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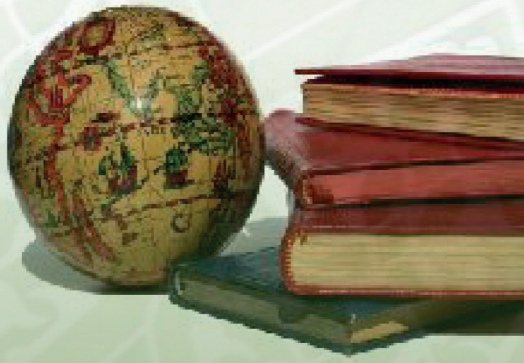

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Preface

This is the first issue of the BUITEMS Journal of Social Sciences and Humanities published and distributed by the Balochistan University of Information Technology, Engineering and Management Sciences (BUITEMS) a leading university of Pakistan with vision and mission statements as follows:

Vision

To be among the leading universities of the world – accessible to all, imparting quality education and promoting cutting edge research.

Mission

We are committed to providing quality education with focus on research and to equip students with the art of living as productive members of society, contributing to the socio-economic uplift of Pakistan in general, and Balochistan in particular.

About the journal

BUITEMS Journal of Social Sciences and Humanities (BJSSH) is a peer-reviewed journal focusing on Social Sciences and Humanities. It is a scholarly journal of research and opinions in academic discourse. The mission of BJSSH is to provide a forum for researchers to debate and discuss interdisciplinary issues in Social Sciences and Humanities. BJSSH is published bi-annually in a print version. It invites and welcomes contributions in all areas of Social Sciences and Humanities: International Relations, Political Science, Sociology, Anthropology, Linguistics, Religious Studies, Gender Studies, Geography, History, Education, Economics, Media, Psychology, Cultural Studies and Business Administration.

BJSSH considers original research, critical analysis, conventional and popular issues in the area of Social Sciences and Humanities. Submissions can be in the form of conceptual or theoretical approaches. We welcome well-written and timely manuscripts for publication – that have some application to academicians, researchers, social scientists, analysts and policymakers.

Types of contributions

- **Research articles:** Original research in various fields of Social Sciences and Humanities will be evaluated as research articles.
- **Book/Article reviews:** This includes review of books published in Social Sciences And Humanities.

Submission guidelines

- Manuscripts must be written in English and submitted in a word format (Times New Roman) via email.
- The length of the manuscript should be: (1) Article between 6000-9000 words (2) Book review should not exceed 2500 words.
- The abstract should not exceed 300 words.
- The review process would normally take 2-3 months.
- We confirm to the (APA 6th) Manual of style.

- **Examples:**

Books: Hair, J., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (Eds.). (2006). *Multivariate Data Analysis* (Sixth ed.). New Jersey: Pearson Prentice Hall.

Journal article: Michie, J., & Sheehan, M. (2003). Labour market deregulation, 'flexibility' and innovation. *Cambridge Journal of Economics, 27*(1), 123.

Conference: Richard, J. (2011, 13 -15 July, 2011). *Title:* Paper presented at the 24th Annual SEAANZ Conference Australia Technology Park Sydney, NSW, Australia.

Ethics

The publications in BJSSH are prerequisite in the development of growing knowledge on social sciences and humanities. We welcome quality work from authors that reflect contribution in academic development. Therefore, we expect the contributors to comply with ethical research behavior.

Conflict of interest

Contributors are expected to unveil any actual or potential conflict of interest that could inappropriately influence, or be perceived to influence, their work.

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Contextualizing teacher-centered versus student-centered learning approaches: a study of university graduates

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Abstract

This study aims to investigate pedagogical approaches within a public university in Pakistan. The study takes place against the backdrop of a widespread and deeply entrenched culture of conventional teacher-centered learning across academia including institutions of higher learning. The objectives of the study were to determine the degree of autonomy students enjoy within classrooms. Student autonomy signifies class participation, questioning, discussion, critical thinking, and teacher allocating sufficient time for questions and answers, and student asserting themselves without any fear or hesitation of the teachers. In addition, the study attempted to ascertain the amount of teacher-centric and student-centric tendencies, and examine its causes. Employing a mixed methods of data collection involving questionnaires, focus group interviews and observation (participant and non-participant), the research drew students from all the faculties. A total of 101 students responded to the questionnaire while 40 students participated in focus group interviews. The findings indicate that teachers predominantly exercise teacher-centric approaches in classrooms. A small segment of the students usually participates and asks questions in the class. Communication anxiety does play its part in low class participation; however, it is not the only reason. The study traces the causes of teacher-centric approaches primarily in the broader socialization patterns and the influences of local cultural norms. Besides, larger classes and workload also appear to be the major impediments in the execution of teacher-centered learning methodologies. In the end, a workable framework has been suggested for execution of student-centric practices.

Keywords: critical thinking, teacher-centered approach, student-centered approach

Introduction

Approaches towards teaching and learning across the academia have taken a paradigmatic shift from teacher-centric pedagogical methods towards student-centric methods and greater learner autonomy. An extensive amount of literature has accumulated over the last few decades in which scholars predominantly emphasize on the potential benefits and better learning outcomes of student-centered approaches than the conventional teacher-centered classroom practices (Blumberg, 2009; Boud, 2012; Kaplowitz, 2012; Scharle & Szabó, 2000; Weimer, 2002; Wlodkowski & Ginsberg, 1995). The former approach is also believed to be providing relatively favorable environment for critical thinking, which broadly encompasses practices such as students' participation, interaction, collaboration, questioning, reasoning, analyzing and so on (Duron, Limbach, & Waugh, 2006; Facione, 2000; Paul & Elder, 2012; Willingham, 2008). Precisely, the student-centered approach puts student (learner) at the heart of learning activity. In view of the potential advantages associated with student-centered approaches towards pedagogy, we witness that the trends are yet to change in the context of Pakistan. One observes that the teaching and learning approaches are predominantly teacher-centered with negligible amount of critical thinking permitted in classrooms. Traditionally, teachers are at the center of activity in classrooms while the learners find themselves excluded in the process. Several scholars from Pakistan also confirm the pedagogical problems in general and the lack of learner autonomy, and the exclusive control of teachers on classroom processes which ultimately constrict spaces and narrow opportunities for critical thinking and autonomous learning (Hoodbhoy, 1998; Mustafa, 2011; Rashid, Muzaffar, & South Asian Free Media, 2014; Retallick & Farah, 2005; Siddiqui, 2007).

In this backdrop, the present study aims to investigate the classroom situation with particular focus on teacher- centric/students-centric dimensions, and examine the use or denial of critical thinking. Critical thinking in the present context signifies a number of pertinent variables that include student-teacher interaction patterns in classrooms, amount of student participation, and the freedom to ask questions, reason or advance their individual analysis on the academic/theoretical issues.

Literature

Critical thinking

Critical thinking has excited the imagination of educationists over the years; it has been widely recognized as a vital soft skill, which the students require at different phases of their schooling for academic success, employment purposes and upward professional mobility. Stating the meaning of critical thinking at the very basic level, it is an individuals' ability to question and evaluate information. A critical thinker analyzes information, situation or contexts the way he/she views it. Critical thinkers tend to assert themselves through clear and objective appraisal of any received information. Other attributes of critical thinkers involve using abstract ideas, thinking open-mindedly, and communicating effectively with others. Contrary to critical thinkers, passive thinkers tend to answer questions with yes-or-no-view, considering their views and facts as the only sensible and the relevant ones. While elaborating upon the scope of critical thinking, Hatcher and Spencer (2006) argued that, critical thinking is an important and necessary skill because it is required in the workplace, it can help deal with mental and spiritual questions, and it can be used to evaluate people, policies, and institutions, thereby avoiding social problems.

The roots of critical thinking are generally traced in two academic disciplines of philosophy and psychology Lewis and Smith (1993). Notwithstanding its widely held recognition as a vital academic discipline, the academicians are yet to reach a universally recognized definition of critical thinking. The basic reason for the lack of a uniform definition is its application in a number of academic disciplines. Within the educational approach towards critical thinking, Bloom's taxonomy is widely cited as the most relevant to critical thinking with focus on teaching and assessment of high-order thinking skills (Bloom, 1956). This taxonomy has hierarchical order with 'comprehension' at the bottom while 'evaluation' at the top. Despite points of disagreement among philosophers, psychologists and educationists, scholars of the three schools agree, and share some commonalities on the definition of critical thinking. According to them, critical thinking encompasses the following qualities: analyzing arguments, claims, or evidence making inferences using inductive or deductive reasoning (Paul & Elder, 2012); judging or evaluating (Case, 2005) ; and making decisions or solving problems (Ennis, 1985). In addition, other behavioral traits that are relevant to critical thinking involve asking and answering questions for understanding and defining terms (Ennis, 1985); identifying assumptions (Paul & Elder, 2012) ; interpreting and explaining (Facione, 2000) ; reasoning verbally, especially in relation to concepts of likelihood and uncertainty (Halpern, 1998, 2001); predicting (Tindal & Nolet, 1995); and seeing both sides of an issue (Willingham, 2008). The oft-cited dispositions most of the critical thinkers tend to demonstrate include inquisitiveness (Facione, 2000) the tendency to seek reason (Bailin, Case, Coombs, & Daniels, 1999) open-mindedness (Ennis, 1985); flexibility, fair- mindedness , respect for, and willingness to entertain others' viewpoints (Facione, 1990); and the desire to be well-informed (Ennis, 1985).

Objectives of the study

This study aims at the following research objectives:

- to determine the student-centric or teacher-centric patterns in the class-rooms
- to study students' perceptions on the above patterns
- to propose workable classroom-based student-centered approach.

Methods

The study was conducted in a public university in part of Pakistan. The reasons for conducting study in this university was the researchers' easy access to respondents and classrooms, and the presence of a large number of departments where students are enrolled in various academic programs at the bachelor level. The study employed a mixed-method involving quantitative and qualitative methods of data collection and analysis. Personal observations and first-hand experiences of the researchers also contribute to the findings of the study. The purpose of applying mixed methodology was to collect simultaneously both quantitative and qualitative data, and put together and use the results to understand a research problem. It is a useful methodology in which quantitative and qualitative data complement each other and facilitates valid and in-depth understanding of the phenomenon under question (Creswell, 2008). One of the striking characteristics of a mixed method is that it concurrently incorporates and integrates not only statistical information, but it also grasps a contextualized understanding of individual voices and feelings (Bryman, 2011). Therefore, we believe that the complementary nature of this research methodology enables the study to capitalize on the strengths of each type and counterbalance the weaknesses of the other.

Sampling and research tools

A probability sampling technique was used for the survey questionnaire. Probability sampling involves "selecting a relatively large number of units from a population, or from specific subgroups (strata) of a population, in a random manner where the probability of inclusion for every member of the population is determinable" (Tashakkori & Teddlie, 2010, p. 713). Within the probability sampling, random sampling was used for the quantitative data collection. This sampling technique was used because it seeks to achieve representativeness, which is the degree to which the sample accurately represents the entire population (Teddlie & Yu, 2007). A total of 101 students participated in the study. They were from different Bachelor Studies (BS) four-year academic programs offered at the university. In terms of gender representation, 70 (69%) were male while 31(31%) were female students. The researchers designed a 43-item questionnaire distributed among 101 students, who were drawn from all the faculties. A pilot study was conducted prior to distributing the final copy of questionnaire so that content validity may be assessed. A total of 20 students participated in the pilot study. Pilot study was conducted to ensure contents validity, which is that the " the instrument must show that it fairly and comprehensively covers the domain or items that it purports to cover" (Cohen, Manion, & Morrison, 2003, p. 137). In addition, it was also conducted to "determine that the individuals in the sample are capable of completing the survey and that they can understand the questions"(Creswell, 2008, p. 390) .

The data collection involved the following procedure: a questionnaire distributed among 101 participants, focus group discussions and non-participant observation. Questionnaires contained the following main sections: background information; items eliciting participants' responses on critical thinking, class participation, teacher-student interaction patterns; and their opinions about certain context-bound observations. Frequency scales such as always, often, sometimes, rarely and never were used to gather their responses.

Furthermore, four sessions of focus group discussions were conducted in which participants were asked to answer questions and share their individual experiences on the same topic. A purposive sampling technique was used which involved selecting individuals and group of individuals based on specific purposes linked with research questions of the study. Purposive sampling was used as it represents a broader group of cases as closely as possible (Teddlie & Yu, 2007). A total of 40 students (10 each) participated in the focused group discussions. The questions were open-ended allowing them to elaborate comprehensively on the subject. The responses were video recorded during the discussions that were thematically categorized, and then triangulated within the analysis and discussion parts. The analysis process involved transcription and coding of the interviews. Coding is termed as data reduction process (Onwuegbuzie & Teddlie, 2003). According to Creswell (2008), coding

is a process of segmenting and labeling text to make descriptions and form broad themes in the data.

Results

Background information

The table given below illustrates background information of the respondents. They represent different faculties and semesters. They are equally diversified in terms of linguistic backgrounds.

Table 1: Background information

Faculty/field of study	Number	Semester	Number	Mother Tongues	Number
Engineering	22	2nd	12	Pashto	48
Information & Communication Technology	17	3rd	1	Punjabi	14
Management Sciences	25	4th	20	Saraiki	10
Life Sciences	27	5th	19	Brahui	2
Arts & Basic Sciences	10	6th	9	Balochi	2
		7th	12	Urdu	14
		8th	28	Persian	7
				Shina	1
				Torwali	2
Total	101		101		101

Knowledge about critical thinking

The following table outlines the respondents' answers concerning their knowledge about critical thinking:

Table 2: Knowledge about critical thinking

I study/have studied Critical Thinking:

As a subject	as a topic in a subject	never studied
n=22(%)	n=24(%)	n= 55(%)

The purpose of this item was to ascertain the respondents' background knowledge of critical thinking. The response suggests that the more than half of the participants with (55%) indicate they have never studied it at all while (24%) have as a topic, and (22%) have as a subject. The results cumulatively show that the respondents' level of understanding and background knowledge is considerably low.

Responses on factors supporting learning and critical thinking

This section of questionnaire sought participants' experiences and observations against items that were to positively influence learning, create and enabling environment for smooth and meaningful communication in classroom. The total responses were calculated, and the percentages were drawn. Following is a list of the situations/contexts presented before participants:

- I participate in class.
- I ask questions in class.
- My teachers teach through discussion/questions.
-
- Whenever I have problems with a subject/topic, I ask question in class without any fear or hesitation.
- Whenever my classmates have any problem with a subject/topic, they can ask questions without any fear or hesitation.
- Teachers allocate sufficient time for questions and answers.
- My teachers willingly (happily) answer all questions.

The cumulative response results in following graph: Figure 1. Factors enabling learning and critical thinking

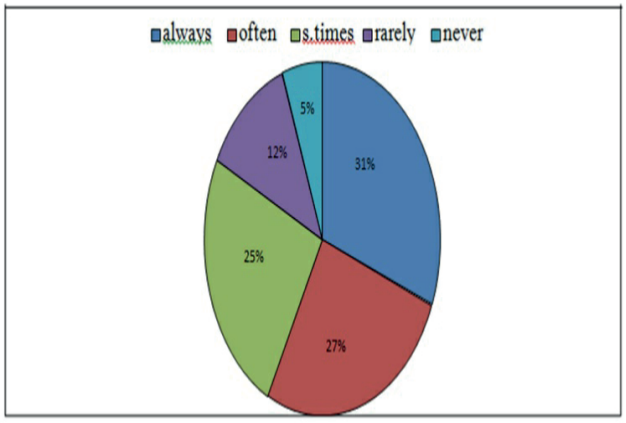


Figure 1: Factors supporting learning and critical thinking

The above pi chart illustrates the responses of the participants towards the above listed seven items. All the items are believed to be providing enhanced levels of learning, ensuring a certain degree of critical thinking. The numbers on a whole are indicative of

favorable classroom environment. As the figures suggest, 31% of the participants reports that they always experience the above situations in their classrooms while 27% happens to experience the above circumstances often. Similarly, 25% of the participants believe they sometimes enjoy the luxury of above conditions. Furthermore, a relatively smaller segment 12 % and 5% of participants respectively choose rarely and never.

Factors negating (minimizing) learning and critical thinking

This section of questionnaire sets to elicit participants' opinions on some of the classroom-based and context-bound observations. Based on experiences and observations in the university, the researchers presented before participants some classroom-based participation and critical thinking related conditions, and sought their own experiences. Following is a list of those conditions which the researcher believes can potentially minimize student-centered learning and negatively impact critical thinking.

1. *Teachers usually take questions personally.*
2. *Teachers usually create tense/stressful environment in class.*
3. *Students usually do not ask questions because they feel asking questions will make teachers punish them.*
4. *Teachers usually give low marks and fail students who frequently ask questions.*
5. *Our classrooms are usually teacher-centered (means teachers occupy much more time than students)*
6. *Teachers are usually biased(partial); they focus some best students and ignore many others*
7. *Teachers allow only their favorite students to talk/discuss/question in the class*
8. *Teachers usually do not like students who argue/debate in class.*
9. *Teachers usually prefer those students who keep silent/don't ask questions in class*
10. *To please teachers and get good grades, students strategically keep silent in class.*
11. *When students disagree/reason with teachers, they receive punishment in shape of failure or low grades*

In order to explore participant's views on the above items, their opinions were sought through scale with *agree, strongly agree no opinion, disagree* and *strongly disagree.* Subsequently, in order to quantify responses in the form of a statistical presentation, the scales were further broken down into three categories: (a) *agree + strongly agree* (b) *neutral*, and (c) *disagree + strongly disagree*. Importantly, since the exercise or presence of the above conditions negatively influence their learning and critical thinking patterns, therefore the respondents' agreement/strong agreement amounted to unfavorable whereas disagreement/strong agreement amounted to unfavorable conditions. After calculating the responses to the above items, the cumulative ratios/percentages resulted in following graph:

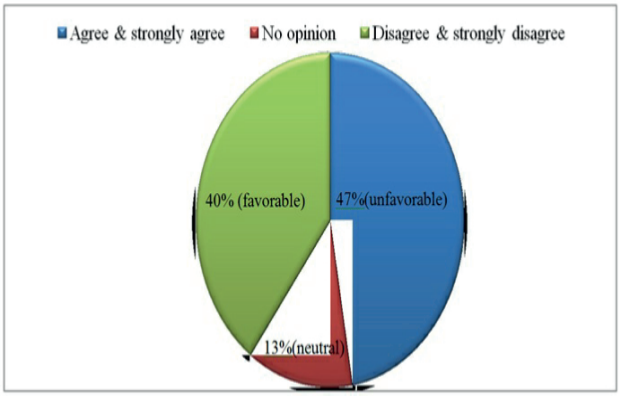


Figure 2. Factors minimizing learning and critical thinking

The results suggest that 47% of respondents indicate that their classrooms fail to provide with the above-listed items, and believed to be favorable for learning and making critical thinking happen in classrooms. A noticeably lesser section of them reports that their classrooms do offer favorable environment for learning as well as critical thinking while 13% of the respondents stay neutral giving no opinion. Considering their responses to items (items believed to facilitate learning

and critical thinking) in the previous figure, the respondents demonstrate inconsistency in their approach. As we witness, a significant segment of them indicate in the previous figure that their classrooms environment suits learning and critical thinking. One could see a sense of inconsistency in respondents' responses to some of the items specifically the ones such as *"I participate in class"*, and *"I ask questions in class"*. Their responses respectively suggest the given percentages: always (44%), often (27%), Sometimes (18%), and always (28%), often (21%) and sometimes (28%). Based on personal experiences and the results of focus group discussions, the researchers observe that their responses to these very items appear exaggerated because practically, more than 90% students usually keep silent while only few students perform active participation. The same goes for questioning in the class wherein only few students ask questions while the majority of them are laidback.

Table 3: Presentation and questions in class

Description	1-3 times	3-5 times	5-8 times	More times	N A
Number of presentations I have made per Semester	64	24	4	1	8
Number of questions I have asked per semester	10	14	20	46	11
Number of occasions when I experienced activity-based , task-based learning throughout my studies	39	21	4	20	17
Number of presentations I have made throughout my studies	21	18	14	40	8

This section aimed to determine broadly the number of presentations respondents deliver, and the number of questions they raise per semester. The rationale behind eliciting this information was critical because the researchers' experiences in the university suggest that students happen to get rather limited opportunities for delivering formal presentations in the class. For instance, a student of final semester revealed that he had delivered only one presentation during his entire academic session that spans for eight semesters. A significant number of students raised the same issue saying that they have had few opportunities for class presentation. As the above figures indicate the majority of respondents (n=64) suggests that they made from 1-3 presentations during a semester. The second row indicates the number of questions they asked during a semester. The third row presents the number of occasions the respondents were exposed to any form of collaborative and participatory learning that put learners on the center of activity, and which involved techniques and methods that characterize participatory teaching and learning involving drills and practices, question and answer, brainstorming, group-work, role-play, demonstrations, debates and so on. A significant number of them (n=39) indicate they had such occasion from 1-3 times while (n=17) report they never experienced such leaning opportunities. Besides, findings of the focus group discussions evidently testify that very few students knew what collaborative or group learning was, let alone experiencing it in the class.

Discussion

Having presented the data in tabulated and graphical form, and triangulated input from group interviews, the discussion part attempts to bring forth the major emerging themes drawn from questionnaire data and focus group discussions.

Teacher-centered versus learner-centered paradigms

A significant number of participants suggest that teaching methodologies and instructional approaches are predominantly teacher-centered. For instance, 55% participants agree that their classes are usually teacher-centered while a relatively lower segment of 26% disagrees with this observation. In addition, a considerable portion of 19% prefers to stay neutral. Thus, the statistics from questionnaire and personal narratives of the participants during focus group discussion substantiate the fact that the classes are mostly teacher-fronted and teacher-dominated while the learners (students) stand on the margins. To a significant extent, the researchers' personal experiences and observations also confirm almost identical classroom scenario.

As the word signifies, the term student-centered is a method of learning or teaching, which puts the learner at the center. The student-centered learning is premised on the philosophy that learner is at the heart of

learning process. This approach is diametrically opposed to the conventional or traditional approach that tends to view students as passive recipients of information. Within the conventional learning approach, the pedagogical method employed is traditionally one of lecturing, note-taking, and memorizing information for later recognition or reproduction (Maclellan & Soden, 2007). In general, we observe that the conventional teacher-centered approaches are marked by low level of learners' participation, teacher acts as the sole source of knowledge, and this largely non-participatory approach seldom allows learners to ask questions, conduct discussions, or challenge the information that flow from the teachers. The classroom setting is usually that of lecture theatres, laboratories and conventionally set up classrooms with a podium in the center for teachers and, chair set up in orderly manner facing the teacher, with whiteboards placed in front. Teacher is exclusively responsible for designing the curriculum, setting examination tasks and assessment procedures. The activities are almost exclusively exam and grades oriented.

In view of the characteristic features of the teacher-centered teaching and learning approach and learning outcomes, a vast majority of respondents of the present study rightly refers to their teachers' methodologies as teacher-centric. They are so because the instructional approaches and classroom exercises show identical conditions we usually associate with teacher- centered approaches. The following table illustrates what participants undergo and experience within the classrooms:

Table 4: Teacher-centered versus learner-centered paradigms

Observations/situations	Agree	S. Agree	Total
Our classes are usually teacher-centered (*means teachers occupy much more time than students do*)	36	20	56
Teachers are usually biased(*partial*); they focus some best students and ignore many others	37	27	64
Teachers allow only their favorite students to talk/discuss/question in the class	34	24	58
Teachers usually don't like students who argue/debate in class.	34	22	56
Teachers usually prefer those students who keep silent/don't ask questions in class	18	16	34
To please teachers and get good grades, students strategically remain silent in class	28	18	46
When students disagree/reason with teachers, they receive punishment in the form of failure or low grades.	30	20	50

As a significant number of participants confirm the teacher-centric nature of teaching methodologies, therefore, one could theoretically argue that classrooms in the present context hardly provide enabling environment for critical thinking to grow. It is pertinent to highlight that the proponents of student-centered approaches derive inspiration from the theory of constructivism. Constructivism is based on the idea that in order to learn effectively, learners must construct and reconstruct knowledge. The methodology favored by constructivism tends to encourage learner-centered environment. It also emphasizes on devising flexible learning modes and methods.

Researchers associate numerous disadvantages with teacher-centric approaches. The learners are exposed to teacher-dependent environment and passivity. Moreover, since teachers occupy the center and talk nearly all the while, therefore, learners hardly find sufficient opportunities to engage meaningfully in the learning process, and capitalize on dispositions that traditionally mark critical thinking such as inquisitiveness, collaboration, open- mindedness, the tendency to reason or the desire to be well-informed, and to construct or see others construct knowledge. However, in stark contrast to passivity-oriented teacher-fronted methods, the student-centered learning experience is largely active one, as it is based on the premise that 'student passivity does not support or enhance … learning' and that it is precisely 'active learning' which helps students to learn independently (Machemer & Crawford, 2007). Importantly, student-centered approaches transform the role of both teachers as well students as the teacher is viewed as a facilitator and guide, rather than as the main source of knowledge. It empowers students and changes the role of a teacher from the mere 'transmission of knowledge to supporting and guiding self-regulated student learning' (Eekelen, Boshuizen, & Vermunt, 2005).

Influence of local teaching-learning culture

Traditionally, the teaching-learning practices within the academia in this part of the world especially the Indian sub-continent are characterized by teacher's upper-

handedness and students' obedience. Locally, Students' obedience and teachers' domination is a taken-for- granted exercise. Contextualizing the issue in a broader term, the teacher-dominated teaching and learning practices replicate not only the local culture within the academia, it also reflects the broader socializations patterns, cultural values and norms prevailing across the region. In an insightful book on differences in the Eastern and Western patterns of socialization, titled as 'Why Asians are Less Creative than Westerners', the Singaporean scholar Ng Aik Kwang (2001) identifies characteristics that demonstrate why passive culture is deeply entrenched in the Asian culture. According to him, while dealing with others, Westerners are inclined to be frank and direct, tend to put themselves apart from others and establish their distinctness. Their emphasis is on individuality (Ng, 2001). In addition, the concept of self in the West centers on self-interest rather than following a group. Contrary to the Western culture, the Asians tend to be "psychologically dependent on the in-group, and conform to it instead of following the wishes and desires of his own heart". Individuals tend to stay within the established confines, stand up for social harmony and order, and uphold social rules and norms of the in-groups. Emotions are "other-focused". All this is done for the purpose of reassuring sociability and gaining group's approval. Importantly, Ng advances that emphasis is laid on respect and obedience to parents is rather than to foster self-reliance in the children. Ng further contends that:

The cultural emphasis on filial piety means that children from a traditional Asian family are resided in terms of whether their conduct meets some external moral criteria e.g not being rude to one's parents or not treating them in a disrespectful manner. Dependence of the child on parents is encouraged, and breaking the will of the child, so as to obtain complete obedience, is considered desirable (Ng, 2001).

Because of different socialization patterns, a child in the Western world tends to assert his/her uniqueness, and it provides scope for criticism in the surrounding. Thus, the emphasis on obedience in the Asian context limits a child's capacity to look beyond what the social norms and moralities prohibit. The social upbringing naturally strangulates a child's potential for creative and critical thinking, and the surrounding paves way for authoritarian teaching structure and suppressive culture. Traditionally, as a member of in-group, the role of a student remains to obey the teacher, absorb the information by the teacher without questioning or reasoning.

Some of the participants aptly argued that critical thinking is an attribute, which fundamentally originates and grow from homes and schools. Homes and schools are the basic formative nurseries that play instrumental part in the construction of individuals' worldviews and personality building.

Large classes

Large classes are one of the major obstacles in the proper implementation of student-centric teaching and learning approaches. It is a potential practical challenge the teachers usually encounter. If one has to estimate roughly, every class on average enrolls about 45 students, which is by all standards a much larger class than what we would ideally imagine in terms of implementing the constituent variants of critical thinking. Some classes even have more than 45 students. In these circumstances, it becomes virtually impractical for a teacher to allocate special time for questions/answers, and provide every individual student the opportunity to raise questions or entertain elaborate discussions. In the semester system in particular, the teacher normally undergoes hectic work schedules with course completion as the prime objective.

Contextualizing large classes, the researchers believe that it may prove as one of the major challenges for teachers to execute student-centered methodologies. It is a major impediment on the following grounds: One, teacher is unable to respond to every individual in the class. Two, if the teacher gives any subject-related assignment or task, he/she will not be able to thoroughly examine all the assignments and give each student quality time to discuss his/her assignment. This might also cause students to take their assignments with lower degree of dedication and seriousness. Three, if the teacher has been assigned multiple classes with larger strength, and multiple courses, it

is likely to affect his/her teaching methodology and paper marking. Since the level of interaction between teachers and students is limited, therefore, he/she is unable to develop student's interest in the subject. Four, larger classes are likely to multiply likelihood of communication anxiety among those who even tend to communicate hesitantly amongst few people. The presence of larger number of students in the class causes them to stay back, avoid participation or engage in questioning. Such students remain silent even if they have to share or ask an important subject.

Feedback mechanism

Feedback is a vital component in acquiring the larger goals of effective learning and critical thinking. Feedback allows both teacher and student(s) to engage in a dialogue about what distinguishes successful performance from unsuccessful performance as they discuss criteria and standards (Fink, 2003). Students' feedback is a crucial tool that can be used in the improvement of course contents, teaching approaches, and learning outcomes. A number of participants particularly in the focus group discussion distinctly pointed to the absence of any systematic and regular feedback mechanism in classroom. According to them, very few of their teachers were collecting students' feedback either at the end of the class or on the following day. The responses cumulatively suggest that this important element of critical thinking is missing in classrooms. We could term this as one of drawbacks of teacher-centric approach. In the hindsight, the lack of regular feedback practices may also cause lack of understanding and lack of learning. Alongside collecting feedback from students, it is equally crucial for the teachers to provide with regular feedback to improve upon their performances. According to Wlodkowski and Ginsberg, teachers should provide feedback that is informational rather than controlling, based on agreed-upon standards, specific and constructive, quantitative, prompt, frequent, positive, personal, and differential (i.e., indicating personal improvement since the last performance) (Wlodkowski, R., & Ginsberg, M., 1995). Feedback, in the process of teaching, is considered important for two reasons: it contributes directly to progress in learning through the process of formative assessment, and indirectly through its effect on pupils' academic self-esteem (Gipps, 1994). Bennett also attaches importance to feedback which is viewed as crucial for both pupil involvement and comprehension and hence achievement (Bennett, 1981).

Other causes of non-participation

Non-participation of students is a major emerging theme. The participants of this study have come up with a number of reasons of non-participation. One observes that class non- participation, learning and critical thinking are deeply interlinked as non-participation results in silence; therefore, it is entirely opposed to the overall spirit of critical thinking and active engagement. We have defined some of the prominent features of a critical thinker are that they pose questions, remain inquisitive, carry searching minds, many factor force students to stay silence and avoid participation. The following lines briefly highlight some of the emergent factors of non-participation:

According to the respondents, there are many students who join the class late; therefore, they miss some of the earlier part of lecture to catch up with other students. This may cause them to observe silence in classrooms.

- Many others prefer to stay calm and quiet on the backbenches. These students habitually take no interest either in studies or in class participation. Most of the teachers tend to ignore such students.
- One of the larger pools of students escapes from class participation because they do not trust their linguistic and overall communicative competence. Both perceived and real deficiency in the above two important skills prevent them from taking part in the proceedings. Although, these students demonstrate a certain degree of receptiveness and ambition within themselves; however, they do not chance questions for their shaky linguistic and communicative competence. Some students revealed that most of the time, they ambitiously desire to ask questions, and they do have serious questions in their minds, but fear of losing balance make them

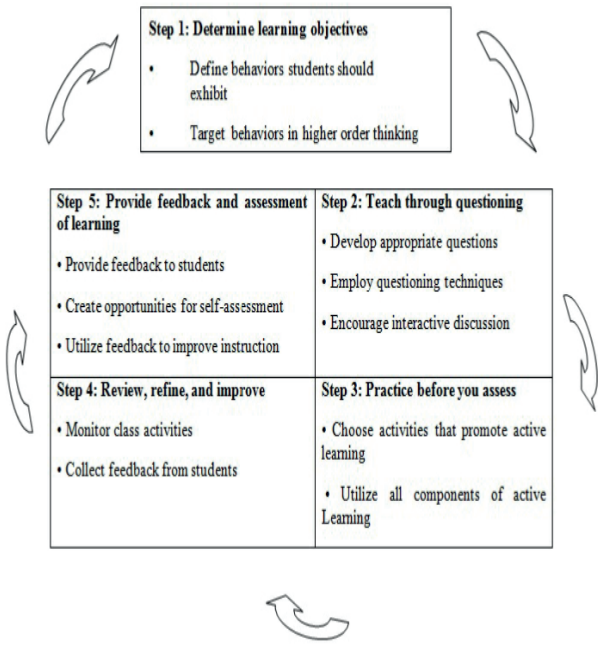
become silent. For instance, a large number of students from KPK disclosed that they strategically avoid class participation because they are not fluent enough in Urdu, the medium of communication in majority of the classes. This fact might surprise many, but it is true that students from the KPK province struggle in the Urdu language. The apparent reason being the lack of sufficient exposure and experience to Urdu in their schooling and surrounding. Thus, the sociolinguistic realities of a monolingual and Pashto-dominated milieu would have played significant part in their low proficiency in the Urdu language. Similarly, English language also poses serious challenges than the Urdu language in classrooms.

- Lack of interest in a subject or a topic is another reason of non-involvement. Lack of interest may be motivated by student's aptitude, difficulty of the subject, incomprehension of the contents or the boring teaching method of the concerned teacher. The contents and methods at times hardly excite their interest.
- The participants of the study revealed that insolent behavior of the teachers also forces passivity among students. For instance, a rude response to a students' query not only demoralizes him/her occasionally, it is also bound to spread apprehensions among other fellows.
- Teachers do have their favorite students in class whom they generously entertain when it comes to answering questions or interaction. The participants also unfolded that some teachers tend to encourage the frontbenchers and the toppers of the class while leaving the majority of relatively poorer students to get marginalized.

The way forward

Having elaborately presented evidence of participants' input on the nature of teacher-centric, student-centric facets of classrooms, the scale and extent of critical thinking, and the cultural and sociological dynamics of the issue, we need to identify areas that require attention. The data provides ample evidence that the teaching and learning approaches are largely teacher-centric while the students have relatively lesser role in the process. Considering the potential benefits and strengths of the student-centric approaches and its comparatively richer learning outcomes vis-à-vis conventional teacher-centric approaches, one would argue that the former methodology promises a great deal than the later. In addition, the student-centric approach also naturally provides abundant opportunities for exercise of critical thinking, therefore, it is more critical- thinking-friendly than the conventional approaches in practice currently. Now, given the ground realities and the nature of problematic areas, what roadmap or framework one could draw for the teachers to minimize teacher-centric practices, and possibly integrate a semblance of student- centric components into their teaching practices.

Duron et al. (2006) offer one such framework, which they believe, could be applied for any discipline. According to authors, this is an interdisciplinary model "which is built upon existing theory and best practices in cognitive development, effective learning environments, and outcomes-based assessment, provides teachers with a useful framework" (Bloom, 1956). The following graph illustrates the 5-step framework designed with student-centric orientations and integration of critical thinking.



Step 1. Determine learning objectives

According to Duron et al. (2006), in order to make critical thinking happen, the teachers need to base learning objectives, activities and assessment on the higher order levels of Bloom's taxonomy. The learning objectives should aim at a behavior, which is suitable for a certain level of the taxonomy. Bloom introduces different levels for imparting and assessing different skills in students (Bloom, 1956). These *include knowledge, comprehension, application, analysis, synthesis* and *evaluation*. It develops in hierarchical manner beginning from simple skills to medium to higher order skills. For instance, knowledge level needs students to show simple recall of facts. Comprehension aims at making students understand information. Application calls students to use answers to show the ability to use information, concepts or theories in different situations.

Analysis drives students slightly further as it requires them to give answers that display the ability to see through patterns, and classify theories, concepts or any information in smaller units or components. Synthesis needs them to show the ability to relate and synthesize knowledge from different areas to create new work. Finally, evaluation involves students to give answers that demonstrate the ability to evaluate or judge an event or evidence on the basis of reason: …a well-written lesson plan should target a specific behavior, introduce and allow for practice of the desired behavior, and end with the learner exhibition of the behavioral response. The development of well-written questions will greatly accelerate a learner's movement into critical thinking (Duron et al., 2006, p. 162).

Step 2: Teach through questioning

Many scholars engaged in teaching and learning regard questioning as one of the crucial components of the process. Duron et al. (2006) suggest that questioning is vital because it allows teachers "to establish what is already known and then to extend beyond that to develop new ideas and understandings" (p. 164). Elder and Paul propose that the art of questioning is essential because if the students fail to ask genuine questions or seek answers, they are not likely to take course contents seriously . Questions can also be employed to foster interaction between teacher and students, and challenge them to carry forward their opinions or defend their stance through critical evaluation of any issue under question (Duron et al., 2006). In the actual classroom context, the teacher may categorize questions in different ways. One of the simple ways is to ask both convergent and divergent questions. Convergent questions normally require one or two simple correct answers while divergent questions seek a variety of explanatory answers. In relation to Bloom's taxonomy, convergent questions apply to lower levels of knowledge, comprehension and application whereas divergent questions apply higher levels of analysis, synthesis and evaluation. Thus divergent questions are normally open-ended; therefore, it stimulates student-centered discussions, prompts reasoning and promotes critical thinking.

Step 3: Practice before you assess

Over the past decades, a shift has taken from passive to active learning. According to Duron et al. (2006) teachers who have used active learning have found learning more enjoyable. Active learning involves students that make them think about what they are doing (Duron et al., 2006). Fink also indicates that research shows that active learning supports students to learn more and retain knowledge for longer. Fink (2003) proposes two guiding principles for an active learning to take place, and suggests that activities should be devised to address the following three components of active learning: *Information and Ideas, Experience,* and *Reflective Dialog*. *Information and Ideas* include primary and secondary sources accessed in class, outside class, or online; *Experience* includes doing, observing, and simulations; *Reflective dialog* includes papers, portfolios, and journaling. Secondly, teachers may use other active learning strategies involving direct activities such as exercise of activity in an authentic setting, direct observation of the issue or phenomenon in question, reflective thinking and journaling outside the class. Fink, suggests activities for reflective writing making students to ponder over the following contextual questions: What am I

learning? What is the value of what I am learning? How am I learning? What else do I need to learn? (Fink, 2003).

Step 4: Review, refine, and improve

Duron et al. (2006) propose that teachers are required to continually strive to review and refine their course material, instructional approaches, activities conducted and so forth (Duron et al., 2006). This would require them to monitor classroom activates keenly, and track things particularly class participation, activities and the learning outcomes. One of the crucial strategies to this end is to constantly collect and give back feedback. This may be done by conducting minute papers, asking students to identity the most important points learned, and the ones need to be learned.

Step 5: Provide feedback and assessment of learning

Feedback and assessment of learning is another means towards critical thinking. According to Duron et al. (2006), the purpose of feedback is to enhance the quality of student learning and performance, rather than to grade the performance of the student for mere sack of grading. It also helps students assess their performances and ensure necessary improvement for the future (Duron et al., 2006). Fink contends that feedback facilitates both students and teacher to engage in a dialogue about what distinguishes successful performance from unsuccessful performance. Feedback should be driven by thoughtful and purposeful aims (Fink, 2003). As Wlodkowski and Ginsberg (1995) suggest, teachers should provide feedback that is informational rather than controlling, based on agreed-upon standards, specific and constructive, quantitative, prompt, frequent, positive, personal, and differential (i.e., indicating personal improvement since the last performance) (Wlodkowski & Ginsberg, 1995).

Similarly, Duron et al. (2006) conclude that Information gathered from students' feedback and assessment gives immediate and significant source of information to the teacher with respect to which objectives were met, the effectiveness of specific learning activities, things to start or stop doing, effectiveness of feedback on standards, etc. To practically implement student-centered leaning methodology, experts suggest a number of class-based and outside the class activities. For instance, O'Neill and McMahon (2005) propose a list of activities that may be conducted within and outside classes to make students experience student-centered learning. Following is a tabulated representation of the activities:

Outside of the lecture format	In the lecture
Independent projects	Buzz groups (short discussion in twos)
Group discussion	Pyramids/snowballing (Buzz groups continuing the discussion into larger groups)
Peer mentoring of other Students	Cross-overs (mixing students into groups by letter/number allocations)
Debates	Rounds (giving turns to individual students to talk)
Field-trips	Quizzes
Practicals	Writing reflections on learning (3/4 minutes)
Reflective diaries, learning	Student class presentations
Journals	
Choice in subjects for study/projects	Poster presentations
Writing newspaper article	Students producing mind maps in class
Computer assisted learning	
Portfolio development	

Conclusion

The guiding principles as laid down in the above framework as proposed by a number of studies on student-centered learning approaches manifestly orientate towards increased student participation, enhanced students involvement, and empowered students, enjoying considerably enabling environment for self-expression, personal voice-raising, reason making and meaningful learning. Therefore, in view of the numerous advantages of the student-centric pedagogical approach, if applied to the minimum degree, it would still yield positive results on the overall learning outcomes. In addition, the same approaches will meaningfully engage students and assign them relatively greater responsibility, making them accountable for their own academic obligations. It also ensures learner autonomy, a factor which many scholars believe can play critical part in engaged and meaningful learning. One may also observe that student-centered learning methodologies execute activities, tasks and role-play, conducted within and outside the class, are marked by greater degree of participation, collaboration and interaction; therefore, teacher-student and student-student interaction is bound to optimize understanding of the subject-matter, and is likely to maximize opportunities for critical

evolution, problem sharing and problem solving. It will also provide an outlet for diversified opinion sharing. Importantly, in a student-centered learning, the students constantly learn by doing rather than by passive listening. As numerous experts posit, one of the major disadvantages of the conventional teacher-fronted methods is that teachers talk all the while; therefore, teachers thinks mostly than their students do. Cognition and involvement is the key to learning. Simply, the more the students ask questions about mathematics, the more they will learn mathematics, and the more they reflect on mathematics, the greater they will understand mathematics. The same argument indisputably applies to every other academic discipline.

In sharp contrast to what we observe in student-centered learning method, the conventional teaching methods minimally deliver on active learning and creativity. In the context of Pakistan, scholars regard student passivity and rote learning as the major impediments to meaningful learning. The sources of both the problems may be traced in the teacher-centered conventional methodologies as these force passivity and promote rote learning or memorization. Furthermore, conventional methods are primarily examination and grade oriented with least focus on genuine long-term learning. A host of scholars have signaled towards these vital issues in their research work (Siddiqui, 2007). For instance, Hoodbhoy (1998) incisively argue that in Pakistan, teaching heavily relies on dictation and “examinations are tests of memory” . Hodbhoy has repeatedly criticized the education system and instructional approaches which he aptly believes produce rote learners and blind followers rather than conscientious critical thinkers with searching minds.

Challenges in the implementation of student-centered learning are numerous, larger classes being one of the potent ones; however, given the potential benefits and richer learning outcomes, this approach can be worth-adopting. It may also be proposed that execution of student-centered methodology in classrooms may largely be a matter of an attitudinal and conceptual shift rather than a total overhaul of the current system. Since majority of the current lot of teachers have themselves undergone and experienced the conventional methods as students; therefore, they tend to prefer the methods and techniques their own teachers had employed. To sum up, we would like to propose for a paradigmatic shift towards teaching and learning practices in which students are put at the center of teaching and teaching activity. Such paradigmatic shift also entails a perceptual shift and departure from conventional teacher-dominated classrooms where learner autonomy and critical thinking hold prim positions. At broader level, such pedagogical shift is likely promote an egalitarian academic culture within the classrooms and universities.

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Level of shyness among the adolescents in public and private schools: a comparative study

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Abstract

The relationship between level of shyness among the adolescents (13-18 years) in public and private schools were investigated in the present study.120 students studying in different grades including vii, viii, ix, x, xi and xii grades from public and private schools in Islamabad were selected by Random sampling technique. It was hypothesized that level of shyness among the adolescents of private and public school is different. To measure the level of shyness, the McCroskey Shyness scale was administered on the sample. Data was analyzed by applying t-test for independent samples and hypothesis was rejected because there is no significance difference between level of shyness among the public and private schools adolescents. The research presents evidence that there is no impact of schooling system on shyness level of adolescents but shy adolescents are less likely to communicate and participate in classroom activities or ask questions when they need help with schoolwork. They suffer from social anxiety.

Key words: Shyness, Adolescents, Schooling System, Social Anxiety.

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Introduction

Shyness is a feeling of apprehension and discomfort which is experienced by everyone to some extent in his/her life. It becomes problematic when a person is unable to cope and overcome shyness in daily routine which upsets personal, social and professional life. A person confronts difficulties of attending parties, meeting people, visiting others and communicating freely etc. In such case person's social life is badly affected. Particularly adolescents suffer from shyness which causes social anxiety and isolation. They do not want any social relation or participate in social activities. Teachers feel problems to engage such children in classroom activities as they are not willing to communicate with others. They do not answer question even if they know it.

During any presentation, shy adolescents also face difficulty in expressing views and sharing information. They are weakened by their social anxiety and unable to convey information. As shy adolescents are often hesitant in asking for help due to which they face a lot of complications in their daily activities. They prefer to stay alone, unexpressive, unwilling to talk and inactive to participate in physical activities such as sports, outing etc. The shy adolescents experience tension, apprehension, certain physiological symptoms and feeling of negative evaluation by others during any social interaction (Briggs, Cheek, , & Jones, , 1986). There is a need to identify such adolescents, assess their problems and treat them so they can overcome this problem and spend healthy social life. Shyness can be defined "as a fear of, or withdrawal from, other people or social situations, can have many different causes depending on the individual child and the specific circumstances (Random House Dictionary of the English Language, 2005)". Shy generally means "tends to avoid human beings". This is something that all people experience at one time or another. Shyness has been defined as "a heightened state of individuation characterized by excessive egocentric preoccupation and over concern with social evaluation, with the consequence

that the shy person inhibits, withdraws, avoids, and escapes (Zimbardo, . &Brod., 1981)". Different psychologists such as, James considered it a basic human instinct (James, 1980)", Darwin described "shyness as a discrete, fundamental emotion". An emotion profile in a "shy" situation includes interest and fear, which interacts with shyness (Izard, 1972). Carver and Scheier defined "shyness in self-regulation terms, with unfavorable social outcome expectancies leading to disengagement in task efforts (Carver & Scheier, 1986)". Sometime it is considered as a normal momentary behavior due to different circumstances.

In children, shyness is normal and a part of usual behavior during five months to two years. It is considered as a part of social and personality development. It becomes problem after two years when children face difficulties in relationships. Their personal, social and school life is affected by their shyness. Problems with shyness are usually evident by the time a child reaches three years of age (Crozier, 1990). Whatever the causes of shyness in an adolescent, it is a behavior that parents must not ignore. It can be very painful for an adolescent to live with, and it can have negative effects on other aspects of an adolescent's life. These negative effects can follow an adolescent into adulthood, too. For example, many shy adolescent develop low self-esteem and lack self- confidence. This can cause great difficulty for a shy adolescent to make friends. Also, many shy adolescent are so quiet that they don't receive the help they need from teachers at school, which results in poor school performance which could be better (Rubin, Mills, & Hymel, 1990).

Zimbardo writes, "We believe that the pain and pressures of the teen-age years are considerably greater for today's young people than they have been for previous generation. If it is a bad time generally for all adolescents, one can safely assume that it is far worse for the shy ones. He recommended his book "The Student's Shyness and Behavior Modification" to the parents of adolescent shy children, working indirectly to make their children feel secure and have fewer things over which to feel self-conscious. He advised parents to provide personal appearance assistance and participating in the education system of the shy child. Extreme shyness usually leads to psychological problems in adolescent's i.e. low self-esteem, lack of confidence, social phobia and social withdrawal (Richmond, & McCroskey, 1981). If it develops phobia (social fear) among children who are unhappy because they are unable to make friends, it is called "conflicted shyness"; if it is based on the lack of a strong motivation to engage in social interaction, it is called "social disinterest." Both types can be detected at an early age (Cheek, & Busch, 1981).

The major behavioral components of excessive shyness in adolescents are as follows: difficulty talking, stammering, stuttering, blushing, shaking, sweating hands when with other people, difficulty in thinking of things to say to people, absence of outgoing mannerisms such as good eye contact or an easy smile, reluctance to play with other kids, to go to school, to visit relatives and neighbors. Psychologists have two views of shyness. The nature view is that some infants are genetically predisposed to be shy. The nurture view is that infants learn shyness from their environment (Harris, P. R., 1984). A shy adolescent avoids social interactions, and is very uncomfortable when he inadvertently finds himself in one. He doesn't say much, and has a very weak presentation. He doesn't handle any form of criticism very well, and does very little to defend himself (Harris, 1984).

Literature

Symptoms of shyness

Shyness reactions can occur at any or all of the following levels: cognitive, affective, physiological and behavioral (see Table 1) according to CBT Cognitive Behavioral Therapy Model (Carducci, MarionLynch, Dosch, & Boley, 1997,).

Table 1: Symptoms of shyness

Cognitive	Affective	Physiological	Behavior
Negative thoughts	Embarrassment and painful	Enhanced heart rate	Reserve/ passivity
Fear of negative evaluation	Shame	Dry mouth	Stare/ hate
Worry/apprehension	anxiety	Trembling/ shaking	Avoidance / nervous
Self-pity	Sadness	Sweating	Low speaking voice
Weak/ dull	Loneliness	Feeling faint/ dizzy	lethargic
Negative biases in the self-concept	Depression	Leave place removed	Speech problem/ escape

Causes for shyness in adolescents

Shyness can have many different causes. There may be a specific cause for shyness in some adolescents, while in others it may occur for a number of different reasons. Here are some of the reasons why adolescents become shy (Carducci, 2005). In adolescents it may arises from different biological and environmental factors (Carducci, 2005). Majority of causes are related to how these adolescents are nurtured while growing up. Adolescent learn everything through imitation (Carducci, 2005). If parents themselves are not that outgoing and shy by nature, then shyness in their adolescents is highly apparent (Carducci, Marion, Lynch, D., Dosch, &Boley, 1997). That is because parents are role models. Adolescents who have abusive parents tend to be insecure and shy by nature (McCroskey, 1977). Another type is over critical and dominating parents because they criticize their child a lot and always controlling them. So adolescents are pushed into a shell when they are criticized so much, that they fear making mistakes which leads to shyness (Harris, P. R., 1984). An overall low confidence in personality can be the reason for shyness in adolescents. This low confidence may have been induced by peer pressure, comparison with siblings or even bullying in school (Malouff 1998).

Lack of experiences in social situations

Adolescents may have problem to participate in social activities. They do not learn how to socialize with others, how to make friends, how to express emotions and feelings in any social setup. As friendship is a very important part of socialization, if a child does not make friends he/she will remain alone and isolated. Many shy adolescents hesitate to talk with others because they are weak in social skills. As they have fear of shame, embarrassment, rejection and humiliation, so they prefer to avoid others and are happy to live alone and isolated.

Difficulties with effective communication

As shy adolescents are reluctant to interact with others so they do not learn effective communication skills. They have problem in speaking freely and in expressing their views. They do not answer any question and remain quite due to lack of confidence. Even they have problem in writing skills because they use limited words to describe any question and situation.

Difficulty expressing emotions

Shy adolescents have problem in expressing feelings and emotions. They always try to repress emotions which later on create psychological distress i.e. depression, anxiety and stress etc. are some of them.Buss explained that early developing shyness means fear of novelty and physical reactivity. Later developing shyness (4-6 years) is due to excessive parental evaluation of observable aspects of a child's behavior. Self-conscious shyness seems to be higher in self-blame and shame than fearful shyness (Buss, 1993). He added self-blaming attributions as dependent variable means fearfulness, not shyness, predicts self-blaming attributions for interpersonal failure. Both fearfulness and shyness predict internal attributions and state shame in hypothetical interpersonal failure situations and both predict shame. Shyness has still been a negative predictor of control. Research from varying sources over the past 20 years indicates that approximately 40% of adults and adolescents surveyed currently consider themselves to be shy. In addition, past research has also consistently demonstrated that there are certain situations, such as interacting with authority figures and other unknown person, that are more likely to elicit shyness than others for both adults and adolescents. In attempt to cope with their shyness 85% of adults and 72.5% of adolescents surveyed indicated their willingness to do something about their shyness. The previous research has investigated a variety of the self-selected strategies used by adults to deal with their shyness. Given the developmental

significance associated with peer relationships during adolescents (Atwater, 1996), the study of shyness as a barrier to such interpersonal relations is of critical importance (Cheek & Krasnoperova, 1999). Research on influence of shyness on anxiety and academic achievement among high school students of 160 samples were selected through stratified random sampling from three high schools of Mysore City, India. The students were assessed using Shyness Questionnaire and Taylor's Manifest Anxiety Scale. Results revealed that high levels of anxiety and contradictorily shyness did not influence the academic achievement of the students. Boys and girls were found to have equal level of shyness. Remedial measures for reducing shyness have been suggested. Another Study investigates the relationship between shyness and fear among high school students of Mysore city, India. A total of 311 high school students studying in viii, ix and X grades in English and Kannada medium were randomly selected for the study. They were administered the shyness Questionnaire and fear checklist, the results revealed that, as the level of shyness increased linearly students studying in Kannada medium were found to be more fearful as compared to students studying in English medium (Cheek & Krasnoperova, 1999). The view of nurture or environmental triggers is also linked to the manifestation of shyness. Malouff, Associate Professor of Psychology at Nova Southeastern University, Florida states in his Internet article, "Helping Young Children Overcome Shyness" the following environmental reasons “(a) a less than firm attachment bond between parent and child, (b) poor acquisition of social skills, or (c) parents, siblings or others harshly and frequently teasing or criticizing a child (Malouff, 1998)”.

Another research goal was to explore the moderating role of teacher-child relationships in the relation between shyness and socio-emotional adjustment in early elementary school. Child adjustment was assessed by both child and teacher reports. Among the results, shyness and negative teacher-child relationships were related to socio-emotional difficulties, whereas close teacher-child relationships were associated with indices of positive adjustment. However, several interaction effects were also observed, with teacher-child relationships moderating the relations between shyness and adjustment. The pattern of results suggested a potential protective role for teacher-child relationships in shy children’s adjustment. The study considered the relationship between shyness, some related personality variables and socio-economic status. Adolescent shyness levels were examined using two self-report questionnaires which cover the spectrum of inherent, emotional and situational shyness. Furthermore, shyness is related significantly to the socio-economic class of adolescents: a relatively higher percentage of shyness occurs among adolescents of lower socio-economic class (Kimberley, Arbeau, Robert &, Coplan, 2005).

Learning to be successful in social interactions is one of the hallmarks of late childhood and early adolescence. Children who lack social initiative may be hesitant to engage in the social practice necessary to become socially skilled and successfully integrated into social networks. Lack of social integration may be manifested as poor social acceptance for these youth who tend toward shy behavior (Scott, 2003). Socially anxious youth who exhibit shy behavior may also be at risk for poor social acceptance and self-esteem [30]. Social anxiety involves a marked and persistent fear of social or performance situations in which embarrassment may occur. This fear response may cause noticeable discomfort, avoidance of specific social situations, and interference with daily functioning. This is highly consistent (*Diagnostic and Statistical Manual of Mental Disorders*, 4th ed., APA, 1994). The conceptualization of shyness, which combines a high desire to interact socially with a pronounced tendency to avoid social interactions, is due to fear of negative evaluation (Asendorpf, 1990). Furthermore a strong association has been found between shyness and social anxiety.

Schooling system

Shyness may lead to problems in school**.** Education is not only a basic human right it is also critical for personality development and socio-economic development. A school

is an institution designed for the teaching of students (or "pupils") under the supervision of teachers. Education in Pakistan is carried out in two languages, Urdu and English. There are two types of schooling systems in Pakistan i.e. public and private. The public, government-run schools, which educate the vast majority of children while the private sector has played a crucial role in filling the vacuum left by the public sector in providing quality education. It nevertheless leaves a lot to be desired. High-quality private education remains outside the reach of the majority. Nevertheless schooling system plays important role in socialization, personality development and all other aspects of student's life.

Rationale of study

First and foremost, it is important for a teacher to differentiate between shy students, and students who are quiet because of disinterest or those who need scholastic help and support. While it is true that a student who does not speak up in class may not have done his/her homework, some students may not speak up or even answer questions because they are shy.

The present research aims to study whether level of shyness is high in adolescents of public schools or private schools. The reason behind selection of this criterion is to highlight that which schooling systems develop shyness vs. confidence in adolescents. The present study also aims to find out whether Zimbardo's definition of shyness (Zimbardo, Philip. &Shirley, 1981) can be applied in Pakistan with enough face validity to establish and generalize research. The study is beneficial, as we have highlighted the role of schooling systems including public and private in formation of shyness among adolescents. Further, we made an attempt to make the people aware of outcomes of the shy behavior such as severe social anxiety. Enabling parents, schools management and the teachers to provide productive, supportive and healthy environment to the adolescents, in order to prevent or stop shyness from developing and if an adolescent exhibit any shy behavior then recognize and detect the attitudinal change in them.

Methods

In this study, a problem related to adolescents has been highlighted, to investigate the level of shyness among private and public school adolescents. Here it is aimed to find the relationship between Level of shyness and schooling system. Finally to recommend solutions to teachers, parents and school administration to handle shyness among adolescents.

Participants

This study carried out on 120 adolescents aged 13-18 years, selected from Islamabad from two different types of schooling system i.e. 60 from public schools and 60 from private schools. They were studying in grades vii, viii, ix, x, xi and xii. The random sampling technique is used to select sample.

Measures

Demographic Information Sheet

Demographic information sheet was given to the subjects to get their information regarding age, gender, class, school name, and so on.

Shyness Scale (Ss)

For measurement of shyness we used McCroskey Shyness Scale. This measure has generated high alpha reliability estimates (>.90) and has excellent face validity. Research has indicated that it also has high predictive validity. It is five point Likert scales with 14 items. Scores above 52 indicate a high level of shyness. Scores below 32 indicate a low level of shyness. Scores between 32 and 52 indicate a moderate level of shyness.

Procedure

The present study is a Natural Group Design. The study was administered on 60 public and 60 private schools adolescents, thereby constituting the total sample size of 120. The adolescents constituting the sample were instructed to give the true response. They took few minutes for the completion of demographic sheet then they completed shyness scale. The results obtained from sample were statistically treated, and adolescents' responses on every item were calculated. The t-test was applied and to determine whether the research hypothesis was proved or not.

Data analysis

The data acquired by this study has been analyzed by using SPSS software (Statistical Package for Social Sciences) version 17. The tabulation form of data was presented for quick understanding the statistical procedures.

Results

Reliability analysis

The instrument used to carry out this study was based on scale format having 5 response styles to answer. The appropriate method of calculating the reliability coefficient was the Alpha Cronbach Technique. The reliability coefficient of 0.82 was calculated which is high reliability.

Table I: Alpha reliability coefficient of Shyness Scale (SS) (N= 120).

Scale eliability	No. of items	Alpha Coefficient
McCroskey Shyness Scale (SS)	14	.82

The value of the reliability coefficient .82 indicates that the scale is reliable for the present study.

Table 2: Mean, Standard Deviations and t-score of level of shyness among adolescents of public and private schools (N= 120).

	Schooling System					
	Public	Private	t	UL	LL	Cohen's d
McCroskey Shyness Scale	36.14 (5.91)	36.83 (6.59)	.39	16.45	.583	0.11

Note. * $p < .05$. Standard Deviations appear in parentheses below means, UL=Upper limit, LL=Lower Limit

The above table revealed no differences on level of shyness among adolescents of public and private schools. McCroskey Shyness Scale (SS) score of public schools adolescents (M = 36.14, SD = 5.91) and private school adolescents (M = 36.83, SD = 6.59), t (198) = 0.39, p = 0.68 which is found to be statistically non-significant. Cohen's d value presented small effect size of two groups mean values.

Discussion

The study examined was related to the levels of shyness among public and private school adolescents. For this purpose McCroskey Shyness Scale (SS) was applied to measure shyness level of adolescents (13-18 years). The scale consists of 14 items which measured three different level of shyness i.e. high, moderate and low level of shyness. The scale was reliable for present study (see table I). Sample was selected from the Public and Private schools of Islamabad. Scale was filled by the students of 7^{th} -12^{th} grades. The result of this research (See Table 2) narrates that there is no difference in level of shyness among the adolescents of public and private schools. Furthermore after given consideration to just the means of public schools (36.14) and private schools (36.83), it is clearly observed that there is very minor difference in level of shyness in both schooling system adolescents. It presents the clear picture that schooling system does not affect the level of shyness among the adolescents. The study proved that different schooling systems could not be the cause of shyness among the adolescents.

Conclusion

Both private and public schools adolescents equally scored moderate and high level of shyness on scale. In fact shy adolescent does not want to communicate with others especially in classroom; even if they know the answer but they do not response because of fear, embarrassment and humiliation. "Bruno stated "Shyness leads to shyness (Caspi, , Glen, &Bem, 1988)". A troubled adolescent experienced anxiety in presences of others and show hesitation. They remained alone to avoid their anxiety and shy behavior probably increased by reinforcement.

The study proved that different schooling systems could not be the cause of shyness among the adolescents. Both private and public schools adolescents equally scored moderate and high level of shyness on scale. A shy adolescent have problem in participating, interacting and communicating with others class fellows. Furthermore, interpersonal factors are found to have played a role in long-lasting shyness. These adolescents do not know how to stand up for their rights or themselves in interpersonal contexts and therefore tend to find them avoiding others."

The present study had limitations for which suggestions and future research options have been advised. There has been little work done on this phenomenon, largely due

to a lack of reliable nationwide data either in private schools or public schools. The conclusions of this work point towards the importance of a nationwide analysis of private schooling and public schooling and their role in educational delivery, personality development and to build confidence in adolescents to participate in communication. Although the scale was reliable enough to be used in the present study, it had some faults and limitations e.g. locally developed scale is only limited to the present culture and more age appropriate for which it was developed. Scale has not much number of statements for covering the whole measurement of level of shyness. The other limitation of the research is that, it was conducted in Islamabad. The sample was limited to a small area although the hypothesis has been supported it must be kept in mind that individual differences do exists.

Finally, the study of adolescent shyness has implications for understanding some of the more extreme examples of adolescent violence as demonstrated by recent high school shootings perpetrated by shy, socially isolated, angry adolescents labeled as "cynically shy". It is suggested that if any replication of the present study is done, it will utilize a large and more diverse sample, so as to be more representative of the population. It is hoped that in future the researcher will give special attention to the problem of the truly representative sample which is very much possible at a group level and also the number of items in the scale would be increased for recording proper variables.

The results of the present study have a number of suggestions for parents, teachers, and mental health professionals to help shy adolescents deal with their shyness. In support of the benefits of the "tend-and-befriend" response, parents and teachers should encourage shy adolescent, especially shy males, to become more involved in social activities as means of establishing a social support network. For example, service learning programs through the school and other community volunteer activities have been proposed as offering shy individuals non-threatening opportunities for practicing and developing their social skills in a semi-structured social environment while minimizing feelings of social anxiety and self-consciousness (Carducci, 2009). In addition, to help shy adolescents in their efforts to make conversation with others, teachers should consider including in the general curriculum information on such topics as the basic elements and protocol for approaching and engaging others in social conversation (Carducci,, 1999). Finally, parents, teachers, and mental health professionals should also be sensitive to the possibility of substance abuse issues. If students are aware of their shyness and are given strategies to cope with the feelings of anxiety and fear, they will be able to report more effectively.

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Estimating wheat productivity function under capricious irrigation sources: an evidence from the upland Balochistan

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Abstract

The aim of this study was to estimate the determinants of wheat productivity on varying irrigation sources in the upland Balochistan. Wheat growers including tubewell owners, water buyers and rain-fed farmers were selected from the five districts of upland Balochistan. Wheat crop was chosen for its wide coverage and cultivation across the study area. The results of the wheat productivity function analysis showed that among other crop inputs fertilizer and organic farm yard manure (FYM) have significant positive effect on wheat yield. While the number of irrigations (IRRI) has positive and seed rate has negative relationship with wheat yield. The source of irrigation specific dummies shows that yield of tubewell owners was greater than that of water purchaser and rain-fed grower. The comparison of wheat productivity of tubewell owners, water buyers and water non-buyers shows the economic effect of tubewell irrigation on crop productivity by providing a reliable access to irrigation water. The rain-fed farmers got the lowest yield for not having assured irrigation. One of the key findings of this study is that overall productivity can be increased by a reliable water supply through tubewells, the water in excess of own needs can be sold to fellow farmers to ensure the full utilization of tubewell capacity. The results also show the importance of tubewell irrigation in enhancing productivity leading to self-sufficiency in food production for increasing population.

Key words: Wheat, productivity function, tubewell, irrigation, water buyer, upland Balochistan

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Introduction

Globally fresh water withdrawn for agriculture is 67%, domestic and industrial use 20%, power 10%, while 3% is evaporation losses from reservoirs (Parliamentary Office of Science and Technology (POST), 2011). Intensive use of groundwater is common in many parts of the world, particularly in arid and semi-arid areas. Groundwater is generally a reliable and good quality water source, and with modern technology for drilling, electrification and pumping, it is widely accessible in many parts of the world today (Villholth and Giordano, 2007). Groundwater is an important factor for reducing poverty and malnutrition, and improving sanitary conditions; it has helped farmers to overcome the poverty thresholds in many regions (Custodio et al., 2004).

Millions of farmers and consumers have benefited from the growth of groundwater use all around the world. It is evident from the fact that during the period 1975 through to 1995, the rapid growth in groundwater irrigation in South Asia and the North China plains has been the main driver of the groundwater boom in these regions which resulted in the ` growth and creation of millions of rural livelihoods (Mukherji, 2004; Qureshi et al., 2008; Shah et al., 2003; Shah et al., 2006). It has been a major element of programmes aimed to improve livelihoods for the poor in the developing countries of Asia and Africa (Shah et al., 2006). The major stimulating factor for groundwater development has been the groundwater-

related policies adopted by the governments in many of the countries of South Asia and China (Mukherji and Shah, 2005; Qureshi et al., 2008; Shah et al., 2003).

The groundwater brought about an agrarian boom in South Asia during the past two decades. This creates a complex and difficult challenge as more than 50-60% of populations are now directly or indirectly dependent upon groundwater irrigation (Shah et al., 2003). Due to the more reliable water supply through tubewells, yields in areas irrigated by groundwater are often substantially higher than yields in areas irrigated by surface sources (Meinzen-Dick, 1996; Shah, 1993;). In India, groundwater-irrigated areas account for about half of the total irrigated area and some 70-80% of the country's total agriculture production may be groundwater dependent (Dains and Pawar, 1987). In Pakistan, the groundwater constitutes 40% of the total agriculture water supplies in the Punjab province, which produces around 90% of the country's food (Qureshi and Barrett-Lennard, 1998).

The irrigated agriculture sector in Pakistan is facing the challenge to cope with low crop yields, increasing gap in the supply and demand of agriculture products, decreasing trend in agriculture productivity and agricultural production. Tubewells are an important source of irrigation in Balochistan and irrigated more than half of total irrigated area. Tubewell irrigation increases the reliability of water for crop growing. The reliability refers to a situation when a farmer knows with certainty that he will be able to get tubewell water at a given time. The reliability of the irrigation source is important in the sense that the productivity of irrigated agriculture is mainly determined by a timely and reliable water source (Meinzen-Dick, 1996). Most of the literature related to the effect of irrigation water available through tubewells pertains to a few South Asia countries and China. Only a few studies were found underlining the impact of tubewell irrigation on crop choices, agricultural productivity and incomes. Tubewell irrigation is said to have increased the irrigation reliability (Meinzen-Dick, 1996). Water obtained through owned tubewells or purchased increases the irrigation reliability and hence affects the crop choices and crop productivity of both tubewell owners and water buyers (Meinzen-Dick, 1998). A reliable water supply ensures the use of modern inputs such as organic fertilisers, pesticides, improved seeds, etc. that affect crop productivity (Meinzen-Dick, 1998& Shah, 1993).

Groundwater markets increase the total water available for crop growth, hence affecting crop choices and crop productivity, and causing farmers to shift from low value to high value crops (Bahadur, 2004; Bhandari and Pandey, 2006; Shah, 1993). Meeting the irrigation water requirements of crops, either through their own tubewells or obtained purchased from fellow farmers, is most important to achieve a better crop yield and profits. Besides irrigation water, farm mechanisation, the use of other important inputs such as pesticides, seed, and fertilisers, and, more importantly, favourable weather conditions are the main determinants of the farm income (Bahadur, 2004).

The importance of irrigated agriculture to the Pakistan economy is explained by the fact that irrigated land supplies more than 90% of agricultural production and contribution of agriculture to GDP is 21 %, and employs around 45% labour force (Government of Pakistan, 2014). Pakistan's water resources country have been under tremendous pressure similar to many other developing countries of the region such as China, India, and Iran due to factors such as increasing population, improved living standards, urbanization, and climate change. As a result, the per capita availability of water is on a decline in Pakistan. Moreover, the irrigated agriculture in Pakistan is being confronted by the problems of unequal distribution of water, water logging and increasing soil salinity that are causing low crop yields and social disparity as well (Zaidi, 2004). Especially in the areas under canal irrigation system; the distribution of water is characterized by inequity at different levels i.e., along the main canals-their distributaries and within water courses (Latif & Ahmad 2007). The water shareholders at the head of the distributaries do get sufficient water concomitant with their

share but those at the middle and the tail end often don't get enough water equivalent to their allocated share. The dilemma facing the farmers of tail end is not only the insufficient water short of their share from canal system, but the quality of groundwater at the tail ends of the irrigation system is also poor and mostly saline that not only reduces their crop yields but also causing land degradation (Latif & Ahmad, 2007).

Some studies undertaken in the past focused mostly on soil and agronomic factors and less on water related factors at farm and at systems level (Hussain et al., 2004;Mushtaq et al., 2007). This study thoroughly analyzes a fairly wide-ranging set of agronomic and water related factors such as the quantity and quality of different inputs and their influence on wheat yields under tubewell irrigation (either own tubewell or purchased water) and wheat yields obtained under rain-fed cropping in Balochistan.

Methods

This section presents a general description of the study area and its agriculture and the theoretical aspects of the research methods employed to undertake the research. It also presents the theoretical frameworks and empirical models used. The empirical model for measurement of wheat productivity is presented.

The study area

Balochistan is the south western province of Pakistan that is located between latitudes 25^0 and 32^0 N, and longitudes 61^0 and 71^0 E. The geographical area of Balochistan is around 347,190 square kilometres. The provincial plateau is mostly comprised of hilly terrain. Balochistan has an annual rainfall of less than 250 mm on average. The province can be classified as a dry/arid region, and thus the reliance on rainfall for crop growing is low, which intensifies the search for a more reliable water source to secure irrigation to ensure high crop yields for the Balochistan farmers.

The study area of Upland Balochistan can be classified as arid in terms of rainfall, receiving an average rainfall of 200 mm to 250 mm annually, which emphasises the need for irrigation water in this area for high value crops. The upland comprises the Ziarat, Kalat, Quetta, Pishin, Killa Abdullah, Mastung, Zhob and Loralai districts of Balochistan.

Balochistan is characterised by having a diversified climate which ranges from semi-arid to hyper-arid. Temperature regimes vary widely, from cool temperate to tropical, with cold winters and mild summers in the northern uplands. The annual rainfall varies from less than 50 mm to more than 400 mm. Owing to the wide agro-ecological diversity, the province has been divided into four agro-climatic zones; namely uplands, coastal, plains and desert (PARC, 1980), and hence the province has the potential to cultivate a wide range of field crops, vegetables and horticulture.

The irrigated agriculture in the province is dependent both on surface and groundwater resources where about 47% of the cultivated area is irrigated, while the remaining 53% is under *sailaba* and *khushkaba* farming (Government of Balochistan, 2009-10). The main sources of surface irrigation are IBIS's Khirther, Pat Feeder and Lasbela canals. Another important source of surface water is the floodwater that flows through streams. Around 30% of floodwater has been harvested for agriculture through *sailaba* diversions, storage dams and minor perennial irrigation schemes. Groundwater is available for irrigated agriculture through *karezes*, springs and tubewells. The total number of tubewells in upland Balochistan is 18,420, which is 53.42% of the provincial total. The tubewell density grew at the rate of 184% during 1971-80, 99% during 1981-90, 40% during 1991-2000, and 64% during 2001-2010 (Government of Balochistan, 2009-10).

Data source and sampling

This study used both primary data and secondary data. A well-structured questionnaire was developed to collect data from the sample respondents. A total of 110 sample respondents, Comprising of 64 tubewell owners, 33 water buyers and 13 rain-fed wheat growing farmers were interviewed face-to-face. A multistage

sampling technique was used for the selection of farmers for interview. In the first stage, three key upland basins were purposively selected out of eighteen basins in Balochistan namely Pishin Lora Basin, Nari river Basin and Zhob River Basin. In the second stage, two sample villages within each upland basin were selected randomly. In the third stage, farmers were selected using a proportionate stratified random sampling technique based on matching the proportion of respondents to the proportion of tubewell owners, water buyers and rain-fed crop growing farmers in the overall population.

Multivariate analysis

The study employed both descriptive analyses and econometric models to quantify the key variables. The econometric model used in this study is presented in the proceeding section:

Multiple linear regressions could be used to predict the effect of a number of continuous and/or discrete independent variables on a continuous dependent variable. To see the effect of a number of independent variables on the continuous dependent variable for the wheat productivity analysis multiple linear regression analysis was carried out. The usual method of estimation for regression analysis is Ordinary Least Square (OLS). The parameters of OLS estimates are obtained by minimising the sum of squared residuals. The estimated regression parameters are normalised by subtracting the mean and dividing the estimated standard error, following the t distribution with N-k degrees of freedom. To measure the goodness-of-fit in the multiple regression model, the coefficient of determination R^2 is used. The coefficient of determination R^2 measures the proportion of the variation in the dependent variable explained by the independent variables included in the multiple regression equation. R^2 is often used informally as a goodness-of-fit statistic and compares the validity of regression. Pindyck and Rubinfield (1997) defined R^2 as follows:

$$R^2 = 1 - \sum \hat{\varepsilon}_i^2 / \Sigma (Y_i - \hat{Y})^2$$

The addition of more independent variables to the regression equation can never lower R^2 and is likely to raise it. The interpretation and use of R^2 becomes more difficult when a model is formulated that is constrained to have a zero intercept. In particular, the difficulty with R^2 as a measure of goodness-of-fit is that R^2 pertains only to explained and unexplained variations in Y and therefore does not account for the number of degrees of freedom. A natural solution is to use variances, not variations, thus eliminating the dependence of goodness-of-fit on the number of independent variables in the model (Pindyck & Rubinfield, 1997). The adjusted R^2 is defined as follows:

$$\hat{R}^2 = 1 - \hat{Var}(\varepsilon) / Var(Y)$$

= 1-(1-R2) N-1/N-k

F statistic can be used to test the significance of the R2 statistic in the multiple regression model. The F statistic tests the overall model significance by testing the hypothesis that:

H0: $\beta 2 = \beta 3 = \ldots = \beta n = 0$

The alternative hypothesis that at least one of the parameters associated with wheat productivity is different from zero is:

H1: $\beta 2 = \beta 3 = \ldots = \beta n \neq 0$

A high value of the F statistic is a basis for rejecting the null hypothesis. SPSS-20 was used to derive the coefficients of the multiple regression models.

Empirical model for estimation of wheat productivity function

To have access to groundwater, it is not compulsory for farmers to be tubewell owners because they can obtain water by purchasing it from other tubewell owners. Those farmers who do not use groundwater can use other sources of irrigation (K*areze*, spring) or can grow crops under rain-fed conditions. For estimating the impact of tubewell irrigation, the comparison of productivity of tubewell owners and water purchasers provides an estimate of their economic benefits (Bhandari & Pandey, 2006), while the comparison of the productivity of tubewell owners and rain-fed farmers provides the economic value of assured irrigation (Bhandari & Pandey, 2006). Tubewells provide a more reliable water

supply, obtained through groundwater markets, to small and landless farmers (Meinzen-Dick, 1996). Likewise, a more reliable water supply not only increases the area and production of crops but also ensures the use of modern inputs such as high yielding varieties, fertilisers, improved seeds, etc. that result in higher yields (Meinzen-Dick, 1996; Shah, 1993).

The effect of different sources of irrigation (either available through owning tubewells or purchasing) on agricultural crop productivity was measured through estimating wheat productivity using the survey (2009) data, and following on from Bhandari and Pandey (2006) & Manjunatha et al. (2011), who compared the returns from irrigated crops with rain-fed crops for evaluating the effect of irrigated water purchased from the groundwater markets. Wheat crops were chosen because they were grown at all locations of the study area, and on own tubewell water, purchased water and as a rain-fed crop which made it easy to compare the productivity difference of the crops grown on irrigation sources (own or purchased) with that of rain-fed crops. The wheat crop inputs use and yield is presented in the following section.

To see the relative importance of the various inputs influencing wheat productivity, the productivity analysis was carried out with the following independent variables:

$$Y = \beta_0 + \beta_1(IRRI)_k + \beta_2(FERT)_k + \beta_3(SEED)_k + \beta_4(FYM)_k + \beta_5(OWNTW)_k + \beta_6(PURWATER)_k + \beta_7(RFED)_k + \varepsilon_k$$

Where: Y is wheat production in kg per acre; IRRI is the number of irrigations applied to wheat crop during a season; FERT is the amount of fertiliser applied in kg per acre; SEED is the quantity of seed applied in kg per acre; FYM is farm yard manure applied in kg per acre; OWNTW is the dummy value for own tubewell (OWNTW = 1 if the water source is own tubewell and zero otherwise); PURWATER is the dummy value for purchased water (PURWATER = 1 if the irrigation source is purchased water and zero otherwise); and RFED is the dummy for the rain-fed crop (RFED = 1 if the crop is rain-fed and zero otherwise).

The above mentioned coefficient measures the absolute change in wheat productivity per unit change in one independent variable holding the others constant. The source of irrigation (through the irrigation source specific dummies) enters as a shift variable - measuring the absolute difference in wheat yields between the different irrigation sources i.e., wheat grown with water from farmer's own tubewell as the source of irrigation, wheat grown with purchased water and wheat grown with rain water. The irrigation source specific dummies mainly capture the effect of irrigation source specific factors other than the above included in the estimation (such as water source reliability, quantity of groundwater markets and farm income).

Results and Discussion

This section presents the results derived from the data analysis. It presents the demographic and socio-economic characteristics of sample respondents, sources of irrigation, payment methods prevalent in the study area, inputs used in wheat production and empirical model for wheat productivity. In the end remedial measures for improvement are presented.

Demographic and socio-economic characteristics of sample respondents

The analysis of the demographic and socio-economic characteristics of the households, such as average age, income, education level, employment sources, distance to market and its location helps understand the population of interest (Mushtaq, 2004). The results are presented for the size of landholdings and cropping patterns that have a direct relationship with groundwater use.

Family size and composition

The study area is characterised by large family sizes as joint family systems prevail there and this is shown by the fact that the maximum family size varies from 65 to 95 at different locations of the study area. The existence of such large families is not an exception in the study area. These large families prefer to live together for security and other reasons and cook in a common kitchen. They jointly manage their agricultural

properties and have the advantage of a lot of family labour. Moreover, as a family unit, they are wealthier than the other average families and usually own a large number of tubewells. Table 1 shows the descriptive statistics of the family members and adult family members that are mainly the working members of the family.

Age

The age variable is usually used as a proxy for measuring the farming experience of sampled respondents. Age, years of schooling and farm experience of the household head are considered to be most pertinent in framing farmers' perceptions (Mushtaq, 2004). Table 2 depicts the distribution of sample respondents according to average age in the study area. The results shows that the majority of respondents belonged to the experienced age groups between 26-55 years, while the younger (< 25 years) and older (> 56 years) age groups were 4.64% and 15.8% respectively, comparatively less in proportion to the others.

Table1: Descriptive statistics of family size, adult family members and age

	Mean	Minimum	Maximum	STD*
Family size ** (#)	22.19	3.33	76	
Adult (> 18 years) members	10.57	2	42.67	7.56
Age (years)	42.09	20.69	78.73	20.69

Source: Survey (2009) * Standard deviation * * The family means a group of people living under one roof and doing joint cooking. The family size was found very large due to the extended family system prevailing in the study area and its typical socio-cultural conditions.

Table 2: Altitude-wise distribution of respondents according to age groups (Frequency)

	<25 years		26-40 years		41-55 years		>56 years	
	N	%	N	%	N	%	N	%
Age	16	4.64	136	40.2	133	39.36	54	15.8

Source: Survey (2009)

Education

The educational level of a population helps in judging the quality of human resources and the development stage of the society (Mushtaq, 2004). Mushtaq (2004) further argued that the literacy status of the farmers is an important variable which influences the farmers' resource allocation efficiency and adoption of new technology. Moreover, the education level shows the human resource development position of a community. The literate respondents are more likely to be more efficient farmers (Bahadur, 2004). Similarly the better educated respondents are more likely to adopt modern technologies and use modern techniques (Mushtaq, 2004). The results show that the overall literacy level was around 65%. Among the literate farmers, the highest proportion had primary education, followed by secondary, intermediate, then graduate and post graduate. The higher education levels (graduate and post graduate) were found among 11 to 14 % of sampled respondents at the various locations of the study area.

Sources of irrigation

The major source of irrigation in all locations of upland Balochistan was tubewells (91%). The other sources of irrigation such as K*arezes and* springs (5%), while dug well were (4%). *Karezes* and springs were more viable in the high uplands. While at the low and medium altitudes their share in the overall irrigation sources was insignificant.

Payment Methods

The two methods of payment for water reported are in cash and payment in kind as a certain share of crop output. Payment in kind as a share of crop output varies from 33% to 66% of crop output. Moreover, water rates vary and are influenced by water scarcity, energy source and charges, pump capacity, power tariffs, productivity-related factors and cropping patterns.

Wheat inputs use and yield estimates at various water sources

The purpose of this analysis is to estimate wheat productivity with different sources of irrigation to wheat grown as a rain-fed crop. The inputs use and average wheat yield of wheat irrigated by own tubewell, purchased water and rain-fed are presented in Table 3. The inputs such as fertiliser, farmyards manure (FYM) and water was used in a more appropriate quantity in the irrigated wheat areas than in rain-fed wheat areas due to the

complementary use of the inputs with water. Yield per acre was found highest for those farmers having their own tubewells as a source of irrigation, followed by purchased water and then rain-fed. The obvious reason was the reliable and timely availability of groundwater either through their own tubewell or through water markets. However, the yield of rain-fed wheat crops was found to be significantly less than irrigated wheat, due to moisture stress mainly because of the erratic and scanty rainfall.

Table 3: Major inputs use in wheat production

	Owned tubewell water	Purchased water	Rain-fed
N	64	33	13
Inputs			
Yield (kg/acre)	1,048	924	307
Seed (kg/acre)	49.10	51.15	49.42
Fertilisers (kg/acre)	54.62	40	15.72
FYM (kg/acre)	702.33	588	524
Irrigation (number)	4.08	3.79	------

Source: Survey (2009)

The difference in yields showed a difference of 124 kg per acre between the yields of wheat irrigated by owned tubewells and wheat irrigated by purchased water. But the more significant difference in wheat yield was between that grown on owned tubewell water versus the rain-fed crop which comes to 741 kg/acre while that of purchased water versus rain-fed was 617 kg/acre (Table 3). The yield difference is shown by Figure 1.

The above mentioned yield difference in favour of tubewell owners is most probably due to the greater control of the water source that tubewell owners have.

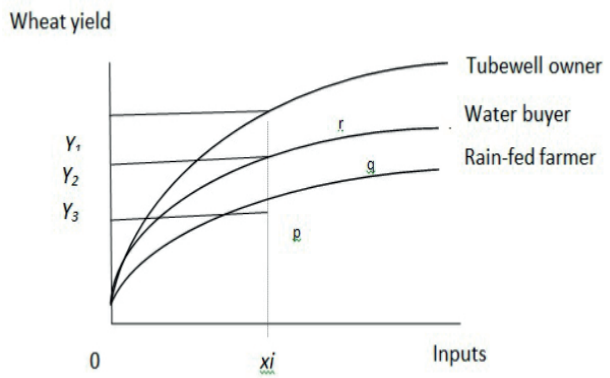

Figure 1: The hypothesised effect of tubewell irrigation on wheat productivity

The water buyer was able to get a reasonable yield (more than the provincial average yield of 859 kg/acre) due to their ability to buy water. Water non-buyers on the other hand had very low yields. The effects of different inputs on wheat yield are presented in the following section (Table 4).

Table 4: Difference of average yields (kg per acre)

Irrigation source	Difference
Difference between owned tubewell water and purchased water wheat yields	***124
Difference between owned tubewell water and rain-fed wheat yields	***741
Difference between purchased water and rain-fed wheat yields	***617

Source: Survey (2009) ***, **,* means significance at 1, 5 and 10 % respectively.

Empirical Model for Estimation of wheat productivity

To see the relative importance of the various irrigation sources and the inputs influencing wheat productivity, productivity analysis was carried out for the inputs given in Table 3. The following empirical model was estimated with a set of independent variables.

$$Y = \beta_0 + \beta_1(IRRI)_k + \beta_2(FERT)_k + \beta_3(SEED)_k + \beta_4(FYM)_k + \beta_5(OWNTW)_k + \beta_6(PURWATER)_k + \beta_7(RFED)_k + \varepsilon_k$$

Where:

Y is wheat production in kg per acre;

IRRI is the number of irrigations applied to the wheat crop during a season;

FERT is the amount of fertiliser applied in kg per acre;

SEED is the quantity of seed applied in kg per acre;

FYM is farm yard manure applied in kg per acre;

OWNTW is the dummy value for owning a tubewell (OWNTW = 1 if the water source is from an owned tubewell and zero otherwise);

PURWATER is the dummy value for purchased water (PURWATER = 1 if the irrigation source is purchased water and zero otherwise); and

RFED is the dummy for the rain-fed crop (RFED = 1 if the crop is rain-fed and zero otherwise).

The above mentioned coefficient measures the absolute change in wheat productivity per unit change in one independent variable holding the others constant. The source of irrigation (through the irrigation source specific dummies) enters the production function as a shift variable measuring the absolute difference in wheat yields between the different irrigation sources i.e., wheat grown by tubewell owners using their own tubewell as the source of irrigation, wheat grown on purchased water and wheat grown on rain water. The irrigation source specific dummies mainly capture the effect of the irrigation source specific factors other than those included in the production function (such as water source reliability, quantity, etc.). The multicollinearity test showed that the multicollinearity problem doesn't occur (Table 5). Moreover, to see the robustness of the model, diagnostic tests were conducted by adding and dropping variables and it was found to be insensitive to these.

Table 5: Correlation matrix of factors affecting wheat productivity

Variable	Irrigwhtowntw	Rfedwht	Irrigwhtpurwat	Irrino	Fertiliser	Seed	Manure
Irrigwhtowntw	1.000	-0.425	-0.530	0.476	0.269	-0.074	0.210
Rfedwht	-0.425	1.000	-0.247	-0.590	-0.257	-0.016	0.014
Irrigwhtpurwat	-0.753	-0.247	1.000	0.120	-0.100	0.128	-0.176
Irrino	0.476	-0.590	0.120	1.000	0.336	0.048	0.043
Fertiliser	0.269	-0.257	-0.100	0.336	1.000	0.172	0.076
Seed	-0.074	-0.016	0.128	0.048	0.172	1.000	-0.001
Manure	0.210	-0.014	-0.176	0.043	0.076	-0.001	1.000

The results of the estimated equation are shown in Table 6. Fertiliser and organic manure (FYM) have strong positive effects on the wheat yields. The irrigation number and seed rate are also positively related with higher wheat yields. The results showed that wheat productivity changes in the following way with the effect of different inputs:-

(i) with each additional irrigation, wheat productivity increases by around 38.26 kg/acre;

(ii) with each additional kilogram of fertiliser use, the wheat productivity increases by 2.74 kg/acre;

(iii) increasing the seed rate by 1 kilogram per acre decreases the wheat yield by 2.096 kg/acre, and

(iv) an additional 1 kilogram of farm yard manure increases wheat productivity by 0.033 kg/acre.

The irrigation source specific dummy for owned tubewell (OWNTW) shows that average yields taken by tubewell owners are greater than purchased water and rain-fed wheat yields by 124 and 741 kg/acre respectively.

Table 6: Estimated regression coefficients of the effect of various irrigation sources on wheat yield in upland Balochistan, 2009

Variable	Coefficient	t statistics
(Constant)	***638.596	3.182
OWNTW	178.671	1.196
RFED	-296.805	-1.543
PURWATER	149.648	1.016
IRRI	38.265	1.377
FERT	***2.740	7.536
SEED	-2.096	-.896
FYM	**.033	2.338

N= 97, R^2 = 0.80, *, **, *** means significance at 10, 5 and 1% respectively.
Dependent variable: Yield in kg per acre
Source: Survey (2009)

The reason for this productivity difference in favour of tubewell owners is probably the availability of timely and reliable groundwater from their own tubewell. The dummies for purchased water (PURWATER) and rain-fed (RFED) irrigation sources suggest that yields of purchased water are greater than rain-fed wheat yield due to the access of water buyers to irrigation water as compared to rain-fed farmers. The wheat crop productivity gap between tubewell owners, water buyers and water non-buyers shows the importance of tubewell irrigation and groundwater markets, and their impact on crop productivity.

The future of agriculture in the upland of Balochistan depends on the sustainable use of groundwater being the major irrigation source. In future the tubewells development may be allowed only in those areas having potential for development. The existing

tubewells may be regulated in terms of pumping. The following section present some measures from the literature for the improvement in the efficient water use:

Improving water use efficiency for sustainability

To improve the efficient water use Halcrow Pakistan and Cameos Consultants (2008) suggested the downward revision of electricity subsidies on tubewells, replacement of high delta crops with low delta crops; and restrictions on the installation of new tubewells. While Barker et al., (2000) suggested that, to meet the demand for high value water uses such as domestic, industry and hydropower and in order to meet the ever increasing demand for food under the increasing water scarcity situations, the agriculture sector must produce more food with less water through becoming water efficient in canal irrigation systems, better management of groundwater and surface water, and assessing the potential of alternative low cost micro-irrigation technologies in water-scarce rain-fed areas. Sahibzada (2002) suggested that the efficient water use in agriculture sector needs to be given urgent attention because it is the major user of water. Moreover, water being an un-priced commodity for agriculture purposes in many parts of the world, is used without great care, and giving water a price will help ensure its value and efficient use. He further argued that inadequate attention has been given to devising a mechanism for pricing of irrigation water to its users and he considers reviewing the level and form of water charges in the past as an important way of increasing efficient water use through improving water allocation. Because there is little room for building new dams in Pakistan, water use efficiency needs to be increased through the introduction of an appropriate water pricing system to replace the existing supply-based irrigation system with a demand-based system.

Similarly, Ellis (1992) argued that to improve efficient water use farmers should be charged a price per litre for the volume of water used, adequate to cover operating costs and to provide a rate of return for the investment. This in turn would make farmers more efficient in water use and would use water only up to the point where the marginal return on water use equalled the price per litre farmers pay for water. As a result a proper market for irrigation water would be created and efficiency ensured. Water markets already exist in many parts of the world, but improving the market outcome is still a challenge with respect to efficiency and equity. Contrary to them in another study Qureshi et al. (2009) argued that in Pakistan, due to the large number of small users, techno-institutional approaches such as introducing water rights, direct or indirect pricing and permit systems wouldn't be successful. They suggested instead water demand management through the adoption of water conservation technologies, revision of existing cropping patterns, exploration of alternate water resources and supply management through the implementation of the groundwater regulatory frameworks developed by Provincial Irrigation and Drainage Authorities (PIDAs) and the introduction of institutional reforms to enhance effective coordination.

Conclusion

The results showed that average yields taken by tubewell owners were greater than yields taken by water buyers and rain-fed wheat yields by 124 and 741 kg/acre respectively. The comparison of productivity of tubewell owners and water purchasers provides an estimate of their economic benefits, while the comparison of the productivity of tubewell owners and rain-fed farmers provides the economic value of assured irrigation. In other words, the productivity gap between tubewell owners, water buyers and water non-buyers shows the importance of tubewell irrigation and water availability from water sellers and their effects on overall crop productivity.

The findings of the study have many implications. The preceding analysis results shows that tubewells are providing reliable access to irrigation water hence enhance the overall crop productivity and help reduce poverty. Electricity for tubewells has been subsidized for many years that helps keep moving the wheels of the agriculture economy of upland Balochistan. The results also show that the subsidy benefits are not

merely restricted to tubewell owners, instead are redistributed to water buyers and many others who are many times more in number than tubewell owners.

For a sustainable groundwater use, as recommended by Mushtaq et al. (2014), the demand side groundwater management that should include a rational pricing for efficient water use; replacement of water demanding crops water-use efficient crops; and the adoption of modern water-saving irrigation techniques and practices are suggested. Moreover, the institutional factors such as defining water use rights, a more rational power pricing policy can help in water demand management. While the availability of institutional credit facilities to the farmers can play an important role in the groundwater development in the potential aquifers.

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Implication of community participation & empowerment theory in NGOs: a testimony on NGO (HANDS) in Pakistan

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Abstract

NGOs in Pakistan can be categorized as welfare and charity, health care and medical, youth and sports, art recreation, commerce and consumer, professional, arts, women, social, religion and right based organizations. The aim of NGOs is to develop communities through social services initiatives. Good governance and proper information sharing within NGOs are essential to ensure community participation for implementing their projects smoothly and making them successful. The main research objective of this paper was to determine the system of community participation in the NGO (HANDS). The NGOs need to determine and explore how the system of community participation works in their domains. The present study utilized an analysis of contents to view framework systematically and conduct data collection from community members. The data was collected from the 100 direct beneficiaries / community members. This research study adds value for extending clarity on the subject for the purpose of the adapting and standardization of the community participation system of NGOs, in particular. The results showed that the community participation system of NGOs is an important factor. Furthermore, the HANDS follows most of the participatory practices in its sphere. On other hand, the lack of a guiding protocol particularly in order to specific project and its implementation is felt. The study suggests a proper community participation mechanism needs to be followed and enhanced in the projects.

Key words: community participation, NGO, HANDS, information and knowledge sharing, consultation, deciding together and acting together.

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Introduction

Today the universe has become a global village, 'but we have not made much progress in the management of the world despite its diminished size (Mohammad & Charles, 2004)'. Social problems are increasing day by day. The gap between haves and have nots is widening with the passage of time. Indeed, these social and management issues can be seen in the form of conflicts, environmental degradations, inflation, human rights violation, discrimination, poverty, low quality human resources and unequal distribution of resources, thereby leaving the communities marginalized and deprived from their basic rights. Certainly, the community development process is viewed as the reliable way to build the capacity of people in their respective areas.

While highlighting the community related issues several community involvement approaches are implemented by NGOs and the governments. One of the finest ways to involve communities is to let them find problems and their solutions. Community development process has a great potential to build community cohesion by facilitating, guiding and supporting their groups to build the capability for strengthening the connections among individuals, organizations and local groups of the society (Adnan, 1984). Thus, the community participation is vital in community development programs in order to share knowledge and information, consult with community members and make them part

of decision making process. In reality, community participation matters in the development projects and it is also significant in the success of any initiative. Consequently, interaction among the people in communities is important and this can be attained through effective communication.
The management of non-profit organizations was seen as esoteric and irrelevant, but now there is much greater interest to manage it accordingly (Anheier, 2005). With the passage of time, NGOs have adapted the corporate working system and have established successful development models. Presently, most of the NGOs have transformed themselves as professional organizations and they work in an organized way.

Literature

It is common perception that society damages due to social problems. Nevertheless, the matter is quite complicated to understand. Some people see social problems harmful to some segments of society while at the same time it is beneficial for others (Anheier, 2003). Susanne and Jane (2002) mentioned that poverty looks natural and hard to do anything about it. They further argue that "poverty is as a matter of fate, caused by bad karma (bad luck). However, many other social scientists reject their thought and suggested that poverty is considered as a social problem and it can be tackled and solved through development programs.
Moreover, at this time (UNDP, 2011) presents the state of poverty all over the world "more than 80 percent population lives in countries where income differentials are widening". Demographers have great concern due to huge increase in the world's population and they have great concern that unplanned population growth will contribute in increasing poverty.
In 1945 the population of the world was 2 billion which reached to 5.7 billion in 2000 (Keith, 2005). Due to the increased population, the equitable distribution has become major problem and gap between the underprivileged and wealthier is widened. A major threat to the world is that the developing countries are depending on foreign aid and until these countries are not be able to generate their own resource and create self-reliance, their problems could not be overcome (Susanne and Jane, 2002).
Civil society catches all related terms like; the concepts of liberalism, radicalism and democracy. It is part of the mainstream political theory. Social policy and the agendas of social movements are used as a phrase that has profound relevance to societies across the universe. It has now become a melting pot into which arguments, ideas and examples are poured ceaselessly (Paul and Ilona, 2010).
The NGOs have emerged as third sector in discourse of addressing the community development needs (Ruhul, 2009). Non-governmental organizations (NGOs) are known as agents of community development or social change mediators and they have been promoted with increasing frequency (Candland, 2002). Robert reports the number of international NGOs has grown from 6000 in 1995 to 26000 in 2009 registered organizations all over the world (Candland, 2002). Mostly International NGOs work for the betterment of community. NGOs play an important role in community development sector. Talking about Pakistan, these NGOs are running several social services projects. Reports show that 56219 NGOs are registered in Pakistan with different laws /regulation (Asia and Oceania Pakistan, 2012). Apart from the registration authorities, another separate center have been established namely Pakistan Center for Philanthropy (PCP) in Pakistan for the purpose to conduct check and balance of NGOs' activities.
In various villages of the country the benefits of community development projects were not fairly and equally distributed (Asia & Oceania Pakistan, 2014). There could be many reasons behind the project management. It is suggested that proper knowledge and information sharing, joint decision making, maintaining transparency in the organizations should be retained then the NGOs would be able to play a vital job in efficient management of the programs. Mladovsky & Mossialos (2008), highlighted that how the effective way of working can increase community spirit, mobilization and participation. Thus, participative community development model can be helpful for the

country like Pakistan. The increasing role and significance of NGOs means that the importance of these organizations is going to enlarge. Hence, community participation systems are taken as complex structures in NGOs. They should be examined through the research studies.

State of community development problems in Pakistan

As per Human Development Report, rapid population growth of the country is a major challenge and it has made Pakistan as the sixth most populous nation in the world (UNDP, 2011). At the moment Total Fertility Rate (TFR) is 4.1 which is highest among developing countries (Jaffrey, 2008). Demographers have mentioned that if the same rate is continued, the country Pakistan would be 3rd largest populous country of the world by 2050. Evidently, if the population grows and proper utilization of available resources is not made properly then several socio-economic and other problems would come out in the society. At present Pakistan is the country where youth dividend is around 63% that is highest in the world (Ahmed, 2012). The country's leadership needs to take the serious note on the matter and launch youth development program on priority basis.

The socio-economic indicators of the Pakistan are worse than most of the countries in South Asia. Rukanuddin et al. (2007) points out that the poor health services system, unavailability of medicines in the health centers, lack of necessary lifesaving equipment and low level of awareness on maternal health act as additional challenges, consequently maternal and infant mortality rates are high in the country. However, the government alone cannot tackle these issues. Few prominent organizations like Aga Khan Health services, Health and Nutrition Development Society (HANDS), HELP, IDSP, SPO, TRDP, NRSP, SGA, Aman Foundation, Marie Stops Society, HOPE and other NGOs are working to enhance the health services of Pakistan.

Moreover, the socio-economic problems are increasing day by day in the country and the people face many human development related issues like poverty, illiteracy, unemployment, inflation, lack of proper health facilities and a widening gap between rich and poor like other developing nations. Tomothy (1998) states that Pakistan is multi-lingual, multi-ethnic and multi- cultural country, therefore, "the most difficult task facing Pakistanis today seems to be creating a sense of 'nation' among the diverse communities and ethnic groups that make up the country's population Moreover, being an agricultural country Pakistan has to be one among leading countries in Asia but improper management of natural and human resources affects development progress. Agricultural development should be focused as the prime areas of interest to develop the livelihood of communities. In the light of above mentioned facts there is dire need to see the role of civil society organizations and how the government and CSOs can implemented community development programs with joint efforts and shared resources (Ahmed, 2012).

NGOs can be analyzed under the conceptual framework of community participation and empowerment theory. Community is the integral part and most important stakeholder of NGOs while providing development services. Community should be taken as a significant partner in development interventions. The relationship between the field teams of NGOs and community is just like a backbone for the organizations. Indeed, the essence of community development is participation of communities in solving the community affairs. However, the community members should be trained properly so that they can be able to become the key companion in the projects.

Theoretical framework

The conceptual or theoretical framework of research study is like an assumption, expectation, belief, system and concept that support and give track to any research. There are several notions that are applied for sound governance, openness, honesty, transparency, accountability, responsibility, fairness, reputation, social responsibility resulted these qualities improve the attachment of stakeholders (Hilhorst, 2003). Several NGOs follow numerous approaches to ensure community participations in their

work i.e. community empowerment, community mobilizations, community motivations, community partnership, community capacity, community engagement, asset based community development, community development driven and so on. These concepts emphasize how to engage communities and the workers, but the main goal of all approaches is almost similar.

Theory of community participation and empowerment is applied in this research study. Research finds out that how the participation mechanism works to involve communities in development projects by the NGO (HANDS). The theory talks about the information sharing, consultation together, deciding together, acting together and support independent community interests.

Spotlight on the notion of NGOs

The term 'NGO' is now becomes complex to understand. Hilhorst (2003) mentioned that NGOs primarily are being shaped by people to work for the betterment of society. NGO is defined as an independent voluntary or professional association of people acting together on continuous basis to focus and resolve community issues. NGOs have been actively involved in social sector and their work supplements the provision of government services regarding the health, education, poverty alleviation and environment (Lee, 2007).

Role of NGOs in community development

The prime mandate of the NGOs is to support deprived people and develop grassroots level community groups in rural areas. Mostly, NGOs work in two major areas; service delivery and advocacy for human rights. Service delivery organizations generally focus on provision of services to community such as basic education, health, community infrastructure schemes; provide micro-credit and income generation opportunities. However, the advocacy organizations are known as right-based organizations. These organizations make their efforts to increase political participation, consult in policy formulation, mobilize communities for their rights and strengthen the networking with other organizations. The working approach varies in both types of organizations. The service delivery model requires high level of community participation that means the community just not only attends meetings and shares their views, but their wide-ranging participation is needed like how community is taking interest, whether the community practically stands with NGO or not and how are they sharing their resources to resolve the problems (Anthony, 2005). NGOs in Pakistan are working for welfare and charity, health, youth issues, art recreation, women development, social development and religion etc. (Rukanuddin,etal.2007).

Health and nutrition development society (HANDS)

"Health And Nutrition Development Society (HANDS) is registered, tax exempted, PCP certified and European Union accredited Not for Profit registered organization working since
1979. The key programs includes; human and institutional development (HID), health, education, poverty alleviation, water supply, sanitation, sexual and reproductive health, gender and development and infrastructure development (Ahmed, 2007). HANDS is working all over the county through its development project interventions (Ahmed, 2007). HANDS is one of the largest NGOs of Pakistan working for sexual and reproductive health in the country. Mother and child health and HID are the core programs of the organization. The organization is registered in society act. HANDS is covering most of the community development components to touch the needs of marginalized communities of Pakistan and the organization strongly believes on creating the community leadership and participative working atmosphere in villages (Ahmed, 2007).

Concept of community participation in NGOs

The concept of participation in development activities is certainly not a new one. In rural development, community participation has been recognized as an essential component

at least since the early 1950s (Nour, 2011). Community participation practice supports in building and maintaining trust among people. The trust provides solid base to partners to build relationships and enhance participation (Suzanne, 2008). Participation should be justified on the basis of its contribution toward the objectives. David Wilcox's theory of 'community participation and empowerment' gives a framework and stresses on the five-rung ladder of participation which relates to the stance an organization promoting participation may take- information sharing, consultation, deciding together, acting together and supporting independent community interests. Thus, the objective of this study is to assess the implication of community participation & empowerment theory in NGOs: A case of NGO (HANDS) in Pakistan.

Methods

The research study was carried out at District Malir in Karachi as the NGO (HANDS) is implementing its projects in selected area. However, just one project on reproductive health was selected for the study. That project was funded by 'Rutgers WPF (World Population Foundation) Pakistan. Data was collected from one hundred (100) participants; the adult population (age 20 – 45). They all were direct beneficiaries of the project. In-depth Interviews (IDIs) were conducted to collect the data from communities. A survey, questionnaires and interview techniques were also used. Random sampling method was used for data collection. A total of 100 (N = 100) participants out of 270 (37.03%) were interviewed. The questionnaire was based on six components; 1) personal information of respondent 2) Knowledge and information sharing, 3) consultation, 4) decision making 5) acting together and 6) resource sharing.

The SPSS software was used for the data analysis. Data analysis was made through the descriptive analysis, tabulation, multiple-linear regression methods, ANOVA. Graphical presentation was also done in the paper. Ethical considerations were given priority and strictly followed in this study. Due respect of respondents and their willingness to participate, was ensured. So, before filling the questionnaire a consent form was signed by the participants.

Results

Demographic characteristics of community participants

Table 1 illustrates the gender analysis. In this study 48 (48%) female and 52 (52%) male participated.

Table 1: Gender analysis of the respondents

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	48	48.0	48.0	48.0
	Male	52	52.0	52.0	100.0
	Total	10	100.0	100.	

Knowledge and information sharing

Knowledge and information sharing ensure effective communication in organizations and very wide-ranging approaches can be used for that (Keith, 2005). Lack of coordination among institutions/NGOs shows improper information and knowledge sharing system in organizations (Nalini, 2002). The process of community participation starts with knowledge and information sharing.

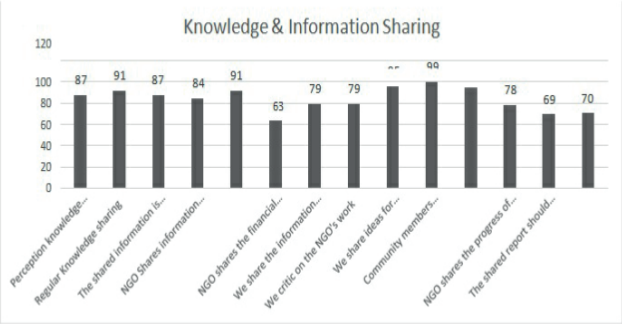

Figure 1: Knowledge and Information sharing

As figure 01 shows, 87% of community members intended that the NGO should have a knowledge and information sharing system with communities. On the other hand the information sharing rate with communities is 91% on a regular basis by the NGO. 87% of participants showed their satisfaction that the shared information is accurate and timely sharing response is 84%. However 91% community members anticipated that financial reports should be shared with them by the NGOs. In response

63% community members responded that financial reports are shared. 79% of community members said that the community members share their matters with the NGO. 79% community members were allowed to criticize the NGO work. 95% community members are encouraged by NGO to share new ideas/suggestions for improvement of project progress. 99% community members intended that they should be trained. In response 94% the members are trained by NGO. The progress sharing response with communities is 78%, verbal sharing is 69% and written is 70%.

Consultation

Consultation creates good understanding among partners (Nalini, 2002). Several organizations are striving to conduct conflict resolution in Pakistan so the consultation is imperative for them. The relationship between NGOs and Government is vital in community development sector (Warren, McFadyen, 2010). However, consultation in community development sector matters while implementing the projects in rural areas.

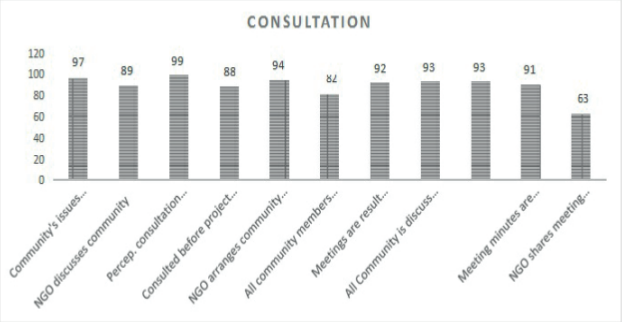

Figure 2: Consultation with communities

Figure 02 shows that 97% of community members wished that issues related to communities should be discussed with them, while 89% of respondents answered that the NGO shares community issues with them. 99% of community members stressed that the community should be consulted before the initiation of any project and 88% of community members stated that the NGO consulted with them before starting any project activity. Community meetings are the appropriate forums to consult with communities (Nour, 2011). However, for consultation purpose 94% respond came with point that NGO arranges meetings and 82% members attend these meetings. According the community perception 92% respondents mentioned that the meetings are result oriented, 93% community members are consulted in meetings and 93% members mentioned they make joint action plan. 91% respondents mentioned the meeting minutes are made and 63% respondents ensured that the minutes are shared.

Deciding together

Lack of ownership in community development projects is one of the aspects of sustainable development. Flo and Anne stress on team-building, participatory decision making and problem-solving processes are significant ways to ensure community participation (Flo, Anne, 1998). However, in NGO sector interpersonal communication and justice is reflection of proper process of decision making because people feel better when they become part of decision making procedures (Ruth, 2006).

Figure 3: Decision Making

Figure 03 represents the placement of decision making process in communities. The figure shows that 85% of community members felt that the community should the part of decision making in the NGO's projects in response 87% of members was the part of decision making. Response rate on fair participatory decision making was76% and 88% community members said that they follow decisions made in the meetings.

Acting together

Acting together in other words is 'performing together' represents combined efforts that means 'complement each other's work'. This term has attracted interest from scholars of many different disciplines (Noë, 2006). Togetherness is significance in community development sector. Several confusions reduce and removed through working together and strengthen individual relationships (Payne, & Williams, 2008).

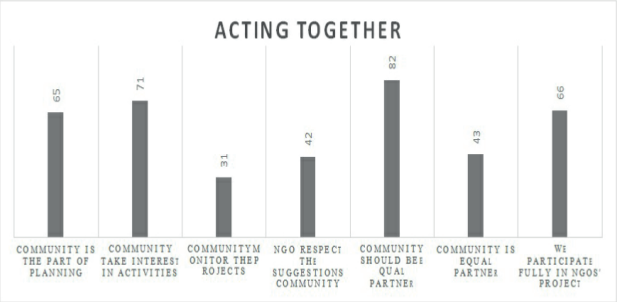

Figure 4: Acting Together

The figure 04 shows that 65% of community members are the part of project planning, the level of participation by community is 71% and 31% of members monitor the project activities run by NGO. Furthermore, 42% of community members mentioned that NGO respect their suggestion and also implement them. The study reveals that the 82% of community members should be equal partner in projects, in response 43% members thought that they are the equal partners. However, 66% of community members participated in activities organized by NGO.

Resource sharing

Over the past few years resource sharing is considered as one of the most significant indicators of community participation and it reflects the value of activities or services in order to render services by non-governmental organizations (NGOs) or government given by community (Louise, et al., 2008).

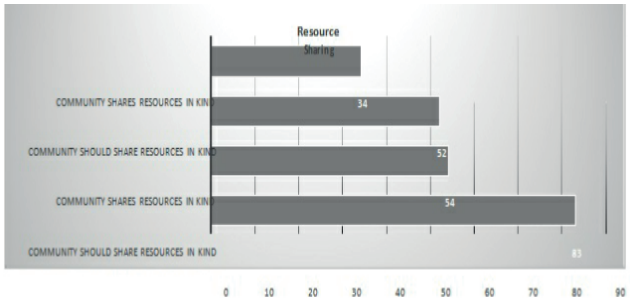

Figure 5: Resource Sharing

The resource sharing is one of the strong indicators of community participation. Study explores that 83% respondents wished that community should share resource in kind but in response the resource sharing rate by them is 54%. Moreover, 52% respondents intended that community should share the resource in cash but in response 34% community members share in actual means.

Regression analysis community participation practices in NGOs

Table 2 provides the R and R square value 0.982 and 0.964 respectively, which shows the R value is almost 98%. However, the effect size, as estimated by adjusted R^2 is 0.904 (90%).

Table 2: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.982	0.964	0.904	0.252

Table 3 shows the regression ANOVA, which demonstrates value of F, is 15.84 with significance *p* value is 0.000. It is less than 0.05 and represents high goodness of fit for the model with degree of freedom of 12.

Table 3: ANOVA

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.10	12	1.01	15.84	0.000
	Residual	0.45	7.00	0.06		
	Total	12.55	19			

The table 04 illustrates coefficient result. It shows all beta value for dependent and independent variables. The variables like 'communities are the part of decision making for conduction of project activities in their areas': 0.020, 'NGO shares the financial matters with communities':0.001, 'community is already trained to run the project independently': 0.050 and 'communities voluntarily share their resources in cash': 0.017 are significantly contributed to the model as they are significant *p* value is less than 0.05. The variables 'NGO staff is accountable to communities': 0.135 and 'employees are directed to response communities accordingly': 0.095' are insignificance.

Table 4: Coefficients

Model		Unstandardized		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.821	1.006		1.811	0.113
	Communities are the part of decision making for conduction of project activities in their areas	-0.796	0.265	-0.625	-2.998	0.020
	NGO staff is accountable to Communities	0.232	0.137	0.260	1.688	0.135
	Employees are directed to response communities accordingly	-0.309	0.160	-0.288	-1.928	0.095
	We share the financial matters with Communities	0.852	0.156	1.013	5.446	0.001
	Community is already trained to run the project independently	0.552	0.246	0.411	2.249	0.050
	Communities voluntarily share their resources in cash	-0.305	0.098	-0.414	-3.098	0.017

Dependent Variable: Community owns the projects run by NGO

Discussion

In recent years the concept of social inclusion and community empowerment has drawn considerable response by the development experts. The study revealed that most of community participations components are being persuaded by the NGO (HANDS). Actually, it is all about working together for common goals and sharing resource. The findings revealed that the financial matters are not shared properly. That should be enhanced to make community an equal partner. Every single person can complement and synergize the process of community empowerment. The findings also revealed that few variables are important for NGOs to include community in their projects like 'communities are the part of decision making for conduction of project activities in their areas', 'NGO shares the financial matters with communities', 'community is trained to run the projects independently' and 'communities voluntarily share their resources in cash'. These variables significantly contributed to NGO for ensuring the community participation.

Mostly in developing countries NGOs are made and run by practitioners. However, the community participative or inclusive approaches should be adapted by the NGOs. Furthermore, Size and nature of the organizations varies. Nevertheless, if we narrow down the service delivery sector two types of organizations could be found; charity-based and development-based organizations. The proper working system in charity-based organizations lacks, but development organizations have major concern on appropriate management procedures. HANDS is one of the model having sound management procedures in development sector.

The 'community monitoring mechanism' is considered as an emerging notion in the development sector. In spite of that, HANDS implements this approach in its projects. Finding revealed that 31% community members are involved in community monitoring process. This study recommends that the status should be enhanced more for empowering communities. The process of community participation is most significant function in any NGO. Therefore, it is important to consider or understand the impacts of information sharing, mechanism of consultation decision making processes, acting together and resource sharing in NGOs. In simple words, 'it is proper information sharing that triggers to initiate the process of participations'.

Conclusion

This findings of this study will not only be beneficial for the selected NGO (HANDS) but other NGOs working on the same area can be benefited through adaptation of community participation and empowerment concept. However, the organization can be considered as a successful mode of participatory development. Moreover, it can be said that community participation and empowerment is the core function of organizations. NGOs are particularity suggested to make proper system of participation, maintain and enhance relationships among communities. Community participation is now quite tested way of working and running the community development projects smoothly. The studies and empirical research show that having great potential and dire need to follow community participation process but somehow most of organizations don't take it serious. The concept of knowledge and information sharing, consultation, deciding together and acting together enhance community participation in NGOs. Indeed, that's participation which empowers powerless people. Community participation is an instrument that increases chances of sustainability of any development project.

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Exploring training and development practices in Pakistani SMEs

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Abstract

This study examines the adoption of training & development practices in Pakistani small & medium-size enterprises (SMEs). The study was conducted in the service and manufacturing sectors in a Pakistani context. The primary data was collected through a survey of recruitment & selection practices and as such the study is quantitative in nature. For the purpose of this study, a SME is defined as an organisation employing between 20 and 250 employees with a small organisation employing 20-100 employees and a medium sized organisation employing 101 -250 employees. The target population of the study consisted of SMEs operating in the city of Karachi, Pakistan. Stratified random sampling method was applied to collect data from 357 SMEs. Cross tabulation was used to examine the level (low, moderate or high) of adoption of training and development practices in small and medium size firms. Chi square statistics was used to see the significant differences between small and medium-size firms regarding the use of training and development practices. Our findings indicate that there is a low level of adoption of recruitment and selection practices in Pakistani SMEs. However, there were significant differences between small and medium-size firms regarding the use of majority of training and development practices.

Key words: Pakistan; Training; Development; SMEs

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Introduction

Small and Medium Enterprises (SMEs) play a significant role in the economic development of a country (Bacon & Hoque, 2005) both through employment creation and income generation (Lange, Ottens, & Taylor, 2000). Key to strengthening the SME sector is through the optimal utilisation of its human resources, technology and processes (Barney, 1991; Huselid, 1995). Within SMEs each employee constitutes a larger percentage of the total workforce (Hill & Stewart, 2000) emphasising the crucial importance of recruitment and selection practices which create an environment within which the skills and capabilities could be optimised and contribute to firm performance (Golhar & Deshpande, 1997; Hornsby & Kuratko, 2003). Further to the latter, the focus of this paper is on exploring training and development practices in Pakistani SMEs.

Prior studies have indicated that there is no uniform definition of SMEs in Pakistan (Dasanayaka, 2008; Mustafa & Khan, 2005; Rana, Khan, & Asad, 2007). The Small and Medium Enterprise Development Authority (SMEDA), SME Bank, Pakistan Bureau of Statistics (PBS) and State Bank of Pakistan (SBP) have defined SMEs in different ways. For example, SMEDA defines a SME based upon the number of employees and total number of productive assets. The SME bank uses only total number of assets as the criterion. PBS takes into consideration only the number of employees. Whereas, SBP's definition of a SME is based on the nature of the business, number of employees, amount of capital employed and net sales value per annum. In this paper a SME is defined as: A small business is defined as an organisation employing one hundred or fewer employees, whereas medium-sized businesses are defined as ranging from 101 to 250 employees (the maximum size of employees are used as 250, as most of the official organisations in Pakistan use this size

of employees in their definition of SMEs). Twenty employees are used as the lowest extremity for size because five out the six practices that the study focuses on are functional HRM practices and SMEs with a workforce with more than 20 employees are expected to have some kind of management structure (Wiesner, McDonald, & Banham, 2007).

Pakistan's economy, like that of many developing countries is a direct reflection of its SME sector (Khalique, Isa, & Nassir Shaari, 2011). According to Economic Census of Pakistan 2005 (this is the latest census in Pakistan), there are 3.2 million businesses in Pakistan. SMEs represent more than ninety percent of all private businesses and employ nearly 78 percent of the non-agriculture labour force in Pakistan (PBS, 2011). SMEs' contribution to Pakistan's Gross Domestic Product is more than thirty percent. Additionally, the sector represents 25 percent of exports of manufactured goods and thirty-five percent in manufacturing value added. Almost 53 percent of all SME activity is in retail trade, wholesale, restaurants and the hotel sector. Twenty percent of SME activity is in industrial establishments and 22 percent in service provision (PBS, 2011).

However, regardless their economic importance, SMEs in Pakistan suffer from a variety of shortcomings, which have confined their ability to adjust to the economic liberalisation measures introduced by the GoP and their capacity to take full advantage of the rapidly growing world markets. These shortcomings include for example a focus on low value-added products, absence of an effective business information infrastructure, energy crisis, lack of strategic planning, low levels of financial literacy, unskilled human resources and non-aggressive lending strategies by banks (Bari, Cheema, & Ehsan-ul-Haque, 2005; Khawaja, 2006; Mustafa & Khan, 2005; Rohra & Panhwar, 2009; SBP, 2010).

What makes a study on Training and Development practices in Pakistani SMEs is important? Pakistani SMEs are facing a big challenge in managing their human resources (SMEDA, 2007). For example, the higher education institutions and the technical training institution are the only two educational providers, both of which are not familiar with the unique requirements of SMEs nor are they equipped to deal with the challenges associated with SMEs. Yasmin (2008) noted that the Human Resource Management (HRM) systems employed in Pakistani firms is in a developing phase. Many businesses have renamed their personnel and administration departments to Human Resource (HR) departments, while in reality they still tend to practise reactive HRM approaches (Yasmin, 2008). Khilji (2001), argues that HRM practices are not applied in a systematic and integrated way in Pakistani firms. As a result, low motivation, lack of commitment and high turnover in employees are common problems within these organisations. Hence, there are very few businesses that have followed a systematic approach to HRM. In addition, the limited financial resources of SMEs significantly limit their human resource development (Bari et al., 2005). In view of the fact that Pakistani SMEs are in a growth phase, there seems to a need for Pakistani SMEs to realise the prominence and importance of the role of a skilled and a more career oriented labour force that could play an important role in economic sustainability. Khawaja (2006) argue that most Pakistani SMEs are in a low growth trap dealing with traditional products and an inability to enter into the modern technological world. He further argues that most of the time they fail to absorb various shocks and eventually have to close their businesses. His study indicates that nineteen percent of SMEs are less than five years old and only four percent are able to survive beyond 25 years. However, he suggests that such SMEs could be supported by the provision of capital, finance, and marketing, trained human resources, quality management and the upgrade of technology.

Literature

Most small business owners need to be 'micro managers' during their initial (first three) years of their business development and continuously engage in everyday affairs of their businesses (Mazzarol, 2003). As the

business grows, the owner/managers may not be able to make all decisions and thus need to develop a team by hiring competent people to occupy the new positions and delegate authority (Mazzarol, 2003; Smith, 1992). However, Rutherford et al. (2003) found that as the firm grows, the HR issues move from recruitment to retaining and then to training. They suggest that SME owner/managers should be ready to make these changes along with the growth of a firm.

Human resource development is the crucial element that affects the performance of SMEs (Pansiri & Temtime, 2008; Temtime & Pansiri, 2004). Two components of Human resource development are training and development. Training is defined as '*activities that teach employees how to better perform their present job'* and development is defined as '*activities that prepare an employee for future responsibilities'* (Stone, 2008, p. 353). Lange et al.(2000) argues that highly skilled employees are the key to enhancing a firm's competiveness and sustainable growth. In line with the discussions in the previous two sections, research on small firms have shown that informal, on the job training is the predominant training method for human resource development (e.g. Kotey & Slade, 2005; Lange et al., 2000; Nolan, 2002).

Mixed results exist regarding the prevalence of training and development in SMEs. Duberley and Walley (1995) studied manufacturing SMEs in UK and report a very low level of training and development, whereas Cassell et al. (2002) found that SMEs are quite focused and targeted in their training. Low levels of training and development in small firms could be attributed to four key barriers to skill development. These are: cultural barriers, financial barriers, accessing skill development opportunities barriers and awareness barriers (Lange et al (2000).

Pansiri and Temtime (2008) noted that SMEs do not use the services of consultants in their human resource development. There are two possible reasons for this: it could be due to a lack of knowledge about the role of consultants; and it could also be that good consultants are hard to come by and expensive (Temtime & Pansiri, 2004).

Regarding the training and development and firm performance link, a large number of research studies have shown a positive relationship (e.g. Syed Akhtar, g, & GE, 2008; Chand & Katou, 2007; Huang, 2000; Ichniowski & Shaw, 1999; Katou & Budhwar, 2007; Lange et al., 2000; Michie & Sheehan, 2003; Singh, 2004; Van de Wiele, 2010). According to Katou and Budhwar (2007), an effective training process can enhance firm performance by producing highly trained and skilled employees. Ichniowski and Shaw (1999) argue that well-trained and skilled employees are able to react quickly to future changes in production and market conditions. Van de Wiele (2010) and Shih et al. (2006) noted a positive relationship between employee's participation in training programmes and firm performance.

Similarly, Michie and Sheehan (2003) found a negative relationship between low level of training and innovation. Singh (2004) indicated a positive and significant impact of training on firm performance. In a comparative study of high and low performer firms, Huang (2000) indicates that high performers tend to identify training and development as a highly important function and address these practices on a long-term basis in comparison to low performers. Chand and Katou (2007) examined 436 high performing hotels in India and found a high correlation between training and development and good service quality. Moreover, in a study of manufacturing and service sector firms, Akhtar et al. (2008) indicated a significant impact of training on both quality of products/services and financial performance.

The above literature indicate that prior research has mainly focused on large organisations and conducted in developed countries. Thus, in order to fill such gap (focusing SMEs of the developing country), the objective of this study to explore training and development practices in Pakistani SMEs.

Methods

Sample

To explore Training and Development practices in Pakistani SMEs, a large scale questionnaire survey was conducted in the industrial city of Karachi, Pakistan. The sampling frame was based on the following data bases: Karangi Association of Trade and Commerce (KATI) Karachi; Karachi Chamber of Commerce and Industry (KCCI) and Jamal's Yellow pages, Pakistan. However, the three databases were not specifically designed for SMEs. Nevertheless, these data bases were deemed to be the most reliable and updated databases in Karachi, Pakistan. A random sample of 703 firms was selected. The population was stratified by industry sector (manufacturing and services). These two sectors were selected based on their economic importance (Economic Survey, 2010-11) and their likelihood to have some management structure.

Data collection

It was not possible to collect data in the 'normal' postal survey method and the researcher had to utilise a team of 10 individuals to collect data from the selected sample owing to the following reasons: (1) security was an issue, (2) data collection commenced shortly after a major flood occurred in Pakistan, (3) SME managers who represented the target sample may not have a good command of the written English language, and (4) education levels of SME managers are low. The data collection team consisted of postgraduate research students at University of Karachi. The researcher is a senior university lecturer and was able to identify suitable individuals. The researcher provided a 2-day training course to the data collection team on the content of the survey itself and collection of the data through filling out the questionnaires by face-to-face collaboration with survey respondents. The team was continuously monitored by the researcher. To seek participation from the selected organisations, the research team contacted the organisations first by telephone and through their personal interaction with the management of trade associations. The selected organisations were first asked about the size of their workforce and the number of employees they employ since the databases were not designed specifically for SMEs (as mentioned above). If the selected organisation fulfilled the requirements of the definition of a SME (20-250 employees), the SME manager was invited to participate in this survey. In cases where a particular organisation declined the invitation, it was replaced by contacting another organisation in the same industry as per the sampling frame.

A total of 703 firms were selected, contacted by phone and invited to participate in this survey. Of these firms, 357 SMEs (50.78 percent response rate) accepted the invitation to fill out the survey questionnaire. Most of the respondents who agreed requested that the researcher visit their organisations personally, and only a few respondents (from services sector) agreed to fill questionnaire by email (five firms). In each case, the procedure was explained to the respondents about how to fill the questionnaire out and they were assured that their responses would be treated as strictly confidential. The questionnaires were filled out by either the owner or human resource manager in each firm. In the end, 357 questionnaires were collected. Of the 357 responses collected from SMEs, 243 were from the manufacturing sector and 114 responses from the service sector. A total of 227 responses were collected from small firms (145 from manufacturing and 82 from service sector) and 130 responses from medium sized firms (98 from manufacturing and 32 from service sector).

Measures

Questionnaire: The survey instrument was adapted from Wiesner et al. (2007) and was applied in the Pakistani context of this study. In addition, the language of survey questionnaire was English as this language is commonly used in most of the Pakistani organisations. This survey questionnaire was originally developed and validated by Wiesner et al. (2007) for the study of 'high performance management practices' in Australian SMEs during 2007. The content validity and reliability of the updated

questionnaire were also addressed. The *content validity* of the revised questionnaire was determined by interviewing and presenting the questionnaire to 10 SME owner-managers in different SMEs within Karachi, Pakistan. In addition, five managers from SMEDA (Small and Medium Enterprise Development Authority Pakistan) were invited to comment on the questionnaire. This was followed by a pilot survey conducted in 20 different SMEs in Karachi, Pakistan. On the basis of the interview feedback and results from the pilot survey, the survey instrument was revised and presented to the selected sample.

Results

Table 1 indicate that 65 percent of SMEs reported providing training to their employees. However, informal on the job training (52%) and informal mentoring (62%) were the dominant training methods. None of the practices was adopted to a high extent. There was a moderate level of adoption in 4 out of 23 practices (Does your business provide any kind of training, Conduct an informal training needs analysis, Does your provide informal on-the-job training, Provision of informal mentoring) and a low level of adoption in the rest of the practices (Conduct a formal training needs analysis, Does your business have a formal training budget, Does your business have informal individual development plans for employees, Formal individual development plans for employees, Training of a vocational or technical nature, Management and development training, Has your business increased training where a program previously existed, Introduced formal training where none previously existed, Introduced new career paths, Provision of formal mentoring, Provide computer-based/aided instruction/training, Evaluate the satisfaction of trainees regarding training programs, Evaluate the results of training, Utilise web-based learning, Management values learning as long as it's related to performance, Formal in-house training provided by own staff, Formal in-house training provided by an external consultant, Provide external training (e.g. provided by a training body or institution) (see Table 1).

Discussion

In relation to training and development practices, SMEs have a low level of adoption in all of the practices. None of the practices was adopted to a high extent. There was a moderate level of adoption in only 4 practices, and a low level of adoption in nineteen of the practices. Thus, eighty two percent of practices by SMEs were adopted to a low level which indicates a 'bleak prospect' (Wiesner & McDonald, 2001) of Training and Development practices in Pakistani SMEs. The results were indicative of an avoidance of formal practices. Once again there was a reliance of mainly informal practices training practices such as: an informal training need analysis, informal on the job training and informal mentoring. In the UK, a study by Hughes et al. (2002) reported mixed reactions of SME managers towards formal training and development practices. For instance, they acknowledge the positive side of formal training such as employee motivation, increased productivity and high business growth. However, they also report some negative aspects of formal training such as increased wages, disruption in the workplace and high turnover rates (competitors or larger firms may attract them). In addition prior research provides significant evidence on the use of informal training and development practices in SMEs (e.g. Kotey & Slade, 2005; Lange et al., 2000; Nolan, 2002). SMEs tend to shy away from the use of consultants in their human resource development (Duberley & Walley, 1995; Pansiri & Temtime, 2008). The general lack of training and development activities and the trend towards predominant informal training practices in Pakistani SMEs may be the result of certain key barriers. However, it could also be owing to barriers in accessing skill development opportunities and awareness of these opportunities (Lange et al., 2000). For instance, in a recent study, Memon et al. (2010) argue that lack of formal HR policies and a HR department have resulted in informal HR practices such as recruitment, selection, training and compensation. Due to this SMEs are facing difficulty in entering and competing in the international market (Shameel Akhtar, Raees, & Salaria, 2011).

Table 1: The prevalence of Training and Development practices in SMEs

Practices	Overall								Small Firms								Medium-Size Firms							
	Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)		Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)		Never (a)		For some jobs (b)		For all jobs (c)		Total (b+c)	
	n	%	n	%	n	%	n	%	N	%	n	%	n	%	n	%	n	%	n	%	n	%	n	%
Does your business provide any kind of training?	115	35	214	65	2	1	216	65	77	36	137	64	1	1	138	64	38	33	77	66	1	1	78	67
Conduct a formal training needs analysis	315	95	15	5	1	0	16	5	205	95	9	4	1	1	10	5	110	95	6	5	0	0	6	5
Conduct an informal training needs analysis	183	55	145	44	3	1	148	45	118	55	94	44	3	1	97	45	65	56	51	44	0	0	51	44
Does your business have a formal training budget?	317	96	14	4			14	4	205	95	10	5			10	5	112	97	4	3			4	3
Does your provide informal on-the-job training	158	48	151	46	22	7	173	52	96	45	104	48	15	7	119	55	62	53	47	41	7	6	54	47
Formal individual development plans for employees #	312	94	19	6			19	6	203	94	12	6			12	6	109	94	7	6			7	6
Does the have informal individual development plans for employees	263	80	64	19	4	1	68	21	167	78	45	21	3	1	48	22	96	83	19	16	1	1	20	17
Training of a vocational or technical nature	252	76	62	19	17	5	79	24	167	78	36	17	12	6	48	22	85	73	26	22	5	4	31	27
Management and development training	301	91	30	9			30	9	195	91	20	9			20	9	106	91	10	9			10	9
Introduced formal training where none previously existed	310	94	21	6			21	6	207	96	8	4			8	4	103	89	13	11			13	11
Has your business increased training where a program previously existed	301	91	30	9			30	9	198	92	17	8			17	8	103	89	13	11			13	11
Introduced new career paths	295	89	36	11			36	11	198	92	17	8			17	8	97	84	19	16			19	16
Provision of informal mentoring	125	38	184	56	22	7	206	62	82	38	116	54	17	8	133	62	43	37	68	59	5	4	73	63
Provision of formal mentoring	293	89	38	12			38	12	193	90	22	10			22	10	100	86	16	14			16	14
Provide computer-based/aided instruction/training	300	91	31	9			31	9	197	92	18	8			18	8	103	89	13	11			13	11
Evaluate the satisfaction of trainees regarding training programs	281	85	25	8	25	8	50	15	183	85	18	8	14	7	32	15	98	85	7	6	11	10	18	16
Evaluate the results of training (ROI)	282	85	27	8	22	7	49	15	187	87	14	7	14	7	28	13	95	82	13	11	8	7	21	18
Utilise web-based learning	312	94	19	6			19	6	203	94	12	6			12	6	109	94	7	6			7	6
Management values learning as long as it's related to performance	297	90	18	5	16	5	34	10	197	92	9	4	9	4	18	8	100	86	9	8	7	6	16	14
Formal in-house training provided by own staff	279	84	43	13	9	3	52	16	186	87	21	10	8	4	29	14	93	80	22	19	1	1	23	20
Formal in-house training provided by an external consultant	318	96	13	4			13	4	203	94	12	6			12	6	115	99	1	1			1	1
Provide external training (e.g. provided by a training body or institution)	329	99	2	1			2	1	213	99		1			2	1	116	100	0	0			0	0

In another regional study, (HafizUllah, Shah, Hassan, & Zaman, 2011) mentioned that the failure rate of SMEs in Pakistan is 90-95% at the initial stages. They identified a lack of training and education (before initiating a business), entrepreneurial skills, and SME characteristics as causes of failure of Pakistani SMEs.

Within the training and development component, the subcomponents such as formal training budget; providing informal on-the-job training; training of a vocational or technical nature; introducing formal training where none previously existed; increased training where a program previously existed; introducing new career paths; provision of formal mentoring; evaluating the satisfaction of trainees regarding training programs; evaluating the results of training; management values learning as long as it's related to performance; formal in-house training provided by own staff; featured significantly more in medium firms as opposed to small firms. This finding is consistent with other studies including (e.g. De Kok & Uhlaner, 2001; Kotey & Slade, 2005; Marlow & Patton, 1993; Wiesner & McDonald, 2001; Wiesner et al., 2007). However, Wiesner & Innes (2012) argue that informality in small firms reflect their needs and types of management and thus are more dependent on informal interactions which integrate their norms and direct behaviours. Moreover, Bacon et al. (1996) argue that the communication in small organisations is more direct and informal and employees tend to have more flexibility. They also argue that small firms have a horizontal hierarchy and the contribution of each employee to organisation performance is more obvious. In addition, they assert that due to high insecurity, small firms are more responsive to changes in customer demands and markets. Similarly, small firms tend to use more informal approaches to change in comparison to formal bureaucratic approaches employed by large firms. As a result, it is much easier to bring about change in small firms than in large organisations (Bacon et al., 1996). Misztal (2000) argue that informality may be driver of effective interactions and communication in a small, family owned and single owner/manager SMEs as is mainly the case in this study.

SMEs in Pakistan are facing challenges such as political instability, lack of intellectual capital and infrastructure, and an energy crises (Khalique et al., 2011). Such problems have been highlighted by the State Bank of Pakistan in its annual report of 20092010 (SBP, 2010). According to this report, SME's financial and economic health have been significantly affected due to power failures, the economic down turn, and the poor law and order scenario of the country (SBP, 2010). As a result, SMEs received low credit provision compared to 2009 (p. 27). The report further mentions the effect of the global economic crises on Pakistani SMEs as a result of a conservative lending approach by Pakistani banks to the SME sector since they consider SMEs as one of the more risky sectors of Pakistan economy (SBP, 2010).

Moreover, specific triggers of this lack of adoption of formal training & development practices, could be the lack of resources (Kaya, 2006; Shih et al., 2006), current financial and economic problems (SBP, 2010), a lack of awareness about the benefits of such practices (as discussed above) and also a lack of training, education, and entrepreneurial skills which are integral to the current characteristics of the respondent SMEs (HafizUllah et al., 2011).

Conclusion

SMEs have a low level of adoption in all of the Training and Development practices. None of the practices were adopted to a high extent. There was a moderate level of adoption in only 4 practices, and a low level of adoption in nineteen of the practices. Thus, eighty two percent of practices by SMEs were adopted to a low level which indicates a 'bleak prospect' (Wiesner & McDonald, 2001) of Training and Development practices in Pakistani SMEs. Significant differences were also found between small and medium size firms in adopting training & development practices such as formal training budget; providing informal on-the-job training; training of a vocational or technical nature; introducing formal training where none previously

existed; increased training where a program previously existed; introducing new career paths; provision of formal mentoring; evaluating the satisfaction of trainees regarding training programs; evaluating the results of training; management values learning as long as it's related to performance; formal in-house training provided by own staff; featured significantly more in medium firms as opposed to small firms.

Like any other research, this study is not without its limitations. First, the data have been obtained from a single person in the form of owners/mangers who rated their HPMP in their organisations (Gerhart, Wright, McMahan, & Snell, 2000). However, collecting data from owners/mangers, managing directors or the chief executive officer (CEO) as the self reporting person is a common approach since CEOs are well informed about all strategic and operational activities within the organisation (Frost, Birkinshaw, & Ensign, 2002). Nevertheless , in order to enhance the internal validity of the research, an extension of this study to collect data from employees within the organisations may be beneficial (Shih et al., 2006). The data for this research study was collected from SMEs in services-based and manufacturing firms in a single city (Karachi) within Pakistan. Thus, caution should be applied for interpreting the generalisability of results. The survey in this study was conducted at a single point in time. This limitation could be overcome by conducting longitudinal studies in the future (Barnes, 2002). Longitudinal data will further clarify the causal relationships between HPMP and economic sustainability (Tsai, 2006).

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