Need of Psychometrics for Recruitment and Selection in Organizations: A Qualitative Perspective from a Developing Country

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Abstract

The ultimate goal of any organization is to improve their efficacy and performance which is achievable through people. Within organizations, Human Resource Management (HRM) is a key factor for recruitment and selection of employees; hence organizations are in competition for acquiring qualified and highly skilled personnel. By applying a qualitative approach, this study explored the current practices of personnel recruitment and selection with reference to psychometric testing in Pakistan in a sample of ($N = 6$) senior Human Resource managers by using semi-structured interview protocol. Two central themes emerged after the content analysis of the transcribed data such as recruitment and selection practices and the challenges behind effective decision making. Findings indicated that 34% organizations stated the use of both, psychological test and interview methods for selection purposes whereas 67% organizations have been using personality tests as part of their selection processes. Almost 50% organizations have reported some lacks in their personnel selection decision such as difficulty in the assessment of employee's attitude and poor decisiveness skills among team members. The current research has expanded the limits of existing literature in this realm, in addition, themes could be applied for indigenous tool development.

Keywords: Cognitive Mental Ability, Decision Making, Personality Assessment, Personnel Selection, Recruitment and Selection Practices

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Introduction

Recruitment and selection is a major HRM function (Dessler, 2007) as it incorporates all the organizational practices and verdicts. The current industrial developments, globalization, cultural trends and variations within organizations have brought new challenges for recruitment and selection (Rowley & Benson, 2002). Because, stiff competition in the marketplace has forced organizations to focus on achievement-oriented culture. Several billions of dollars are being consumed on job publicizing, interviewing, scheduling, as well as assessment to decide the right person for the right job. It is estimated that globally entire market is over $200 billion. For the most part, assessment is being conducted by organizations to assess the best, credible and tangible performance of their prospective employees.

Assessment is vital as it facilitates the organizations to perform deliberately and strategically to enhance their efficiency (Bartram, 2004). According to managing director of McKinsey and Company, Rajat Gupta, the hunt for marvelous and wonderful

people is a 'battle of aptitude' (Singh, 2001). Schmidt and Hunter (1998) have provided an expedient list of validity estimations from meta-analysis studies, for a variety of diverse selection measurement tools. Some of the selection means which have become customary within Western culture are application forms (open or structured), tests of comprehension, proficiency and capability, tests of aptitude and personality, interviews (more or less structured), and numerous measurement center practices such as in-baskets, group discussions, group problem solving exercises etc. (Bartram, 2004).

 As far as the employee selection is concerned in applied psychology, the cognitive capabilities carries a distinct place among all the individual differences' constructs (Ones et al., 2010). Hence, General Mental Ability is an abstract concept. For the past 75 years, psychologists have been using various labels such as intelligence, capacity, potential, aptitude, and ability to identify a construct that appears to be useful to predict various kinds of behaviors. Globally, it has been accepted that the test assessing 'intelligence' are usually considered to be as 'general cognitive ability' or 'g' (Spearman, 1927). The discipline of psychological assessment kept on flourishing throughout the World War II since the federal government established organizations such as the Committee on Service Personnel and Selection in order to examine the impact of psychological testing and assessment in the war exertion. However, all over the war, psychologists kept on proceeding the utilization of psychological assessment for selection, training, as well as performance appraisal (Driskell & Olmstead, 1989). Consequently, these achievements and accomplishments lead towards the development of several organizations in order to facilitate research such as, the Office

of Naval Research, the National Science Foundation, the Army Research Institute for the Behavioral Sciences, and the Air Force Human Resources Laboratory. However, psychologists kept on developing the selection and classification testing intended to be utilized in the Armed Forces Qualification Test and the Armed Services Vocational Aptitude Battery, generally accepted tools for selection, placement, and training verdicts for recruits (Driskell & Olmstead, 1989; Lubinski, 1996).

However, despite the significance of psychological testing in HRM, there is still a lack between the empirical recommendations and executive exercises (Highhouse et al., 2016), where psychological tools are usually utilized very infrequently (Ones et al., 2007). Because, still the people are very doubtful to be dependent on decision aids while making estimations or else verdicts formations (Diab et al., 2011). Mainly, the reasons behind these, is their assumptions that they can reflect more useful information as compared to the assessment tools and they do believe that variance in employee accomplishment cannot be predicted before employee selection (Highhouse, 2008). Thus, the lack of standardization behind these attitudes compromises the reliability and predictive validity of employee selection methods (Conway et al., 1995) in addition, makes the selection process susceptible to the idiosyncratic beliefs and preferences of decision makers (Arthur et al., 2006; Judge et al., 2000).

As far as the psychometrics is concerned in developing countries just like Pakistan, there is scarcity of research in the field of psychometrics. However, initial efforts in the field of intelligence test development shows the development of a group verbal intelligence test 'Sajjad Verbal Intelligence Test' (SVITU) in Urdu language for the assessment of candidates appearing at Army Selection and Recruitment Centre (Hussain

& Ajmal, 2001). Another indigenous test of intelligence was developed for the assessment of Pakistani youth and adulthood (Gardezi & Ajmal, 2001; Sadiq & Khan, 2011). Later on, Ambreen and Ajmal (2014) adapted, translated and standardized the Wechsler Intelligence Scale for Children-Fourth Edition. In addition to this, another group nonverbal intelligence test for youth was developed by Chaudhry and Khalid (2019). Hence, these pieces of evidence indicated some lacks in the current practices of psychometrics being used for personnel selection. Thus, to get a clearer perspective on this issue, the present study was designed to take indigenous data from top national and multinational companies in the Pakistan, on the extent of their usage of traditional selection methods as well as use (if any) of online testing for recruitment and selection purposes. Later on, findings will be used to develop some measures that would enhance their personnel selection decision making skills.

The Objective of the Study

The objective of present study was to explore the current state of personnel recruitment and selection in both national and multinational organizations in Pakistan and to assess the need of psychometric testing for hiring and recruitment practices.

Research Question

What is the current state of recruitment and selection practices in Pakistani organizations?

The Rationale of the Study

Recruitment and selection are vital functions of HRM, however in any organization, the quality of the HRM is mainly dependent on these two functions (Gamage, 2014). Since, choosing the incapable candidates usually comes with an enormous destructive cost, which businesses usually cannot afford.

However, scant available literature indicated that various tools have been used so far in international market since the World War II (Driskell & Olmstead, 1989; Lubinski, 1996) but an indigenous literature was missing that could have explored the nature of practices being used for personnel selection of managers in both multinational and national organizations.

Hence, inferring from the literature, the use of hiring methods with increased predictive validity leads to substantial increases in employee performance (Hunter & Schmidt, 1996). So, this can be another reason to study personnel selection and recruitment methods, indigenously, in order to develop some methods which may increase the organizational effectiveness, later on. Thus, this has highlighted that an in-depth exploration of personnel selection and recruitment methods is unavailable. Therefore, the present research was designed to shed light on the most neglected area of industrial/organizational psychology in Pakistan as well as to fill the existing research gap.

Method
Sample

A sample of ($N = 6$) Human Resource Managers were recruited by using snowball sampling technique. Human resource representatives from both national and multinational companies, were interviewed by using semi-structured interview protocol. Only those human resource management representatives were recruited who were senior HR managers having at least five years of experience in the field of personnel selection decision making, with an age range of (35-60) years and with ($M = 47.5$, $SD = 6.53$).

Table 1

Sociodemographic Characteristics of Participants (N = 6)

Participant's Id	Age	Gender	Education	Employment Status
1.	45	Female	MBA	Senior HR Manager
2.	55	Male	PhD in Business Sciences	Senior HR Manager
3.	52	Male	MBA	Senior HR Manager, Coach, Consultant and Trainer
4.	38	Male	MBA	HR Manager
5.	43	Male	MBA	HR Manager
6.	52	Male	MBA	Senior HR Manager

Interview Guide

In the current research, interview guide was finalized after pilot testing based on the need of testing. Following are some sample questions of semi-structured interview guide that were asked from each participant.

- What are the practices that are being used for hiring currently in your organization (probing questions would be at different levels and positions for hiring etc.)?
- How their company recruit and select (at managerial level)?
- How they compare their hiring practices with those of international standards?
- What are the problems/issues/challenges (if any) they are facing or have experienced in hiring decisions?

Procedure

First of all, permission to conduct this study was taken from the Institute of Applied Psychology, University of Punjab. Later on, the interview protocol was finalized in consultation with the experts of the field. An overall aim of this research was to explore the current state of personnel recruitment and selection though, more specifically, to identify the parameters being used for hiring decision making in Pakistani organizations (fluid reasoning; induction, general sequential reasoning; quantitative reasoning and comprehension knowledge) as presented by (Carroll, 1993; Schneider & McGrew, 2012). The current study was conducted from June to November 2021. The participants were contacted and interviews were conducted via Zoom and Google meet with a duration of almost 30-40 minutes. Participants were briefed about the nature and purpose of the study while explicit permission was taken to audio record the conversation and was assured of the fact that it would be used for academic and research purposes only. Later on, all the participants were thanked for their participation and cooperation. The audio recordings were then transcribed and translated, later on themes were generated by using content analysis method of Hsieh and Shannon (2005). For maintaining confidentiality, all the participants were assigned a random identity code (HR-01 to HR-06) that would further be used while sharing their respective illustrative quotations. Two coders having PhD qualification were selected to code the data. Descriptive statistics including frequency percentages were used to analyze the data. Later on, inter rater reliability was computed for content coding.

Results and Discussion

Following Hsieh and Shannon (2005) method of content analysis, the data was analyzed. During the research, all conversations were recorded and then transcribed and analyzed. Since, right away after each session, the interview was heard numerous times and then written as well as the smallest significant units were identified, afterwards the meaningful units were converted into summarized meaningful units; later on the codes were extracted and placed into sub sub-categories; also, similar sub sub-categories were placed, in the sub categories and categories of transactional model.

As most of the participants have reported in a mixture of both English and Urdu languages thus with the help of two bilingual experts, the whole manuscript was translated into English language for maintaining language consistency. Various central and sub-themes were generated from the coding of the data that was thoroughly analyzed and eventually reduced into two central themes such as recruitment and selection practices and challenges behind effective decision making.

Figure 1

Graphical Representation of Themes of Personnel Selection Methods in Pakistan
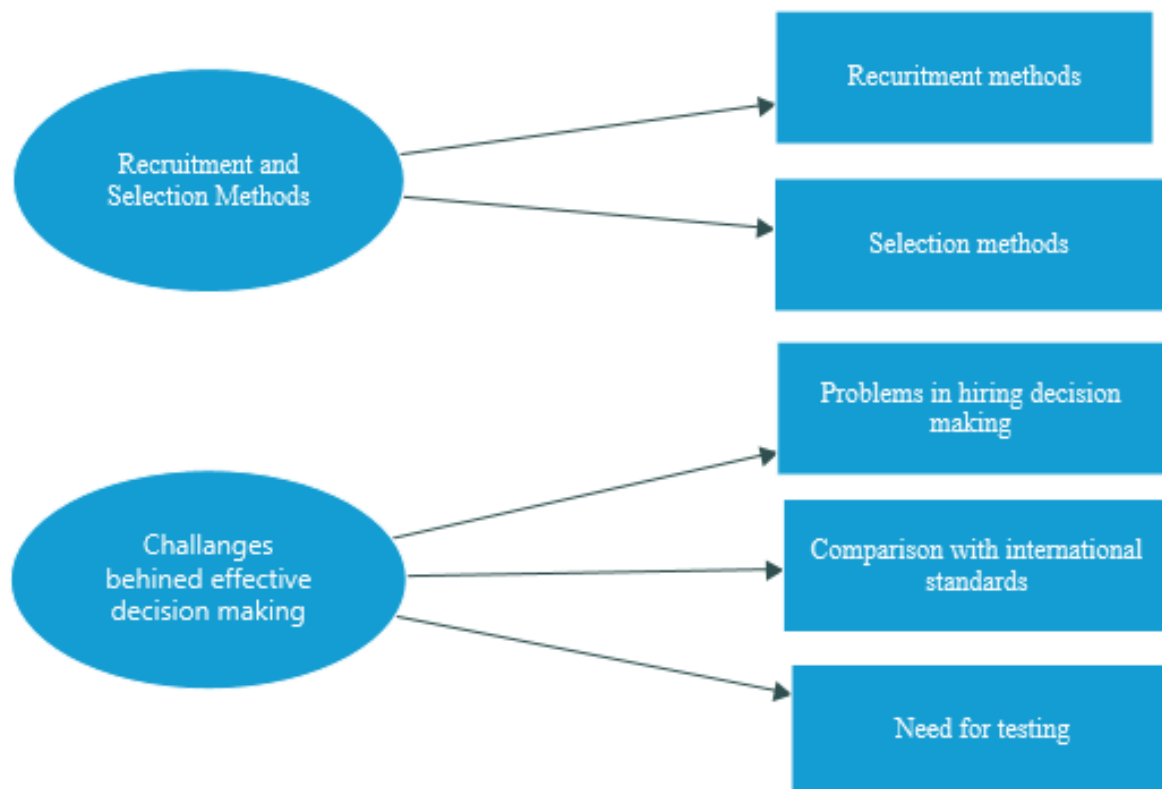
Table 2

Central and Subthemes on Current State of Recruitment and Selection Practices in Pakistan

Central Themes	Sub Themes	Example Quote
Recruitment and selection methods	Recruitment methods	"Good GPAs indicated they have good intelligence skills". (HR-01) "Referral system is used when limited resources are available". (HR-05) "Jobs are advertised on different portals i.e., Rozee.pk, and social media as well". (HR-06)
	Selection methods	"We are doing psychological testing before initial interview". (HR-01) "At initial level, online testing is being carried out then people are shortlisted for further interview". (HR-02) "Online tests and then interviews are taken". (HR-03) "Only interview method is used"(HR-04)
Challenges behind effective decision making	Problems in hiring decision making	"Identification of candidate with a non-sense attitude was a big issue before using psychometrics". (HR-05) "Decisiveness is an issue, people are more biased with referral hiring. Subjectivity gets involved here. Though, interview method is cheapest and worst method specifically panel interviews are also very worst."(HR-03)
	Comparison with International standards	"Currently, we aren't doing psychological assessment for each and every level, so in this regard, we are lacking". (HR-01) "Currently, we haven't hired any psychologist for conducting psychological assessment, so this is a major lack". (HR-03) "There are no lacks, almost same procedures are being carried out". (HR-06) "Being a multinational, almost same standards are being used". (HR-02)
	Need for testing	"Currently, we are not using any test for experienced candidates but we are working on it so if you will share your test with us, we will definitely look at this, evaluate it and will definitely use it". (HR-05) "Tests plus interview method should be used, in addition different tools should be used at different times in order to avoid the impact of subjective factor i.e., mood and personal biases". (HR-01). "Psychometrics is needed to get information about the mindset of employees and we need tools either intelligence based or else psychological to resolve these issues (decisiveness, subjectivity)". (HR-03)

Recruitment and Selection Methods

Recruitment and selection methods appeared to be the first and foremost central theme that emerged from the content analysis conducted to investigate the current state of personnel selection methods in Pakistani organizations. Some participants reported that they were doing initial recruitment on the basis of participant's CGPA scores means higher scores are predictor of their better job performance. As one participant has stated that:

"Good GPAs indicated they have good intelligence skills". (HR-01)
In addition, some participants have stated the use of referral system due to limited resources or else for small levels as expressed in the narrative of one participant.

"Referral system is used when limited resources are available". (HR-05)
On the other hand, employees are also approached by job posting on different portals as reported by some participants.

"CVs are also collected from social media i.e., fb, WhatsApp groups (fresh and managers)". (HR-05)

"jobs are also advertised on different portals i.e., Rozee.pk and social media as well". (HR-06)
In addition, organizations have reported some selection methods as well as one of the most commonly used method is test taking and interviewing of employees as reported by most of the participants such as:

"we are doing psychological testing before initial interview". (HR-05)

"both testing and interview method are used". (HR-01)

"online tests and then interviews are taken". (HR-03)
However, in Pakistani culture, organizations were initially relying on personality assessment only but now they are currently relying on almost both kinds of assessment i.e., personality assessment and intelligence testing. Their verbatim are as follows:

"assessment of personality is very important for an organization, specifically for team building". (HR-05)

"personality assessment is being carried out by using TAT as the psychological testing is all about personality assessment". (HR-01)

"their attitude, verbal reasoning, analytical skills are very important and communication skills are badly needed in our country". (HR-02)

"testing is taken informally on GMAT format (logical, English literature and soft skills". (HR-01)
The findings of the first central theme and its related themes could be related to the Schmidt and Hunter (1998) who have reported a wide range of selection methods being used in Personnel Psychology, worldwide. The current research indicated that in Pakistan, mostly companies are using traditional recruitment methods (e.g., resume, reference checks, certain CGPA scores). However, 34% organization stated the use of psychological test and interview method both for selection purposes. The rest of the 33% companies rely on online pre-employment screening tests whereas the other 33% are relying on only interview method. Interestingly, 67% organizations have been using personality tests as part of the selection processes whereas 17% organizations have highlighted its significance for personnel selection purposes. Despite the widespread recognition of cognitive mental abilities' importance, still varying attitudes towards the practical use of cognitive mental ability measures in personnel selection exist. Thus, the organizations can compete in a better way by adopting well developed methods of personnel selections.

Challenges Behind Effective Decision Making

It is the second most important factor and it includes three sub-categories such as problems in hiring decision making, comparison with International standards, and need for testing. In organizations, HR department is facing various problems in their decision making such as selection of right candidate with right attitude as reported by them:

"identification of candidate with a non-sense attitude was a big issue before using psychometrics". (HR-05)

On asking for comparison with International standards, participants have highlighted some lacks in their personnel selection practices as reported in their verbatim.

"currently, we are not doing psychological assessment for each and every level, so in this regard, we are lacking". (HR-01)

"currently, we are lacking in some parameters (assessment centers: group discussions and presentation) in the selection process of fresh graduates as per international standards". (HR-05)

Whereas others have reported that same parameters have been used being multinationals as reported in their verbatim:

"being a multinational, almost same standards are being used". (HR-02)

In Pakistan, as such psychometrics is not being used in appropriate ways as compared to foreign countries. HR managers have highlighted certain lacks as mentioned above, further they have highlighted the need for testing as expressed in their verbatim.

"psychometrics is needed to get information about the mindset of employees. We need tools either intelligence based or else psychological to resolve these issues (decisiveness, subjectivity)". (HR-03)

As evident from the findings of the second central theme and sub themes that in Pakistan, organizations have been facing various challenges in their personnel selection decision making. Almost 50% organizations have reported the lacks in their decision making whereas rest of them are confident in their procedures. More inclusively, 33% organizations have highlighted the issues which are assessment of employee's attitude and the most important one is decisiveness in personnel selection. Though, the best part is, organizations have highlighted the need for accurate and scientific procedures for personnel selection decision making. Though, there is a lack of literature, so this study can be regarded as a step forward in this direction of investigation. In short, in a modest world, these organizations are superfluously making a competitive detriment for themselves thus by implementing valid and reliable personnel selection practices, they could turn these detriments into competitive gains.

Limitations and Suggestions

In the current study, the data was not analyzed by organizational size as Hsu and Leat (2000) suggested that size is significant as an influence upon both the recruitment and selection techniques and approaches used and upon the devolution of responsibility for recruitment and selection decisions. However, the emerged themes and sub-themes are indigenous which might be somehow irrelevant to International market. Therefore, it is suggested that factors which emerged qualitatively must also be explored quantitatively in future studies to enhance its external validity.

Conclusions

In Pakistan, there has been an emerging interest in the cost-effective methods of recruitment and selection, such as the use of psychological tests as they are more interested in assessing the attitude and personality of employees rather than type or level of qualifications acquired. But, due to

lack of appropriate, valid and reliable tools, they are facing various challenges which are ultimately affecting their organizational effectiveness.

Implications of the Study

The current research served as a stepping stone towards a more specific and indigenous understanding of recruitment and selection methods being used in Pakistan as the previous literature have hardly explored this. Therefore, by adding up to the already existing body of research, this study would set grounds for the development and validation of short, precise, valid and reliable indigenous tools to be used for personnel selection.

Contribution of Authors

Sherin Gul: Conceptualization, Methodology, Validation, Investigation, Data Curation, Formal Analysis, Writing-Original draft, Writing- Review & Editing
Saima Ghazal: Conceptualization, Writing-Review & Editing, Supervision

Conflict of Interest

There is no conflict of interest declared by authors.

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