in this regard. The cost of arbitration incurred by IPTL amounted to US\$ 1,272 thus contributing to total project cost overrun and further delay of 44 months, rendering the project as one of the very expensive project by the developing countries' standard due to allegations of corrupt practices between government officials and private investors.

Similarly, there was the construction of the Okpai Independent power projects in Nigeria which was also trailed with contractual disputes. However, parties were able to resolve the dispute out of court. However, the dispute did affect the payment plan as the plant did not make full payment to the national electricity company which was the off-taker, and therefore could not amortize after 5 years as originally agreed in the PPA even though the plant was producing power. Although unconnected to the dispute, the Okpai independent power project in Nigeria experience a significant budget increase by US\$150 million amid change in scope between the initial negotiations in 2001 and the plant coming on-stream (scope increase from 300 MW to 450 MW 2005). Factors cited for cost overrun were: vandalism as well as underestimation of the initial cost of transmission infrastructure required (Eberhard and Gratwick, 2012).

Another factor is fraudulent practices comprising non-adherence to contract conditions, kickbacks, discrepancies in contract document have also been reported as one of the causes of project cost overruns in developing countries in Sub-Saharan (Kenny, 2007). Mansfield, Ugwu and Doran (1994) noted that transportation projects in Nigeria incurred cost overruns were attributed to a number of factors which include kickbacks. Allegations of kickbacks is very rife in infrastructure projects in the sub-region and led to the spiraling out of control infrastructure project cost in the Independent Power Tanzania Limited power project (Gratwick, Ghanadan and Eberhard, 2007). US\$ 250 million were specified to have been erroneously paid to contractors due to inflated project costs and deceitful overpayment of contractors by the Petroleum Trust Fund agency officials in Nigeria between 1994 and 1999 (Tell, 2002).

Effects of infrastructure project cost over-run

This section addresses the consequences of project cost and schedule overruns on infrastructure procurement in Sub-Saharan Africa. The economic effects of project cost and schedule overrun are a myriad of problems ranging from the possible loss of the economic justification for the project to constituting a strain on financing capacity to secure additional foreign as well as domestic credit facility. Aibinu and Jagboro (2002) and Flyvbjerg (2005), have identified the following effects as critical consequences of infrastructure project overruns:

Pareto-inefficient allocation of resources: cost and schedule overrun often lead to waste of scarce resources as about three quarters of the infrastructure projects are funded with foreign loans or donor aid funds (Mold, 2012). According to Flyvbjerg (2005) Project cost underestimation at the planning stage arising from poor forecasting techniques often misleads decision makers to buy-in on inferior projects with high overruns and low cost-benefit thereby leading to allocative inefficiency. Cost overrun can also lead to waste when project cost spirals out of control and therefore been abandoned due to inadequate resources. This is often referred to as throwing of good money after bad project called *white elephant* projects. A particularly notorious example of cost overrun leading to wastage is the Nigerian Ajaokuta Steel plant which was supposed to be commissioned to start operations in September 1979 and reported worth over US\$ 9 billion. Over three decades have passed since the commission of Ajaokuta steel plant, yet it had still not produced any steel (The Economist, 2000).

Further delays and cost escalation: cost and schedule overrun can further complicate an overrun situation as often takes a lot of time to secure additional funding to cover overruns (Flyvbjerg, 2005). In some instances, project overruns may require a renegotiation of the contract as well as seek fresh approvals thereby leading to further cost and schedule overruns. This was particularly the case in the Gabonese road maintenance project where delay in the disbursement of funds led to further deterioration of the roads and thus necessitating renegotiation of an increase in the financing amount and terms of agreement (AfDB's OED, 1997). Similarly, Gratwick, Ghanadan and Eberhard (2007) reported that the 180 MW natural gas-fired Tanzanian independent power plant located on the Songo Songo islands which was completed 2004 incurred a cost overruns of 50% in budget due to delays and thus requiring additional debt restructuring of capacity payments. The authors reported that nearly 30% of the cost overrun was attributed to increase in debt interest charges arising from project delay which amounted to US\$ 100 million.

Contractual disputes and litigation: contractual disputes, litigation and arbitration are major effect of project overrun in Sub-Saharan Africa especially amongst public-private partnerships (Aibinu and Jagboro, 2002; Gratwick, Ghanadan and

Eberhard, 2007; Kikwasi, 2012). Claims and counterclaims amongst contractual parties (usually the government agency and private investor) on whom to bear the cost of overrun as well as on the terms of the concession agreement have often led to further loss of time and revenue. Gratwick, Ghanadan and Eberhard, (2007) reported that the 100 MW Independent Power Tanzania Limited 100 MW power project that delayed for 44 months due to disputes and litigation incurred an arbitration cost of US\$ 1,272. The cause of the dispute was over the actual cost of the engineering and procurement construction as well as non-adherence to the contract specification by the private investor firm. Similarly, the rehabilitation of the domestic wing of the Murtala Mohammed International Airport in Lagos concession to Bi-Courtney Aviation Services Limited (BASL) ran into disputes over the actual cost incurred by the concessionaire as well as the duration of the concession. BASL claims it obtained an extension of the concession period from 12 years to 36 years to enable it recoup the over US\$ 230 million invested. However, this claim is being contested by the Federal Airport Authority in court as there are doubts on the concessionaire spending that much amount of money (Daily Trust, 2014).

Negative public perception: significant overruns on critical public infrastructure projects often generate negative public perception and suspicion of corruption and inefficiency thereby reducing the attractiveness of the investment (Ansar, Flyvbjerg, Budzier and Lunn, 2013). This is particularly the case with the Bujagali Hydro Power project in Uganda which attracted a lot of negative public outcry regarding the cost overruns amidst swelling allegation of corruption. The Bujagali Hydro Power project experience a budget increase from an estimated USD 430 million to USD 860 million by the end of March 2007 which social activist alleged was due to corruption and kickbacks but the project developers refutes this claim citing increase in the cost of metals by an estimated 90% over the last 5 years, increase in the cost of oil by 140% between 2000 and 2006 as well as a shortage of power generation equipment as the main cause of cost overrun (IRM, 2008)

Loss of Job and Income: Projects completed at record time and with the stipulated amount will free up resources for other usage and this will generate additional utility in the economy. The essence of any project is to create more jobs, either directly or indirectly. When projects experience overruns, it jeopardises this desire of more jobs and income. A good example is the Ajaokuta steel company that was estimated to create 6000 jobs directly and more than 1 million jobs indirectly, which never happen.

Total project abandonment: The total abandonment of infrastructure project is perhaps the worst effect of project cost and schedule overrun. Project abandonment could be temporary or for permanent duration (Aibinu and Jagboro, 2002; Murali *et. al.*, 2007). The Nigerian Abandoned Projects Audit commission report (2011) revealed that 11, 886 federal government projects were abandoned across the country over the past 40 years due to a varied number of reasons including overruns. A particularly notorious example of abandoned project in Nigeria is the Ajaokuta Steel Company which was abandoned for over three decades after incurring over US\$ 9 billion (Mold, 2012).

Methods of mitigating and controlling project overruns

The following cost and time overruns mitigating measures have been identified as very essential in controlling incidence of cost overrun by the European Commission DG XVI (1998):

Enhanced project management capability: the importance of appointing an effective and efficient project manager to supervise the project in a bid to mitigate project overrun in terms of cost and time cannot be overemphasized. It is the responsibility of the project manager to put in place appropriate project control and performance measures to ensure that project is completed within scheduled time and budgeted cost (European Commission DG XVI, 1998). The project managers should undertake periodic project risk assessment so as to be able to provide strategic information to the project sponsors as well as liaise with the project contractor in order to avert any situation that may lead to project overrun by reacting quickly to changing circumstances. Inefficient project risk management often lead to project over-run thereby hindering the project to meet its stipulated cost and time target.

Reference Class Forecasting: Reference class forecasting has proven to be a more accurate and successful way of controlling cost overruns especially the type arising from optimism bias (Flyvbjerg, 2003; Odeck, 2004). Reference class forecasting basically entails benchmarking new projects to a reference class of similar projects that have been recently completed in a bid to arrive at a probability distribution of likely cost estimate for the new project rather than trying to forecast offhand the specific uncertainties that might affect the project. Flyvbjerg and Cowi (2004) developed a practical guide of reference class forecasting for the UK Department for Transport. The authors developed benchmark of optimism bias uplifts by generating probability or frequency distributions of cost escalations for the different classes of project under review in

order to arrive at a more realistic capital expenditure forecasts for each class of projects. The crux of reference class forecasting is that project cost estimators are encouraged to take an outside view in estimating project cost rather than take an inside view as studies have shown that people and organisations who took an outside view in a forecasting exercise had significantly more accurate prediction over organisations and individuals that intuitively took an inside view (Gilovich, Griffin, and Kahneman, 2002). For instance, the study suggests that optimism bias uplifts for road projects should range from 15% on the 50th percentile rank to 32% on the 80th percentile rank. Whereas for rail projects and other forms of urban transport, the optimism bias uplifts percentile ranges from the 50th percentile at 40% to 80th percentile at 57%.

Computer-Aided Cost Estimating and Forecasting Models: several Computer-Aided Costs Estimating (CACE) models and tools are now available giving modern cost engineers an advantage over issues of cost overrun (Ahiaga-Dagbui and Smith, 2012). These computer aided estimators range from a simple spread sheets software to sophisticated collaborative online platforms for project construction designs, simulation models, as well as cost monitoring and control models. Some of these models include Artificial Neural Networks (Ahiaga-Dagbui and Smith, 2012), Data Mining (Ahiaga-Dagbui and Smith, 2014), Building Information Modelling (BIM) as well as 3D Cost Estimation models. Other advanced computer aided construction cost estimation methods include fuzzy neural inference model (Cheng, Tsai and Sudjono, 2009), Genetic Algorithms (Rajasekaran, Febin, and Ramasamy, 1996), Stochastic simulation (Belli, Conti, Crippa, and Turchetti, 1999) as well as Discrete - event simulation (Flood and Worley, 1995).

Risk and contingency planning: Risk and contingency planning is a very common cost overrun mitigating measure in procuring large infrastructure projects (Baccarini 2005). Contingency plans are not based on any estimation technique but rather on a "rule of thumb" calculation. They are usually an additional cost allowance on the project by a certain percentage above the base cost estimate based on the experience of the project cost engineer (European Commission DG XVI, 1998). The industry average for contingency risk allowance in many jurisdictions is a 10% figure over the gross costs. However, it is not always suitable to allocate fixed contingency allowance estimate for the entire duration of a project but rather allocated in phases as each stage comes with its specific risks and can be eliminated has they manifest. A critical review of the cost determining factors in infrastructure procurement would help to ascertain which of the costs is most likely to overrun. This in turn would enable cost engineers and project sponsors to arrive at a more correct contingency estimate.

Prequalification of contractors: Prequalification of contractors has been proven to be an effective way of controlling project overruns by screening out bidders with doubtful capability who tend to strategically misrepresent project cost in order to unduly gain contract approval (Siemiatycki, 2015). Prequalification is a process of assessing the suitability of firms to execute an engineering and procurement contract prior to commencing the actual contract bidding process by the sponsors and financiers of a construction project. The successful procurement of infrastructure projects requires that contracts approvals are only given to firms, or consortia that are suitably qualified in terms of experience, construction technology, financial and managerial competence, and can execute the project within scheduled time.

Use of Public-Private Partnerships: The OECD (2012) defines PPP as a "long term agreements between the government and a private partner whereby the private partner delivers and funds public services using a capital asset, sharing the associated risks." Empirical evidence has shown that PPPs can be employed as a mechanism in controlling the frequency and magnitude of cost overruns (Siemiatycki, 2015; Kostka and Anzinger, 2015). For instance, Kostka and Anzinger (2015) using data from a survey of 121 large infrastructure projects spanning three sectors of the Germany economy, namely: road transport, building construction and ICT infrastructure, found that PPP projects reported significantly lower incidence and magnitude of cost overruns and project schedule delay than Non-PPP projects. The study found that PPPs in road construction projects, recorded merely 9% cost overruns as compared to 34% for Non-PPP projects. Similarly, PPPs in the building construction sector recorded cost overruns of 3% compared to 45% of Non-PPP projects. The authors also observed that about half of total PPPs in road construction projects included in the sample reported costs under-runs.

Conclusion and Recommendation

A critical review of the literature on the concept of project overrun reveals that it is a widespread global phenomenon spanning across continents and historical divides. Project cost escalation and schedule delay continues to persist in the infrastructure projects in spite of the enormous attention given to the causative factors.

Project overruns can have adverse effect on the project procurement and on society in general ranging from escalation of cost, delay in schedule, disputes and litigation, as well as project abandonment. Efficient and effective project monitoring

and evaluation performance has been recommended amongst other measures such as the adoption of modern computer-aided cost estimating tools and class referencing as some of the best ways of mitigating against project overrun. Also, public private partnership seems to be a good method of mitigating cost and schedule overruns has documented in the literature.

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Why Do Albania Doctors Migrate?

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Abstract

Migration has become a very topical political and economic concern over the past few years, with particular reference to human migration from developing countries to more developed countries. Health workforce migration from the countries in Western Balkans, especially from Albania to more developed countries is increasing during the past few years according to official statement of medical associations. So, last three years 400 doctors have asked for certificate of "Good standing" in order to apply for a job abroad. Thus, the migration of healthcare personnel in Albania is becoming a phenomenon that might risk the stability of the healthcare system with its upgrading intensity. It also contributes to lowering the quality of services rendered and at the same time reduces the necessary transfer of knowledge to the younger generations. Quantitative research performed during 2014, outlines and frames the problems and causes for the migration in five basic categories: economic, professional, political, personal and social factors for migration, including questions concerning the index of satisfaction for the profession. In order to respond to the objective of the study, doctors were invited by email to fill online the questionnaire in Survey Monkey webpage. The aim of this paper is to understand the "push" factors which affect the mobility of Albanian healthcare personnel. The needs for higher income, living and working conditions are the main causes of the expansive trend of migration of healthcare workers from Albania in the past several years. Still, the reasons behind migration of health workforce are multifold, ranging from economic and professional, to political and personal factors. The lack of job satisfaction and possibilities for further education and career development, poor working conditions, political pressure, the exposure to verbal and physical violence, are also the factors that stimulate the migration.

Keywords: Albania, health workforce, migration, factors, higher income, professional development

Introduction

Albania has experienced massive migration since in early 1990 immediately after the communist regime has fallen, whereas one third of Albanian population leaves abroad (Nurja 2011). Albanian healthcare system is one of the sectors most affected by massive migration of population where health staff is part of this massive movement. So, according to Order of Physicians there are 400 doctors have asked for "Certificate of good standing" in order to go and work abroad¹. As consequence of massive migration and other factors Albania has the lowest rate of medical doctors for covering healthcare to population, by 1.1 doctors for 1000 inhabitants. Taking in consideration very low ration of population coverage by medical service and number of doctors leaving country to migrate to other countries, it is a small production of doctors in Albania. Thus, there are two medical faculties situated in Tirana and total students graduated last five years is 1141 (Table 1). The number of students graduated each year can't replace number of doctors retired, leaving the country, shifting from public service to private practice. This will require other options from government in order to fulfill the need of the system for medical doctors.

¹ Order of Physician 2016

Table 1. Basic indicators for Albania

Indicator	Value	Remark (e.g. year)
Total population	2,886,026	INSTAT 2016
GDP per capita	11,900 PPP USD ¹	World Bank 2015
Health expenditure as % GDP	6%	WHO, World health statistics 2014
Health expenditure (in US \$)	534 PPP int. \$	WHO, World health statistics 2014
Number of doctors	7708	2016
Number of specialists	3960	2016
Number of medical universities / faculties	2	2016
Number of graduated medical students	1141	2012-2016

According to Lee's Push and Pull Theory² migration is likely to occur when the plusses at the destination outweigh the plusses of staying at the origin. Using this theory, this paper inventories those "plus factors" of the destination country as compared with the "plus factors" remaining in the home country (Albania) regarding doctors' migration.

Methodology

In the framework of this study are selected and analyzed six main groups of factors behind mobility of health workforce: *employment opportunities, salary, working conditions, career opportunities, social status and living conditions*. These push or pull factors are analyzed for the three groups of respondents: doctors who already migrated, potential migrants abroad, and potential internal migrants who participated in the survey specially designed and conducted for the purposes of the project. An on-line questionnaire was available in albanian language, and over 254 doctors from Albania and abroad responded. The total number of completed responses was 210 with response rate 83%.

Findings

Albania has faced huge migration of population since early 1990, where around one third of population (1.4 million) moved abroad³. Parts of these phenomena were even healthcare workers, as social strata which suffered a lot during transition. In table 2 of this paper is presented the socio-demographic characteristic of the interviewed doctors.

Table 2. Socio-demographic characteristic of the sample

Category	Sub-category	%
Sex	Female	58.6
	Male	41.4
Age (years)	<36	54.2
	36-45	27.3
	>45	18.5
Family Status	Married	64.8
	Not married	35.2

¹ Index mundi 2016

² Lee, E. 1966. A theory of migration. *Demography* 3(1), 47-57.

³ Albanian Census 2011

Have children	Yes	60.3
	No	39.7
Profession	Specialist	50.9
	Specialist-in-training	8.3
	General physician	40.7

Most of the interviewers belong to specialized doctors, age cohort younger than 36 years old, married and female. Most of potential migrants see living conditions and working conditions as main factors that influence their migration from Albania to other countries which offer better conditions (Table 3).

Table 3. Factors that influence migration of doctors from Albania

Factors that influence migration				
Very important	Migrants	Potential migration abroad	Internal migration	Unemployed
Working conditions	88.2	72.5	67.6	64.3
Career opportunities	58.8	54.5	64.9	71.4
Social status	47.1	55.7	47.3	21.4
Economic situation in the city you live in	35.3	50	57.4	64.3
Employment opportunities	64.7	68.6	64.9	85.7
Living conditions	82.4	78.6	66.2	71.4

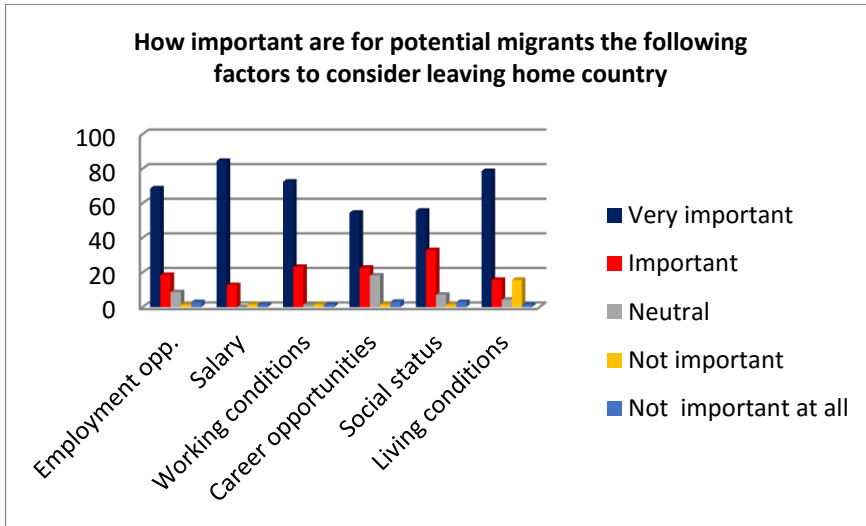
The factors that influence the migration of doctors are different for four groups of respondents: migrants, potential migrants, inner migrants and unemployed.

On the other hand, different groups have some similarity in pushing factors. So, working conditions and living conditions are factors that affect mostly decision of migrants and potential migrants to leave the country. Unemployed doctors are motivated to migrate because of employment opportunities, living conditions and career opportunities, as most important issues for them. Doctors thinking to move into other cities inside the country are motivated by working conditions, living conditions, career opportunities and employment opportunities as factors they can't fulfill in their present city. By analyzing data according to six groups of factors which influence migration of doctors abroad for each group of doctors, we can have better picture of main "push" factors. So, in graph 1 we see that salary is the most important factor that influence decision making to move abroad. This happen because average salary for specialists in Albania is 414 Euro/month¹ which is less than average salaries in other regional countries².

¹ Health Insurance Fund 2012

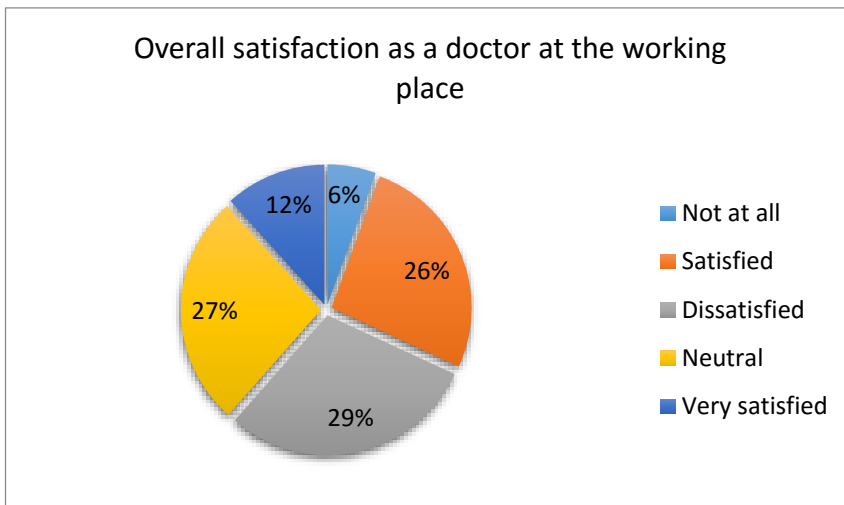
² European Hospital Doctors' Salaries, Enrico Reginato, Rosario Grosso, 2011

Graph 1: Factors that influence potential migrants to consider leaving home country



Another important factor influencing decision to leave home country is working condition (Graph 1). Unsatisfactory working condition is one of the reasons that decrease satisfaction of doctors at the working place. So 35% of interviewed (Graph 2) declare they are dissatisfied or not at all satisfied at the working place. According to motivation theory of Herzberg¹ working conditions and salary level are factors for dissatisfaction or hygiene factors, which make doctors decide to leave home country.

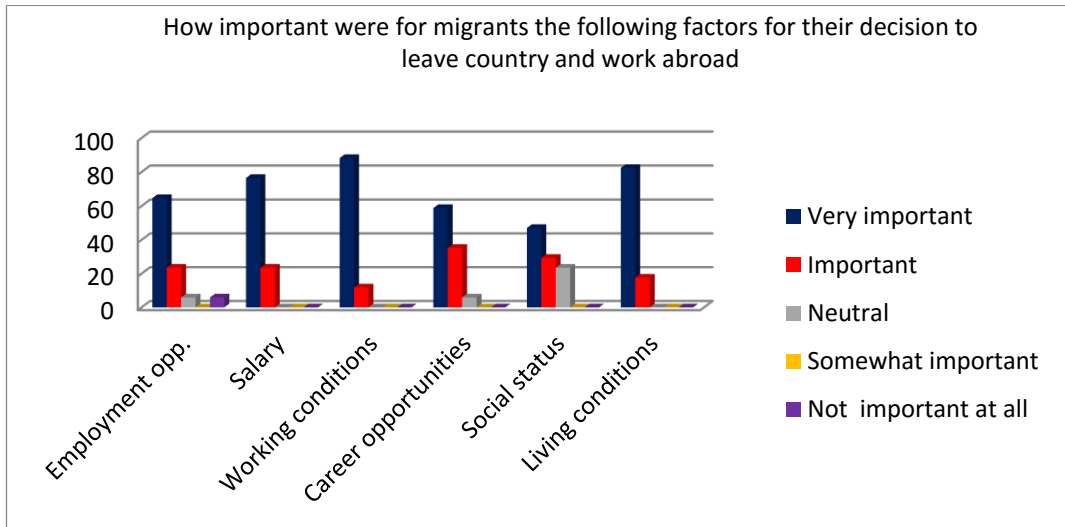
Graph 2: Satisfaction of interviewed doctors at the working place



¹ Herzberg's Motivators and Hygiene Factors

On the other hand, most important factors that influenced their decision to leave home country and work abroad were working conditions, leaving conditions and salary (Graph 3). These results reinforce the findings from the interviews of potential migrants who had salary and leaving conditions as main drivers to leave Albania.

Graph 3: Importance of factors for migrant's decision to leave home country



Conclusion

The increasing trend of health workforce migration from Albania endangers normal functioning and quality of services delivered by national health care systems. According to Order of Physician over 400 doctors from Albania left over the past years to work abroad. This number may increase in the following years, which brings this problem to be recognized and put in the center of development of further health and educational policies in these countries.

Based on research findings, the needs for higher income (better salary), better working and living conditions are the main causes of the expansive trend of migration of healthcare workers from Albania in the past several years. Still, the reasons behind migration of health workforce are multifold, ranging from economic and professional, to political and personal factors. The lack of job satisfaction and possibilities for career development, poor working conditions are also the factors that stimulate the migration. On the other hand, the main "pull" factors are attractive salaries, better possibilities for professional development and employment policies that recognize good performance.

Albanian institutions must take actions in order to stop the increased trend of the migration of the healthcare workers and protect the stability and quality of the healthcare system. Based on our research, the main recommendations for measures that need to be taken by institutions in order to improve the situation in the health system's, are:

To increase the investments in the health sector in order to improve the working environment

To increase the income level of doctors

To improve the access to quality program for healthcare workers

To improve the education infrastructure and continued education of the health workforce

Health workers migration is a serious condition that requires timely intervention from the concerned authorities. If appropriate recommendations are not taken, there will be serious consequences for healthcare system and population health in Albania.

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Experienced and Anticipated Discrimination in Persons with Physical Disabilities in Serbia

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Abstract

The aim of this study was to explore extensity (regarding various life domains in which it appears) and intensity of experienced and anticipated discrimination of persons with physical disabilities; (2) to investigate how experienced and anticipated discrimination relate to each other; (3) to explore relations between experienced and anticipated discrimination and certain socio demographic variables (gender, marriage, residence, family type, employment and age). The levels of experienced and anticipated stigmatization were evaluated by Discrimination and Stigma Scale (DISC – 12). The results showed that persons with physical disability experience discrimination in family life (63. 3%), (starting a family (65. 5%), marriage (45. 4%), role as a parent (45. 3%), in the experience of being avoided or shunned (42. 1%), in relation to professional staff (40. 3%), etc. They anticipate discrimination in making close relationships (46. 3%), in employment (30. 2%) and in education (24. 3%). Multiple regression analysis showed that experienced discrimination is a predictor of anticipated discrimination. Discrimination is more anticipated by unmarried participants, younger, participants living in extended families and by participants not living in their own apartments. It is necessary to design an anti-stigma campaign, which will lead to the reduction of experienced and anticipated discrimination.

Keywords: stigma, experienced discrimination, anticipated discrimination, persons with physical disability.

Introduction

The World Health Organization defines physical disability as “any impairment which limits the function of limbs or fine or gross motor ability” (WHO, 2011). It can be the result of congenital birth issues, accidental injury, or illness. Physical disabilities include impairments which impact one or more major life activities. Goffman (1963) observed physical disability to be a discrediting social identity which influences the sense of personal value. He suggests that it is not the experience of actual limitations that pose the greatest challenge to persons with physical disabilities but rather perceptions of deviance and being labeled as a person with a disability (Goffman, 1963).

Stigma includes three elements: problems of knowledge (ignorance or misinformation), problems of attitudes (prejudice), and problems of behavior (discrimination) (Thornicroft, Rose, Kassam & Sartorius, 2007). There is a great deal of literature exploring attitudes towards persons with physical disabilities. Research of stigmatization was largely conducted in the field of mental illness, but only recently in the field of physical disabilities.

Thanks to progress in human rights, the promotion of social equality legislation and improved access to public spaces in recent decades, people with physical disabilities have attained better social acceptance, greater visibility and more opportunities. But despite this progress, people with disabilities still face stigma and discrimination in many areas of life. The effects of stigma are strong and are manifested in the realm of employment, housing, education, transportation, medical care, making and keeping friends, lower self-esteem and damaged family relationships (Thornicroft, Brohan, Rose, Sartorius & Leese, 2009). Consequences of stigma may take different forms, such as withholding help, avoidance, and segregated institutions (Corrigan & Watson, 2002). There are different expressions of discrimination. Overt discrimination has been reduced nowadays, but new and subtle forms of discrimination exist for different groups in society (Staniland, 2009). Perceived discrimination is defined as the perception of experiencing different and negative treatment just because of belonging to a particular group. Anticipated discrimination refers to the expectation of being mistreated. Anticipation of

negative or unfair treatment may result in avoidant behavior of persons with disability (Link, Struening, Cullen, Shrout & Dohrenwend, 1989). Furthermore, expectation of rejection refers to the anticipated responses of individuals which may or may not be the result of actual experiences of discrimination.

The Republic of Serbia signed the Convention on the Rights of Persons with Disabilities and Optional Protocol in December 2007. The Parliament of the Republic of Serbia ratified them in May 2009. ¹ Anti discrimination law in Serbia was passed in National Assembly in 2006. ² The annual reports of the Commissioner for the Protection of Equality³ indicate that the greatest number of complaints on the basis of disability was in the field of labor and employment, access to public services and/or using public facilities, education and professional training, as well as in the proceedings before public authorities. The main findings of the Commissioner for the Protection of Equality was "that even though *de jure* prohibition of discrimination and promotion of equality of persons with disabilities exist, they are still *de facto* discriminated in almost all aspects of the private and social life which is, among other things, a consequence of the lasting practice of segregation of persons with disabilities, rooted stereotyped attitudes and prejudice against persons with disabilities." ⁴

The aims of this cross-sectional study were: (1) to explore extensity (regarding various life domains in which it appears) and intensity of experienced and anticipated discrimination of persons with physical disabilities; (2) to investigate how experienced and anticipated discrimination relate to each other; (3) to explore relations between experienced and anticipated discrimination and certain socio demographic variables (gender, marriage, residence, family type, employment and age).

The study conducted was the first systematic study in Serbia in which participants with physical disabilities were asked to report if they experience discrimination in different areas of life.

Methods

Participants:

The sample consisted of persons with different types of physical disabilities (N=119, N_{male}=59), of different age (18-70), various levels of education, employment, marital and residence status (see table 1). Sample was designed based on probabilistic principles, and therefore it cannot be considered as completely representative for Serbian population.

Table 1: Socio-demographic characteristics of a sample (N = 119)

		Frequency	Percent
Gender	male	59	49.6
	female	60	50.4
Education	primary	19	16.0
	secondary	78	65.5
	higher	22	18.5
Employment	unemployed	43	36.1
	student	20	16.8
	employed	31	26.1
	retired	25	21.0
Marriage	single	75	63.0
	married	35	29.4
	divorced	4	3.4
	widowed	5	4.2
Family type	narrow family	37	31.1
	wider family	69	58.0
	alone	13	10.9
Type of residence	own apartment	45	37.8
	relatives apartment	65	54.6
	support	3	2.5

¹ "Official Gazette of RS - International Agreements", No. 42/2009

² Official Gazette of RS, No. 33/2006

³ The Regular Annual Report of the Commissioner for the Protection of Equality for 2014, Belgrade, March 2015

⁴ Alternative report on the implementation of the Convention on the rights of persons with disabilities in the Republic of Serbia, 2015: 6.

Diagnosis	institution	6	5.0
	cerebral palsy	17	14.28
	spinal cord injury	25	21.00
	muscular dystrophy	15	12.60
	multiple sclerosis	10	8.40
	amputation	26	21.84
	orthopedic cases	26	21.84
		Mean	SD
Age		35.68	14.63

Instruments:

In the study, the revised 32 item Discrimination and Stigma Scale (DISC 12), interview based instrument, was applied. DISC 12 was administrated in research exploring experienced and anticipated stigma and discrimination of persons with mental health problems. The scale was adapted for persons with physical disabilities, for the sake of this study. Instead of the term mental illness we used the term physical disability. The question whether a person is improperly treated in mental health services was changed to whether a person is incorrectly treated in services for physically disabled persons. DISC 12 was first administrated in the Aspen Indigo study exploring stigma and discrimination in persons with major depression in 24 European cities. The instrument was translated into the Serbian language, back translated, and approved by the general team of the INDIGO study group. Participants were asked to comment on the extent to which they had experienced discrimination as a result of their disability. The instrument addresses key areas of everyday life and social participation, including work, marriage, parenting, housing, leisure and religious activities. This instrument also considers the extent to which participants limit their involvement in areas of everyday life due to anticipated discrimination. DISC 12 considers experiences of positive as well as negative discrimination, focusing on these events from a service user perspective. In the first part (questions 1-21) the experienced discrimination was explored. Service users were asked about situations when they have been treated unfairly because of their disability (for example: "I would like to ask about times when you have been treated unfairly because of disability?" or "Have you been treated unfairly in making or keeping friends?") In the second part (questions 22-25), the anticipated discrimination was explored. Participants were asked how often they had stopped themselves from doing things because of anticipated social responses. The service users were asked to give examples of each experience of stigmatization. For each part of the scale participants had to answer if they encountered these situations *not at all* (score 0), *a little* (score 1), *moderately* (score 2), or *a lot* (score 3). If the question was not applicable for a particular participant, it was treated as a missing value (for example, the question "Have you been treated unfairly in your role as a parent to your children?" was not applicable if the participants had no children.).

Procedure:

The scales were administrated by the fourth semester students of the Faculty of Special Education and Rehabilitation at Belgrade University, trained in conducting interview and administrating the scale. The instrument was designed to gather self-reports of discrimination that was actually experienced and anticipated by people with physical disability. Data collection was conducted during 2014. Contacts with participants were obtained through organizations of people with different types of physical disability, in five cities in Serbia (Belgrade, Niš, Kragujevac, Vranje, Leskovac). All participants gave written consent after being fully informed about the study procedures. The participants were informed they could stop answering the questions at any moment and that their responses would be kept confidential and will have no implications for care received. The testing procedure lasted 30–45 minutes. Participants were persons with any disorder of the musculoskeletal

system which may have arisen from various causes resulting in reduced mobility (spinal cord injury, muscular dystrophy, multiple sclerosis, amputation, orthopedic cases and cerebral palsy) (Table 1).

Data analysis:

Pearson correlation coefficients were used to obtain relations between various discrimination scores from DISC12 questionnaire and gender. Paired samples t test was used to investigate differences between experienced and anticipated discrimination of same participants in different life domains. Independent samples t test was used to investigate relations between experienced and anticipated discrimination and participant's gender, marriage status, residence type. Univariate analysis of variance was used to investigate relations between experienced and anticipated discrimination and participant's family type and employment status. Linear regression analysis was used to test prediction of anticipated discrimination based on experienced one.

Results

Answers on Discrimination and Stigma Scale were scaled from 0 (not at all) to 3 (a lot) and two types of scores were calculated:

Discrimination extensity, showing the spread of discrimination across various domains of life, regardless of its intensity. This score was calculated as a number of questions on which a participant marked any answer except 1, that is, answers 2, 3 and 4 (*a little*, *moderate* and *a lot*, respectively). Frequencies of *a little*, *moderate* and *a lot* answers were not considered, but just the information if there was, or was not, any discrimination, for every question.

Discrimination intensity, showing the degree of discrimination presence in life, regardless of life domain. This score was calculated as a mean of all questions, for experienced discrimination and for anticipated discrimination. These scores include frequency of different answers (*not at all*, *a little*, *moderate* and *a lot*), not just the information if there was, or was not, any discrimination, for every question. Not applicable answers (NA) did not affect this score, since they were treated as missing values. For example, if a participant had one NA answer out of 21 questions, mean was calculated based on remaining 20 questions.

Both scores have satisfactory reliability, which is shown, with other descriptive statistics, in table 2.

Table 2: Descriptive statistics for extensity and intensity of anticipated and experienced discrimination on Discrimination and Stigma Scale

N=119	Minimum	Maximum	Mean	Sd	Crombah α
Extensity of experienced discrimination	.00	21.00	6.39	4.43	0.86
Extensity of anticipated discrimination	.00	3.00	1.06	1.07	0.71
Intensity of experienced discrimination	0.00	2.57	0.55	.46	0.88
Intensity of anticipated discrimination	0.00	3.00	0.70	.79	0.69

Two scores, discrimination extensity and intensity correlate between each other significantly for experienced ($r=0.926$; $p<0.01$) and for anticipated discrimination ($r=0.789$; $p<0.01$). We can see that for experienced discrimination two scores are very similar, while for anticipated stigma they differ, which is why we decided to use both in further analysis.

If we consider experienced discrimination distribution across life domains, we can see that highest level was established for realms of starting a family (65.5%), of family relations (61.3%), of getting married (45.4%), of assuming a parental role (45.3%), privacy (43.7%), employment (42.1%), problems with transportation (40.4%) and of discrimination by professional staff (40.3%). Detailed distribution of discrimination intensity across various life domains is given in table 3.

Table 3: Responses for experienced discrimination through different life domains (N (%))

	A lot	Moderate	A little	Not at all	Not applicable
Family	3 (2.52)	33 (27.73)	37 (31.09)	45 (37.82)	1 (0.84)

Avoided or shunned by people	5 (4. 2)	14 (11. 76)	31 (26. 05)	69 (57. 98)	/
Making or keeping friends	2 (1. 68)	15 (12. 61)	21 (17. 65)	81 (68. 07)	/
Keeping job	3 (2. 52)	8 (6. 72)	9 (7. 56)	99 (83. 19)	/
Privacy	5 (4. 2)	15 (12. 61)	32 (26. 89)	67 (56. 3)	/
Physical health	9 (7. 56)	6 (5. 04)	12 (10. 08)	92 (77. 31)	/
Personal safety and security	1 (0. 84)	12 (10. 08)	20 (16. 81)	86 (72. 27)	/
Marriage/divorce	12 (10. 08)	19 (15. 97)	23 (19. 33)	65 (54. 62)	/
Neighborhood	9 (7. 56)	10 (8. 4)	12 (10. 08)	60 (50. 42)	28 (23. 53)
Role as a parent	6 (5. 04)	20 (16. 81)	28 (23. 53)	50 (42. 02)	15 (12. 61)
Dating and intimate relationship	16 (13. 45)	6 (5. 04)	14 (11. 76)	63 (52. 94)	20 (16. 81)
Finding job	3 (2. 52)	3 (2. 52)	7 (5. 88)	89 (74. 79)	17 (14. 29)
Public transport	5 (4. 2)	19 (15. 97)	24 (20. 17)	71 (59. 66)	/
Police	4 (3. 36)	2 (1. 68)	4 (3. 36)	85 (71. 43)	24 (20. 17)
Stuff	9 (7. 56)	13 (10. 92)	26 (21. 85)	71 (59. 66)	/
Social life	3 (2. 52)	11 (9. 24)	13 (10. 92)	92 (77. 31)	/
Education	5 (4. 2)	4 (3. 36)	12 (10. 08)	80 (67. 23)	18 (15. 13)
Welfare benefits or disability pension	6 (5. 04)	4 (3. 36)	18 (15. 13)	91 (76. 47)	/
Housing	3 (2. 52)	3 (2. 52)	2 (1. 68)	65 (54. 62)	46 (38. 66)
Religious practice	2 (1. 68)	7 (5. 88)	2 (1. 68)	55 (46. 22)	53 (44. 54)
Starting a family or having children	6 (5. 04)	23 (19. 33)	49 (41. 18)	41 (34. 45)	/

On the other hand, anticipated discrimination was explored in domains such as looking for a job, in applying for education and when engaging in close relationships. The highest level of anticipated discrimination was established in seeking intimate relationships (Table 4).

Table 4: Responses for anticipated discrimination through different life domains (N (%))

	A lot	Moderate	A little	Not at all	Not applicable
Stopped self from applying for work	11 (9. 24)	5 (4. 2)	20 (16. 81)	50 (42. 02)	33 (27. 73)
Stopped self from applying for education or training	6 (5. 04)	7 (5. 88)	16 (13. 45)	60 (50. 42)	30 (25. 21)
Stopped self from looking for a close relationship	7 (5. 88)	19 (15. 97)	35 (29. 41)	58 (48. 74)	/

Looking at the difference between experienced and anticipated discrimination intensity, for domains for which it was possible, it was observed that participants anticipated discrimination in intimate relationship more than they actually experienced it. In other two domains no such differences were found (Table 5).

Table 5: Statistical significance of difference between experienced and anticipated discrimination on various life domains¹

	Mean (SD) Experienced	Mean (SD) Anticipated	t	df	p
Close relationship	0. 48 (. 779)	0. 79 (. 919)	-3. 238	118	. 002
Education	0. 73 (. 914)	0. 54 (. 905)	1. 571	88	. 120
Employment	1. 02 (1. 095)	0. 73 (1. 045)	1. 908	85	. 060

¹ Differences in degrees of freedom are a consequence of various number of participants for which certain life domain was applicable. For instance, in education 30 and employment 33 participants marked this domain as not applicable for them, and therefore were treated as missing values

Further on, we tried to analyze whether experienced stigma can predict anticipated one. This was done separately for two scores, discrimination extensity and intensity. Analysis showed that anticipated discrimination extensity can be predicted by experienced discrimination extensity ($F_{1,117}=49.901$; $p<0.01$; $R^2=0.299$). Also, anticipated discrimination intensity can be predicted by experienced discrimination intensity ($F_{1,117}=33.287$; $p<0.01$; $R^2=0.221$). These results indicate that experienced discrimination can be considered as one of possible sources of anticipated discrimination.

As for socio-demographic variables, independent samples *t*-test didn't reveal any significant gender difference in scores of administrated DISC subscales. Same analysis showed that unmarried participants had higher anticipated discrimination intensity than married participants ($t_{117}=2.236$, $p<0.05$). Also, it was established that participants who did not live in their own apartment reported higher level of anticipated discrimination intensity ($t_{108}=-3.489$, $p<0.01$) and higher level of anticipated discrimination extensity ($t_{108}=-2.086$, $p<0.05$) than participants who had lived in their own apartment.

In regards to whom participants had lived with (nuclear family, extended family and alone), a significant difference was observed on anticipated discrimination intensity ($F_{2,116}=3.983$, $p<0.05$). Scheffe post-hoc tests showed that participants living in extended families anticipated discrimination more than participants living in nuclear families. The highest anticipated discrimination intensity was found in participants who lived in extended families, then in those who lived in primary families, and the lowest intensity was in those living alone.

Univariate analysis of variance showed significant relation between employment status and experienced discrimination extensity ($F_{3,115}=3.294$, $p<0.05$), (anticipated discrimination extensity ($F_{2,115}=7.019$, $p<0.01$) and anticipated discrimination intensity ($F_{2,115}=3.395$, $p<0.01$). For experienced discrimination extensity employed and unemployed adult participants had higher scores retired or students. For anticipated discrimination extensity and intensity, unemployed adult participants had highest scores, retired had lowest scores, while employed and students were in between.

Pearson correlation coefficient showed a negative relationship between age and experienced discrimination extensity ($r=-0.186$, $p<0.05$), anticipated discrimination extensity ($r=-0.315$, $p<0.01$), experienced discrimination intensity ($r=-0.199$, $p<0.05$), anticipated discrimination intensity ($r=-0.314$, $p<0.01$). Negative correlation coefficients mean that younger participants perceive larger extensity and intensity of both, experienced and anticipated discrimination than older ones.

Discussion

Participants in this research experienced discrimination in all explored domains, but the mean score was low. However, the consequences of discrimination should not be underestimated because of the accumulation of discrimination experiences. Research in the field of racial discrimination established, for example, that discrimination might accumulate, across processes within a domain (e. g., discrimination in high school may diminish opportunities to attend university) or across domains (e. g. discrimination in education may affect employment opportunities) (Blank, Dabady & Citro, 2004). The results are also in line with findings which point to a high level of empowerment in persons with disability as well as to their better social acceptance and to attitudinal changes among members of the general population. In a British survey it was established that 82% of the sample of persons of general population perceived the persons with disability as everyone else (Stanilend, 2009).

The highest levels of experienced discrimination against persons with physical disabilities in Serbia are reported in areas of family life, starting a family, marriage, role as a parent, privacy, being shunned or avoided, transportation and in communication with professionals.

In our research, younger and unmarried participants have higher scores in experienced and anticipated discrimination, assuming they face more challenges in looking for intimate relationship and starting a family. In general, persons with disabilities have more or less narrowed communications and fewer opportunities to benefit from sexual counseling. In the realms of intimate relationships, the research results show that persons with physical disabilities are not perceived as sexual human beings (Milligan & Neufeldt, 2001). Furthermore, a disability can challenge long-standing family roles. Disabled men have been stereotyped and stigmatized as if they cannot fulfill traditional role of breadwinner (Lewis, 2000). As for disabled women there exists a conviction that they are not able to be mothers and housewives (Addlakha, 2007). They are twice as likely to be divorced (Abu-Habib, 1997). Studies in other developing countries have found similar results (Addlakha, 2007). People with a disability are less likely than people without a disability, to be married (Watson & Nolan, 2011). The difference is evident in the age group 25 to 44. While 48% of the general population in this age group is married, the same figure for people with a disability is 35%. In our research, 75 participants are single compared to 34 married. Possible explanations

for the association between marital status and disability are that persons with disability may have greater difficulties in meeting a suitable marriage partner and lower socio-economic status, which contributes to remaining single or having a marital breakdown (Watson&Nolan, 2011).

Another area in which our participants experience discrimination is the role of a parent. Becoming a parent has been often actively discouraged for persons with disabilities, because of possibly giving birth to children with a disability. In a study by Barker and Maralani, disabled parents appeared more likely to have a disabled child than nondisabled parents (14% vs. 3%) (Barker&Maralani, 1997). The reason for this may lie in genetic causes. Also, more disabled parents are unemployed compared to nondisabled parents (48% vs. 22%), a fact which has an impact on raising a child. Kirshbaum et al. pointed to the fact that U. S. child custody laws imply that parents with disabilities are not capable to properly raising a child (Kirshbaum, Taube& Lasian Baer, 2003). In a survey conducted in Montenegro reasons given by respondents indicated that they are less reluctant to become parent are: socio-economic reasons (financial, housing situation), the difficulty in finding partners, prejudices, lack of support services, lack of self-confidence, reasons related to the disability itself (fear of inheriting the disability and fear for their own health) (Federation of the Association of Paraplegics of Montenegro, 2014).

Callow et al. noted that in most U. S. states a parent's disability can influence official decisions about keeping custody of the child (Callow, Buckland & Jones, 2008). Also, access to adoption has been often impeded for persons with a disability by discriminatory practices. But, the research results indicate that predictors of problems in the process of parenting are often the same for disabled and nondisabled parents (Kirshbaum, Taube& Lasian Baer, 2003).

Higher scores in experienced discrimination in the area of family life can be explained by insufficient social support. Although family members may be the main source of support, they also could contribute to discrimination that people with disabilities experience in family life. They can begin to blame others or to withdraw (Corrigan, Watson & Miller, 2006). Family members are more likely to abandon the disabled relatives if they don't believe that improvements are possible (Howard, Leese & Thornicroft, 2000).

Family members could also be a target of stigmatization themselves. Negative attitudes towards family members of persons with disabilities can be described as "stigma by association" (Mehta & Farina, 1988). This type of stigma can strain the relationship between family members and add to the burden or "experience of care-giving" (Lefey, 1989). Family sometimes describes living with a relative with disability as a type of bereavement (Wahl & Harman, 1989). Parents who have a child with a disability are troubled by what will happen when they are old and not able to care for the child. Anxiety, depression and sleep disturbance are common mental health problems in parents of children with a disability (Szmukler et al., 1996). Some parents see the child as an extension of themselves and may become over-protective and encourage dependency (Szmukler et al., 1996). The paternalistic relationship is also a discriminating attitude, which interferes with the capacity for self-reliance of persons with a disability. On the other hand, it is important to recognize that many people with disabilities receive unconditional support from family members. In our research it was established that younger participants experience positive discrimination mostly in family life. Family members are first to help in coping with the constraints and barriers that disabled individuals may face. Many studies show that family members are satisfied with their role of care giving (Thomas, Bax & Smyth, 1989).

It was observed in our research that employed and unemployed participants experience more discrimination than students or retired participants. Persons with disabilities may experience discrimination in looking for a job or keeping a job. According to Thomas et al., (1989) unemployment can have serious negative effect on the lives of disabled persons, such as financial and psychological stress, feelings of frustration and being constrained to live on state benefits. In spite of anti-discrimination laws in numerous countries, the percentage of employed persons with a physical disability is lower than the same percentage among able-bodied persons. According to the US Census Bureau, out of 15.6 million adults, aged 16-65, 79.8% without a disability were employed compared to only 34.6% with a disability (US Department of Commerce, Bureau of the Census, 1999). They also earned less than the general population. It could be due to inadequate education and training of persons with disability, inadequate employment conditions, inaccessible public transportation, and ignorance about their potential at work (Lonquist, 1979). Employers are concerned about work performance, absenteeism, the level of monitoring needed and the negative attitude of other employees toward persons with a disability (Kregel & Unger, 1993), so their attitudes could be potential barriers.

In a survey conducted in Belgrade, it has been found that the period after acquiring disability affects education, profession and specific needs of the professional rehabilitation. It is estimated that 1/5 of unemployed persons with disabilities live

below the poverty line comparing to general population in Serbia (where 7.9% of the population live below the line of absolute poverty and 13.2% below the relative poverty line. Almost 4/5 of the respondents believe that environmental barriers represent the main obstacles to obtain the job. Only 1.95% of persons with disabilities were employed in organizations that were the subject of research. Center for Independent Living of PWDs Serbia, 2010).

In our research 40.4% participants experience discrimination related to transportation. Difficulties in transportation can be associated with limited life opportunities (access to work, housing, health care or education facilities, shopping, leisure and recreational activities etc.). The Australian Human Rights and Equal Opportunity Commission identified difficulties in getting to and from work, including lack of physical access and high transport costs as major barriers to work (HREOC, 2005). Accessibility problems include: getting on or off the vehicle, transferring between services, getting to the stop or station, the availability of public transport in the area, badly designed parking spaces, etc. Russell, Quinn, King, Riain&MacGinity, 2008). In Serbia, except the law on the prevention of discrimination, and the prohibition of discrimination in public transportation, laws that govern public transport does not mention accessibility standards. Center for Independent Living of PWDs Serbia, 2007).

In our research 40.3% of participants report they have been stigmatized in relationships with professionals. In the relationships persons with physical disability often feel patronized or humiliated, excluded from important decisions or lacking the capacity to be responsible for own lives (Grewal, Joy, Lewis, Swales & Woodfield, 2002). Staff attitudes were found to be a key factor affecting disabled people's experiences of accessing goods and services (Grewal, Joy, Lewis, Swales & Woodfield, 2002). Professionals are also seen as unhelpful in dealing with client's stigma (Thornicroft, Rose&Kassam, 2007).

Persons with a disability often report experiences of being shunned and avoided. This can be due to ambiguous interaction of persons with and without a disability, in which a person without a disability, experiencing embarrassment, tries to avoid interaction (Oaten, Stevenson & Trevor, 2011). It may be the reason why persons with disability anticipate discrimination even without experiencing many overt acts of discrimination. So in this research it was established that participants significantly more often anticipated than experienced discrimination in looking for close relationships. Experienced discrimination is a predictor of anticipated discrimination with probability of 29.9% (with count scores) and 22.1% (with mean score). This can point to conclusion that along with experienced discrimination other factors contribute to the strength of anticipated discrimination.

A limitation of the study is the number of participants which did not allow generalization of results. Also, persons with different impairments were included in one group. Exploring separate experiences of discrimination in persons with different types of physical impairment would possibly yield different results. In the study, the subjective perception of past discrimination experiences is explored. So, distortions in memory may influence the results.

Conclusion

Although persons with disability report a low level of discrimination, they experienced it in many important areas of life. The experience of discrimination, even in low intensity, can have serious effect on the lives of persons with a disability. The main finding is that even with low levels of discrimination persons with disability anticipate it. Belonging to a more vulnerable social group, persons with a disability, as well as their family members, should be supported, especially in improving self-esteem and developing coping strategies. It is also necessary to design an anti-stigma campaign which will lead to the reduction of experienced and anticipated discrimination in important areas of life of young persons with physical disabilities. The high percentage of discrimination experienced in relationships with professionals should be taken seriously since their job is to help people with disabilities and to work with them to find strategies to combat stigma and discrimination.

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Utilization Patterns of Anti-Asthmatic Drugs Use in Albania During 2004-2014

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Abstract

Aim: To evaluate the patterns of use of the out-of-hospital Anti-Asthmatic drugs in Albania during the period 2004-2014. **Methods:** The study was retrospective and we analyzed the prescription and consumption of these drug classes in the primary health care in Albania during 2004-2014. All data were collected from Health Insurance Institute (HII)^[1] and analysed reflecting the ambulatory and outpatient use for the period 2004-2014. The data about the consumption of drugs were expressed as a number of Defined Daily Dose (DDD) /1000 inhabitants/day. Utilization was measured in DDD/1000 inhabitants/day and was also compared with Bronchial Asthma morbidity/1000 inhabitants, to understand the covering of the population from the reimbursement scheme. For all the period under study 2004-2014, there were collected and analysed the data of import and domestic production of drugs, which altogether represent the real consumption of drugs in the country. These data were subsequently included in a comparative analysis with the utilization data according to the HII. **Results:** The values of consumption of Anti-Asthmatic drugs were 6.62-8.48 DDD/1000 inhabitants/day respectively in 2004-2014. 2.14-3.76 DDD/1000 inhabitants/day constitute the consumption of beta2 agonists and 2.66-3.69 DDD/1000 inhabitants/day is the consumption of corticosteroids. In addition, it turns out that the consumption of beclometasone and the association Beta-2-mimetic-corticosteroids (salmeterol+fluticasone) based on HII data is superior to the consumption of this forms based on Import data, which cannot be true. This finding probably reflects fictive prescriptions and the entry of drugs by contraband. During some years of our study we notice that the consumption of Antiasthmatic drugs is higher than the morbidity level (cases/1000 inhabitants). **Conclusions** There is only a small increase in the national consumption of Anti-Asthmatic drugs during these years, but the values still remain very low in comparison with other countries. Less than 40% of the consumption of beta2 agonists is covered from the reimbursement scheme. In addition, it results that the scheme covers about 50% of antiasthmatic drugs consumption.

Keywords: Drug utilization, DDD, Anti-Asthmatic drugs, bronchial asthma

1. Introduction

Between 100 and 150 million people around the globe suffer from asthma and this number is rising. World-wide, deaths from this condition have reached over 180,000 annually ^[2]. Asthma is not just a public health problem for developed countries. In developing countries, however, the incidence of the disease varies greatly. Mortality due to asthma is not comparable in size to the day-to-day effects of the disease. Although largely avoidable, asthma tends to occur in epidemics and affects young people. The human and economic burden associated with this condition is severe. The costs of asthma to society could be reduced to a large extent through concerted international and national action. WHO recognizes asthma as a disease of major public health importance and plays a unique role in the co-ordination of international efforts against the disease.^[2]

According to the detailed data deriving from physicians, in year 1997, in Albania, only 3% of the population resulted as affected from asthma. This figure today has reached 13%. Such difference indicated that the disease has returned and is being spread quickly, a situation that requires immediate intervention. The pediatric age is most at risk and more and more affected by asthma – 1 in every 4 children suffers from bronchial asthma ^[3].

Based on studies performed in Albania as part of international studies (ECHRS, ISAAC), the prevalence of asthma for the age of 13-14 years old has resulted 2.6% in 1995 and has reached 3.4% in 2000. The study for year 2011, whose data are

currently being elaborated, is expected to present a further increase in the prevalence, provided that Albania has now adopted a western method of living [3].

The morbidity data referred from HII indicates that the number of Asthmatic patients in Albania (expressed in cases/1000 inhabitants) is 5.26-8.09 cases/1000 inhabitants, 2004-2014.

Although Bronchial Asthma cannot heal it can be cured and controlled.

Because asthma is a chronic condition, it usually requires continuous medical care.

The treatment is a major issue, especially in developing countries as Albania, where the high cost of medicine constraints patients to not obtain the treatment. A long and serious follow-up of asthma would enable patients to reach a good level of control over their disease.

2.Objective, Materials and Methods

2.1 Objective:

To evaluate the out-of-hospital Anti-Asthmatic drugs use in Albania during the period 2004-2014.

2.2 Materials and Methods:

The data were obtained from the HII. These data were collected and analysed for all the period 2004-2014.

The data included the total number quantities of drugs used from the prescriptions.

The population data were obtained from the Institute of Statistics (INSTAT)^[4]. The consumption of drugs was expressed as a number of Defined Daily Dose (DDDs)/1000 inhabitants/day. All drugs were classified by groups of Anatomic Therapeutic Chemical Classification (ATC).

Data on the levels of Bronchial Asthma morbidity

From the database of HII we extracted the general number of patients reported with this diagnose, for each year. In addition, we calculated the respective levels of annual morbidity (based on the respective code-diagnoses) for 1000 inhabitants.

The total number of Asthmatic patients reported from the HII data base is shown in the table below:

Years	Number of Asthmatic patients
2004	16,597
2005	19,837
2006	17,572
2007	17,010
2008	17,795
2009	18,301
2010	22,636
2011	23,565
2012	24,910
2013	25,798
2014	26,936

Table1 Total number of Asthmatic patients reported from HII in each year of the study period

Data on real consumption (import and domestic production)

For all the period under study 2004-2011 there were collected and analysed data from the import and domestic production of the drugs,^[5] which represent the real consumption of drugs in the country. It was noted that the increase in consumption from one year to another was small, e.g. the consumption from 2011 to 2014 (i.e. 4 years) was increased by only 1.97%. Consequently, in order to obtain an updated study, there were chosen the data of import and domestic consumption only for the last three years, 2012, 2013, 2014, and those were included in a comparative analysis with the equivalent consumption data according to HII. In order to minimize the effect of variations between consumption and stock inventory

balances from one year to another, it was calculated and put to analysis the annual average value of the three chosen years (on one hand that of the import and domestic consumption, and on the other hand that of HII).

Presentation of the results and statistical elaboration

The database of HII was modified in Microsoft Office Excel 2007, whereas the statistical elaboration of the obtained results was conducted with the statistical package StatsDirect (version 2.7.2.). A descriptive statistics was used to report all data on drugs consumption and the results obtained were displayed in tabular form as well as through the histogram method.

Average annual values of consumption in the country level and for each district were used as a basis to generate the overviews and the graphics that illustrate the trends of consumption for each class of drugs during the 10-years period 2004-2014. The linear regression model was used to evaluate the trends of consumption of drugs relative to the time. A value of $p \leq 0.05$ was considered as significant.

In order to assess if there exists a correlation statistically significant between the level of consumption of drugs and the level of morbidity, it was applied the Spearman correlation (with a significance level of ≤ 0.05).

3. Results

The data were expressed as a number of defined daily doses per 1000 inhabitants/day (DDDs/1000 inhabitants/day).

Drugs included in the reimbursement list are: aminophylline, beclomethasone, budesonide, fluticasone, formoterol, ipratropium, salbutamol, salmeterol, salmeterol+fluticasone, theophylline.

The consumption of AntiAsthmatic drugs results 6,62–8.48 DDD/1000 inhabitants/day (2004-2014). In addition the consumption of Beta2 agonists is 2,14–3.76 DDD/1000 inhabitants/day (2004-2014); corticosteroids: 2,66 –3.69 DDD/1000 inhabitants/day (2004-2014); **methylxanthines**: 1,74 - 1,33 DDD/1000 inhabitants/day (2004-2014).

Asthmatic morbidity data indicate that there does not exist a correlation statistically significant between this disease and the trend of consumption of Anti-Asthmatic drugs, ($p = 0,6615$), (Figure 1).

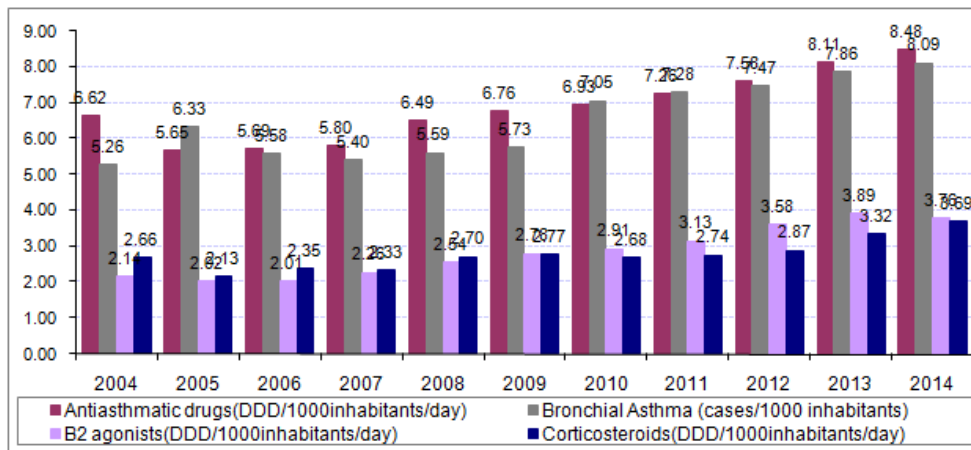


Figure 1 Consumption of Anti-Asthmatic drugs at the national level (DDD/1000 inhabitants/day) versus Bronchial Asthma morbidity (cases/1000 inhabitants); ($p = 0,1928$; strength (with significance level $\leq 0,05$) = 24,4%; correlation coefficient is not statistically significant).

The annual average value of drugs used for Asthma disease and the annual average value of consumption of each alternative, as a consumption from import (real actual consumption) versus the consumption reported by HII (DDD/ 1000 inhabitants/day), (2004-2014), are respectively presented in Figures 2 and 3.

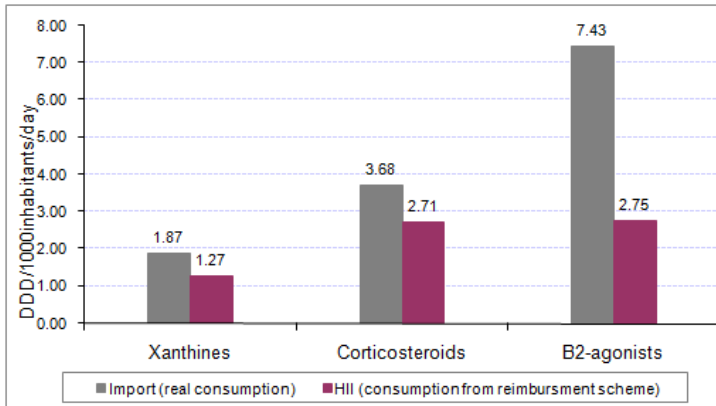


Figure 2 Annual average value of consumption of drugs used for Bronchial Asthma: consumption based on import (real consumption) [*] versus consumption based on HII.

[*] The "Import" item includes the consumption based on import data as well as the consumption based on domestic production: this represents the factual consumption.

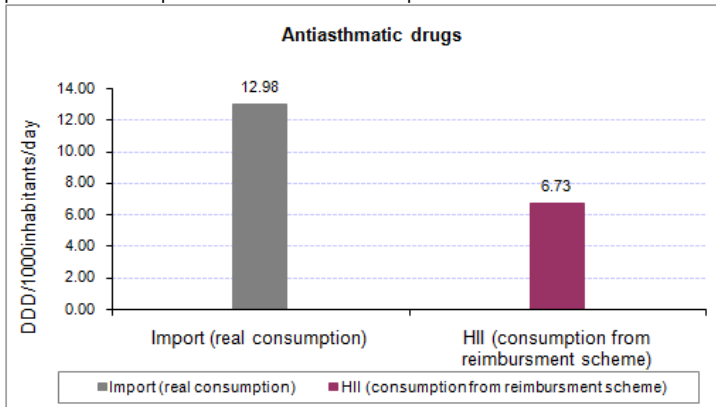


Figure 3 Annual average value of consumption of drugs used for Bronchial Asthma in total: consumption based on import (real consumption) versus consumption based on HII (DDD/1000 inhabitants/day).

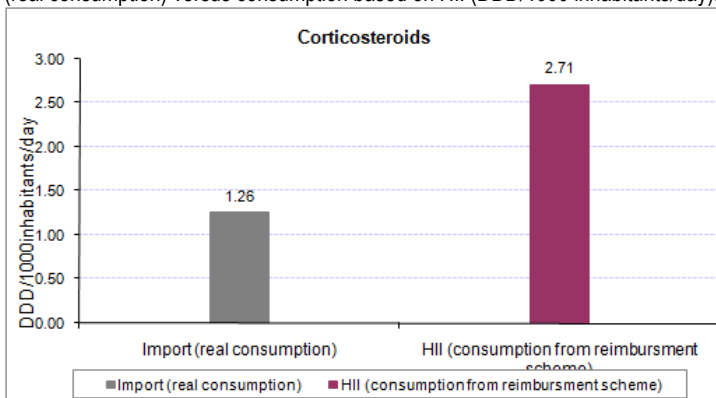


Figure 4 Annual average value of consumption of Corticosteroids: consumption based on import (real consumption) versus consumption based on HII (DDD/1000 inhabitants/day).

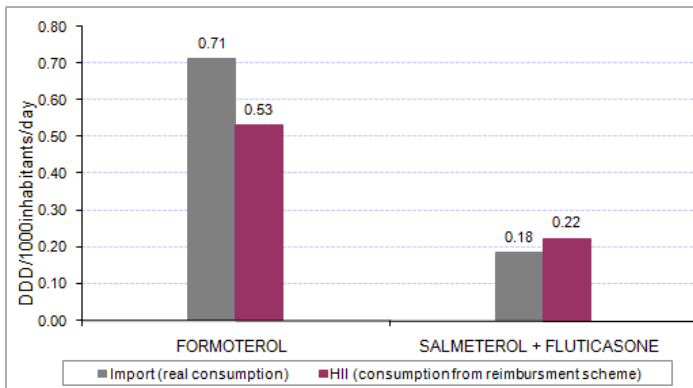


Figure 5 Annual average value of consumption of Beta2 agonists inhalators : consumption based on import (real consumption) versus consumption based on HII (DDD/1000 inhabitants/day).

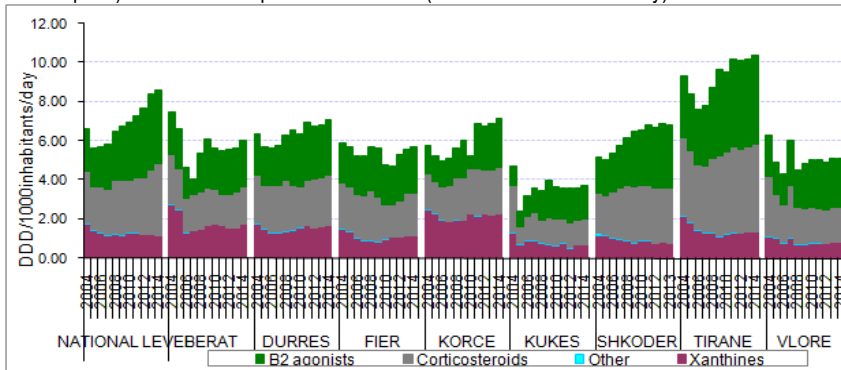


Figure 6 Consumption of drugs used for Bronchial Asthma in different regions and at the national level (DDD/1000 inhabitants/day).

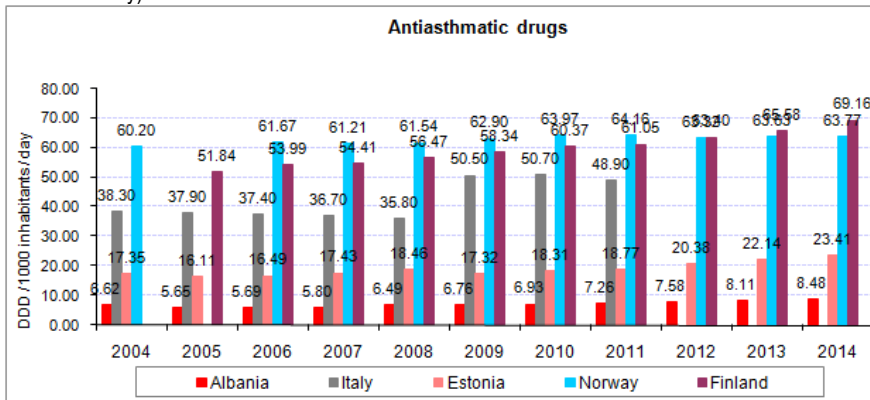


Figure 7 International comparisons of Anti-Asthmatic drugs consumption. Norway [6,7], Estonia [8, 9], Finland[10,11], Italy [12,13,14], (DDD/1000 inhabitants/day)

4. Discussion

Bronchial asthma consists in the main obstructive pulmonary disorder in young and medium ages (less than 50 years old). In elder ages, bronchial asthma is often accompanied by chronic obstructive pulmonary disease (COPD), leading to difficulties in determining the correct diagnosis [15, 16].

In Figure 1 it is noticeable that the consumption of anti-asthmatic drugs in most of the years exceeds the figures of asthmatic morbidity. This trend can be explained by the fact that these drugs are reimbursable not only for bronchial asthma, but also for the treatment of COPD level III, IV, as well as for the treatment of chronic bronchitis with or without emphysema. In the meantime, there can be noted a regular and almost parallel consumption of β_2 agonists and corticosteroids – a fact that indicated their joint usage but in separate formulations.

In order to understand better the real situation, we analysed the data of consumption connected with imports. The comparison between the average annual consumption value connected with imports and the corresponding value obtained from HII is presented in Figure 2, where it can be noted again that the imports exceed the consumption reported by HII. Less than 40% of the consumption of β_2 agonists is covered by scheme, whereas corticosteroids are consumed within the scheme at a level of around 70%. Figure 3 shows that HII covers only around 50% of the consumption of anti-asthmatic drugs.

The question we pose is: what did really happen and which were the reasons? In the case of consumption reported by HII for this class of drugs, it appears for the first time that the consumption covers relatively well the reported morbidity, by even exceeding it in a few years. On the other hand, from the analysis of the real consumption data (connected with imports) it results that scheme covers only around 50% of the consumption of anti-asthmatics, the rest flows outside of it.

We analyse below each of the major anti-asthmatic groups.

Xanthines derive from the scheme at around 70%, the rest flows outside of it. A possible reason can be that fact that they have a low price and a part of patients prefer to get them directly in pharmacies, by skipping/avoiding the general physician step.

The consumption of corticosteroids characterised by two features that need the respective clarification. More specifically, the total import exceeds the consumption as reported by HII, whereby an important role is played by alternatives outside of the scheme that circulate in the pharmaceutical market such as: the combination beclomethasone+salbutamol, mometasone, flunisolid.

Whereas, if we compare only the corticosteroids included in the scheme (beclomethasone, budesonide, fluticasone) with the analogue values related to imports, the result appears as reversed: HII exceeds more than twice the total consumption based on import (Figure 4). This abnormal situation can be due to fictitious drug prescriptions. The reason for such abusive prescriptions is somehow related to the high costs and the deemed high profits involved with these drugs.

We have found a similar situation in more occasions throughout our studies, where there resulted higher consumption values reported from HII compared to import values but we would have expected instead that import values had included the primary health care consumption values. This anomaly is particularly noted in expensive drugs with a continuous chronic consumption, as is the case of anti-asthmatics (mainly inhaled combinations of corticosteroids and beta2 agonists) (Figure 8)

Another reason for this situation can also be the entry of drugs without customs clearance (contraband).

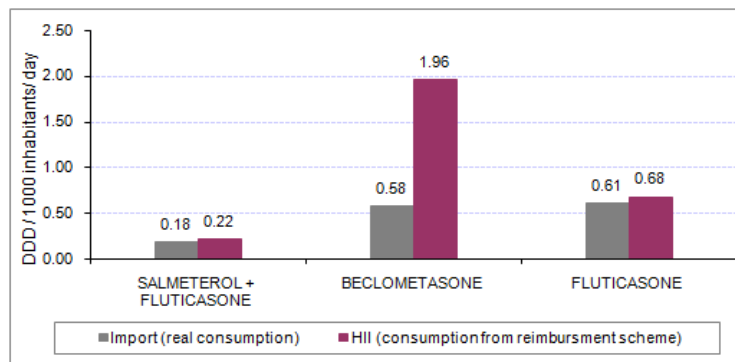


Figure 8 Annual average value of consumption of inhaled corticosteroids and their combinations with long acting Beta-2-agonist inhalators: consumption based on import (real consumption) versus consumption based on HII (DDD/1000 inhabitants/day).

The consumption of β_2 agonists is also characterized by anomalies of both types. In total, the consumption based on imports exceeds several times the consumption within the scheme and the main consumed item is salbutamol oral tablet, for which, as for xanthines, the reimbursement scheme is overlooked in the majority of cases. Whereas, for inhaled β_2 agonists which similarly to inhaled corticosteroids and combined fix formulations have high costs, the situation appears different. In Figure 5 there can be again noted the anomaly of excess of consumption according to HII versus import. Probably, this illustrates again the effect of fictitious and abusive prescriptions.

The consumption of this class in some regions (Figure 6) results to be decreasing, whereas in principle, there can be expected an increasing trend. The region with the lowest consumption values for anti-asthmatic drugs is Kukës, with decrease from 2004 to 2014 and with the minimum consumption values registered in 2005: twice as low as in 2004. Other regions with low consumption values are Fieri, Vlora, Berat, where there is again noted a considerable decrease of consumption from year to year (2004-2014). It is difficult to explain this phenomenon, considering the chronicity of the pathology and its natural increase. Morbidity data show its growth to be at the level of 42.83% (from 5.26 cases/1000 inhabitants in 2004 to 8.09 cases/1000 inhabitants in 2014).

The region with the highest consumption values is Tirana, characterised by consumption stability: 9.31-10.38 DDD/1000 inhabitants/day, 2004-2014. The same stable consumption is noted also in Durrës: 6.36-7.08 DDD/1000 inhabitants/day, 2004-2014.

At the national level, the consumption of this group remains relatively constant and in low values. There can be noted a decrease of consumption in 2005-2006 and then a gradual increase in subsequent years.

Following the results of TORCH study, international therapeutic guides are increasingly turning into a therapeutic standard the pre-prepared associations of long-acting β_2 agonists and inhaled corticosteroids for all obstructive chronic bronchial pathologies, including COPD^[17, 18]. It is to be emphasised that systematic revisions of the data obtained from direct comparisons of an-associated consumption (sole usage) of long-acting β_2 agonists, do not bring to evidence clinical benefits, on the contrary, they indicate a significant increase of side effects, especially of pneumonia^[19, 20]. Based on insurance data, obtained from a meta-analysis with over 60.000 patients, FDA has recently released a series of communications on the correct usage of long-acting β_2 agonists in asthmatic patients, which has led to modification of the drug leaflet-guide. Especially in the treatment of bronchial asthma, the usage of β_2 agonists not associated with steroids is strongly counter-indicated due to the added risk of appearance of severe episodes of acute asthma (need to hospitalize, need of intubation, and even cases of death)^[19, 20].

In our country, short-acting β_2 agonists continue to have high consumption values compared to long-acting β_2 agonists, a fact that indicates a poor control of bronchial asthma. According to the guidelines short-acting β_2 agonists should be used for short-term symptom relief. All other countries show a trend of significant increase (since the beginning of years '00) of consumption of long-acting β_2 agonists and especially of pre-prepared combinations with inhalation steroids, a trend that goes in line with international therapeutic guides.

International consumptions comparisons

The consumption of anti-asthmatic drugs in Albania, in total, is multiple times lower compared to other countries (Figure 7).

In European countries, the main item in the consumption of anti-asthmatics is β_2 agonists (R03A) and especially the associations β_2 agonists+corticosteroids (R03AK)^[6,7,8,9,10,11,12,13,14]. The figure below (Figure 9) shows clearly the difference in consumption of this subclass in our country as compared to other European countries.

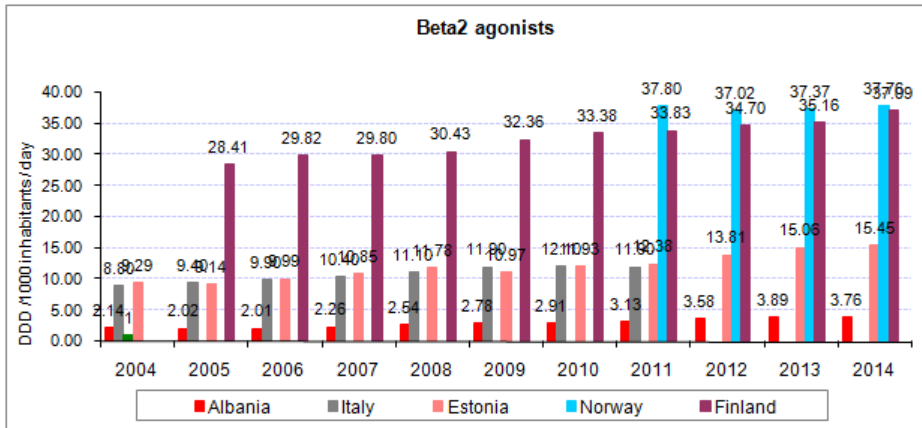


Figure 9 International comparisons of Beta2agonists consumption. Norway [6,7], Estonia [8, 9], Finland[10,11], Italy [12,13,14], (DDD/1000 inhabitants/day)

5. Conclusions

The consumption of anti-asthmatic drugs has increased during 2004-2014.

In total, the consumption of anti-asthmatic drugs in Albania, is multiple times lower compared to other countries

We need to undertake other studies to deeply understand the reasons and the differences of the prescription and consumption of Antiasthmatic drugs in our country.

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The Role of Psychological Empowerment and Organizational Citizenship Behaviors on Employee Resistance to Change

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Abstract

In today's competitive business world, change is *inevitable* for organizations. During an organizational change, the toughest challenge of organizational leaders is to manage employee resistance to change. It is well established in literature that employee *resistance* is one of the leading causes for the *failure of organizational change efforts*. The purpose of this paper is to explore the impact of psychological empowerment and organizational citizenship behaviors on employee resistance to change. It also investigates if psychological empowerment can be used as a human resource management strategy during a planned change in order to increase commitment to change. The study took place in Turkey in a private company which went under a strategic organizational change recently. Survey collection from employees and interviews with two human resource managers were the main tools in collecting information. The results from 85 respondents showed that both psychological empowerment and organizational citizenship behaviors have significant negative influence on employee resistance to change. The interview results showed that through psychological empowerment, employees were more involved in change process, took active role in decision making and were more committed to the change. The implications of the study can be used by organizational change practitioners to maintain employees' positive reactions to change by considering psychological empowerment and organizational citizenship behaviors as a tool to lower the level of resistance.

Keywords: Psychological empowerment, organizational citizenship behaviors, employee resistance to change, commitment to change

Introduction

Organizational change has been a major business trend in today's business environment. Change is a need, in some cases a must for an organization. It is complex, challenging and requires intensive effort and time. The main goal to change is to make the organization more effective and efficient in performance and increase its competitive advantage. A great deal of articles and books have been written about change management to provide the answer to successful organizational change. However, organizational change is an extremely difficult in practice, as over 70 percent of organizational change efforts either fail or underperform (Burke, 2011; Cinite et al., 2009). There are many reasons why *organizational change* efforts do not reach their objectives, but employee resistance is often cited as one of the most leading causes for the failure of change initiatives (Bovey & Hede, 2001). In a study of 288 companies who shared lessons and best practices in change management, Creasey found that the top obstacle to change was employee resistance at all levels (Haslam & Pennington, 2004).

Resistance is expected in change management. There is a human tendency to resist change, because it forces people to adopt new ways of doing. Resistance is a natural response to a perceived threat of personal loss. The most common beliefs about resistance are that it is harmful, as it introduces costs and delays into the change process (Ansoff, 1990), and cause lowered morale and disruptive work environment. Employees' resistance is destructive, as it has significant negative effect on essential work behaviors such as employees' organizational commitment, job-satisfaction and positive relationship with intention to leave their organizations (Oreg, 2006).

Resistance to change is critical barrier to the success of the changes; however, with proper change management and leadership, resistance to change can be minimized, even avoided. This can be achieved by engaging employees in the early stage of change process. Capturing and leveraging the passion and positive emotion surrounding a change can many

times prevent resistance from occurring (prosci. com). This can be achieved through employee empowerment and organizational citizenship behavior.

Psychological empowerment refers to a set of psychological states that are necessary for employees to feel a sense of control in relation to their work. It is mainly about how employees experience their work and their role in relation to the organization (Spreitzer, 2007). Empowerment is a management strategy that has been touted by practitioners and researchers as one of the answers that organizations need to meet the challenges of the current business environment, especially in the context of turbulent and dynamic changes. Empowered people are motivated by knowing that they possess the power to produce changes or have the ability to influence the environment within which they are embedded (Chan, 2003). Empowered employees can change the organization to a learning one in such a way that it increases its capabilities continuously and achieve its desired results.

Organizational citizenship behavior is another antecedent that has impact on resistance, as it expresses employee loyalty and identification with organizational goals (Chahal & Mehta, 2010). Additionally, organizational citizenship behavior is another concept which organizations require to survive in the challenging and competitive environment of the contemporary age. If employees work in their own organization as good organizational citizens, they can help their organization to be more competitive and change it into an ambiance full of trust and motivation (Bagheri, Matin & Amighi, 2011). As working under changing circumstances becomes an essential feature of organizations (Lee, Dendrick, & Smith, 1991), organizations will necessarily become more dependent on individuals who are willing to contribute to successful change, regardless of formal job requirements (Somech & Drach-Zahavy, 2004: 281). Behaviors that exceed delineated role expectations, but are important and even crucial for an organization's survival are defined as organizational citizenship behaviors (Brief & Motowidlo, 1986; George, 1990).

In this research, the impact of psychological empowerment and organizational citizenship behavior on employee resistance to change is investigated. This study is important, because the need to understand the effect of resistance has increased significantly in private industries and government organizations over the last decade because of globalization, fast-changing markets and economic developments (Piderit, 2000). Additionally, while much attention has been given to such perspectives and how to overcome resistance to change, the role that positive employees may play in positive organizational change has been largely ignored (Avey & Wernsing, 2008). Therefore, any study that evaluates resistance may provide an important point of reference to understand the variables that support organizational change and it will help change agents and practitioners to create the appropriate interventions to minimize employees' resistance.

Literature review

Employee resistance to change

Resistance to change is defined as the pattern of organizational behavior that decision makers in organization employ to actively deny, reject and refuse to implement, repress or even dismantle change proposals and initiative. Resistance is the resultant employee's reaction of opposition to organizational change (Folger & Skarlicki 1999). Resistance can be attitudinal and behavioral responses to change. Attitudinal resistance to change would entail a psychological rejection of the need for the change, whereas behavioral resistance would be represented by behaviors that reflect an unwillingness to support the change or unwillingness to stay with the organization through this tumultuous time (i. e. lack of commitment to change) (Chawla & Kelloway, 2004).

In literature, there are many different factors that have been commonly identified as causes of resistance to change. Change starts with the perception of its need so a wrong initial perception is the first barrier to change (Pardo Del Val & Fuentez, 2003) such as inability of the company to look into the future with clarity and denial or refusal to accept any information that is not expected or desired (Kriger, 1996), communication barriers, that lead to information distortion or misinterpretations (Hutt, Walker & Frankwick, 1995). Other reasons may be listed as a low motivation for change (Pardo Del Val & Fuentez, 2003), mistrust of management, a fear of failure/unknown, loss of status or job insecurity, and peer pressure (Kreitner & Kinicki, 2004)

An overview of the literature reveals that resistance to change has more negative consequences than positive ones for employees and organization. It is a key variable affecting change decisions and outcomes and also it might lead to a failure of organizational change (Regar et al., 1994). Resistance can lead to dysfunctional behavior, such as withdrawal (Abramson et al., 1978), decrements in performance (Bazerman, 1982), and acting out (Galphin, 1996). Resistant behaviors,

employees can engage in a work slowdown, loose of loyalty to the organization and motivation to work. The number of absenteeism, errors and mistakes increase (Robbins, 2003). A recent study also found that resistance to change was related to lower levels of job satisfaction and intentions to quit (Wanberg & Banas, 2000). Resistance often results in politics or political behavior (Kotter & Schlesinger, 1989).

Commitment to change

Employee commitment to change is extremely important for an organization that is embarking on a change program (Michaelis et al., 2010). Herscovitch & Meyer (2002) define commitment to change as a force (mind-set) that binds an individual to a course of action deemed necessary for the successful implementation of a change initiative. Employees with a high commitment to change are not passive, but active in implementing the change program (Fedor et al., 2006). Commitment to change shows that people may have various motivations to support a change (Herscovitch & Meyer, 2002). Some employees are committed to their organization because they love what they do, or because the organizational goals are in the same line with their own goals. Other employees might be afraid of the things they lose when they quit working or feel obligated to the organization, or to their manager. In the three-component model of commitment (Meyer & Allen, 1991) are three components of commitment distinguished: affective commitment, continuance commitment, and normative commitment.

It can be predicted that there is a strong correlation between psychological empowerment and commitment to change. Study done by Malik et al. (2013), Hashmi and Naqvi (2012), Ambad (2012), Dehkordi et al. (2011) have stated that psychological empowerment has correlated with organizational commitment. Based on the findings from Rashid and Zhao (2010), and Mangundjaya (2013) showed that organizational commitment had positive and significant correlation with commitment to change. It can be assumed that psychological empowerment has positive and significant correlation with commitment to change.

Organizational citizenship behavior (OCB)

OCB refers to "those organizationally beneficial behaviors and gestures that can neither be enforced on the basis of formal role obligations nor elicited by contractual guarantee of recompense" (Izhar, 2009). Organ (1988) defines OCBs as 'individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization'. OCBs have 5 dimensions. Altruism is mainly about helping behaviors which is advantageous for the organization (Organ et al., 2006). Conscientiousness consists of behaviors that go well beyond the minimum role requirements of the organization (Law, Wong & Chen, 2005). These behaviors indicate that employees accept and adhere to the rules, regulations, and procedures of the organization. Civic virtue can be demonstrated on a larger scale by defending the organization's policies and practices when they are challenged by an outside source. Courtesy is about preventing problems from arising. Finally, sportsmanship is defined as a willingness on the part of the employees that signifies the employee's tolerance of less than ideal organizational circumstances without complaining and blowing problems out of proportion. More importantly, it is the ability to roll with the punches even if they do not like or agree with the changes that are occurring within the organization.

In an organizational change context, OCB can act like an informal psychological contract for instance through sportsmanship by demonstrating tolerance of less than ideal circumstances without complaining (Omer & Umur, 2007) in most case, change is considered as unexpected or less preferable and also through civic virtue by participating in organizational practices with the concern of the life of the company such as change. In change process, employees with high OCBs will be willing to follow the rules, and directions of change agents, more collaborative and less conflict oriented. Based on Chernyak-Hai and Tziner's findings (2012) OCB remained the only significant predictor of openness to organizational change which indicates willingness to support change and positive affect about its possible consequences (Wanberg & Banas, 2000). Therefore, the following hypothesis is derived:

Hypothesis 1: OCB is negative related to employee resistance to change.

Psychological empowerment

Psychological empowerment is about psychological states that produce perception of empowerment in the workplace (Rahman, Panatik & Alias, 2014). Researchers, such as Yukl and Becker (2006) and Conger and Kanungo (1988), have defined psychological empowerment as workers' influence in decision making processes that are most commonly

associated with four factors: meaningfulness, competence, choice, and impact. These factors may help make workers feel more motivated and in control of their workplace environment. Empowerment offers the potential to positively influence outcomes that benefit both individuals and organizations (Liden & Tewksbury, 1995).

It has four dimensions. Meaning involves a fit between the needs of one's work role and one's beliefs, values and behaviors (Hackman & Oldham, 1980). Competence (self-efficacy) is an individual's belief in his or her capability to perform task activities skillfully. Self-determination is a sense or autonomy of choice in initiating and regulating one's actions. Impact is the degree to which an employee can influence strategic, administrative, or operating outcomes at work (Spreitzer, 2007).

Empowerment is an important construct in change management. In the literature of change management and resistance, the proposed ways by different authors for overcoming resistance to change are collectively expressed in different words like participation and empowerment (Kotter & Schlesinger 1979; Mabin & Forgeson 2001; Chawla & Kelloway, 2004). Psychological empowerment management practices represent an important contextual buffer against the negative effects of dispositional resistance to change. Psychological empowerment (Spreitzer, 1995) is important concept to consider when dealing with changes at work and improving performance. Psychological empowerment increases employees' sense of personal control and motivates them to engage in work, which in turn results in positive managerial and organizational outcomes (Quinn & Spreitzer, 1997). Main reasons for resistance are feeling excluded from the process and **lack of competence**. By psychological empowerment, employees are allowed to be part of the change, and they can influence the outcome. Psychological empowerment can enhance employees' decision making in change process by giving them increased participation, authority, freedom and information. Lastly, psychological empowerment translates into increased productivity and efficiency, increasing their ability to adapt to change and be more responsive to transforming workplace issues (Lin & Tseng, 2013). In summary, this research proposes the following hypothesis:

Hypothesis 2: Psychological empowerment is negative related to employee resistance to change.

Methodology

Participants

With convenience sampling method, participants completed the study's instruments on a voluntary basis. The participants who volunteered to take part in the study were 85 employees (47 men, 38 women; mean age=37. 68) in a private company in Istanbul. They had a mean of 13. 5 years of work experience and 7. 3 years at their existing organization. 60% of the participants (N=51) had managerial duties, whereas 40% (N=34) did not have a managerial duty basically working at the clerical level. They all have bachelor's degree; 54 employees also have a master degree.

Instrument

The questionnaire used in this study was 3 pages long and included three sections. Section one was the cover page explaining the purpose and the nature of the study. Section two included demographic questions such as age, gender, tenure track, and position. Section three included 52 questions of measures of psychological empowerment and organizational citizenship behaviors and employee resistance to change. All questions were translated into Turkish for semantic and syntactic equivalence by two research associates. Resistance to change was measured by Oreg (2003) 16-item scale. The 16 items cover four dimensions: routine seeking, emotional reaction, short-term thinking and cognitive rigidity. The Cronbach's alpha reliability was 0. 85. The response scale ranged from 1 (strongly disagree)-7 (strongly agree). Spreitzer (1995) 12-item scale was used to measure psychological empowerment. The measure comprises four dimensions: competence, meaning, self-determination and impact. The Cronbach's alpha reliability was 0. 93. Responses ranged from 1 (completely disagree)-5 (completely agree). To measure employees' OCB Organ's questionnaire (1988) was used. Twenty-four items were used based on five main dimensions (altruism, courtesy, conscientiousness, sportsmanship, and civic virtue). The Cronbach's alpha reliability was 0. 87. The response scale ranged from 1 (strongly disagree)-7 (strongly agree).

Findings and Results

To test the impacts of model variables, factors were computed and the reliability analyses were done to all of the factors by SPSS 21. 0 version. In order to determine the factor structures of variables, the principal components analysis, method of factor analysis with Varimax rotation was used. Each step was conducted on one- item- a time basis by discarding any item with a factor loading of less than. 50, or which loaded to more than one factor with a. 10 or less difference, or that

singly loaded on a factor. Those factors with Eigenvalues of 1.00 or more were taken into consideration in total variance explained. The internal consistencies of the scales were calculated by Cronbach's Alpha and the factors with Alpha values of .70 were considered to have sufficient reliability.

The analysis starts with designating the descriptive statistics for demographics in order to provide an overall picture of the sample. Table 1 includes descriptive statistics of the participants.

Table 1. Sample Characteristics of Participants

Variable	Group	N	Percentage
Age	up to 30 years	12	14.1
	31 to 40 years	48	56.5
	41 to 50 years	20	23.5
	51 to 60 years	5	5.9
Gender	male	47	55.3
	female	38	44.7
Overall work experience	up to 10 years	26	30.6
	11 to 21 years	45	52.9
	21 and up	14	16.5
Job position	non managerial	34	40
	mid-level management	32	37.6
	senior level management	19	22.4

To test Hypothesis 1, a simple regression analysis was conducted to examine the contribution psychological empowerment to employee resistance to change. The results showed there is *significant negative* relationship between these two variables ($\beta = -.39, p = .001$). To test Hypothesis 2, a simple regression analysis was conducted to examine the contribution organizational citizenship behaviors to employee resistance to change. The results showed there is *significant negative* relationship between these two variables ($\beta = -.34, p = .000$).

In order to investigate the impact of psychological empowerment as a human resource management strategy during a planned strategic change to increase commitment to change, two interviews were made with human resource division managers separately. 12 questions were asked in total. The answers were based on managers' perception about employees' commitment, as there was no quantitative information about this variable. Based on the answers, the findings were: psychological empowerment gave freedom to employees to be a part of change process. Empowered employees feel a strong sense of ownership for the planned change. Employees felt powerful and confident in decision making especially when the decisions were about their daily task and routines part of change plans. Managers used open communication channels to receive feedback from their employees on a regular base and evaluated the impact of psychological empowerment. Compared with previous experiences, managers believed that employees felt less stressed, more motivated, as employees did not feel like they were forced to change.

Conclusion

Today's fast-moving environment requires organizations to undergo changes almost constantly (Jones & Brazzel, 2006; Kotter, 2010). Managers and change agents want these changes to succeed and therefore, do anything in their power to achieve this goal. By implementing a change, no matter what size it is, every organization should expect to meet some level of resistance from employees. To reduce this resistance and the negative reactions from within the organization, it is useful and more importantly a need for organizations to know more about the reasons why employees resist. Because of that, the topic of change and resistance is well acknowledged in the literature and is one of the great themes in the social sciences (e. g. Cummings & Worley, 2014; Thompson, 2011).

Organizational scholars and practitioners alike have argued that if organizations are to flourish in the volatile global environment and meet the concomitant challenges of geographic dispersion, electronic collaboration, and cultural diversity, they must become more knowledge intensive, decentralized, participative, adaptive, flexible, efficient and responsive to rapid change. Muir (2014) found that this can be achieved through methods of increasing employee participation and empowering more employees to make decisions. The involvement and participation increase ownership and commitment

to change, and fosters the work environment in which employees are motivated and contributing. It is well established in literature that one of the ways to reduce resistance is to build positive and trustworthy relationship with employees to increase commitment. This can be also reached by psychological empowerment.

Widespread interest in psychological empowerment comes at a time when global competition and change require employee initiative and innovation (Drucker, 1988). Despite of cultural and organizational differences, previous research which found that individual factors specifically employee empowerment support individual readiness for change. (Rafferty & Simmons, 2006; Lam, Cho & Qu, 2007). In this study, it was found that the employees with psychological empowerment show less resistance to change. Empowerment increases employees' participation level in the decision making process, which means encouraging employees to participate more actively in the change. In summary, there is consensus among academics that to introduce change successfully, managers often need to gain the support of employees. To do so, they are advised to use practices that empower employees (Tesluk, Vance, & Mathieu, 1999; Morgan & Zeffane, 2003).

Today, changes in organizational environments, their resultant innovations, and flexibility are emphasized, which necessarily calls for voluntary behavior from members of an organization. Accordingly, an organization should be capable of shifting its members' attitudes and behaviors which act for organizational development from egoistic behaviors. With regard to this issue, many researchers have paid attention to organizational citizenship behavior (Lee, Kim & Kim, 2013). In this study, it was found that employees with organizational citizenship behavior show less resistance, but more commitment. This can be explained in an organizational content as commitment can be seen an employee's attachment to the change program (Ford et al., 2003). This kind of commitment has strong relationship with organizational citizenship behavior (Fedor et al., 2006).

Employee commitment to a change process is of paramount importance for changes to be effective. Lau and Woodman (1995) conceptualized commitment to change as a "specific attitude towards change". The interview results in this study showed that through psychological empowerment, employees were more involved in change process, took active role in decision making and were more committed to the change. Psychological empowerment gives employees desire to support change initiatives and sense of obligation to be supportive of the organization's plans for change, therefore it is essential for HR managers consider psychological empowerment as a tool to increase commitment and also lower the resistance. Based on this findings organizations undergo any change process need to pay attention on this matter.

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The value of a person in Akan traditional life and thought: A contemporary inquiry

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Abstract

As a contribution to the debate on African Philosophy, this paper explores the value of a person in Akan traditional life and thought. African philosophy can be found in the various traditional and cultural schemes of the people. This paper maintains that one of the approaches of appreciating African philosophy is through the traditional concept and worldview of the nature of a person. This paper argues that a person is not just a bag of flesh and bones that we see with our eyes, but, a more complex being with soul and body. Through a qualitative analysis of the relevant literature, this paper argues that some contemporary incidents, such as African crossing the Mediterranean Sea to seek better life in Europe, and the recent Xenophobic attacks on some African nationals in South Africa, undermines the indigenous value of a person in Akan traditional life and thought. This paper concludes that the real goal of the value of human life, as one of the dominant themes in African philosophy, must be properly studied, assessed, understood and harnessed in addressing contemporary African problems, such as corruption in government and society, environmental degradation, indiscipline, diseases and conflicts in our communities and other social vices.

Keywords: Akan worldview, philosophical thought, communalism, humanism, Agenda 2063

Introduction

The understanding of a person refers to beliefs and perceptions that Akans have of a person as an individual. A person in the Akan worldview is the basis, centre and end of everything. All other things only make sense in relation to persons. Regardless of their social status, gender or race, persons are recognised, accepted, valued and respected for their own sake. The value of the person is of deep concern to the Akan people in particular and Africans in general, to the extent that it forms part of the themes in African philosophy. Akans recognize the dignity of the person and as such hold a deep and insistent anxiety for human welfare and happiness. ¹ In African culture for example, the deep concern for the value of human dignity is reflected in indigenous African philosophical thoughts, actions, art forms, institutions and is intrinsically linked with all people whether or not they are biologically related. This deep concern for human welfare is manifested in such communal social structures as the clan, the extended family, the whole community, and the nation. ²

The Akan of Ghana

Akan is one of the principal tribes in West Africa, inhabiting Ghana, Cote D'Ivoire, some parts of West Africa that speak the *Twi* language. ³ The best-known representatives of the tribe are the *Asante*, *Fante*, *Akyem*, *Akuapem*, *Assin*, *Kwawu*, and several of the present *Twi* speaking races of [modern] Ghana and Cote D'Ivoire. ⁴ They are the largest tribal group in Ghana occupying five of the ten administrative regions of the country. According to the 2010 Ghana National Population Census, 47.5% of the national population of Ghana are from the Akan ethnic group. ⁵ According to Ekem, the geographical location of these Akan-speaking groups is conducive to farming, hunting, and fishing. ⁶ They have in common many political, social, religious, and cultural institutions, though there are local variations.

¹Kwame Gyekye, *African Cultural Values: An Introduction*. (Accra: Sankofa Publishing Company, 2003): 23

²Gyekye, *African Cultural Values*, 23

³John David Kwamena Ekem. *Priesthood in Context* (Accra: Sonlife Press, 2009): 27

⁴ Joseph Boakye Danquah. *The Akan Doctrine of God* (London: Frank Cass and Company Limited Education, 1968): 198-199

⁵2010 Population and Housing Census: Ghana Statistical Service." Available at:

http://www.statsghana.gov.gh/docfiles/2010phc/Census2010_Summary.pdf. (Accessed 12th March 2013)

⁶Ekem, *Priesthood in Context*, 28

Akan societies are mainly matrilineal and exogamous in their social set-up: inheritance and succession to ranks are usually traced through the mother's lineage, and marriage is not normally permitted between members of the same kin group.¹ On his part, Noel Smith believes that the basis of Akan society is religious, and the foundation of Akan religion is social. He continues to argue that the completely political and social organisation is inextricably interlocked with religion, and at its heart is the *abusua*, (the clan), or kindred group.² The *abusua* is the smallest social unit that comprises the man, his wife, or wives of a different *abusua* from their husband and their children. This further grows to become the extended family. The *abusua* includes not only the living, but also the dead and the generation yet unborn.³

Theoretical Framework

The theoretical framework that underpins this paper is borrowed from Kwame Gyekye's social theory of *humanism*. The concern for human welfare constitutes the hub of the Akan axiological wheel.⁴ This orientation takes its impulse from the humanistic outlook that characterises Akan traditional life and thought. The theory of humanism sees human needs, interest, and dignity as fundamental to the building up of every society. It insists that the good of all determines the good of each. It is therefore expected that every member of the society will work for the good of all, which also takes into account the individual good. In Akan worldview all beings in the universe are interrelated and interconnected to such an extent that the flourishing of one is a function of the flourishing of others. Thus the welfare and interest of each member of society can hardly be accomplished outside the communal system.⁵ The value of person in Akan traditional life and thought this thus better explained through the lens of Akan humanism.

Methods

There are two approaches to the study of the concept of a person in Akan philosophy. One is ontological or descriptive and the other normative or the social. The descriptive concept of a person in Akan philosophical thinking examines the constituent parts—physical and non-physical—of the human person and their functions or significance in the scheme of things. Wingo Ajume maintains that it is a concept that informs a variety of social institutions, practices, and judgments about personal identity, dignity, moral responsibility, and the proper relationship both among individuals and between individuals and community.⁶ The concept of the *person* seems to be one of the widely debated ideas in African philosophy. Various thinkers have adopted irreconcilable differences in articulating this concept. This has led to the rise of different schools of thought.

The basic worldview of the *person* is more or less the same among all the ethnic and religious groups in Africa. In African worldview, the person or individual is not just a bag of flesh and bones that we see, but is made up of something additional to the body that we do not see.⁷ The person is seen as God's creation and is believed to be a biological as well as a spiritual being. In an attempt to understand the value of a person in Akan traditional life and thought, I shall be examining the views of three major Akan philosophers: Kwasi Wiredu, Kwame Gyekye and Kwasi Appiah. These philosophical thinkers present very different accounts of the same concept, particularly with respect to the relationship between social recognition and innate characteristics to the person.

Examining the value of a person in Akan traditional life and thought from these different perspectives highlights both the richness of the conception. It also highlights four contrasting views from Western philosophy. These are:

the continuous nature of the person,

the means by which individuals achieve full status as a person,

¹Ekem, *Priesthood in Context*, 8

²Noel Smith, *The Presbyterian Church of Ghana: 1835-1960* (Accra: Ghana University Press, 1966): 65

³Robert S. Rattray, *Ashanti* (Oxford: Clarendon Press, 1923): 35, 77

⁴Kwame Gyekye, *An Essay on African Philosophical Thought: the Akan Conceptual Scheme*. (Philadelphia: Temple University Press, 1987): 143

⁵Gyekye, *An Essay on African Philosophical Thought*, 155

⁶Wingo, Ajume, "Akan Philosophy of the Person", in *The Stanford Encyclopedia of Philosophy* (Fall 2008 Edition). Edited by Edward N. Zalta. Available at: URL = <<http://plato.stanford.edu/archives/fall2008/entries/akan-person/>> (Accessed 4th May, 2015)

⁷Gyekye, *An Essay on African Philosophical Thought*, 85

the implications of this conception of personhood for the relationship between individuals and the community, and lastly the Akan understanding of responsibility and freedom.

Results/Discussion

In some philosophical, sociological and anthropological accounts, the nature of a person gives the impression of a tripartite conception, which is the soul *Okra*, (spirit) *Sunsum* and *Honam* (body). Kwasi Wiredu upholds a pentachotomistic view of a *person* in the Akan culture. He states that the *okra* is the life principle and source of human dignity and destiny. The *Sunsum* is the personality principle of the *person*, the *Mogyia* (blood) is the kinship principle, the *Nipadua* (the physical body) and the *Ntoro*, that which is responsible for the cast of personality. The *Ntoro* (the semen) is inherited from one's father and is taken as the basis of membership of a patrilineal group.¹

Kwame Gyekye on the other hand believes that the Akan conception of a person is dualistic: that is *Okra* (soul) and *Honam* (body), but not tripartite.² He observes that, the *okra* (soul) and the *Sunsum* (spirit) are the immaterial (spiritual) part of the person, and the *Honam* (body) is the material (physical) part of the body.

Wiredu is however quick to warn against the translation of *okra* to the English "soul."³ He maintains that the *okra* is "that whose presence in the body means life and whose absence means death and which also received the individual's destiny from God."⁴ Contrasting between the "soul" and the *Okra*, Wiredu believes that the "soul" is supposed in Western philosophy to be a purely immaterial entity that somehow inhabits the body, the *Okra*, on the other hand, is quasi-physical substance and having a "para-physical properties."⁵ This is because the Akan believe that "highly developed medicine men" with extrasensory (or medicinally heightened) perceptions are capable of seeing and communicating with the *Okra*. Gyekye contends this argument and notes that these phenomena do not take place in the ordinary spatial world: otherwise anyone would be able to see or communicate with the *Okra* (soul).⁶ In his opinion, the ability to see the *Okra* is not at the physical or spatial level.

Another Akan philosopher, Kwame Appiah, perhaps, offers a clearer summary of the Akan concept of a *person* in his tripartite analysis. He writes among others that:

A person consists of a body (*Nipadua*) made from the blood of the mother (the *mogyia*); an individual spirit, the *Sunsum*, which is the main bearer of one's personality; and a third entity, the *okra*. The *Sunsum* derives from the father at conception. The *okra*, a sort of life force that departs from the body only at the person's last breath; is sometimes as with the Greeks and the Hebrews, identified with breath; and is often said to be sent to a person at birth, as the bearer of one's *Nkrabea*, or destiny, from *Nyame*. The *Sunsum*, unlike the *okra*, may leave the body during life and does so, for example, in sleep, dreams being thought to be the perceptions of a person's *Sunsum* on its nightly peregrinations.⁷

I acknowledge the magnitude of these debates on the Akan perception of the *person*. Despite the various views expressed by the different Akan thinkers; I consider that the most important theme that runs through the various positions is the understanding of the presence of the *Okra* in man. In my view the *Okra* is that which constitute the innermost self, the essence, of the individual person. I agree with Gyekye in saying that the *Okra* is the immaterial or spiritual component of the person, with the *Nipadua* as the material component. I have examined so far the constituent-parts of the *person*, in the next section, am focusing on the normative concept of a person as found in Akan philosophical thinking.

¹ Kwasi Wiredu, "The Akan Concept of Mind," in *Ibadan Journal of Humanistic Studies*, no 3 (1983): 119.

² Kwame Gyekye, "The Relation of Okra (Soul) and Honam (Body): An Akan Conception." In *African Philosophy: An Introduction*. Edited by Emmanuel Chukwudi Eze. 58-66. (Oxford: Blackwell, 1998): 64

³ Wiredu, "The Akan Concept of Mind," 119

⁴ Wiredu, "The Akan Concept of Mind," 120

⁵ Wiredu, "The Akan Concept of Mind" 119

⁶ Gyekye, *African Philosophical Thought: the Akan Conceptual Scheme*, 86

⁷ Kwasi K. Appiah, "Akan and Euro-American Concepts of the Person" in *African Philosophy: New and Traditional Perspectives*. Edited by Lee M. Brown. (Oxford: Oxford University Press, 2004): 28

The Making of a person in Akan Culture

Another approach to the study of the concept of a *person* in Akan thinking is the social (normative) method. It reveals the social status of the individual. To be a *person* is not something one is born with, it has a particular significance within the African cultural context. Wiredu maintains that *personhood* is not an automatic quality of the human individual; it is something to be achieved, the higher the achievement, the higher the credit.¹ From this perspective, a *person* is not just any individual, but one who has attained the status of a responsible member of the society.

The individual life does not and cannot exist alone except within a community. The normative concept of a *person* therefore evolves from the way in which a *person* is understood in a given community in terms of his relations to other living beings and his role among other men. The Kenyan theologian, John S. Mbiti, in his work *African Religions and Philosophy*, argues that the individual owns his/her existence to other people, including those of past generations and his contemporaries.² The individual is part of the community, and it is the responsibility of the community to ensure his/her upbringing. The community must make, create, nurture or produce the individual.

Mbiti maintains that physical birth is not enough: the child must go through rites of incorporation so that it becomes fully integrated into the entire society.³ Agreeing with Mbiti, Joseph Kofi Antwi writes that the growth of the individual is marked by stages: birth, puberty, marriage, death and life after death. After birth the baby grows through the puberty stage into a young adult and then to adulthood. The adult then marries, brings forth children, grows old, and dies.⁴ In the view of Mbiti, even after death, the person is ritually incorporated into the wider family of both the dead and the living.⁵

In bringing up the individual, it is envisaged that every aspect of the person's being will be fashioned and nurtured. Throughout each stage of the nurturing process, the person is formed "to become." This is to enable the individual to live an acceptable moral life within the *Abusua* (family) and be a respected member of the community. Bernard Matolino, argues that in African thinking, the concept of personhood is the sort of thing that one can be better at, worse at, or fail at.⁶

The virtue of human dignity in Akan philosophical thought

In Akan culture, it is believed that a person has dignity, which makes the person or individual divine and therefore to be respected and valued. This dignity stems from the belief that the individual is created by *Onyakopong* (Supreme Being). In the Akan worldview, as in all African societies, a person is not "a thing or a number" but something valuable than these.⁷ Whether a person is known or not, respect is expected to be accorded to him or her. Respect for an individual, which is accompanied by acceptable good behaviour, is highly regarded in African culture. Addo Dankwa stresses that Africans are value-minded people.⁸ As such, a person who exhibit great value is preferable. In the view of Gyekye "values are the patterns or principles of conduct that are considered most worthwhile and cherished by a society."⁹

The need for respect for value becomes evident when one undermines or ill-treats another person. The Akan maintains that anything that brings disgrace to the value of the person, the family, and the society in general, is said to be an abomination. Society therefore frowns on anything that brings reproach to the person. A person of good moral values is the toast of the society. The Akan believe that such a person is made or nurtured to be, by the community, and not born. Antwi argues that the Akan maxim: *Anim guase mfata Okanni Ba*, "a thing of dishonour and a son of the Akan go ill together,"

¹Kwasi Wiredu, "The African Concept of Personhood," *In African-American Perspectives on Biomedical Ethics*. Edited by Flack E. Harley and Edmund D. Pellegrino. (Washington, D.C.: Georgetown University Press, 1992):104

²John S. Mbiti, *African Religions and Philosophy*. (London: Heinemann Publishers 1969: 106

³Mbiti, *African Religions and Philosophy*, 106.

⁴Joseph Kofi Antwi. "Integrating Indigenous Akan Educational Patterns into Christian Education in the Presbyterian Church of Ghana." An Unpublished MPhil diss., School of Graduate Studies, Kwame Nkrumah University of Science and Technology, Kumasi, (2011): 95

⁵Mbiti, *African Religion and Philosophy*, 106

⁶ Bernard Matolino, "The (Mal) Function of "it" in Ifeanyi Menkiti's Normative Account of Person." *African Studies Quarterly*, Volume 12, Issue 4, 23-37, (2011): 24

⁷Mluleki Michael Ntutuzelo Mnyaka, *Xenophobia as a response to Foreigners in Post-Apartheid South Africa and Post-Exilic Israel: A comparative critique in the light of the Gospel and Ubuntu Ethical Principles*. An Unpublished Doctor of Philosophy dissertation presented to the University of South Africa, (2003):iii

⁸Dankwa, Addo O. III. *Christianity and African Traditional Beliefs*. (New York: The Power of the Word Press, 1990): 86-87.

⁹ Gyekye, *An Essay on African Philosophical Thought*, 70,

sums up the whole attitude to morality, dignity, and behaviour. ¹ In other words, an Akan is a person of dignity, one without disgrace in nature. In explaining this maxim, Danquah argues that what made a person of importance, outstanding in the eyes of the society, was the fact that such a person had lived their life as an ordinary citizen and had not lost in dignity or honour and not suffered disgrace, ('animguase, 'face descending to basement, 'debasement of the person'). He emphasizes that:

As a son of the Akan, he was born with an *anim*, a positively good Akan, and his success in life consisted in not having fallen below the high degree at his birth, that is to say, in not having allowed his face, presence or countenance, *anim* (to *gu*, fall, ase, down) to be lowered. To the noble Akan son, fall from grace is a fall during one's own lifetime...it is a fall within the conscious power of each particular moral subject to avoid. Not to have fallen...is counted to the moral subject a thing of supreme achievement. ²

For this reason a lot of formal and informal activities are lined up for the Akan, especially the young ones, so that they start their journey towards the older and future lives well prepared, in order to avoid '*animguase*'- debasement of personality. The Akan has a maxim that supports this position: "*Biribiara nye yaw se aniwu*," – "nothing is more painful than disgrace." Hans W. Debrunner stresses that in Akan philosophy an immense value is put on ordered *Amane* (behaviour) and *Bra pa* (character training). He further indicates that by these a man should prove himself as *Wapow* (polished) and *Okanni* (gentlemanlike). ³ This absence of disgrace, this attainment and maintenance of dignity, makes the moral subject an excellent person. ⁴ The person is expected to perform every activity and come up on top without disgrace, or debasement to the dignity. Therefore, any act that affects such dignity is an affront to humanity.

In indigenous Akan philosophical thought for example, the virtue of human dignity is expressed throughout the various human activities. Danquah observes that:

The person had married and been given in marriage with honour; he had been a member of the *Asafo* or company of fighting men with honour; he had taken wine and dined with men with honour; or enjoyed plenty with honour; brought up children with honour; worshipped at the shrines with honour; he had sowed and reaped with honour; had suffered bereavement with honour; and above all, had joined with others, or acted alone, to settle family and other disputes, bringing peace and increase to the family with honour. ⁵

Anybody who goes through these activities, or passed these tests without disgrace is seen as the ideal person. Danquah describes such a person as: "an adult (an *Opanyin*), a grown up person, a person of rank, an elder." ⁶ Generally, the African believe that "an adult" is not born but made, or nurtured. An Akan philosophical maxim states that "*Obi nhyee da nwoo pinyin pen*". ⁷ Meaning, no one by design ever gave birth to an adult. Philosophically, the adult is made, nurtured, groomed or discovered. The community makes the person. Such a person becomes the focus by which the young and inexperienced of the family and community are exhorted to measure their conduct. Another Akan maxim puts it plainly as '*Abofra hu ne nsahohoro a, one mpanyinfo didi*.' That is a child may dine with his elders if his hands are nice or clean. ⁸ In the Akan philosophical thought the standard set by the "adult" is preferred by the community. The Akan will say "*Opanyin ano sen suman*", that is the word of the elder is more potent than the fetish. ⁹

Some contemporary challenges to Human Dignity

In Akan worldview it is believed that life is the highest gift of God to humanity. Anything that undermines hurts, threatens, brings disgrace and destroys life is not accommodated, but is frowned upon since it affects the very foundation of the entire community. The Akan view about human dignity and the value that is attached to it perhaps derives from the indigenous belief that humanity is a creation of God. This is expressed in the Akan maxim, *Nnipa nyinaa ye Onyame mma; obi nye*

¹ Antwi, *Integrating Indigenous Akan Educational Patterns into Christian Education in the Presbyterian Church of Ghana.*, 54

² Danquah, *The Akan Doctrine of God*, 121

³Hans W. Debrunner, *A History of Christianity in Ghana*. (Accra: Waterville Publishing House, 1967): 2

⁴Danquah, *The Akan Doctrine of God*, 122

⁵Danquah, *The Akan Doctrine of God*, 122

⁶Danquah, *The Akan Doctrine of God*, 122

⁷Danquah, *The Akan Doctrine of God*, 188

⁸Danquah, *The Akan Doctrine of God*, 189

⁹Danquah, *The Akan Doctrine of God*, 194

asaseba. This means all men are the offspring of God; no one is the offspring of Earth. ¹ Another maxim indicates *Onipa na oma onipa ye yiye*, that is the beneficence of man depends upon man. These and other such indigenous philosophical thoughts indicate how the African value human life. However, recent happenings around the world, especially, in some parts of Africa raise concerns that are affront to the concept of human dignity in Africa.

One of such situations the exodus of some young Africans crossing the Mediterranean Sea for better life in Europe. The deadly voyage across the Mediterranean Sea into Europe is often the last resort for many desperate Africans. Most of the victims were from poor families from almost every country in West Africa. According to the United Nations, 2016 has been the deadliest year for African migrants bound for Europe. UNHCR reported that 3, 740 lives had been lost so far in 2016, just short of the 3, 771 reported for the whole of 2015. ² The number keeps on increasing by the day. Human lives being wasted on the road to better life opportunities.

The other situation is the xenophobia attacks on African immigrants in post-apartheid South Africa. Earlier in 2015, some disgruntled black South Africans targeted foreigners, mainly Zimbabweans, Somalis, Nigerians and Pakistanis, accusing them of stealing jobs and opportunities in Durban, KwaZulu-Natal province and in Grahamstown, Eastern Cape. At least five (5) people were killed, thousands displaced, prompting the country to deploy its army to help police curb the violence. ³ These disgruntled black South Africans have sacrificed the principles such as human dignity, human rights, reciprocity, love, compassion, and community in their dealings with foreigners. ⁴ These attacks received international condemnations, with the Christian Council of Ghana describing them as ungodly, unwarranted and barbaric, which has led to scores of deaths and loss of properties. ⁵

Reconstructing a new African through Agenda 2063

These, and many more dehumanising situations, such as tribal conflicts, politically-related violence, and famine (are extremely worrying, especially at a time when Africans are seeking to have an integrated, united, sovereign, independent, confident and self-reliant continent through “*The Africa We-Want-Agenda 2063*” which is currently being championed by the African Union (AU). ⁶

This agenda talks about how the continent of Africa should effectively learn from the lessons of the past, build on the progress now underway and strategically exploit all possible opportunities available in the short, medium and long term, so as to ensure positive socioeconomic transformation within the next 50 years. This is a people-driven agenda that involves every African irrespective of race, colour, gender, language or religion. From this agenda it is discernable that Africans are conscious of the fact that they have a common humanity, which has a certain dignity, integrity and value that needs to be acknowledged, respected and valued: and that no one has superior or inferior humanity.

An appeal to *communalism*

In an attempt to finding a solution to these and other social problems facing Africa, an appeal must be made to Akan traditional and living philosophy of *communalism*. *Communalism*, as defined by Gyekye, is the doctrine that the group or society constitutes the focus of the activities of the individual members of the society. ⁷ As a social construct, *communalism* insists that the good of all determines the good of each. It is therefore expected that every member of the society will work for the good of all, which also takes into account the individual good.

In Southern Africa this philosophy of *communalism* is known as *Ubuntu/botho*: that is “a person is a person through other persons.” Allister Sparks believes that this expression is in the African psyche and helps to diffuse the individual ego and

¹Danquah, *The Akan Doctrine of God*, 193

²William Spindler, UN High Commissioner for Refugees. Available at: <http://www.unhcr.org/en-us/news/latest/2016/10/580f3e684/mediterranean-death-toll-soars-2016-deadliest-year.html>. (Accessed on 21st Dec., 2016)

³ Available at: <http://www.ibtimes.co.uk/south-africa-xenophobic-attacks-target-foreign-owned-shops/> (Accessed on 21st Dec., 2016)

⁴Mluleki Michael Ntutuzelo Mnyaka, *Xenophobia as a response to Foreigners in Post-Apartheid South Africa*, iii

⁵Kwabena Opuni-Frimpong. Available at:

<http://www.christiancouncilgh.org/XENOPHOBIC%20ATTACK%20IN%20SOUTH%20AFRICA%20UNGODLY.pdf>. (Accessed on 29th April 2015)

⁶Agenda 2063: The Future we all want. Available at: <http://agenda2063.au.int/>. (Accessed on 29th April 2015).

⁷Gyekye. *An Essay on African Philosophical Thought: the Akan Conceptual Scheme*, 155

makes Africans less prone to acts which do not contribute to community building.¹ It is this feature that distinguishes a person from other creatures. Writing on "*Person and Community in African Traditional Thought*", Ifeanyi A. Menkiti asserts that in African thought the reality of the communal world takes precedence over the reality of the individual life histories.² Generally, many African thinkers subscribe to the view that communism, rather than individualism, is the accepted principle around which all other facts revolve.

I believe that an understanding and implementation of the principles and values of *communalism/Ubuntu* can challenge and inspire others to view and treat African immigrants differently irrespective of where they are. Gyekye points out that the divine nature in humanity constitutes all persons into one universal family of humankind.³ The concept of *communalism* advocates for values such as sharing, mutual aid, caring for others, interdependence, solidarity, reciprocal obligation, social harmony and success of the wider society rather than, but not at the expense of, the individual. Mbiti for example, believes that the individual has little latitude for self-determination outside the context of the traditional African family and community. He writes:

"Whatever happens to the individual happens to the whole group, and whatever happens to the whole group happens to the individual. The individual can only say: 'I am, because we are; and since we are, therefore I am.' This is a cardinal point in the understanding of the African view of man"⁴

Aristotle proclaimed many centuries ago that man is by nature a social animal, and that it is impossible for him to live outside society.⁵ The Akan traditional life and thought agrees with this assertion and maintains that the society as a necessary condition for human existence. This philosophical idea is expressed in the maxim "*Onipa firi soro na obesi a, obesi nnipa kuro so*" that is to say, if even a man alights on earth from heaven, he alights in a habitation of men.⁶ This indigenous thought sees humans as originally born into a human society (*Nnipa krom*), and therefore as social beings. It is therefore anti-social for people to live in isolation, or in solitary life. The anti-apartheid activist, Steve Biko, supports this African philosophical thought in his article "*Some African Cultural Concepts*." He writes:

We believe in the inherent goodness of man. We enjoy man for himself. We regard our living together not as an unfortunate mishap warranting endless competition among us but, as a deliberate act of God to make us a community of brothers and sisters jointly involved in the quest for a composite answer to the varied problems of life. Hence in all we do, we always place Man first and hence all our action is usually joint community oriented action rather than the individualism which is the hallmark of the capitalist approach.⁷

In African culture, human relations are highly valued; as such they accord respect and care for strangers irrespective of their racial or ethnic background. This African idea of communalism or brotherhood⁸ is again expressed in the Akan maxim "*Nnipanua ne nnipa*," meaning Man's brother is man. To the Akan, humanity is related, constituting into one universal human family. These Akan maxims and many others similar in content, underscore the need to appreciate *the value of a person* in African culture.

James E Lassiter, quoting Senegalese philosopher Leopold Senghor, regards indigenous African society to be "based both on the community and on the person and which, because it was founded on dialogue and reciprocity, the group had priority over the individual without crushing him, but allowing him to blossom as a person."⁹ Buttressing the importance of community and the value of human life in African culture, Steve Biko, notes:

¹Allister.Sparks.*The mind of South Africa*. (New York: Heinemann, 1990): 249

²I. A. Menkiti, "Person and Community in African Traditional Thought." In *African Philosophy: an Introduction*. Edited by Richard. A. Wright. (Washington: University Press of America, 1984): 171

³Gyekye, *African Cultural Values: an Introduction.*, 24

⁴Mbiti, *African Religions and Philosophy*, 106.

⁵Aristotle *Politics*, (Dover Publications, 2000)

⁶Danquah, *The Akan Doctrine of God*, 193

⁷Steve Biko. *I Write What I like*. Edited by Aelred Stubbs. (Oxford: Heinemann, 1987): 42

⁸Gyekye, *African Cultural Values*, 26

⁹James E Lassiter. *African Culture and Personality: Bad Social Science, Effective Social Activism, or a Call to Reinvent Ethnology?* 3(2), 1999 (Accessed 27th August, 2011)

One of the most fundamental aspects of our culture is the importance we attach to Man. Ours has always been a Man-centred society. Westerners have on many occasions been surprised at the capacity we have for talking to each other - not for the sake of arriving at a particular conclusion but merely to enjoy the communication for its own sake. ¹

In an article "Morals and the Value of Human Life" M. M. Agrawal noted that the moral values of a particular society should be seen to interpret to its members, the notion of an ultimate value. ² In the view of Agrawal, the collective moral value of the entire community is paramount, and it serves as the regulative principle for the determination of moral values. Individual values are however not suppressed but are expected to fall within the ultimate societal values.

From the foregoing, I can argue that Africa has a philosophy which has its roots in the cultural values of the people. However, such philosophical thoughts and ideas are not found in documents, but in oral traditions and through indigenous institutions. These and many other cultural values and practices of indigenous Akan can be considered positive features that could be accommodated in the scheme of African developmental agenda. I propose that these must undergo some interpretation, elucidation, refinement and pruning to become fully harmonious with the spirit of contemporary needs and if possible to function satisfactorily for Agenda 2063, being advocated by the African Union (AU). ³

Conclusion

This paper has examined the value of a person in Akan traditional life and thought. It can conclude that the concept is neither simply descriptive (ontological) nor normative (social) but a combination of both. The Akan concept of a person accommodates a common humanity as an innate source of value, and it also supports moral equality. The concept's emphasis on the social bases of person helps firmly to integrate trust, cooperation, and responsibility to the community. The value of a person in Akan traditional life and thought thus represents an attempt to resolve issues of identity, freedom, and morality in favour of a communalistic way of life.

The paper further concludes that the concept of *communalism/brotherhood/Ubuntu* is opposed to things that are hurting to a person. That is why the recent xenophobic attacks in South Africa, should engage the attentions of African philosophical thinkers to pursue human-centered agenda that will address livelihoods challenges such as poverty, inequality, unemployment, indiscipline, environmental degradation, (poor health services, access to educational facilities and corruption, which greatly affects Africans. African philosophers must reject anything that destroys the most cherished of our beliefs: human life, which is the corner-stone of African society, and with all his ramifications. The great powers of the world may have done wonders in giving the world advance form of science and technology, but that special contribution that has to come from African culture will be in the field of human relationship. This will give the world a more human face.

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²M. M. Agrawal. "Morals and the Value of Human Life." *In African Philosophy: an Introduction*. Edited by Emmanuel Chukwudi Eze. 146-154. (Oxford: Blackwell, 1998): 146

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The Neutrality of International Courts and Tribunals: Why and to What Degree?

Merve Ozkan Borsa

Abstract

It goes without saying that the principle of separation of powers leads to an independent judiciary imposing the rule of law and thereby assurance for the society so as to be prevented against any abuse of power, which is an integral part and a must of democratic values. This independence and impartiality crystallize as to the degree the judiciary (as an institution) and individual judges are able to hold responsibility without being influenced or intervened by any other source. The confidence of the society and the maintenance of justice can only be ensured provided that this independence and impartiality is taken under guarantee by binding instruments and that the manner in which jurisdiction is performed is carried out in accordance to such requirement. Nevertheless, the author of this paper claims that if meant to remain pretty much uncontested, such rhetoric holds true merely for domestic law, since I believe there is reasonable ground to state that this idea –and “ideal” too, since it has also reached such a level-, is relevant mainly for the domestic laws, dissenting from international law; like the title of the article provocatively illustrates. Likewise, there has been theoretical objections asserting that independence, impartiality and neutrality of international courts and tribunals is not required for fair decisions, justice or the court’s effectiveness.

Keywords: Neutrality International Courts Tribunals

Introduction

As regards to above objections, two main critiques can be introduced:

For the first type of objection, it is possible to note that law –not limited to international law but as a “logic”-, most of the time cannot –if not “never”- be free from external factors such as conjuncture, the demands of society, power struggles and alike. This state of affair enables alleging indecency of neutrality and independence of international courts, because, –since we are not in an era of natural or divine law which is based on human conscience, theology or any other origins similar to those-, “law” itself has been a phenomenon constructed depending upon and in relation to such influences. And what the law actually does is merely to mask and sustain the inequality and oppression characteristic of capitalist society. Under such circumstances, the judges to be dependent on some factors like moral ideals, ideological imperatives or certain interests and alike that influence their judgments –though theoretically speaking- can be justifiable and even demandable in the name of eroding the current inequalities and unfairness by re-distributing the justice to reach *de lege feranda* –under the assumption that the influences are not further deepening the existing negative features of the current situation-. This way, by the judges who are belonging to different cultures; different moral systems will be able to be represented in the court and this will open a way for different moralities to take the scene, since current law represents the value prevalent in certain geographies. The phenomenon of “international community”’s becoming a matter of discussion can be used as a supportive argument for this objection. On the other hand, a counter-argument -amongst others-, can be developed to challenge this view by expressing that it ignores the consensual characteristic of international law.

A second main objection can be founded on the basis of an utilitarian perspective. Such perspective suggests that an international court can be effectively working only when instruments have been set up as to allow the court’s jurisdiction to be open to the influence of governments and when the judges can closely be controlled by governments. The main reason for this, according to the approach, is the argument that if the governments can influence the decision of the Court, they become more willing to resort to the Court. This approach can be supported by the theory of “constrained independence”. According to this theory, states create independent international tribunals aiming at enhancing the credibility of their commitments in multilateral settings and then they limit the potential for judicial overreaching by structural, political, and discursive mechanisms. As opposed to that, it is possible to challenge utilitarian objection by the evidence of some states’ resorting to international courts –or establishing them in the very beginning- without any opportunity and facility as claimed.

The application impediments, on the other hand, possess a variety of difficulties ranging from physical shortcomings to structural inadequacies, from the minor and basic ones to the major and unchangables.

All in all, while implying a positive sense regarding justice, effectivity, integrity and credibility, but not exempted from neither theoretical objections nor application impediments, the issue of independence, impartiality and neutrality of international courts and tribunals and their judges has been a moot question in the area of international legal interactions. In this paper, the issue of neutrality of international law will be evaluated by the inquiry of the current and possible theoretical and ampirical/practical objections towards the nearly uncontested dictum and assertion of the (necessity of and) neutrality of international courts and tribunals. The title asks the question of why and to what degree international courts and tribunals are neutral. In this case, the theoretical objections will be explored for discussing the first interrogative article (why should international courts and tribunals be neutral?), while the study on ampirical objections will pave way for discussing the second. At the same time, counter-arguments will also be developed towards each of the objections.

Film Reception by Means of New Media or How the Film Escaped from the Cinema

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Abstract

The biggest change in film reception occurred in the moment when the film audience began to watch films over the Internet, or with devices that can connect to it, i.e. computers, laptops and smartphones. The paper redefined notions of contemporary audience and different horizons of expectations, and a new horizon of expectations has been established, and that is the horizon of device expectations. Also, we have redefined the conative function i.e. the empty spaces function, individual and social reception of the film, while the theory of production relations in the case of the production of art has been applied to the film industry. The paper applies to the film received through social networks requirements of all characteristics of new media, which is also a novelty in scientific thinking.

Keywords: Reception theory, horizon of expectations, film audience, social networks, information and communication technologies

Introduction

Motivated by a lack of attention that is given to the systematization of theory postulates of media reception in Croatia and its environment, and consequently with almost the total lack of their implementation, we decided to deal with the issue of the film reception in more detail, at the moment in time when the way in which the film can be accessed in terms of technology significantly changed. This significant change is reflected primarily in the mobile, Internet transmission of films and hence the film 'consumption' gets relocated from the controlled conditions of cinemas and homes and becomes available at any moment. This change is followed by the change of the audience, its characteristics, expectations and requirements that should also be considered from the aspect of the reception theory. As the reception theory has met with different interpretations over the years, we decided to check out contemporary events through the postulates of original theorists in order to find out if they are applicable in the new media challenges as well. We have opted for this approach due to the especially noticeable lack of scientific production in the environment related to the film reception, which is not surprising given that, unfortunately, scientists have transferred dealing with film onto professional levels that, when the film reception is in question, almost exclusively deal with how the audience received a particular film.

On the other hand, the world's scientific journals (mostly American and British) intensively deal with the problems of film, literature and other media's reception, although their systems do not draw a line between scientific and professional approaches, but still this professional approach is at much higher level than the commercially-semi-scientific approach which we are witnesses of in countries of the region. And although it served to us as preliminary research in the form of content analysis, in this paper we will use only small parts of the analysed corpus that can be considered somewhat deficient from the methodological point of view because it is too broad and not fully defined: the study included the search of online content i.e. scientific journals, which are allowed in free access and those that are available to the Croatian academic community in the temporary access (such as a collection of research and academic journals 'Oxford Journals' that was available until December 4, 2016). The main corpus of the paper will consist of the application of the basic concepts of the reception theory of its primary theorists (Jauss, Isser, Mandelkov, Marx and Nauman) to the medium of film, or to the

reception of the film through the devices connected to the internet, while the paper will also indicate the possible ways of their redefining. A review of the global reception-theoretical production will constitute a smaller part of the paper.

The third motivational aspect is the expected functionality of the initiated researches and scientific work on the definition of legality of media reception shown and customized for the specific medium of film, or in the narrow sense for the film reception by means of information and communication technologies. This paper does not intend in any way to represent a new reception-film manifesto, but rather it tends to 'update' and adapt the existing standpoints to the contemporary film and social changes. The biggest change occurred in the moment when the film audience began to watch films over the Internet, or with devices that can connect to it, i.e. computers, laptops and smartphones. Therefore, this change is necessarily reflected on the film reception as well.

The hypothesis of this paper was that, through the darting changes brought by the advancement of information and communication technologies, which caused a reversal in the understanding and functioning of all forms of human communication, the biggest change was experienced by the audience which represents one of the basic concepts and approaches of the reception theory. The change of such an important factor places the whole reception theory in imbalance and comes to standstill, that is, it also includes the changes of other factors in a greater or lesser extent, and searches for redefining of the theoretical assumptions so that the balance can be established again.

Examples of the Application of Literary Reception Theory to the Film Medium

As we have said in the introduction, the application of the theory of literary reception to the medium of film is not by any means a new approach. We will show here only a few randomly selected examples from the extensive corpus dealing with similar issues, but they do not deal with the change in the reception influenced by ICT, which we consider our own contribution to science.

In their work, 'Narrative', Thomas Albrecht and Celine Surprenant give a book review by Karl Kroeber¹ stressing his study as extremely important for the portraying of the novels of the nineteenth century in the films of the twentieth century. 'Kroeber's approach to this topic is a combination of a casual formalist analysis and what might be called reception theories/.../.../ (in this portion of his demonstration, he makes reference to classical reception theory, for instance to the work of Wolfgang Iser). /.../ Some of these points have been addressed more systematically, more rigorously, and in greater detail by current and past scholarship in narrative theory'.

In her work 'Film Theory', Lisa Trahair² also refers to contemporary research of reception theory on examples of actual, empirical viewers of the film with the assumed future, 'secondary' audiences and deferred meanings of the film text. 'In these terms, cinema, like other arts and technologies, is not bound to the predictability of the future (le future) but the unpredictability of l'avenir, the time to come'.

In the work of the same name ('Film Theory') Lisabeth During and Deborah Levitt are doing a review of expert books on film³ which recreate the historical approach to the film in very different ways, and in doing so, they move away from the so

¹„Make Believe in Film and Fiction: Visual vs. Verbal Storytelling is a study of considerable value to anyone interested in nineteenth-century novels, in twentieth-century narrative cinema, and in the question of how novels and films tell stories differently. Kroeber's approach to this topic is a combination of a casual formalist analysis and what might be called reception theories. On the one hand, he discusses and compares passages from well-known European realist novels and sequences from classical Hollywood and postwar European narrative films in order to demonstrate how each constructs a narrative using very distinct techniques (his first chapter, for example, opens by suggestively juxtaposing the ax murder scene from Dostoevsky's *Crime and Punishment* with the killing of Marion Crane in Alfred Hitchcock's *Psycho* [1960]). /.../ (in this portion of his demonstration, he makes reference to classical reception theory, for instance to the work of Wolfgang Iser). /.../ Some of these points have been addressed more systematically, more rigorously, and in greater detail by current and past scholarship in narrative theory, „ (Downloaded from <http://ywcc.oxfordjournals.org/> at University of North on November 22, 2016)

² :“Instead of countering the ideological conception of the cinematic spectator with the notion of real empirical viewers, as so many recent studies in reception theory do, the tropes of the ghost, hauntology, after-effects and deferred meaning make it possible to think of film texts as engaging with the alterity of future audiences as much as current ones. In these terms, cinema, like other arts and technologies, is not bound to the predictability of the future (le future) but the unpredictability of l'avenir, the time to come.” (Downloaded from <http://ywcc.oxfordjournals.org/> at University of North on November 22, 2016)

³ „Reviewed in this section are a set of books which, in rather different ways, reanimate the historical approach to cinema: they are not film histories perse, but they each take us further into the rich ground where history, culture, and the philosophic imagination meet, and

far established models stemming from psychoanalysis, cultural studies, reception theory or cognitivism. It is exactly this emphasis on the move-away from, among others, the reception theory that proves to us to what extent the reception theory application in film studies used to be generally accepted.

Ernest Mathijs dealt with specific reception in his work 'Bad reputations: the reception of 'trash' cinema'¹. Mathijs believes that marketing and reception contexts, both historical and topical, play a crucial role in determining the public meaning of a film text and believes that the discourse of its reception actually starts long before it is received (which can be considered the epoch's horizon of expectations (author's comment)). Such considerations are fully justified on the reception theory.

Further, similar considerations are discussed in the work 'Film history terminable and interminable: recovering the past in reception studies' by Barbara Klinger in which she states² that 'Reception studies scholars almost exclusively come to terms with a film's meaning by considering the impact that its original conditions had on its social significance.' Klinger points out the presence of contextual analyses which hope to reveal the impact of discursive and social situations on the film, and they examine a network of relationships between a film and filmic element with intertextual fields such as censorship, exhibition practices, star publicity and reviews, and the dominant or alternative ideologies of society at a particular time, that is, reception theories again.

As we can see, most of these works and studies (which represent only a small part of the researched sample which also has similar characteristics) quite competently apply the legality of the theory of literary reception to the medium of film, but in doing so, they mostly concentrate on the historical reception of the film. This approach, of course, cannot be applicable for this research on contemporary synchronic level, since the mobile reception of films is a new concept in the ways of showing and reception of the film and it is not possible in the diachronic analysis.

Redefining of Film Reception Legality

The film is as a mass medium, but with the existing and very present artistic component (in the paper we will not insist on the division of the film into artistic and commercial film, because the debate about it would take us in a completely different direction and would greatly complicate the planned development guidelines relating to redefining of exclusively reception terms) much more suitable for questioning of different horizons of expectations, which, we believe, have changed more than, for example literature, which still represents a largely individual experience. The film is, therefore, chosen as the primary investigated medium although the studied theories focused primarily on literature or on the written text. But the film, with its literary template in the basis, represents a kind of upgrade to the literature which is more approachable to the

inform the appreciation of the cinema./.../One of the tendencies in this rethinking is a move away from the models that have historically dominated theories of spectatorship, whether these emerge from psychoanalysis, cultural studies, reception theory, or cognitivism." (Downloaded from <http://ywccct.oxfordjournals.org/> at University of North on November 22, 2016)

¹ „marketing and reception contexts, both historical and topical, play a crucial role in determining the public meaning of a film text and explaining the creation of reputation, hypes and controversy./.../ the pursuit of information from the time of the film's inception (which is an obvious influence on the film's further development) and its significance for the ways in which the film is eventually presented and received raise the theoretical problem that the discourse of its reception actually starts long before it is received./.../ This provides a view of the complex pattern of influences and opinions that makes up a film's reception. (Downloaded from <http://screen.oxfordjournals.org/> at University of North on November 22, 2016)

² „the object of literary analysis from the text to the intertext - the network of discourses, social institutions, and historical conditions surrounding a work – they helped inspire the development of historical reception studies in film. Those engaged in reception studies typically examine a network of relationships between a film or filmic element (such as a star), adjacent intertextual fields such as censorship, exhibition practices, star publicity and reviews, and the dominant or alternative ideologies of society at a particular time. Such contextual analysis hopes to reveal the intimate impact of discursive and social situations on cinematic meaning, while elaborating the particularities of cinema's existence under different historical regimes from the silent era to the present. /.../ On occasion, reception studies focused on the industry fail to raise the question of how the industrial context connects to surrounding social and historical processes. /.../ Reception studies scholars almost exclusively come to terms with a film's meaning by considering the impact that its original conditions had on its social significance. (Downloaded from <http://screen.oxfordjournals.org/> at University of North on November 22, 2016)

nowadays audience than the book itself. In a culture of the visual and virtual^{1 2}, which today more than ever is emphasized by the visual quality of all-pervasive Internet, the audience has even more pronounced demands and assumed changes must be more clearly shown in the visual media³, such as film, which is therefore, with the necessary respect for the obvious differences, fully adequate to show the reception transformations.

In the scientific literature this approach is not new, but his opponents appear frequently. Thus, for example, the professor Milivoj Solar in his 'Lectures on bad taste' points out that 'At the same time, the image accompanied by speech radically narrows the scope of imagination. The very fact that the image prevails over the speech in advance cancels what theorists call places of uncertainty. What you get on the screen does not give you anything to suggest further imagining and thinking, but you get a concrete form product that is in the consequences exclusively confined to affirmative suggestion' (Solar, 2004: 22.). If we accept such a position, and partly we have to agree with him, one more fundamental concept of the reception theory requires redefinition, and that is (according to Isser⁴) the function of empty spaces. However, the coming of age of a new generation of film audiences, which is used to receive non-linear content, selecting by interest and *scrolling* content that they do not read, but scan, they fill empty places that were not selected in a completely new way. Because they are so used to it and have learned to access the media in that way, their particular approach will be applied to the chronological, non-interactive media by inserting empty spaces into sequences that did not predict such course of actions by extending their meaning and creating no more mass media hypnotic effect, but individual experience. In that way, the film will be a medium that will most satisfy their still existing artistic demands that social networks and television cannot meet. In such an approach conative structure of the film⁵ is more prominent, so it is understandable that the film has a big impact on social issues and particularly on the actions of an individual.

By transferring the film through this relatively inadequate equipment, the quality of the recorded film will be much lower than on the cinema screen for which it was originally recorded. On the mostly small screens (let us even take into account cell phone screens) you simply cannot discern what would be seen in the cinema or even on television. Therefore, there are new empty spaces that the viewer has to complement by his/her imagination. This leads to an almost absurd situation that in fact the poor quality of the film reproduction leads to its greater artistic value! The filmmakers will probably never agree with this thesis (we are not sure if we ourselves can agree with it), but it certainly gives us food for thought.

When we talk about new ways/techniques of receiving/watching the film, we must be aware that the horizons of expectations have fundamentally changed. The very term horizon of expectations can thereby remain unchanged from the original Jauss's definition⁶, or the one by Charles Robert Mandelkov⁷.

¹ : „The roots of longing for the virtual world are fixed in permanent Western belief in the sight as the most noble organ and the sensual metaphor for expansion of understanding. That belief helped in creating a space for the imaging virtual world of visual language that promises 'transcendence' and emotionality in images, which has been denied for us until this day because of our material incarnation.“ (Hillis, 2001: 107.)

² „New virtual terms are not just fashion, they are a new perspective on things /.../ These terms tell us about deep changes which the contemporary culture is going through and the role that literature and art have in these changes /.../“ (Oraić Tolić, 2005: 209.)

³The importance of the visual language was also noted by Umberto Eco in his study *Sounds and images: 'Democratic civilization will be saved only if the language of the picture sets the challenge to critical thinking, rather than a call for hypnosis.'* (Eco, 2005: 179.)

⁴ Wolfgang Iser deals more thoroughly with the relationship of the text and the reader, as well as the concept of uncertainty. He believes that if we accept that uncertainty represents elementary prerequisite for action, then the question arises about what its expansion, especially in modern literature, actually means. It certainly changes the relationship between the text and the reader. The more the text loses of its uncertainty, the more the reader gets involved in the completion of its possible intentions. The amount of uncertainty in literary prose, and perhaps in the literature in general, is the most important element in the inclusion of the reader in the text (according to Iser, 1978: 94. and 112.)

⁵ According to W. Iser, conative structure of the text is the most important element of including the reader into the text.

⁶ The biggest news in Jauss's theory is the introduction of the concept of 'horizon of expectations', which provoked much controversy. Jauss considers that the new text evokes for the reader (listener) the horizon of expectations and those rules of the game which he knows from previous texts and which are now being repaired, altered or only reproduced. The reader may notice a new work in the more narrow horizon of his literary expectations, as well as in the wider horizon of his life experience (according to Jauss, 1978: 45,47.)

⁷ Karl Robert Mandelkov also discussed a horizon of expectations, stating that there are a number of different horizons of expectations. He wondered whether it was justified to talk about one horizon of expectations, or is the historical reality such that one work is continuously received in the mirror of different horizons of expectations depending on non-concurrency and non-uniformity of simultaneous holders of action? Already at the level of historical synchrony at least three different foils of expectations can be

Moving the film on the medium of the Internet (although thus the Pandora's box of copyright relating to almost all Internet content has been opened), the film has received another form of its appearance, or another transmission medium to the audience. In doing so, the individual reception is further influenced by social reception, but to a lesser extent because the online film viewer has the opportunity to, without the mediation of cinemas and distributors, choose a film on his own, but the selection will still probably be influenced by the film's advertising campaigns. However, low-budget films become available as well which owe their promotion almost exclusively to positive evaluation of the audience that evaluates and/or shares them with other users. Therefore, an individual viewer takes more than an active role in promoting a particular film that, in the above case, does not have to invest abundant resources in advertising campaign. Also, film criticism is reduced here to amateur comments, which are short and mostly unskilled, but the audience trusts them much more than the 'professional' ones whose authors, as the impression has been created, are often members of particular film interest lobbies. The possibility of evaluating, sharing, commenting and discussing the film through the Internet and social networks gives the film added value and meets the need of the audience for the immediacy and interactivity that is expected of all content on the Internet, and also of the film, which, in itself, does not have this feature. A new layer of expectations horizon appears here, and that is the horizon of device expectations. As the audience responded to the need that any content posted online must have an interactive content as well, the film industry has done the same. It already started with films on DVD, where they quickly responded to the online media's third request, and that is connectivity, and they offered a choice of content related to the film; shots from the filming, unlisted parts of the final film, uncensored parts, interviews with the cast and director, music videos with film music, link to an online store offering T-shirts, scarves, cups, figurines ... with characters and situations from the film which opens the possibility of creating additional indirect financial gain.

The fourth feature of online media, and that is archivism, will also come into focus while searching the films so that, after watching a particular film, the device 'itself' (using the 'cookies') offers similar films under the assumed affinity; director, actor, genre ... from the vast archive of films on the Internet.

The expectations of the audience, which is understandable, experience the most complete change. Since the film is received through computers, laptops and mobile phones (smartphones), the audience expects of the film similar stimuli and similar forms of presence as in other contents they receive through their gadgets. These expectations will also be linked to the resolution, design, photography and film syntax, and expectations will be extended to the form of film's narrative as well. Since a large number of viewers were raised on computer games, they will look for similar stimuli in the film, remaining less empathic for the fate of the characters, but also for the violence in the film, which, indeed, appears less brutal on a small screen than on the big screen. And although it seems fundamentally different, the requirements of the audience have been changing for centuries in similar direction: 'We do not state that the audience is more corrupt than before: it just has more experienced nerves, so it needs rougher and cruder stimulations.' (Ujević, 2004: 200.)

Hereby, we come to another postulate of the reception theory, and this is a film audience. V. Žmegač wrote about the phenomenon of the audience, but of the literary audience, declaring: 'From the methodological point of view it is necessary to draw attention to the lack which is often accompanied by theoretical considerations about the reception (for example Jauss's considerations), and this lack is reflected in the generalized, abstract understanding of 'literary audience'!.../ The audience, as we conclude, is definable as a sociological and also literary-aesthetic category: in the literary process the reader is economic factor, and partly a selective one, but he is one of the unknown heroes of literature, anonymous or present, elusive figure whom the author either gives in and pleases or throws down a challenge to him.' (Žmegač, 1976: 71- 73.) With the film audience this is even more prominent since one entire, very profitable industry, that is the film industry, is based precisely on the whims of the audience and it is very important, from the standpoint of profit, to assess what film audiences 'love' and what they do not like. Of course, just as the case is with literature, but also with the news media, this pandering to audiences usually goes towards loosening and adjustment and reduction of challenges, rather than its referral that is still present in the non-commercial art film.

Talking of the industry in the context of the reception, and it is more than necessary with the film, it is impossible to bypass the categories of production and consumption that are woven into the critique of political economy of Karl Marx¹. Besides

conceptually distinguished that determine the process of reception and influence it. Mandelkov called these foils the epoch's horizons of expectations, acts expectations and expectations of the author (according to Mandelkov, 1978: 120.)

¹ *Introduction to the Critique of Political Economy* was created in 1857 and first published in the journal *Die Neue Zeit*, 1903, in its unfinished form.

the categories of production and consumption¹, Marx also mentions the *way of consumption* which proved to be a special and new in the case of the film reception through ICT. Another theorist of receptions refers to Marx, and that is Manfred Naumann: 'If we do not forget its 'substantial difference', then 'the production of art' is nothing more than just a 'special form' of production, and hence the same provisions apply to it as the ones 'that apply to production in general.' (Nauman, 1978: 138). When we talk about the film industry, even the reception via the Internet, we cannot disagree with these two theorists from (before) the last century, even though, at first glance, it seems impossible and bizarre, primarily because of the exceptional time delay, but also all the connotations associated with Marx, especially in this region.

Conclusion

The darting changes brought by the progress of information and communication technologies, which caused a reversal in the understanding and functioning of all forms of human communication, the biggest change (with naturally the way or technology of receiving) has been experienced exactly by the audience. The assumed hypothesis at the beginning of this paper that the change of such an important factor, such as the audience, placed the whole reception theory in imbalance has been demonstrated in terms of the necessity of redefining certain settings.

The paper redefined notions of contemporary audience and different horizons of expectations, and a new horizon of expectations has been established, and that is the horizon of device expectations. Also, we have redefined the conative function i.e. the empty spaces function, individual and social reception of the film, while the theory of production relations in the case of the production of art has been applied to the film industry. The paper applies to the film received through social networks requirements of all characteristics of new media, which is also a novelty in scientific thinking. All contemporary changes were compared with root settings of reception theory, rather than with contemporary interpretations.

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¹Production produces consumption in that it creates a material, an object of consumption, and through the object, which is always just that particular object, it creates a way of spending and creating the need for spending, spending incentive, 'the ability for consumption', i.e. in so far as creating an entity for the subject. Consumption also produces production to the extent that it creates real product; as opposed to natural object, the object created by the man only becomes a real product when it is confirmed in consumption and consumption creates the need for new production (according to Marx, 1969: 205-241)

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Microbiological Comparison of Royal Jelly and Chlorhexidine 0.2%¹

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Abstract

The aim of this paper is to evaluate the antibacterial property of royal jelly and chlorhexidine 0.2%. As a methodology, in our study, we used piastres in blood agar, where the holes in the agar field were made through a glass pipette, sterile "Paster", in a diameter of 7 mm. Used a bacterial culture of Streptococcus gr. D (Enterococcus faecalis) in a concentration of 10^5 , which was distributed in sterile condition, using a sterile tampon, according to the method of diffusion in agar. As a result, we used a ruler for the measurement of inhibition areas: -in the royal jelly's hole, the radius of inhibition resulted 14 mm, -in the chlorhexidine's hole, the radius of inhibition resulted 20 mm. Based on the results obtained from our study, presented facts to use the royal jelly and chlorhexidine 0.2% in the dental practice. As a conclusion, we can say that the royal jelly contains important elements with antibacterial action compared to the chlorhexidine one.

Keywords: chlorhexidine, diffusion, inhibition, royal jelly.

Introduction

Nowadays, royal jelly has considerable commercial appeal and is utilized in many sectors, ranging from the pharmaceutical and food industries to the cosmetic and manufacturing sectors. Numerous studies have been dedicated to royal jelly since as far back as the late 19th century [7,8,9]. Additional complicating factors are the multiplicity of experimental conditions, as well as the diversity of the analytical methods used and their continual evolution [14,15]. Knowledge of the composition of recently produced royal jelly is essential in order to define a standard composition, evaluate the quality of commercial products and detect the presence of royal jelly in other products which containing it [13,16,17].

Chlorhexidine is extensively used in various medical fields [3,4]. Chlorhexidine is a bisbiguanide formulation with cationic properties. The molecule is symmetric with two chlorophenyle rings and two bigunide groups connected by a central hexamethylene chain. It is a strong base and is most stable in the form of salts. The most common preparation is the digluconate salt because of its water solubility [2,6]. Chlorhexidine was developed in late 1940s as a result of search for antiviral agents. It was found that chlorhexidine does not possess antiviral activity but instead it possesses antibacterial

¹ Original article

activity. The use of chlorhexidine was begun as a general disinfectant with a broad antimicrobial spectrum. Its antimicrobial spectrum include most of the microbials such as gram positive and gram negative organism including bacterial spores, lipophilic viruses, yeasts and dermatophytes etc [10,11,12].

Aim

This study was done to evaluate the antibacterial effect of the royal jelly and chlorhexidine 0.2%.

Methodology

Diffusion in Agar

Isolation of bacteria used in this research was done by the extraction of a tooth root (premolar) that presented an apical granuloma situated in a cultural field sterile (heart - brain) for microbiology study.

The two bacteria isolated at the coloring Gram resulted as coccus gram positive and negative catalase. Then agglutination test was done (Biomerieux) to identify the group: one of which resulted to be Streptococcus Group D (Enterococcus faecalis), which was chosen as sample to our tests after microscopically identified (Fig.1a,b,c).



Fig.1 a,b,c: These three pictures are for the agglutination test done to identify the group: one of which resulted to be Streptococcus Group D (*Enterococcus faecalis*), which was chosen as sample to our tests, after microscopically identified.

For the purpose of the study we used a bacterial culture of Streptococcus gr. D (*Enterococcus faecalis*) with a concentration of 10^5 (Fig.2), which was distributed in sterile condition, using a sterile swab, according to the diffusion method in agar (Fig.3). We used blood agar plates and through a sterile glass pipet "PASTER" with a 7 mm diameter we made holes in the agar.



Fig.2: 50 μ l of bacterial concentration of 10^5 .



Fig.3: The bacteria (*E.faecalis*) distribution in sterile condition, using a sterile swab, according to the diffusion method in agar.

In one of the holes was added chlorhexidine (positive control) at a concentration of 0.20% (Fig.4), then royal jelly (positive control) was added in the other holes (Fig.5). Royal jelly appeared gelatin, of white color, aromatic flavor and taste acidic (pH 3.5 to 4.5). While in the last hole was added physiological solution (negative control). Plates were incubated at 37°C for 48 hours in a thermostat (Fig.6).



Fig.4: Chlorhexidine 0.2% taken for the test, an active ingredient that fights bacteria in the mouth.



Fig.5: A sample of royal jelly used for our microbiological study.

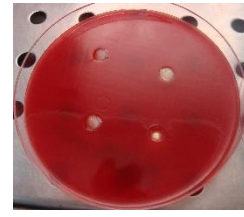


Fig.6: Plate before incubation.

Results

Zones of inhibition were measured by a ruler after the incubation time of 48 hr (Fig.7):

- in the chlorhexidine's hole, the radius of inhibition resulted 20 mm (Fig.8),
- in one the royal jelly's hole (biggest one), the radius of inhibition resulted 14 mm (Fig.9).

The hole with physiological solution resulted with no inhibition radius (negative control).



Fig.7: This is the incubated plate at 37°C after 48 hours in a thermostat.



Fig.8: This is the hole with chlorhexidine 0.2% where the radius of inhibition resulted as 20 mm (positive control).

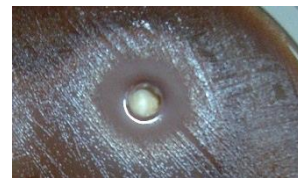


Fig.9: This is the hole with royal jelly where the radius of inhibition resulted as 14 mm.

Discussion

Microorganisms such as *E. faecalis*, *S aureus*, *S. mutans*, *E. coli*, and *C. albicans* are known to cause wide range of oral infections such as dental caries, periodontal diseases, and periimplant diseases due to the formation of biofilm. [1,3,5] *In vitro* the agar diffusion technique was done to evaluate the antibacterial properties of royal jelly and chlorhexidine 0.2%. The results of this study confirmed the antibacterial efficacy of these extracts. Being in different physical conditions (royal jelly as a gelatinous and the chlorhexidine 0.2% as a liquid one), microbiological results showed, although in the gelatinous concentration, the inhibited radius of royal jelly was approximately to the chlorhexidine's one.

Conclusion

We arrived a conclusion that royal jelly contained important elements with antibacterial property in comparison with that of chlorhexidine 0.2%. This significant result can be as a basic help for the treatment of the dental inflammations.

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Intermittency Approach in the Nuclear Collisions of $^{28}\text{Si} + \text{AgBr}$ at 14.6 A GeV - Nuclear Emulsion Experiment a Particle Detector

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Abstract

A new method has been applied for the study of intermittency in the collisions of $^{28}\text{Si} + \text{AgBr}$ at 14.6 A GeV for the produced relativistic charged particles by using the method of mixed factorial moment (MFM). In this paper an analysis has been made for the presence of fractal behavior with three different approaches of Scaled factorial Moments (SFMs) named as- horizontal, vertical and mixed (horizontal and vertical together). The non-statistical fluctuations of relativistic charged particles have been calculated on events with different degree of centrality. These results have been compared with the results of simulated data obtained from UrQMD model and we find a good agreement between experimental data and simulated data.

Keywords: multiplicity fluctuation;, UrQMD simulation technique; scaled factorial moemnts component; charged particle production

Introduction

A phase transition from hadron gas to quark gluon-plasma (QGP) is expected to occur at high energy densities ($\approx 1\text{ GeV}/\text{fm}^3$). There are some signals at the maximum SPS energies that quark-gluon-plasma is created at the early stage of heavy ion collisions [1-4]. Various theoretical models predict an increase of multiplicity fluctuations near the onset of deconfinement state [5, 6]. An approach of 'intermittency' phenomenon [7 and references therein] belongs to scaled factorial moment (SFM) and its scaling nature with diminishing phase-space interval size (δX), which is mainly an arrangement with the short-range correlations among the produced particles in heavy ion collisions at high-energies. Analysis of SFM is also capable of suppressing any Poisson-type statistical noise present in the local density fluctuations and of characterizing the non-statistical component of the same in terms of a finite set of parameters. The experimental data on particle fluctuations in small space domains has been presented for different collisions at different energies [4, 6-8]. We are studying here the intermittent behaviour of multiparticle production can be related to the formation of mini-jets, a second order phase transition from quark gluon plasma to the normal hadronic matter or the random cascading process [6-9].

It has been found that the intermittency is a general property of multiparticle production in relativistic heavy ion collisions [6-9]. The intermittent behavior of multiparticle production can be related to the formation of mini-jets, a second order phase transition from quark gluon plasma to the normal hadronic matter or the random cascading process [9]. In this paper we draw some results of the analysis of the multiplicity fluctuations in pseudo-rapidity scale for ^{28}Si (projectile) + AgBr (target) collisions at 14.6 A GeV. It has been proposed to study the dependence of scaled factorial moments F_q , on the order of the moment, q , as a function of the bin width $\delta\eta$ [6-9], the pseudo-rapidity interval is $\Delta\eta$. The intermittent behavior should a clue of a power law dependence of the scaled factorial moments on the bin size such as follow:

$$F_q = \left(\frac{\Delta\eta}{\delta\eta}\right)^{\alpha_q}, \text{ where } \alpha_q > 0 \quad (1)$$

I. Data collections and experimental details

In the present experiment, FUJI nuclear emulsion pellicles were irradiated horizontally with a beam of ^{28}Si nuclei at 14.6A GeV at Alternating Gradient Synchrotron (AGS) of Brookhaven National Laboratory (BNL), NewYork, USA. The method of line scanning has been adopted to scan the stacks, which was carried out carefully using Japan made NIKON (LABOPHOT and Tc-BIOPHOT) high-resolution microscopes with 8 cm movable stage using 40X objectives and 10X eyepieces by two independent observers, so that the bias in the detection, counting and measurements can be minimized.

The interactions due to beam tracks making an angle $< 2^\circ$ to the mean direction and lying in emulsion at depths $> 35 \mu\text{m}$ from either surface of the pellicles were included in the final statistics. The other relevant details about the present experiments and target identifications may be seen in our earlier publications [10-17]. In the measured interactions all charged secondary particles were classified according to the commonly accepted emulsion experiment terminology into following groups:

A. Black track producing particles (N_b)

The tracks with specific ionization $g^* > 10$ ($g^* = g/g_0$, where g_0 is the Plateau ionization of a relativistic singly charged particle and g is the ionization of the charged secondary) have been taken as black tracks. These correspond to protons of relative velocity $\beta < 0.3$ and range in emulsion $L < 3.0 \text{ mm}$ [11].

B. Grey track producing particles (N_g)

The tracks with specific ionization $1.4 \leq g^* \leq 10$ corresponding to protons with velocity in the interval $0.3 \leq \beta \leq 0.7$ and range $L \geq 3.0 \text{ mm}$ in nuclear emulsion are called grey tracks [11].

C. Shower track producing particles (N_s)

The tracks with specific ionization $g^* < 1.4$ corresponding to protons with relative velocity $\beta > 0.7$ are classified as shower tracks. These tracks are mostly due to relativistic pions with small admixture of charged K-mesons and fast protons. In order to eliminate all the possible backgrounds due to γ overlap (where a γ from a π^0 decay converts into $e^+ e^-$ pair) close to shower tracks near vertex, special care was taken to exclude such $e^+ e^-$ pairs from the primary shower tracks while performing angular measurements. Usually all shower tracks in the forward direction were followed more than $100 - 200 \mu\text{m}$ from the interaction vertex for angular measurement. The tracks due to $e^+ e^-$ pair can be easily recognized from the grain density measurement, which is initially much larger than the grain density of a single charged pions or proton track. It may also be mentioned that the tracks of an electron and positron when followed downstream in nuclear emulsion showed considerable amount of Coulomb scattering as compared to the energetic charged pions. Such $e^+ e^-$ pairs were eliminated from the data.

D. Projectile fragments (Z_f)

The projectile spectator fragments, singly and multiple charged, emitted inside fragmentation cone, usually we determine the number of alpha particles (n_α) and the number of fragments with $Z > 2$, separately [9].

The polar (θ) and azimuthal (ϕ) emission angles of all tracks have been measured, and the pseudorapidity has been calculated by $\eta = -\ln \tan(\theta_s/2)$ for each shower particle.

II. Mathematical analysis

We used three methods of analysis; method of horizontal factorial moments (HFM), vertical factorial moments (VFM) and published in [6-8] and also in the present analysis we used the mixed factorial moments (MFM). The standard horizontal factorial moments $F_e^{(H)}$ characterizing the e th event are defined by the following relation:

$$F_e^{(H)}(q) = M^{q-1} \sum_{m=1}^M \frac{F(n_{me}, q)}{[N_e^{(H)}]^q}, \quad (2)$$

where M is the number of equal bins of size $\delta\eta$ into which the pseudorapidity interval $\Delta\eta$ has been divided, n_{me} is the number of shower particles in the m^{th} bin. Non averaging and non normalized factorial moments are given by:

$$F(n_{me}, q) = n_{me}(n_{me} - 1) \dots (n_{me} - q + 1) \quad (3)$$

The vertical averaging of $F_e^{(H)}$ gives the full form

$$F^{(H)}(q) = \frac{1}{E} \sum_{e=1}^E F_e^{(H)}(q), \quad (4)$$

where E is the total number of events. The denominator of the horizontal moment (Eqn. 2) is $N_e^{(H)} = \sum_{m=1}^M n_{me}$. (5)

The vertical analysis is suggested in case of rare events with sharp peaks [8, 9]. The normalized standard vertical moments characterizing the m^{th} bin are given by

$$F_m^{(V)}(q) = E^{q-1} \sum_{e=1}^E \frac{F(n_{me}, q)}{[N_m^{(V)}]^q} \quad (6)$$

and the horizontal averaging gives the full form

$$F^{(V)}(q) = \frac{1}{M} \sum_{m=1}^M F_m^{(V)}(q), \quad (7)$$

where; $N_m^{(V)} = \sum_{e=1}^E n_{me}$ is the sum of multiplicities which appear in the m^{th} bin of all events. Besides the horizontal and vertical factorial moment methods a mixed approach is applied. The mixed factorial moments are defined such as:

$$F^{(HV)} = M^{q-1} E^{q-1} \frac{\sum_{m=1}^M \sum_{e=1}^E F(n_{me}, q)}{[N^{(HV)}]^q} \quad (8)$$

where; $N^{(HV)} = \sum_{m=1}^M \sum_{e=1}^E n_{me}$ is the total number of charged particles observed in the sample of E events.

III. results and discussions

Figure 1, shows the normalized pseudorapidity distributions (i.e. the particle number densities in rapidity space) of the secondary charged shower particles emitted in the interactions of ^{28}Si -Em at 14.6A GeV. In the same figure the results obtained from the interactions of ^{28}Si -Em and ^{12}C -Em at 4.5A GeV along with the result of ^{16}O -AgBr at 3.7, 60 and 200A GeV respectively have been shown for comparison.

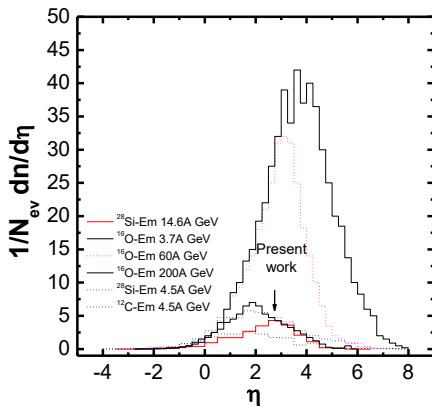


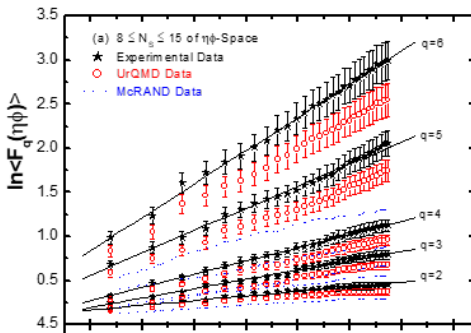
Figure 1. The pseudorapidity distributions of the shower charged particles produced at various energies

One may notice that the η -distributions are completely scaled in the region of smaller values of η and also found to be independent of mass of incident beam whereas weak energy dependence has been found in this region. The distribution is broader for higher mass as well as beam energy. The height of the centroid increases many times in the case of nucleus-nucleus collisions with respect to the proton-nucleus collisions [6-9].

It is well known that the statistical fluctuations are suppressed in the study of scaled factorial moments (SFMs), whereas, ordinary multiplicity moments ($\langle n^q \rangle / \langle n \rangle^q$) is unable to reveal the existence of dynamical fluctuation due to significant contribution of the purely statistical fluctuations. The SFMs are capable of measuring the large-scale fluctuations and provide information about the pattern of these fluctuations. The cumulative interval of $X(\eta)$ or $X(\phi)$ variable, is successively divided into $M = 2-30$ bins. Recently, it has been suggested to study the interaction dynamics and sources of the multiplicity fluctuations and power-law scaling behaviour of SFMs in the multi-dimensional (η, ϕ, \dots) phase-space. Thus analysis of the data has been performed to check the existence of intermittency signal from one-dimensional η or ϕ variable to the two-dimensional $(\eta\phi)$ variable. One started with a rectangle in $(\eta\phi)$ -space. The rectangle was divided into $M_{\eta,\phi}$ bins each of size $(\delta\eta\delta\phi) = (\Delta\eta/M_\eta) (\Delta\phi / M_\phi)$. Fig. 2 (a-c) shows the plots of $\ln \langle F_q \rangle$ as a function of $\ln M_\eta M_\phi$ in the interactions of ^{28}Si -Em collisions at 14.6A GeV for $q = 2-6$ for different N_s -intervals. A linear rise of SFMs is seen from the figure and a larger value of α_q is reported in Table I. A stronger intermittency effect is observed in 2D, in comparison with a weak signal observed in one-dimension (1D). Result obtained using UrQMD model is also shown in Fig. 2 (a-c) for comparison, which also follows the similar trend. The individual analysis in pseudorapidity or azimuthal space may not be favourable to detect the existence of quark-gluon plasma. Instead of QGP, intermittent behaviour is observed. The analysis of experimental result in two-dimensions is more effective than the one-dimension in different N_s -intervals. Finally, it may be concluded that the results in nucleus-nucleus interactions with ^{28}Si beam at 14.6A GeV fulfil the predictions of the self-similar cascade model in observing the intermittency.

TABLE I. THE VALUES OF INTERMITTENCY INDICES IN TWO DIMENSIONAL (2D) PHASE SPACES FOR NUCLEAR COLLISIONS AT AN ENERGY 14.6 A GEV/C

Order of Index	Values of Intermittency Indices		
	$8 \leq N_s \leq 15$	$8 \leq N_s \leq 15$	$N_s \geq 24$
α_2	0.175±0.010	0.155±0.013	0.195±0.012
α_3	0.395±0.011	0.295±0.012	0.425±0.017
α_4	0.689±0.014	0.578±0.013	0.798±0.032
α_5	1.183±0.018	1.091±0.027	1.257±0.039
α_6	1.767±0.025	1.356±0.034	1.953±0.051



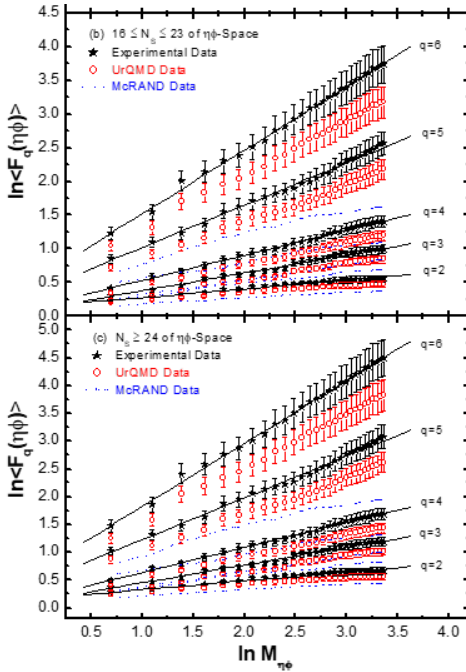


Figure 2. The Variations of $\ln\langle F_q(\eta\phi)\rangle$ as a function of $\ln M_{\eta\phi}$ in $\eta\phi$ -phase space for different N_s -intervals in the interactions of ^{28}Si -Em with UrQMD and MC-RAND model

The error bars in Figs. 2 (a-c) are estimated by considering them as independent statistical errors only and the solid lines drawn indicate the least squares fit to the respective experimental data points. Though the effect of point-to-point correlations of the statistical errors for different bin sizes has not been taken into consideration in the present study, it is expected that the exclusion of the correlation of the statistical errors will not change the main result appreciably. For better understanding of intermittency indices, α_q , it has been calculated using least square fitting of the data points in Figs. 2

(a-c). The values obtained experimentally in different N_s -intervals are reported in Table I in $\eta\phi$ -phase (2D) space respectively. It is observed from the table that the exponent, α_q , in Eqn. (1) increases with increasing order of moments, q , for different sets of data samples in 2-D phase space.

The values of α_q in are consistently higher for multiplicity interval $N_s \geq 21$ than rest of another two intervals values in $\eta\phi$ -space (2D). It is also observed that the intermittency effect is not independent of the phase space variable. The intermittency effect is more pronounced in $\eta\phi$ -space (2D) than in one-dimension. The observation of experimental results clearly indicates a stronger intermittency signal in $\eta\phi$ -space. The higher values of α_q in $\eta\phi$ -space is consistent with the interpretation that the increase in factorial moments is due to clusters of particles yielding a correlation between local η and ϕ -fluctuations. However, a constant and small values of α_q are seen for MC generated events.

It has been observed [7-9] that if the dynamics of intermittency is due to self-similar cascading, then there is a possibility of observing a non-thermal phase transition, which is believed to occur during the collision. If such a non-thermal phase

transition is present then the function λ_q should have a minimum at certain value of $q = q_c$, where q_c is some minimum point in the distribution [7-9]. The region with $q < q_c$ is dominated by numerous small fluctuations, whereas the region with $q > q_c$ is due to rarely large fluctuations. This situation can easily be compared with a mixture of "liquid" of large number of small fluctuations and a "dust" consisting of few grains of very large density.

The "liquid" and the "dust" phases coexist. The variation of λ_q as a function of q for grey and black particles produced in ^{28}Si -Em interactions at 14.6A GeV has been shown in Fig. 3. The result of ^{16}O -AgBr at 4.5A GeV has also been shown for comparison purpose. From the figure we observed that no clear-cut minimum value of λ_q for certain value of q has been observed within the limit $2 \leq q \leq 6$ as reported by other workers [16,17]. However, a little deviation of the experimental data from the "no intermittency" line ($\alpha_q = 0$) indicates the presence of a weak intermittency effect in $\text{COS}\theta$ -space for the present data. A weak intermittency effect is found due to intermixing of many subprocesses during multiparticle production of cascade mechanism. Thus it may be concluded that data for grey and black particles do not support a clear evidence for the existence of non-thermal phase transition. To get more unambiguous evidence, the analysis should be done upto $q = 8$ with large statistics at high energies and with different projectiles.

IV. conclusions and final remarks

With an outlook of the present article entitled "Intermittency Analysis by Mixed Scaled Factorial Moments in the Nuclear Collisions of $^{28}\text{Si} + \text{AgBr}$ at 14.6A GeV" describes the study about the dynamics of multiparticle production in nucleus-nucleus collisions. The analysis is based on 951 interactions of $^{28}\text{Si} + \text{AgBr}$ collisions at 14.6A GeV using nuclear emulsion. One can conclude the followings from the present article:

The generalized power law behaviour of mixed scaled factorial moments in in two-dimension (2D), $\eta\phi$ phase space reflects an evidence for an intermittency pattern of fluctuations in all the above mentioned interactions at 14.6A GeV for shower particles. The present study also gives a strong evidence of self-similar structure in multiparticle production in such collisions at 14.6A GeV for two-dimensional $\eta\phi$ -phase space. The values of the intermittency indices, α_q , in two dimensional-space show a strong dependence on N_s -multiplicity as well as phase-space dimension.

Some significant results have been obtained for dynamical fluctuations in present work. It is believed that these fluctuations may be a weak signal of QGP formation in such experiment. Further, evidence of these fluctuations has also been observed in low energy nuclear collisions, whereas the formation of QGP is not expected. Even in target fragmentation process, where the QGP phase transition is most unlikely, some physicists have reported evidence of dynamical fluctuations in earlier work.

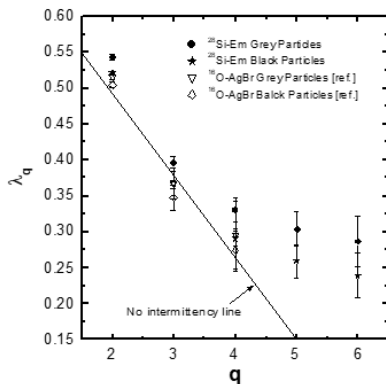


Figure 3. The Dependence of λ_q on the order of moments, q in the collisions of $^{28}\text{Si}+\text{AgBr}$ nuclei at 14.6A GeV.

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