

**WORK RELATED OUTCOMES OF PERCIEVED AUTHENTIC  
LEADERSHIP IN THE CONTEXT OF ORGANIZATIONAL  
STRUCTURES**



By

Aisha Manzoor

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**NATIONAL INSTITUTE OF PSYCHOLOGY**

Centre of Excellence

Quaid-i-Azam University Islamabad

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Aisha Manzoor

A dissertation submitted to the

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**NATIONAL INSTITUTE OF PSYCHOLOGY**

**Centre of Excellence**

**Quaid-i-Azam University, Islamabad**

**In partial fulfillment of the requirements for the degree of**

**DOCTOR OF PHILOSOPHY**

**IN**

**PSYCHOLOGY**

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AUTHENTIC LEADERSHIP IN THE CONTEXT OF  
ORGANIZATIONAL STRUCTURES**

By

**AISHA MANZOOR**

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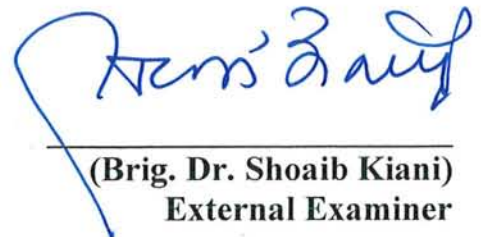
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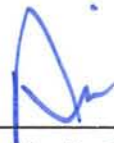
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## ABSTRACT

The study undertaken was designed to determine the direct and indirect effects of perceived authentic leadership on creative work behavior through work related flow and psychological capital of employees working in tall (banks) and flat (software houses) organizations. Measures of Authentic Leadership Questionnaire (Avolio, Gardner, & Walumbwa, 2007), Psychological Capital Questionnaire (Luthans, Youssef, & Avolio, 2007), Work Related Flow Scale (Bakker, 2008), Creativity Scale (Zhou & George, 2001), and Social Desirability Scale-17 (Stober, 2001) were used to assess the constructs of the study. The overall research design comprised of three studies. Study I constituted indigenous exploration of the study constructs which was executed in two separate phases. In phase I, a series of four focus group discussions were conducted to capture the indigenous understanding of the major constructs of the study. Phase II of study I was further comprised of three parts. In part I, appropriate instruments were selected on the basis of the themes emerged in focus group discussions. In part II, instruments were tried on an independent sample ( $N = 25$ ) of employees (software houses and banks) to identify the realistic concerns of the respondents while attempting the instruments. In part III, measures were evaluated by subject experts ( $N = 6$ ) and feedback received by them was incorporated through committee approach.

Study II consisted of empirical estimation of psychometric indices of all the measures and confirmation of measurement models on an independent sample ( $N = 277$ ) of employees. Results showed that all the measures were reliable instruments for the related constructs of the study. Confirmatory Factor Analysis

yielded factor structures of psychological capital, work related flow, creative work behavior, and social desirability in accordance to the theoretical models. However, model of authentic leadership exhibited variations in few items which resulted in modification in the final model of the said construct.

Work related outcomes of perceived authentic leadership in the context of organizational structures were determined in study III through hypotheses and model testing on a convenient purposive sample ( $N = 1180$ ) of employees. Results showed that perceived authentic leadership, psychological capital, and work-related flow positively predicted creative work behavior. Work-related flow and psychological capital has shown parallel mediation between perceived authentic leadership and creative work behavior for employees working in software houses and banks. Findings also revealed that organizational structures significantly moderated the relationship of perceived authentic leadership, psychological capital, and work related flow with creative work behavior. Results showed significant group differences in terms of gender, education, job experience, job period in the current organization, and type of organization across both organizational structures. Additional findings indicated moderating role of gender in predicting creative work behavior from perceived authentic leadership and psychological capital among employees of software houses and banks. Moreover, combined effect of gender and organizational structure was also determined on all the study variables. In the end, path models were generated which distinctively highlighted the similarities as well as differences in the interactions of major constructs which function jointly in the context of tall (banks) and flat (software houses) organizations. Theoretical and practical implications of the present study for employees and future recommendations were also discussed.

**INTRODUCTION**

In recent times, Pakistan has witness a great commotion on social, political, and psychological facets of our national lives. Nevertheless, even in the backdrop of bleak times, certain business enterprises (such as banks and SWH) surfaced as major financially viable sectors in country.

Banks are often described as a nation's economic engine, in part, because they provide financial intermediation functions between savers/investors (who are looking for safety and growth) and consumers/businesses (who are looking for access to credit and capital). During last couple of years, banks have played pivotal role in enhancing the economic edge of Pakistan. On similar lines, information technology sector (especially SWH) has contributed major services in meeting demands of large array of public and private sector organizations. Pakistan is in a very exciting and decisive stage; as policies and practices opted by software companies would have driven them to bear far-reaching impact on our national future. Presently, Pakistan is gradually moving away from an industrial base to a service based economy. Software companies have evolved as service industry that can provide a significant boost to our economic growth in the coming years.

In the present study, sample consisted of adult employees of SWH and marketing departments of banks. The subsequent section would provide an overview of the nature of their jobs which, in turn, would assist in identifying the comparable as well as dissimilar grounds about the nature of their tasks. Moreover, banks and SWH are

considered as prime examples of tall and flat organizations, respectively (Eisner & Harvey, 2009; Spencer & Muchnick, 2015). Therefore, it would be essential to take a closer look at the specific working of these institutions; which is presented in the following section.

### **Marketing Department of Banks**

Just like a retail company, banks have products or services that they sell to the public to gain profits or funds to operate the business. Therefore, they need a marketing department to produce brochures, radio, print, and electronic ads, and promote those products and services in the community. Banks may also organize events and sponsor local groups to raise awareness and increase loans, services, and deposits. The major tasks and functions of the marketing department of the bank included (but not limited to) planning of marketing activities, implementation, monitoring, and adjustment. Marketing helps to develop strategic plans for the bank, which in turn, determine the role of marketing in the bank.

Job description of marketing officers usually revolved around managing all aspects of the marketing for key bank products integrating with the product team. Moreover, to build the acquisition, growth, and retention segment; plans leading the integration and coordination of direct marketing, advertising, campaign development, analytical support, and channel deployment of the marketing for the product. In addition to that, conceptualizes all marketing programs for a specific product, focusing on



attracting new clients, growing and retaining existing clients, and providing direction to all support teams (such as technology and web teams) on product positioning.

### **Software Houses**

Continuous innovation is vitally important to the survival of any high-tech organization such as software houses (SWH). However, the requirements of SWH exceed beyond the designing of innovative software; rather they focus on more customized solutions which are equally helpful in generating revenues as well as keeping pace with the international standards in terms of novelty and innovation.

With the advent of rapid-development software tools, evolution of frameworks, and the emergence of agile methods, development cycles have accelerated significantly. SWH have to keep up the pace with the development time that has been shrunk from years to months, and in some cases, to weeks. Creative output aligned with efficient processes defines the brand of today's SWH. It sets the stage for solutions that are innovative and are developed with super speed; where creativity and efficiency coupled together as a team.

### **Organizational Structures: Tall Versus Flat**

In the context of current study, SWH are taken as case example of flat organizations. Such organizations are exemplified with minimal hierarchies of

management, having decentralized decision making, dynamic communication flow, and low span of control (Rishipal, 2014; Spencer & Muchnick, 2015). Conversely, banks are considered as case example of tall organizational structure marked with multi-layered managerial levels, more centralized decision making, and downward communication patterns (Kappagoda, 2013).

The basic premise of incorporating two types of structural patterns is to establish relative execution of management practices, psychological resources, flow mechanisms, and expressions of inspiration, creativity and originality in work settings. The fundamental postulation is that the variation in organizational structure may impact the dynamics of organizational as well as psychological factors at workplace. In addition, the disparity in organizational structures would also introduce certain preferences for occupation approach, which subsequently influence employees' perceptions regarding themselves and their organizations. Therefore, it is imperative to grasp a little more elaborative functioning of tall and flat organizations (as given below).

According to Sinclair (2016), the degree to which a company is centralized and formalized, the number of levels in the company hierarchy, and the type of departmentalization the company uses, are the key elements of a company's structure. These elements of structure affect the degree to which the company is effective and innovative as well as influences the employees' attitudes and behaviors at work. These elements come together to create tall and flat structures. The difference between tall and flat organizational structures is the layers of management (Khan, Ferguson, & Perez, 2015) with either wide or narrow span of control. It refers to the number of employees

that each manager is responsible for; whereas, in case of wide span of control, numerous employees are reporting to a particular single manager. Conversely, a manager with a small number of direct reports has a narrow span of control (Rishipal, 2014).

Hao, Kasper, and Muehlbacher (2012) asserted that in a flat organizational structure, there may be just one top manager who is an owner or chief executive of the company, overseeing a handful of other employees, all with equal levels of authority. On the other hand, in a tall organizational structure, there are multiple layers of authority between the chief executive and low-level employees. According to Zitek and Jordan (2016), flat structures are flexible and decentralized with low levels of formalization where communication lines are more fluid and flexible. Employee job descriptions are broader and employees are asked to perform duties based on the specific needs of the organization in time as well as their own expertise levels. By contrast, tall organizations are more formalized structures with centralized decision making and the communication flow is mostly initiated from upper layers of management and move towards the lower levels of managerial hierarchy (Lunnan, Tomassen, Andersson, & Benito, 2019). Additionally, higher flexibility in job roles is allowed at horizontal level; whereas, highly specific job descriptions existed at vertical levels.

### **Positive Organizational Scholarship and Positive Organizational Behavior**

As primary constructs of the current investigation have been derived from positive organizational scholarship (authentic leadership) and positive organizational

behavior (psychological capital and work-related flow); therefore, it would be vital to capture the essence of these paradigms.

In the present era, the best places to work are no longer those that promise lifetime employment, rather those that provide their participants with the opportunities, resources, flexibility for sustainable growth, learning, and development. Nowadays, talented employees are looking for employers that can contribute to sustaining their career progress, either within or beyond the specific organizational context.

Positive organizational scholarship primarily originating from the model of positive psychology, focused on comprehending the interaction between positive contextual factors and individual processes that makes work-related behaviors more productive, meaningful, and rewarding (Cameron, 2016; Cameron, Dutton, & Quinn, 2003). In the present study, therefore, importance of introspective, yet, relational concept of authentic leadership is highlighted having an extensive impact on the performance of employees duly shaped by the process of leadership. Besides, authenticity of the leaders has a dual influence on enhancing work-related well-being and self-concept of the leaders as well their followers. Positive organizational scholarship, as a field of scientific inquiry, give emphasis to positive organizational processes that eventually lead to improved employee well-being and distinguishable from “traditional organizational studies in that it seeks to understand what approaches represents the best of the human condition” (Cameron et al., 2003, p. 4).

Conversely, positive organizational behavior has been initially defined by Luthans (2002, p. 59) as “the study and application of positively oriented human resource

strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today's workplace". More specifically, positive organizational behaviors are positive states that are developed and managed at the individual and micro level (Luthans, 2002). In the current study, constructs of psychological capital and WRF have been accounted as state like positive capacities which help the employees at three levels. These include, flourishing and prospering by optimizing their psychological resources; to combat the hurdles and constraints at workplace with hardiness and optimistic attitude; and to be driven by internal happiness and enjoyment by the work itself.

Considering the initial roots of authentic style of leadership, positive states such as psychological capital, experience of happiness and enjoyment in terms of work-related flow, and problem solving approach such as creative work behavior; a more elaborative descriptions of the constructs is given in the following sections.

### **Authentic Leadership**

Leadership has been described as the process of social influence in which one person can enlist the aid and support of others in the accomplishment of a common task (Smith, 2007). In a relatively contemporary perspective, Kellerman (2014) conceptualizes leadership as an equilateral triangle in which the three sides, that is, the leader, the followers, and the context are equally important components of the leadership process and interactive influence. Effective leadership is considered as a determining factor in creating

high performance organizations. In this regard, type of leadership that is incorporated in the present study is authentic leadership.

Walumbwa et al. (2008) offered authentic leadership model characterized by the competency and skills of the leader which promotes positive capacities of the leader in terms of internal standards of morality, unbiased processing of information, relational transparency, and self-awareness. Later, Whitehead (2009) further added that authenticity of the leader constitutes three essential components, firstly, accepting responsibility (both personal and organizational) for ongoing actions, their consequences, and mistakes made during the course of actions. Secondly, a non judgmental, non manipulative, and fair interaction with the subordinates; and thirdly, must have a thorough awareness about the self.

Luthans and Avolio (2003) explain the theoretical underpinnings of authentic leadership model including positive organizational behavior (Luthans, 2002), transformational leadership (Avolio, 1999), and ethical perspective-taking (Kegan, 1982). Because of this confluence of perspectives, their definition of authentic leadership includes positive organizational states such as confidence, hope, optimism, and resilience that later became the basis for Luthans, Avolio, Avey, and Norman's (2007) psychological capital construct. Although the transformational and authentic leadership models show a high degree of overlap; the authentic leadership model is chosen as point of departure, due to its explicit emphasis on the personal and social identification processes, role modeling, and value based leadership (Avolio & Gardner, 2005).

**Dimensions of authentic leadership.** Some refinements have been made to the four components of authentic leadership to reflect both conceptual and empirical insights about their composition. Specifically, the unbiased processing component is renamed as balanced processing (Gardner, Avolio, Luthans, May, & Walumbwa, 2005) out of recognition that all humans are inherently biased and flawed processors of information, particularly regarding self-relevant information (Tice & Wallace, 2003). The behavior component is renamed as internalized moral perspective to better reflect the leader's commitment to core ethical values. Additionally, two dimensions of authentic leadership, that is, internalized regulation and a positive moral perspective, that had previously been posited to be conceptually distinct (Gardner et al., 2005), are combined to form the internalized moral perspective component. The rationale for combining these dimensions is that as both include behavior that is consistent with internal standards and values (Walumbwa et al., 2008). Conclusively, the authentic leadership construct comprises four dimensions; which are narrated below:

*Self-awareness.* It is the degree to which the leader demonstrates an understanding of how (s)he derives and makes sense of the world and is aware of his or her strengths, limitations, how others see him or her, and how (s)he impacts others (Kernis, 2003).

*Balanced processing.* It is the level to which the leader shows that (s)he objectively analyzes the relevant data before coming to a decision and solicits views that challenge deeply held positions (Walumbwa, Luthans, Avey, & Oke, 2009).

*Internalized moral perspective.* It is referred as the degree to which the principles of morality and ethical values are set by the leader to guide their own actions. They are also consistent in expressing these moral and ethical standards (through their attitudes and behaviors) in situations of organizational and societal pressures. Above all, they are equally driven by their internal values of morality in complex processes of making appraisals and decisions (Avolio & Gardner, 2005).

*Relational transparency.* It is the point to which the leader presents his/her authentic self (as opposed to a false or distorted self) to others, openly shares information, and expresses his/her true thoughts and feelings. It is the extent to which authentic leader reinforces a level of openness with others that provides them with an opportunity to come forward with their ideas, challenges, and opinions. The authentic leader's actions are assumed to encourage followers to become authentic themselves through positive modelling (Avolio, Luthans, & Walumbwa, 2004).

Thus, in relation to the question of how managers show their commitment to leadership and how they affect the creativity of their followers, the authentic leadership model is a more fruitful avenue to pursue. With regard to creativity issues, it is



particularly noteworthy that authentic leaders are seen to enhance the work engagement, motivation, commitment, and involvement required from followers to constantly improve their work and performance outcomes through the processes of personal and social identification (Avolio & Walumbwa, 2014), resulting in improved job satisfaction and performance in followers (Černe, Jaklič, & Škerlavaj, 2013). Authentic leaders tend to foster greater self-awareness, relational transparency, an internalized moral perspective, and balanced processing in the sense of comprehensive information search and processing, resulting in positive self-development in followers (Gardner, Cogliser, Davis, & Dickens, 2011).

**Authentic leadership: Empirical evidences from Pakistan.** Relatively few worthy empirical explorations have been carried out on behavioral manifestations of authentic leadership in Pakistani perspective. For instance, Khan (2010) presented a theoretical overview of relatively newer construct of authenticity, authentic leadership, and its impact on organizations' performance. Inferences supported the argument that authentic leadership practices positively impacted the employees' work related attitudes as well as behaviors, subsequently, leading to the elevated organizational performance.

Abid, Altaf, Yousaf, and Bagram (2012) explored the authentic leadership styles of an entrepreneur and its impact on employee's commitment and satisfaction among Pakistani small and medium sized enterprises. Findings showed that employee's opinion towards authentic leadership serves as the intoxicating catalyst of employee job satisfaction and organizational commitment. Moreover, authentic leadership builds new

relationship among leaders' behavior and employee attitudes. Additionally, employees in new and small organizations viewed authentic leadership as having a positive impact on their occupational and job-related attitudes. Additionally, Sultan (2012) also reported that authentic leadership facilitates in enhancing productive output of workers rendering their services in multinational companies operating in Pakistan.

Hassan, Nawaz, Abbas, and Sajid (2013) explored the influence of authenticity in leadership management on ethical work climate that provide basis for emotional attachment with the organization among employees. The results mainly reveal two main conclusions; firstly, authentic leaders help in creating an ethical work climate characterized by collective moral judgment; and secondly, ethical work climate enhances the affective commitment among followers. Findings indicated that authentic leaders with high moral values and ethics promote the ethical moral sensitivity and moral characters of their followers. It is further established that self-awareness and balanced processing of leaders also promotes ethical moral judgment of employees.

Later, Kiyani, Saher, Saleem, and Iqbal (2013) inferred that genuine, legitimate and authentic approach of leaders adopted by managers facilitate in enhancing emotional intelligence and productive behaviors among followers. Later, Dar (2014) also observed positive linear relationship of authentic leadership with work engagement and inverse association with job stress among employees of telecommunication organizations. Saeed (2015) concluded that authentic leadership is positively associated with internal locus of control and negatively linked with burnout among public and private sector bank employees. Relatively in recent times, Dawood (2016) found relationship between

authentic leadership style and conflict management strategies among telecom employees. It has been observed that authentic leadership positively predicted compromising and problem solving conflict resolution strategies; while negatively predicted avoiding and antagonizing conflict management styles.

Adil and Kamal (2016) further declared that authentic leadership encourages the experience of psychological capital and psychological ownership. It has been further established that authentic leadership is helpful in inculcating positive sense of psychological ownership among university teachers. Moreover, authentic practices of the leaders positively promote emotional well being related to one's work; however, it is negatively allied with job stress, turnover intentions and counterproductive behaviors at workplace.

**Role of authentic leadership in banks and software houses.** In today's turbulent and volatile world, the nature of both work and the workplace has changed drastically (Billett, 2016). The recent state of corporate scandals, the increasing diversity of the workforce, and the quickening pace of social and technological change require a fundamental rethinking in leadership and management. Both tall and flat organizations concurred on the realization that the focus of leadership needs to be shifted from process and outcome to people and the future (Lunnan et al., 2019).

The practitioners of administrative sciences have identified threefold challenges that are confronted distinctively by marketing subdivisions of economic organizations with specific mention of banks and software institutes. Firstly, there is an imperative

prerequisite to unleash and discover the behavioral manifestation of resourceful potentials of their employees in order to maximize their greatest output. Secondly, there is a dire need to generate and breed supportive, positive, and encouraging work environment that would magnetize the attention and interest of talented workers to look for such dynamic organizations. Thirdly, equal importance should be placed on working out reinforcement mechanisms to encourage innovative and ground-breaking ideas among potentially capable employees. The outcome of above mentioned challenges would set the organizations in preparatory mode to adopt and equipped to face any uncertain and unpredictable demands of the risky future. On additional note, leadership skills of middle level and second level managers need to be enhanced in terms of self oriented ethical morality and awareness so they can effectively manage diverse needs of their subordinates. A parallel challenge that is emerging on the horizon of business enterprises is to capitalize sundry forces of the workers in terms of their communal, poignant, and divine potentials. Both tall and flat organizations are equally affected by the loss of huge amounts of valuable resources because of human problems. At every level of organization, ineffective leaders create problems and start fires because of their wrong policies or poor planning. Such problems are more likely to happen, when leaders are not skillful and genuine in their approaches.

The human and financial costs of good leadership are beyond imagination. New models of leadership driven by authenticity, ethical climate, self-controlled moral perspective, and relational transparency would be a great asset in retaining competent, motivated, and cooperative employees. In banking and technological sector, first level

managers are at the focal point on capturing business and linking with community. Authenticity of the leaders at managerial level would be of great value and source of vision, guidance, and soul searching among the marketing officers and software developers. They can provide versatile, yet, practical knowledge and guidance to their followers. Above all, commonality in banking and SWH is great reliance on team work which in itself demanding of mutual trust, conviction, and dependence on each other (Biloslavo, Bagnoli, & Figelj, 2012). The most common strengths of the authentic leaders and managers is their ability to work with people (Giallonardo, Wong, & Iwasiw, 2010) and helps the employees to combat negative aspects of the jobs such as dissatisfaction, burnout, and turnover (Gardner et al., 2011). Authentic leaders serve as a protective shield against the toxic emotions at the work place (Avolio & Walumbwa, 2014) and prevent loss of human, social, psychological, and financial resources.

The current investigation entails psychological capital as an outcome of perceived authentic leadership as well as a predictor of creative work behavior; therefore, further theoretical explanation of the construct is subsequently given.

### **Psychological Capital**

Luthans and Youssef (2004) conceptualized psychological capital (PsyCap) as a higher order core construct comprising of state-like capacities of self-efficacy, optimism, hope, and resiliency. In more analytical terms, it is through the discriminant validity across the individual PsyCap capacities (Luthans et al., 2007) that each capacity adds

unique variance and becomes additive to overall PsyCap. Furthermore, both conceptual developments (e.g., see Luthans, Luthans, & Avey, 2014; Youssef & Luthans, 2015) and emerging basic research on PsyCap (Luthans, Avey, Avolio, & Peterson, 2010; Youssef, 2016) provide substantial evidence for the convergent validity of self-efficacy, hope, optimism, and resiliency. It is to be noted that PsyCap is distinguishable from character strengths / virtues (Peterson & Seligman, 2004) and core self-evaluation (Judge, Erez, Bono, & Thoresen, 2003) which bears trait features and stable in nature; while, PsyCap is a state-like element which can be learned, acquired, and change in due course of interaction with environment.

**Dimensions of psychological capital.** The PsyCap construct comprises four dimensions of self-efficacy, optimism, hope, and resilience. Detailed elaborations of individual components of PsyCap are given as follows:

***Self-efficacy.*** Drawing from Bandura's (1997) theory, PsyCap self-efficacy can be defined as "one's conviction about his or her abilities to mobilize the motivation, cognitive resources, and courses of action needed to successfully execute a specific task within a given context" (p. 66). Özkalp (2009) said that self-efficacy is not related to the competences on individuals' capabilities; on the contrary, it is related to the belief on personal abilities. Self-efficacy can be thought as an inner agent to direct people and effectively execute different tasks and roles in their life. Self-efficacious individuals are usually distinguishable on five central features; that is, setting ambitious goals for

themselves; extremely self-motivated; blooming on challenge; perseverance in the face of obstacles; and devoting effort to achieve goals (Hannah, 2006). These five features facilitate highly efficacious people with the ability to grow independently and perform successfully, even with minimal external input for longer durations.

*Hope.* As a PsyCap capacity, hope is described as a constructive motivational condition that is built on identifying pragmatic goals and devising channels to achieve those goals (Gupta & Singh, 2014). Snyder's (2002) definition of hope explains it as a cognitive state in which a person is able to set realistic but stimulating expectations and goals and then reach out for those goals through a self-directed energy, determination, and observation of internalized control. Another equally essential component of hope is way power. In this component, people can generate substitute paths to their chosen destinations if the original ones seem blocked (Snyder, Kenneth, Kluck, & Monsson, 2006). There is a continuous repetition between pathways and agency, in which a person's determination and willpower stimulate the exploration for new pathways, while the innovation, resourcefulness, and creativity required in developing pathways, in turn, stimulate one's sense of control and energy, which together cause an upward spiral of hope (Snyder, 2002). If a person possesses the potential to control in terms of adopting alternate pathways that may lead to their destination, then hope persists and may even grow.

*Resilience.* In the paradigm of psychological capital, resilience is characterized by two associated features that is the ability to sustain and retrieve in case of failures and adversities as well as maximizing the ability to attain challenging goals (Luthans et al., 2010). It is further asserted by Luthans and Youssef (2004) that resilient people are willing for personal transformations and positive personal growth in times of adverse events. Resilience is an ability of people which is based on endurance, tolerance, and flexibility to deal with complex life processes and psychological pressures (Luthans et al., 2007). It also involves coping skills of people in case of uncertainty, negative situations, and obstacles (Cetin & Basim, 2011). There are several factors from positive psychology that have been recognized and studied as hindering or enabling to the growth of resilience. These factors are categorized as risks and assets (Coutu, 2002) as component of adaptational processes that bind these two factors interactively, synergistically and additively, giving rise to resilience.

*Optimism.* As a PsyCap dimension, optimism is considered as an attribution tendency where favorable life scenarios are perceived as more permanent and stable in nature; while negative events are perceived as transitory and fleeting situations. Conversely, a pessimistic explanatory style would interpret positive occurrences with temporary, situation-specific and external attributes, and justify negative events in terms of permanent, pervasive, and personal reasons (Hughes, 2008). Optimism is believed to be a psychological expectation and intention to anticipate the best possible outcome which may have a positive influence on peoples' physical and mental health (Keleş,



2011). Carver, Scheier, and Segerstrom (2010) highlighted that optimistic people can differ in tackling challenges and in success and manner in dealing with misfortune. Optimists enjoy finding good things from adversity and pessimists are always ready to easily give up in bad and sad situations of life.

**Psychological capital: Empirical evidences from Pakistan.** In relatively recent past, the construct of PsyCap has captured the attention of Pakistani researchers and substantial empirical evidences are available which have highlighted its work-related antecedents and outcomes. For instance, Maqsood (2012) reported positive relationship of psychological capital with job performance and organizational commitment. It has also been found that organizational socialization could be fostered by the mediating role of psychological capital. Another study (Iqbal, 2014) investigated the extrapolative role of psychological capital and political practices of organizations in predicting job stress and job involvement among employees of service and industrial firms. Findings concluded that psychological capital act as a buffer against organizational politics and job stress; however, it enhances the feelings of job involvement among employees.

Further evidences are provided by additional indigenous studies; for instance, Shaheen (2015) reported that psychological capital act as an enhancer in predicting organizational citizenship behavior from perceived organizational support among bank manager operations. It is also observed that psychological capital acts as a positive enhancer in relationship between organizational support and prosocial behavior at workplace. Bokhari (2015) explored the impact of psychological capital on stress and

coping strategies among university students. Findings showed that PsyCap is negatively linked with stress, emotion focused and avoidant focused coping styles; while positively associated with problem focused coping strategy. Later, Farhan (2015) inferred the predicting role of psychological capital in work family enrichment and life satisfaction among employees of telecommunication companies; while Abbasi (2015) inferred that the relationship between autonomy and work engagement is mediated by PsyCap and positive emotions among small business entrepreneurs. Empirical evidences also showed that PsyCap is in positive linear relationship with professional quality of life in mental health of rescue workers (Haleem, 2016); organizational commitment, organizational citizenship behavior among female school teachers (Saleem, 2016); along with affective commitment and academic achievement among university students (Siddiqua, 2016). On additional note, Adil and Kamal (2016) highlighted positive association of PsyCap with authentic and way forward format of leadership as well as psychological ownership; while negatively aligned with contradictory industrious behaviors and turnover intentions at workplace.

**Role of psychological capital in banks and software houses.** A consensus is emerging among management educators (Lunnan et al., 2019; Zhang & Bartol, 2010) that the hard skills of information technology and management science are not enough. Conversely, positive skills and states (which also act as soft skills) facilitate the managers and employees to work with continuous demands of workplace. Similarly, the positive psychology of management provides a new direction by capitalizing on human strengths,

positive emotions, and a meaningful workplace (Luthans et al., 2014). In banking and software organizations, the importance of positive states as the most valuable resource of knowledgeable economy is the psychological resources (Jensen, Patel, & Messersmith, 2013). The PsyCap of employees is primarily concerned with culture management and self-sustained progress and development (Luthans, Norman, Avolio, & Avey, 2008). It is the need to capitalize on the personal strengths of the people so as to contribute in the organizational gains. Specifically, employees rendering their services in marketing section of banks (Alalwan, Dwivedi, Rana, & Simintiras, 2016) and software development (Caldwell & Hayes, 2016) are continuously interacting with ever changing needs and challenging goals to meet the demands of the customers. Employees with high PsyCap do not linger for stimulating goals to be assigned to them (which is frequently referred to as discrepancy reduction), instead they invent their own discrepancies by incessantly challenging themselves with better self-set goals and by pursuing and voluntarily choosing demanding tasks (Rego, Sousa, Marques, & Cunha, 2012). Skepticism, self-doubt, social criticism, negative feedback, obstacles and setbacks, and even recurring failure, which may be overwhelming for employees, have little impact on highly psychological resourceful employees (Wang, Waldman, & Zhang, 2013).

Factors of PsyCap interact (in such a manner) to help employees to be able to transfer and apply their efficacy, hope, optimism, and resiliency to the specific tasks within specific domains of their work lives (Rego et al., 2012). A much recent evidence (Jyoti & Dev, 2017) has shown that positive psychological resources (especially self-

efficacy and resilience) provides pragmatic channel to employees to discover their sense of purpose in achieving a full and productive work life.

Next factor which is investigated in the current exploration is work-related flow as an outcome of perceived authentic leadership and predictor of creative work behavior. Its detailed elaboration is narrated in the following section.

### **Work-Related Flow**

The construct of work-related flow is derived from the central concept within positive psychology based on subjective experience called flow (Csikszentmihalyi, 2003). According to Csikszentmihályi (2012), the state of flow is characterized by mental experience of cognitive efficiency coupled with sense of happiness, immersion, and intense involvement while doing a certain activity. Asakawa (2010) explained work-related flow as a state constituent of five interrelated characteristics; that is, actions feel effortless and automatic; unambiguous feedback on performance; low fear of evaluation by others; altered time perception; and performance is accompanied by positive affect (happiness and joy).

Csikszentmihalyi (2014) believed that environments and activities that are conducive for work-related flow are in unison with psychological resources in terms of personal characteristics to escalate the experiences of flow. In order to achieve flow at work, Csikszentmihalyi (2015) outlined essential conditions including clarity of goals, immediate feedback, balance between opportunity and capacity, absorption and

concentration, present moment, subjective control, altered sense of time, and the loss of ego. Usually, it is debated that with escalated experiences of flow at work, individuals undergo growth towards complexity, in which they thrive as their accomplishments swell and with that comes increasing cognitive, emotional, and social complexity (Bakker, 2014). By designing a workplace atmosphere that permits growth and flow, can enhance the achievement and happiness of employees.

**Dimensions of work-related flow.** The most well-known definitions of flow have three elements in common, namely enjoyment, absorption (i.e., complete engrossment in an activity), and intrinsic motivation. These three elements are the central components that are typically incorporated in flow research (e.g., Bakker, 2015; Csikszentmihalyi, 2012). Correspondingly, when flow is applied to a work situation, it can be described as a temporary peak experience at work that is distinguished by work enjoyment, intrinsic work motivation, and absorption (Bakker, 2008). *Absorption* refers to a condition of complete concentration, where employees are absolutely engrossed in their work, time passes swiftly, and they disregard everything in their surroundings (Csikszentmihalyi, 2014). *Work enjoyment* is defined by feelings of happiness, pleasure and making positive discernments regarding the quality of work life. This enjoyment is the result of affective and cognitive evaluations of flow experience (Bakker, 2015). Lastly, *intrinsic motivation* refers to executing some work-related activity with the intention of experiencing the inherent satisfaction and pleasure in the activity (Bakker, 2014). When employees experience these three states, both more frequently and more

intensely, they experience more flow (Bakker, 2008). After a flow experience, an employee feels happy and satisfied (Diener, 2000), and as such, achieving a state of flow can be viewed as a goal in itself (Salanova, Bakker, & Llorens, 2006), but it can also be a factor in enhancing employee performance (Engeser & Rheinberg, 2008).

#### **Relevance of work-related flow in banks and software houses.**

Csikszentmihalyi (2012) believed that all types of work that involve creative thinking and innovative output requires the experience of flow at work, and desirable outcomes can be hindered if the state of flow is not achieved or faced by barriers. In relation to banks, the employees of marketing department are overwhelmed and absorbed with the process of product and service creation and analysis to make it appropriate with the customers' needs (Chintaloo & Mahadeo, 2013). On similar grounds, the primary nature of work in SWH is characterized by immersion, absorption, and complete indulgence to devise newer products by using ever evolving technologies and designs (Hertel, Neidner, & Herrmann, 2003). Moreover, flow is identified as a unique experience of IT personnel in designing and developing software products and services in order to meet organizational and market demands (Maitlis & Ozcelik, 2004). Flow researchers (Andony, Gorjian, & Finkelman, 2016; Bakker, 2015; Linsner, 2009) emphasized that certain mechanisms are essential to experience flow at work by making the work intrinsically rewarding for the employees and facilitates inspiration for perseverance and diligence for creative output. Specifically, software developers often report to be in state of *the zone* or *hack mode* for being into a state of flow and concentration. Similarly, market operators during high

volume trading times frequently refer to the term *in the pipe* to label the psychological state of flow.

Nielsen and Clean (2005) recognized job characteristics and activities that would predict flow states at work. It could be flow at transient level (reflected in the form of activity such as problem solving, evaluation, and brainstorming) or stable level (reflected in the form of cognitive demands and task clarity) among employees in advertising agencies and banks. Britton (2009) added that flow is not only beneficial for individuals, but also influences the organizational goals in terms of innovation, elevated productivity, and organizational development (Poutsma, Heijden, Bakker, & de Bruijn, 2014). Therefore, understanding the ways through which experiences of flow can be improved would increase the effectiveness of the organizations (Peters & Wildenbeest, 2011). Csikszentmihalyi (2014) introduces the idea of good work based on the concept of flow in which employees enjoy doing their routine work; yet, able to contribute value added happiness from the routine work. Siu, Bakker, and Jiang (2014) asserted that finding environments and activities that are conducive to flow, and then developing personal characteristics to increase experiences of flow at work. Applying these methods in the workplace, can improve morale by fostering a sense of greater happiness and accomplishment, and increased performance.

A major outcome variable of the present study is the creative work behavior. In the subsequent description, a more inclusive explanation of the construct is narrated.

## **Creative Work Behavior**

Creative behaviors in organizations has been simply described as the process of “coming up with fresh ideas for changing products, services, and processes so as to better achieve the organization's goals” (Brocke & Lippe, 2013; p. 78). Creativity and innovation at workplace are often used interchangeably, but creativity is separable from innovation in terms of focus. Creativity is about unleashing the potential of the mind to conceive new ideas. Innovation, on the other hand is about introducing change into relatively stable systems. Therefore, employee creativity is an initial requirement for making viable ideas that organization can use to design an innovative solution (Rego et al., 2012).

Creative work performance involves behaviours through which one's creative potential is manifest. In addition, creative work behaviors have been found to be the source of innovation within organizations (Simonton, 2016), something needed for nearly all jobs (Williams, Runco, & Berlow, 2016), and key to organizational competitiveness (Brocke & Lippe, 2013). Williams et al. (2016) further added that creativity at workplace is considered as a tendency to generate or recognize ideas, alternatives, and possibilities that may be useful in solving problems, communicating with others, and entertaining ourselves as well as others. Simonton (2016) asserted that being creative in work settings implies basic functionality (includes everyday problem-solving and the ability to adapt to change) which is often used as an indicator of mental health. Being creative at work,



generally, means taking risks; whereas fear of the unknown is a powerful thing, especially when there are chances of failure and malfunction (Kunze & Menges, 2016).

**Employee creativity in SWH and banks.** Developing softwares necessitate mechanisms that could authorize and unleash the imaginative aspects of the mind; where innovation is the grand characteristic and hall mark of this profession. Employees of SWH are more concerned with the development and modification of software technologies to meet the customized needs of their clients; which requires innovative thinking and creative productivity (Jyoti & Dev, 2015). Software engineers implicitly support creative thinking in dealing with software development challenges, and also use examples from interactive art projects to demonstrate innovation and nontraditional problem solving (Wu, Lee, & Tsai, 2012).

In contrast, marketing managers of banks are concerned with the accumulation of originality and contemplation in terms of newer strategies and techniques both in services and products of the bank (Kappagoda, 2013). The goal of their work is to capture the community attention and ever expanding clientele; while at the same time they are also faced with specific tasks that may fit into a larger organization plan, and the worker has to think out creative ways of fitting the individual task in it (Pillai, 2008). In addition, marketing section of the banks incorporates modern approaches and plans in order to meet the explicit need of the retail and corporate business at national and international level.

In lieu to the succinct yet comprehensive description of the principal constructs of the current study, it is vital to be acquainted with the relevant literature about the probable interactions among these constructs. Moreover, the review of the relevant literature will also provide substantial grounds for the formulation of assumptions in the milieu of organizational structures.

### **Authentic Leadership as a Predictor of Psychological Capital, Work-Related Flow, and Creative Work Behavior**

In the last decade, authentic leadership emerged as a new arena of interest among researchers (e.g., Walumbwa et al., 2008) as well as practitioners (e.g., Ladkin & Taylor, 2010) arguing that authentic leadership promotes positive employees' attitudes and behaviors and contributes to organizational performance. Several studies have directly or indirectly explored the role of authentic leadership as part of personal attribute and its relation with the employee and organizational outcomes; therefore, in the subsequent description, empirical literature is presented that how authentic practices of the leader may function in predicting core constructs of the present study.

**Authentic leadership as predictor of psychological capital.** Numerous studies found considerable support for the prediction that authentic leadership influences employees' psychological capital. For instance, Gardner et al. (2008) declared that authentic leaders portray the positive psychological states that accompany optimal self-

esteem and psychological well-being, such as confidence, optimism, hope, and resilience, to model and promote the development of the similar states in others. Additional evidence (Babou, 2008) has also shown that authentic leaders facilitates the development of psychological resources such as self-efficacy, resilience, and optimism among the followers; thereby enhancing their job performance.

In relation to the individual core dimensions of psychological capital, there are varying evidences asserting the predictive role of authentic leadership.

*Self-efficacy.* As a component of PsyCap, self-efficacy of the employees is likely to be influenced by the characteristics of authentic leaders. Employees may acquire greater confidence in their abilities through vicarious learning by observing the psychological assets and exemplary behaviors of their (authentic) leaders. For instance, authentic leaders are likely to provide feedback and criticism in a constructive and respectful manner that helps the employees to pursue the organizational goals with more confidence and assurance (Luthans & Avolio, 2009). Similarly, tendency of the authentic leaders to share information with honesty and handling confronting views without becoming judgmental also promotes self-assurance among employees (Walumbwa et al., 2009). Since authentic leaders tend to focus their attention on the strengths of their followers; so they constantly try to maximize the potential and talent of their subordinates (Gardner & Schermerhorn, 2004); hence, (as a consequence of self-fulfilling prophecy), self-efficacy of the employees tends to grow and expand (Gupta & Singh, 2014).

*Hope.* Avolio et al. (2004) observed that authentic leaders can enhance followers' hope by establishing not only their willpower, but also by focusing on the positive aspects of the way power or directions to pursue future goals. Authentic leaders are able to transform a sense of security, conviction, and autonomy among their followers which enable them to focus their energies and efforts on goal-oriented activities. This further facilitates the employees to look for the alternate pathways for resolving work-related problems and creative performance (Ilies, Morgeson, & Nahrgang, 2005). Similarly, authentic leaders are perceived as reliable sources of feedback and input (Avey, Reichard, Luthans, & Mhatre, 2011); therefore, employees are likely to persevere even in situations of failure and willing to alter their paths in order to succeed. When guided by authentic supervisors, workers develop a sense of efficacy and positive emotions, which also help them to maintain their willpower and hope in achieving challenging goals (Gardner & Schermerhorn, 2004).

*Resilience.* Gardner et al. (2011) argued that authentic leaders make use of three channels to reinforce resilience among their followers. Firstly, by promoting healthy interpersonal relationships and ensuring the provision of active social support to their followers in difficult times, which is vital for inducing resilience in employees. Secondly, by enhancing emotional safety and self-confidence of their followers this makes them capable of facing adversities with strength and vigor. Thirdly, authentic leaders encourage positive and constructive emotions of employees by being genuine role models, thereby, facilitating them to develop resilience. Tugade and Fredrickson (2004)

also argued that authentic leaders capitalize on individual resilience by ensuring that others have the support they need to recover from adversity, and to thrive when faced with hurdles with high levels of positive change. Authentic leaders anticipate potential strains and adversities make contingency plans to support and help the employees to cope with them, which in turn, augment the ability of employees to sustain and bounce back from adversities.

*Optimism.* Numerous authors propose that authentic leadership promotes employees' optimism. For instance, various studies (Hoogh & Den-Hartog, 2008; Rego et al., 2012; Sweetman et al., 2011) showed that authentic leaders make their followers to be progressive and optimistic about their organization and even willing to add to its success by taking care of emotional states of their followers. McColl-Kennedy and Anderson (2002) further added that as authentic leaders encourage open interaction, being fair and consistent in their moral values; assist their followers to draw optimistic attributions for positive and negative work-related events. Similarly, authentic leaders are inclined to use adaptive approaches toward solving problems, and hence, more likely to motivate their followers to make internal attributions for success (Pradhan et al., 2016; Walumbwa et al., 2009).

**Authentic leadership as predictor of work-related flow.** Although, there is scarcity of findings signifying direct connection between work-related flow and authentic leadership; however, there are multiple empirical connections made between the leader's

authenticity and experiencing flow at work. For example, Sosik, Avolio, and Kahai (1998) found positive effects of genuineness of leader on group fluency and flexibility mediated by role of flow and happiness at work. Additional evidences (Andony et al., 2016; Eisenberger, Jones, Stinglhamber, Shanock, & Randall, 2005; Linsner, 2009) showed that flow experience of the workers is influenced by the organizational leadership, and related to desirable outcomes in software design, computer-mediated communication, medical surgery, and business activities of all kinds. Moreover, balanced processing, transparent communication, and ethical conduct (components of authentic leadership) of the leaders also foster heightened levels of enjoyment, absorption, and intrinsic involvement (components of work-related flow) among the followers. Flow at work has also been shown to relate to academic, artistic, literary, and sports performance, as well as to physical and psychological health (see Nakamura & Csikszentmihalyi, 2009).

**Authentic leadership as predictor of creative work behavior.** There is ample empirical support indicating that leaders play a key role in supporting or inhibiting creative work behavior of employees (e.g., Shalley, Zhou, & Oldham, 2004). Conventionally, large set of empirical explorations on creative work behaviors have focused either on personal attributes (e.g., dispositional traits and mental ability; Fiest, 1998) or creative individuals (Tierney, Farmer, & Graen, 2001). However, empirical attention has been shifted toward the contextual and integrative view (Zhou & Shalley, 2003); while, Woodman et al. (as cited in Simonton, 2015) also presented a dynamic

interactional paradigm of creative work behavior articulating that creativity of employees is a by-product of organizational and individual factors. Moreover, creativity at work is considered as a state like feature which is mostly determined by the confluence of organizational (leadership and management practices) and personal (psychological resources and strengths) factors (Sinclair, 2016).

Literature (Giallonardo et al., 2010; Hmieleski, Cole, & Baron, 2012) pertinent to the employees' creative work behavior revealed three alternative ways in which authentic leaders can support creativity among their followers; that is, through providing developmental feedback, displaying interactional justice, and being trustworthy. More specifically, developmental feedback instills learning and improvement orientation which is vital for creative output; while, interactional justice ensures that subordinates will have the knowledge and information they need to be creative and will be treated with respect even if their ideas do not work out (Hirst, Walumbwa, Aryee, Butarbutar, & Chen, 2015). Finally, trust reassures them that their hard work and risk-taking are well-worth the effort because supervisors have the competence and professionalism to follow through on creative ideas (Hu & Liden, 2014).

According to Egan (2005), creative skills of the employees are contingent upon the interplay of personal, social, and contextual factors. However, other investigators (e.g., Hirst, van Dick, & van Knippenberg, 2009; Wang & Cheng, 2010) emphasize the role of specific leaders' attributes and leadership practices in promoting, supporting, or inhibiting creativity at workplace. These attributes and behaviors of the leader include emotional intelligence, constructive feedback, close monitoring, supportive supervision,

leader's initiative, and leader inspirational motivation. It also included the type of leadership (such as transformational, compassionate, empowering, servant) that may function differentially in generating creative work behavior of employees. However, Rego et al. (2012) reported linear relationship between authentic leadership and employee creativity. Similarly, various studies inferred that authentic leadership helps in attaining desirable work behaviors including job satisfaction of followers (Giallonardo et al., 2010), organizational commitment (Dawood, 2016), and work-related creativity (Wong & Cummings, 2009).

The aforementioned derivations helped to capture the basic essence of the direct relationships of the authentic leadership with psychological capital, work-related flow, and creative work behavior. However, it is equally essential to understand the conceptual and theoretical models explaining the relationship between these constructs.

### **Theoretical Framework**

The current investigation conceptualizes its foundation on the premises of two research models which sufficiently offer reasonable explanation about the interconnectedness of the primary variables of the study. The first research model proposes the parallel mediating role of WRF and PsyCap in the relationship between creative work performance and PAL. The second research model specifies the moderating role of organizational structure in all the direct paths of the relationship of variables. Theoretically, there are multiple inferences which provide the empirical grounds for these research models.

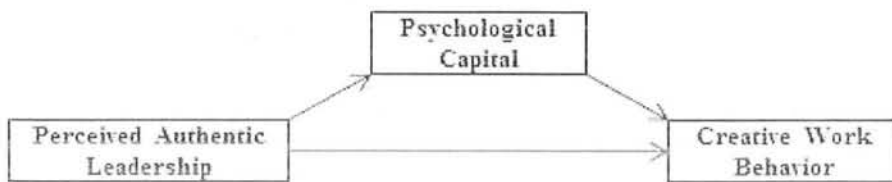


**Mediating role of psychological capital.** Since the inception of PsyCap as a higher order construct, it has been rigorously researched both as predictor (Avey et al., 2011; Luthans et al., 2014) and outcome (Avey, Wernsing, & Luthans, 2008) variable in the organizational and industrial studies. However, later explorations focused more on the complex equations specifying the interplay of psychological states with the personal and organizational outcomes. For instance, Cerne et al. (2013) found that the relationship between organizational climate and job satisfaction is mediated by psychological capital of the employees. Empirical research revealed that collective PsyCap may play an important role in the relationship between authentic leadership and work groups' desired outcomes (Vaccaro, Jansen, van den Bosch, & Volberda, 2012) as well as between leadership and creative performance of employees (Gupta & Singh, 2014).

The arguments given above provide sufficient basis to infer that employees who are supervised by authentic leaders are prone to acquire higher psychological resources which enables them to explore new horizons for the existing problems. However, it is equally imperative to analyze the underlying mechanisms through which authentic practices of the leaders enabled to inculcate creative functioning of the employees. For example, being transparent with employees, self-aware, steered by internal moral standards, and capable of analyzing all pertinent data accurately (including employees' dividing proposals and opinions), authentic leaders foster employees' respect and trust (Hmieleski et al., 2012; Rego et al., 2014). Respect and trust are crucial because people feel profound emotional safety, feel unrestricted to offer eccentric propositions and present contradictory views without any hesitation (Rego, Sousa, Marques, & Cunha,

2014). Authentic leaders firmly believe in relational transparency; therefore, they are not threatened by the vulnerabilities of the unconventional ideas or suggestions given by the employees and are eager to receive their creative proposals (Hirst et al., 2015). The ability of balanced processing and self-awareness of authentic leaders helps them to analyze the employees' ideas in an objective and thoughtful manner (Zhou & George, 2003).

On the basis of inferences drawn from these studies, the following research model is presented:



*Figure 1.* Conceptual Model 1A of the Present Study

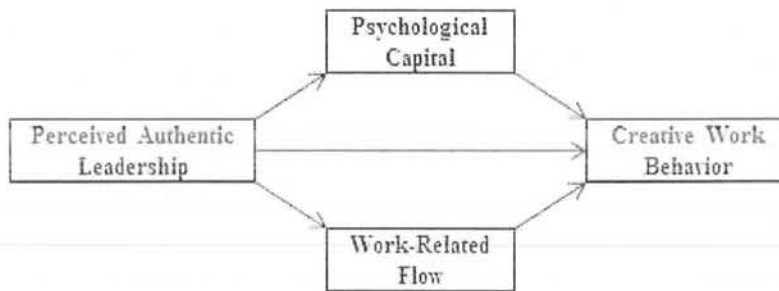
**Mediating role of work-related flow.** Although, little is known about the direct evidences on the mediating role of work-related flow; nevertheless, extensive empirical support is available on the different components of work-related flow. For instance, authentic leaders with their skills of relational transparency, ethical self-guidance, and aptitude for processing data in an impartial way, can set self-sustained grounds for their followers to work with inner urge and contentment to explore newer mechanisms and innovative ideas (Avolio et al., 2004; Michie & Gooty, 2005; Zhou & George, 2003). Authentic leaders tend to provide constructive feedback in a respectful and informational

(rather than controlling) manner. These informational exercises endowed skills of the employees with relevant information to augment their optimal functioning without having an obligation for the consequences, and are, thus, more intrinsically driven to explore and put forward creative and resourceful ideas to confront task-related problems (Poutsma, Moerel, & Ligthart, 2015). In addition, authenticity and genuineness of the leaders serves as a source of encouragement for employees' innate inspiration, which can function as a trigger for creative outcomes (Breevaart et al., 2014). Researchers (Bakker, 2015; Frederickson, 2013) consented on the role of intrinsic motivation with positive emotions of happiness and joy which are equally vital for creative processes. Bakker (2016) further explained that internally driven individuals tend to be inquisitive, prone to learning, prepared to take planned challenges, cognitively flexible, and determined to sustain in case of hurdles and complications.

Authentic leaders can also instigate their followers to work with greater excitement, enthusiasm, and to experience other positive emotions (Ilies et al., 2005; Rego, Vitória, Magalhães, Ribeiro, & Cunha, 2013). According to Frederickson (2004), positive emotions can expand the cognitive scope of the employees which resultantly elevate the range and assortment of cognitive elements that are pertinent to the problem at hand. In addition, the presence of positively experienced emotions also enhances the scope of attention which results in the enlarged availability of cognitive elements essentially required to solve the problem; hence, increasing the likelihood of creative activities. On the basis of aforementioned inferences, a research model is proposed

stating that alongside PsyCap, work-related flow is a parallel mediator in predicting CWB from PAL.

On additional note, WRF seems to be a good fit for the criteria of PsyCap inclusion (Bakker, 2016; Leroy et al., 2012), and especially since research has been directly conducted in the workplace; it can potentially be a promising strength for PsyCap in the future. Therefore, work-related flow is tested as a parallel mediator in predicting CWB.



*Figure 2.* Conceptual Model 1B of the Present Study

**Moderating role of organizational structures.** Derivations of numerous studies pointed out the possible influence of flat and tall organizational structures on attitudes and behaviors of workers. For instance, Spencer and Muchnick (2015) declared that tall structures are characterized by more rigid and bureaucratic configuration that help the companies to achieve efficiency but, lesser flexibility for creative behavior. On the other hand, flat organizations offering more autonomy in decision making and rigorous communication patterns facilitate the enterprises to foster innovation and creativity. Bloisi,

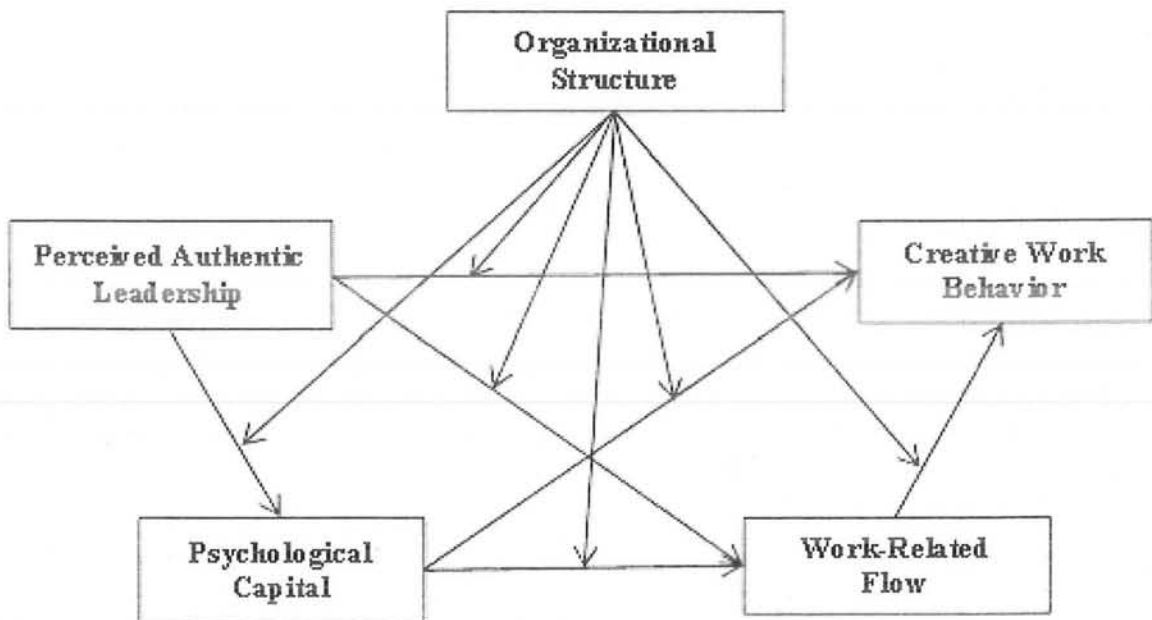
Cook, and Hunsaker (2007) asserted that flatter organizational structures instill feelings of autonomy and enhanced control among the workers; employees in a tall organization have many layers through which they need to advance their careers, and may become frustrated at their relative lack of influence at lower levels within the company.

Brown and Duguid (2001) asserted that flat organizational structure has an advantage over a tall one is the level of flexibility. Decisions can often be made and carried out more quickly in flat structures because there are few layers of communication between the employees doing the work and those making the decisions. Therefore, directives and feedback can be communicated more quickly to allow for necessary changes. Aryee, Sun, Chen, and Debrah (2008) reported that employees working in vertical organizations experienced higher level of abusive supervision, emotional exhaustion, and minimized job satisfaction.

Therefore, in lieu to the aforementioned assertions, second research model is also proposed (see Figure 3). In this model, it is assumed that nature of organizational structure moderates the direct paths between PAL in predicting PsyCap, WRF, and CWB. It is further postulated that organizational structure also moderates the paths of PsyCap and WRF in predicting CWB; while the path between psychological capital and work-related flow is interacted by organizational structure.

The major purpose for proposing the second research model is based on two assumptions. Firstly, to determine the functioning of tall and flat organizations affecting direct relationships of the major constructs of the study. Much of the empirical evidence has suggested that authentic leadership is characterized by the self-awareness, balanced processing, and personal moral standards, which in turn, are likely to be influenced by

the hierarchical layers and span of control being differently practiced in banks and SWH. Similarly, the positive states (associated with psychological capital), positive affect (associated with work-related flow), and desirable work behaviors (employee creativity) are possibly experienced and shaped by the leader-member relations, type of communication, centralized decision making, and layers of management.



*Figure 3.* Conceptual Model II of the Present Study

This model is liable to offer greater comprehensive insight into the relevance of organizational structure. Another assumption of proposing this model is to make differential analysis into the working of Pakistani organizations, in specific, and global, in general, that how does perceptions regarding authenticity among leaders, flow

experience, psychological states, and creativity at work is influenced by the organizational structure in relation to the complete phenomena.

The present study derived its assumptions from two theories that is *psychological resource theory* (Hobfoll, 2002) and *broaden-build model* (Fredrickson, 2004). Details of each theory is given below:

### **Theoretical Underpinnings of the Present Study**

Further elaborations of these theoretical approaches are given in the following subsection so as to grasp the underlying assumptions of the present study.

**Resource theory.** According to Seligman (2006), the role of psychosocial resources in the appraisal of well-being and mental health has gained attention over a period of time. In this regard, resource models have specifically focused on positive states (instead of deficit and pathology models) which act as psychological assets and psychological strengths; thereby helping the people to flourish and prosper.

According to Hobfoll (2002), psychological resources are those qualities that are either centrally valued in their own right (e.g., close attachments, efficacy, resilience, optimism) or act as a method of obtaining centrally valued ends (e.g., social support, money). Hobfoll (2002) further added that an all-inclusive description of psychological resources encompass those resources which are opted by wide variety of people with similar cultural identities. For example, self-efficacy may not be a resource for all individuals or for any individual in all circumstances; however, it has been proven as a resource for most people in an extensive range of scenarios.

Bandura (1997) and Thoits (1994) are the most prominent voices of psychological resource models. They asserted that psychological resources actually function in terms of management resources, for example, individuals having higher self-efficacy would be better capable of selecting, adapting and applying their other psychological assets in turbulent times. Schwarzer (1993) also declared that people high on efficacy are more able to exercise successful influence over their surroundings and the achievement of their goals. Another psychological resource that has received noticeable research focus and support is optimism. Carver et al. (2010) inferred that people with greater optimism are more likely to experience emotional and mental well-being, with higher tolerance for stress. Moreover, optimistic individuals are prone to strive for goal driven actions and perceive negative events or failures as momentary and transient situations. Seligman (2006) contributed in psychological resource model by highlighting the role of resilience as a psychological strength that people employed in times of strain and hardships. Snyder et al. (2006) further confirmed that resiliency of the individuals instills the ability to sustain in case of difficult times and kept on struggling to overcome the obstacles and (also) keeping pace with their goals through continuing goal-driven behaviors.

Several studies (Seligman, 2006; Snyder, 2002) have shown that these individual resources are not detached from one another; in fact, resilience, self-efficacy, sense of control, and optimism are relatively exchangeable resources; when one is high, so are the others. According to Hobfoll (2002), psychological resources are distinctive, yet, interconnected constructs which basically originate from a core developmental basis. In other words, each psychological asset facilitates and promotes in the expression and functioning of other resources. Additionally, key resources can be improved by



intervention, and thus what has been ascertained about the significance of key resources can be deciphered to cultivate other resources (Sandler, 2001).

*Specific derivations of resource theory.* Certain basic assumptions of resource theories can be postulated which would help us in deriving the common mechanisms of psychological resources. Firstly, people who possess psychological resources are better equipped to resolve the difficulties and complexities which are inevitable part of the demanding situations and circumstance. According to Carver et al. (2010), people tend to make decisions about their anticipation of success when they are striving for the goals. These anticipations are, partly, based on the intricacy of the task and the importance of the goal itself. However, they are (mostly) the reflection of a person's appraisal of the resources that they can invest in accomplishing that goal. If they are endowed with a broader and richer resource reserve, they tend to remain involved in goal-attainment activities. Secondly, individuals who are better bestowed with psychological resources are less adversely affected by the resource drain that occurs during stressful conditions; hence, psychological resources facilitate the availability of other psychological assets. Hence, Keles (2011) concluded that there is a general tendency for the enhancement of resources among people who possess a stable resource pool where resources co-travel in resource caravans. Finally, the impact of resources is enduring and do not fade away with the aftermath of stress and strain. This point is quite understandable in the context of resource caravans; since resources are likely to come in bundles, their influence tends to hold over a span of time across different situations, whereas the impact of strain is usually more transitory (Newman, Ucbasaran, Zhou, & Hirst, 2014).

**Broaden and build theory.** The second theoretical premise originated from broaden and build model originally proposed by Fredrickson (2003) stating that certain discrete positive emotions share the ability to broaden people's momentary thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources. Fredrickson (2004) asserted that moments in people's lives are characterized by experiences of positive states (such as self-efficacy, resilience, and optimism) are moments in which they are not plagued by negative affect (such as anxiety, sadness, anger, and despair). Positive emotions signal flourishing repercussions which do not simply exist within the present pleasant moment but over the long term as well. Specifically, this model has the following major premises:

*Positive states broaden thought-action repertoires.* Foundational evidence for the proposition that positive states broaden people's momentary thought-action repertoires (Frederickson, 2013); documented that people experiencing positive states and positive affect show patterns of thought that are notably unusual, flexible, creative, and efficient (Frederickson & Losada, 2005). In general, positive affect (such as happiness, joy, absorption) produces a broad, flexible cognitive organization, and ability to integrate diverse material. In other words, the experience of positive emotions facilitates in the expansion of cognitive competencies of the individuals by rendering more availability of the mental elements essential for problem solving. Likewise, higher order cognitive functions of the brain are more triggered under the influence of positive emotions, thus heightening the probability of creative actions (Frederickson, 2013). Therefore, it is reasonable to assume that work-related flow (based on experiencing positive emotions of

happiness and joy) would have a stirring effect on the employees to work with greater excitement and enthusiasm to strive for creative work output (Ilies et al., 2005; Ozkalp, 2009).

*Positive emotions fuel psychological resiliency.* Evidence for the undoing effect of positive emotions suggests that people might improve their psychological well-being by cultivating experiences of positive emotions at opportune moments to cope with negative emotions (Fredrickson, 2004). Aspinwall (2001) also described the process through which positive affect and positive beliefs serve as resources for people coping with adversity. Resilient individuals are said to bounce back from stressful experiences quickly and efficiently (Tugade & Frederickson, 2004), in effect, resilient people are skilled users of the undoing the impact of negative emotions. Additional experimental evidence reveals that positive emotions can engender better workable and supple resilient flexibility (Chuang, Wen, & Sheu, 2007) and are directly linked to various assessments of well-being and success (Lyubomirsky, King, & Diener, 2005) at workplace. In other words, positive emotions may assist employees in coping with organizational pressures by widening the possibilities they perceive, keeping an open approach to solving problems, and providing energy for altering their actions to corresponding work conditions (Baumeister, Gailliot, DeWall, & Oaten, 2006).

**Theoretical models: Converging research paradigm.** Although the basic premises of the two theoretical approaches have been narrated in detail (discussed above); however, it is important to understand that how the core constructs of the present study are related to the aforementioned theoretical models.

In this regard, the sphere of the newly evolving areas of positive organizational scholarship (Cameron & Caza, 2008) and positive organizational behavior (Luthans et al., 2014) may provide insights into the study constructs. For this study, perceived authentic leadership is the prevailing leadership practices that would enhance organizational efficiency through maximizing employees' psychological resources and performance that may be influenced by the specific leadership style. Moreover, it is also postulated in the present study that better perceptions of contextual factors, for example, authentic leadership would facilitate the employees in developing better psychological assets (i.e., psychological capital) and experiencing work-related positive emotions of absorption and enjoyment.

Primarily the present study explores whether psychological resources (i.e., psychological capital constituting resilience, hope, efficacy, and optimism) of the employees paired with the experience of positive emotions (such as absorption and enjoyment of WRF) would lead to the expression of desirable work outcomes (i.e., CWB). In other words, positive states (PsyCap and WRF) of the employees may result in more productive and effective workplace behaviors.

Another postulate of the present study is based on the empirical evidence that psychological resources (resilience, self-efficacy) and task-related positive emotions (work-related flow) can provoke better innovative work behaviors and decision making (Chuang et al., 2007) at workplace. In other words, psychological assets coupled with positive emotions may assist employees in coping with organizational pressures by keeping an open approach to problem solving and providing energy for constant effort for success (Baumeister et al., 2006). Based on Fredrickson's (2004) work, we propose that

positive emotions and engagement attitudes (work-related flow) would stimulate higher levels of creative work behaviors that would accelerate organizational productivity.

Finally, another main postulate derived in the present study is the positive association between psychological capital and work-related flow. It has been ascertained that employees high in the four components of PsyCap could have an assortment of positive emotions while coping with the organizational demands (Fredrickson, 2013). If a challenge or setback is encountered during innovation and creative output, they are likely to make use of their resource reserves (psychological capital) and contemplate alternative pathways to the goal, signifying resilience and hope. Tugade and Fredrickson (2004) also endorsed that psychological abilities and states such as resilience pave the way for positive emotions and discovered that “high-resilient individuals tend to experience positive emotions even amidst stress” (p. 331).

### **Organizational Structure of Banks and SWH: Pakistani Perspective**

A general overview of the working of both organizational structures is discussed with the point that it is vital to grasp the functioning of these organizations purely with reference to Pakistani perspective.

Although few banks are currently operating in public sector of Pakistan; nevertheless, a large number of banks are rendering their services in the private sector. However, in principle all the banks have to comply the regulatory guidelines defined by State Bank of Pakistan, hence, there is complete harmony and synchronization in relation to policy, lease, consumer loans, and interest markups (Ali & Ansari, 2007; Kashif, Rehman, & Pileliene, 2016). In order to achieve the goals, banks have separate prudential

regulations for different areas, for example, corporate and commercial banking, small and medium enterprise financing, consumer financing, micro financing, and agriculture financing (Rehman & Ahmad, 2008).

The major working of the banks has almost unified structural ornamgram where the country head office is in direct regulation of State Bank of Pakistan (as a central bank). The country director is incharge of zonal offices followed by regional offices which looks after the city branches. Most of the communication and decision making is from upward to downward direction with formalized structure, and each city branch is operated by branch manager who is accountable for the day-to-day working keeping in line with the major working of the overall policy (Shahriar & Tehranian, 2010). However, as each bank is striving to capture the maximum customers, so the nature of services and products do offer maximum variation and autonomy in reaching target communities.

Marketing departments of the banks are specifically assigned the tasks of developing and designing innovative services and products to capture the attention of the people not only in term of products but also with some value added services (Zameer, Tara, Kausar, & Mohsin, 2015). To win the competitive edge, marketing departments are deeply indulged into the process of addressing local needs of the people which are perfectly aligned with the cultural values and traditions.

The organizational structure of the marketing department of the banks constituted vice president (of marketing) who is in charge of the entire marketing department is involved in planning and creating the marketing strategy for the bank, its products, or its services (Shaikh, 2008). The vice president is also the person that the other marketing employees ultimate report and the vice president of marketing is the liaison between the

marketing department and upper management of the bank (Rehman & Ahmad, 2008). Vice president is usually followed by senior marketing director and marketing managers, who are further subdivided as marketing credit managers and managers marketing operations. Their tasks, typically, have the responsibility of carrying out the marketing strategy for the bank. This includes creating marketing messages, choosing mediums such as website advertising and print advertising, and carrying out other marketing campaigns and programs to reach the target audience of the bank (Kaura, Durga, & Sharma, 2015). Marketing managers are further assisted by the business development officers who work closely with sales in generating new business and leads. They persuade potential clients and prospects to engage with the bank and uses incentives to get customers to continue thinking about the product so that the sales team can convince them to buy the product (Shahriar & Tehranian, 2010). They also assist in identifying new markets for existing products or discovering a need that current customers have for a modified version of an existing product (Shaikh, 2008). These aforementioned task specifications of the marketing departments of banks further endorsed the functioning of banks as tall organizations.

On the other hand, in Pakistan, SWH are primarily an IT services companies that mostly deals in software product engineering, business intelligence, enterprise applications, and financial service providers to banks, healthcare, system integration, and IT services to their clients (Younis, 2017). The core products developed included software tools that are used in the automotive industry for fuel-efficient vehicles; publishing software that allows users to incorporate graphic templates, layouts, and web pages directly from the camera; and mobile wallet such as *easypaisa* and *omni* (Chodary,

2016). SWH in Pakistan have made a major leap and specialized in a wide variety of disciplines that include 3D modelling, game development, animation, character design, architectural visualization, cloud enterprise applications, automated data scraping, search analytics, mobile app development, and IT solutions (Sohail, 2013). With the advent of smart phones, Pakistani SWH have soon realized that there is a bigger fish to fry as smart phones changed the gaming landscape and left permanent mark on the face of Pakistani game development market. Local SWH have designed number of games for iPhone, Android, and Windows Phone devices that have hit top spots in their respective app stores (Balouch & Khalil, 2016).

The structural ornamagram of a professional software house is lead by executive manager (working as Head of Development / Project Manager) who reports to the stakeholders; under whom parallel sub-teams of managers are working depending on the size of the organization. Firstly, there is a team of business analysts whose main task is to define the business needs of the market; secondly, the team of software developers who mainly focus on creating the technical specifications and writing softwares; while, third team comprised of software testers who primarily focus on the whole process of quality management. In addition, there are technical writers (writing documentation such as user manuals / guides), graphic designers (designing the graphical user interface), and maintenance engineers (as a technical support backup). All the teams are fully independent and work separately on the different aspects of the projects (Masood & Malik, 2010). All the employees report to one person, that is head of development; however, there is inter-team communication at the horizontal level which makes the optimal usage of knowledge exchange and human resources. The above explained



structural functioning of SWH is, therefore, categorized as a flat organization (Mughal & Trimzi, 2015; Younis, 2017).

Persuasively, despite the structural differences in banks and SWH; there are certain similarities between the working of two organizations as both pertain to creating, developing, and designing the products and services in accordance to the customized needs of the people. Moreover, both organizations dealt with the ongoing process of creativity and novelty in the realm of ever expanding clients, markets, and enterprises.

On a concluding note, in the aforementioned sections, ample empirical and theoretical explanations have been reviewed regarding all the constructs of the present study. Literature based appraisal facilitate in developing comprehensive understanding of each construct not only in its sole entity but also in the paradigm of other constructs. In addition, global and indigenous studies are also examined to built reasonable conceptualization of these constructs in the back drop of Pakistani perspective as well in relation to tall and flat organizational structures. These empirical findings and theoretical underpinnings also assist in developing the theoretical research models which will be tested in the subsequent phases of the study. Given that, literature review further aid in generating research based assumptions on the parameters of personal and organizational demographics and offer pragmatic comparative grounds in terms of organizational structures.

### **Rationale of the Present Study**

As the current study attempted to explore the interplay of major constructs in the backdrop of Pakistani organizational context; nevertheless, there are multiple justifications which provide the inspiring grounds for the present study.

Firstly, review of literature identified an essential need to develop and enlarge the depth of comprehensive understanding about the possible influence of contextual factors such as authentic leadership on personal psychological factors such as PsyCap and WRF that play a vital role in maximizing the managerial efficiency and effectiveness (in terms of CWB).

The present study attempted to fill the void in three ways; firstly, by focusing on the emerging model of authentic leadership and its impact on work-related behaviors; secondly, to provide a comparative view of both tall and flat organizational structures in order to generate a comprehensive picture of the pragmatic value of authentic leadership model. Thirdly, taking SWH as a test case of flat organizational structure would highlight the arenas which further enhance the effectiveness and efficiency of one of the most evolved organization of Pakistan.

The present study centered its attention on the employees rendering their services at middle management of banks and SWH. The underlying assumption is that these workers are likely to be influenced more by the leadership practices and in turn their psychological states may either facilitate or hamper their creative output.

In the context of Pakistan, there is affluent empirical literature which offers inferences on the contextual factors (leadership) and personal or work-related outcomes. However, the major thrust is either on negative job based behavioral outcomes (for instance, job related burnout, turnover intentions, job stress), or positive upshots (such as organizational citizenship behavior, organizational commitment, job satisfaction) in relation to personal traits (such as big five model). Consequently, the native existing literature is silent about the role of psychological resources (resilience, efficacy, optimism, flow) of the employees which they themselves hold and also open to build up and expand (as these resources are developable rather than fixed traits). The present study attempted to explore these psychological resources which by their very nature would be the genuine reserves which managers can utilize for mobilizing the personnel for greater output and productivity.

On additional note, there is need to highlight the imperative role of creativity at workplace. Organizations having employees who are deficient in their creative potential may harm the organizational efficiency. Therefore, an enhanced understanding of the psychological resources (which are instrumental) in initiating and nurturing creativity in organizations would be an essential information with reference to global as well as native perspective.

Finally, in the present study, focusing on multiple job positions would enhance the variance of the variables, thereby, elevating the capacity to detect associations between constructs. This practice is much in accordance to the other studies (e.g., Aryee

et al., 2008; Coelho, Augusto, & Lages, 2011; Dust et al., 2014; Vaccaro et al., 2012) which also followed the similar sampling strategy.

The assumptions and rationale based on the literature review (given in this chapter) provide adequate grounds to proceed with the research design (Chapter II), indigenous exploration of constructs (Chapter III), psychometric estimates of research instruments (Chapter IV), and determining work-related outcomes of perceived authentic leadership (Chapter V). Subsequently, results are also discussed in milieu to the research models, potential flaws of the present study are identified, and corresponding suggestions are also outlined.

## RESEARCH DESIGN

The current exploration was primarily cross-sectional survey research design to determine the work-related outcomes of perceived authentic leadership among employees of two organizational structures. Majorly, the following constructs were explored in the current research that is, PAL, WRF, PsyCap, and CWB among employees working in tall organizations (i.e., banks) and flat organizations (i.e., SWH). The present research comprised of three studies. Study I constituted the indigenous exploration of major constructs of the research, selection of instruments, and tryout of the instruments. Study II focused on the psychometric estimation (reliability and validity) of instruments. Study III is the main study comprised of analyzing direct and indirect effects of perceived authentic leadership in the context of tall and flat organizational structures. Further details of these studies are presented in the following sections.

### **Study I: Indigenous Understanding of Research Constructs in Pakistan**

This study was further comprised of two phases with distinctive objectives. In phase I, indigenous understanding of the PAL, PsyCap, WRF, and CWB has been explored through focus group discussions (FGDs). While in phase II, approximate theory driven instruments were selected and try out of the measures was executed. Subsequently,

review of subject matter experts have been sought in order to address the issues of appropriateness of instruments in the native cultural context.

**Phase I: Focus group discussions.** Although the construct of authentic leadership and psychological capital had been studied in a couple of indigenous studies, but these studies (Abbasi, 2015; Abid et al., 2012; Hassan et al., 2013; Dawood, 2016) have also pointed out the differential understanding of these constructs within the domain of native perspective. Moreover, the constructs of WRF and CWB has been empirically investigated on foremost and initial grounds in Pakistani organizational settings. Therefore, phase I of this study was specifically designed to explore the indigenous understanding of these constructs as well as practices in relation to these constructs. This exploration has been done through four FGDs ( $N = 32$ ). Two FGDs were conducted with representatives of senior management of banks and SWH. Similarly, two focus groups were executed with representatives of first level management of banks and SWH. Another purpose of phase I was to develop an understanding of the specific working of these two organizations (banks and SWH) in terms of contextual factors related to the type of structure (flat versus tall).

**Phase II: Selection and try out of measures.** In the second phase of study I, the key focus was three pronged. Firstly, to select appropriate instruments (based on the themes emerged in FGDs); secondly, to assess the relevance of the sample in relation to the study variables, and thirdly, to determine the appropriateness of measures in terms of

language and content as per criteria of the employees. This phase was executed in three distinct parts. In part I, appropriate theory driven instruments were selected to appraise the primary variables of the study. In part II, measuring protocols of the study were tried on an independent sample ( $N = 25$ ) comprising employees of SWH and banks. The try out of measures on the present sample assisted in the identification of realistic concerns of the respondents, while attempting the instruments. In part III, opinion of subject matter experts (SMEs;  $N = 6$ ) has been sought regarding the measurement protocols of the study. Review of SMEs has been acquired at two levels; content SMEs that is, experts have been requested to review the instruments in the context of content and language difficulty as well as cultural and sample appropriateness. Process SMEs, that is, concerns regarding description of instructions and time required for the completion of all measures have been evaluated by the experts. Feedback received by the experts was reviewed through committee approach; and on the basis of expert recommendations few modifications were incorporated in the statements of the scales.

### **Study II: Psychometric Estimates of Instruments**

The empirical estimation of psychometric estimates of the instruments was established through pilot study. The primary purpose of the pilot study was two-fold; firstly, to determine the psychometric indices (internal consistency and validity) of all the instruments; secondly, to confirm the measurement models of the instruments. For pilot study, an independent sample ( $N = 277$ ) was employed to determine the reliability estimates and validity coefficients. Validity of the measures was assessed through two

aspects, that is, construct and factorial validity. As all the measures used in the pilot study were theory driven; therefore, it was essential to empirically confirm the dimensionality of the PAL, WRF, PsyCap, and CWB. Empirical corroboration of the measures was established through confirmatory factor analysis to analyze the factor structure of the said constructs and to test the distinctiveness of the variables. Confirmatory factor analysis yielded important information about the factor structure of perceived authentic leadership.

### **Study III: Work-Related Outcomes of Perceived Authentic Leadership**

To determine the direct and indirect effect of PAL in the context of organizational structures was established through conduction of main study. The broader aim of the main study was hypotheses testing in relation to main effects among the variables as well as to investigate the mediating function of PsyCap and WRF in predicting CWB from PAL. In addition, indirect effect of organizational structure (as a moderator) in explaining the relationship patterns among major study constructs was also undertaken. Furthermore, various literature based assumptions about group differences were also tested in relation to the personal (gender and education) and organizational (job designation, job experience, job period, and type of organization) variables. In the end, path models were generated to test the functioning of the constructs and demographics in relation to collective sample as well as individual samples of tall and flat organizations. Findings of the main study have been discussed both in the backdrop of the related literature as well as indigenous perspective. Potential limitations of the present study have been identified



and corresponding recommendations were suggested for future endeavors. Finally theoretical, practical, and managerial implications of the present study were also stated.

## STUDY I

### INDIGENOUS UNDERSTANDING OF THE STUDY CONSTRUCTS

The prime aim of this study was to appraise the suitability of the constructs in relation to the native population of the employees working in Pakistani banks and SWH.

Ample measurement literature (Coolican, 2014; Groth-Marnat, 2016; Jorgensen, 2017) highlighted the need to determine the appropriateness of the measures whenever being used in the diverse cultural and community settings. Psychological measurement theories (Ghiselli, 2012; Trendler, 2009) further suggest that scales based on theories mostly encompass the global trends and behaviors; nevertheless, it is a desirable and preferred practice to establish the cultural connotations of the constructs and their measures at the initial level prior to employing them for hypotheses testing to draw major inferences. It could be the case that the researchers may find superficial similarity but when being explored from the people with different language and society they may reflect or perceive the same behavioral expression with some variations in the implicit behavior. These initial exercise of drawing the compatibility of the latent and manifest equivalence helps to reduce the error variance and more confidence in establishing the findings.

Keeping in view the aforementioned considerations, indigenous exploration of the present study constructs was carried out and subsequently, appropriate instruments were selected, and modifications in certain items of the scales have also been sought to

enhance their comprehension and relevance to the native perspective. This study was further comprised of two separate phases with each phase based on the exclusive objectives. First phase employed FGDs to determine the understanding of study constructs in indigenous perspective; while, second phase comprised of selection and try out of measures, as well as review of subject matter experts for lingual and cultural relevance. Detailed description of each of the phases is given as follows.

### **Phase I: Focus Group Discussions**

The current exploration has integrated multiple factors which have been barely investigated in the backdrop of local perspective. In this regard, WRF and CWB are the foremost examples of such constructs. Even though authentic leadership and psychological capital has been studied earlier in various native researches; however, different perceptions of these constructs have been generated. Nonetheless, generous and rigorous researches have been done in Western countries; still these concepts are reasonably novel in Pakistan. Moreover, indigenous perceptions of these constructs would be culturally partialled and influenced. Therefore, FGDs were conducted to determine the general understanding of the employees regarding these constructs and also to grasp the comprehension of explicit behaviors through which these constructs are reflected. As per recommendations of Mishra (2016), this process would facilitate in understanding the structure and dimensions of these constructs.

**Objectives.** The following were the major objectives of the FGDs.



1. To determine the relevance of prime variables of the study in the backdrop of Pakistani work settings.
2. To grasp the functioning of constructs of perceived PAL, PsyCap, WRF and CWB and their individual dimensions, specifically, in relation to SWH and banks.
3. To determine the equivalence of cognitive and behavioral expressions of each construct along with its individual dimensions.
4. To understand the composition of job designations of each organization that is, banks and SWH.

**Method.** Four FGDs were conducted in a progression with the employees of both organizations (i.e., banks and SWH to explore) the dimensions of PAL, WRF, PsyCap, and CWB.

**Sample.** Employees were conveniently drawn from six SWH and banks (see annexure A). Individual focus groups were conducted with participants rendering their services at various levels of management. Focus group with representatives of middle level management was conducted with special arrangement and researcher has made specific appointments with these officers so as to ensure their presence at a given time. Convenient sampling technique was used in order to ensure maximum participation in the focus group.

First focus group was conducted with participants representing middle level management of marketing departments of banks with six (men = 4; women = 2) members

including vice president for investment banking (corporate and institutions = 3), senior managers retail marketing ( $n = 2$ ), and regional manager ( $n = 1$ ). The age of participants ranged from 42-57 years ( $M = 49.47$  years,  $SD = 3.61$ ) with an average of 13.09 years of job experience. This focus group was conducted in the meeting room of regional manager owing to the constricted time schedule of the regional manager.

Second focus group was carried out with eight representatives of entry/ first level management working in marketing departments of banks having an equal number of male and female employees. Participants included manager credit marketing ( $n = 2$ ), marketing manager ( $n = 2$ ), and business development officer ( $n = 4$ ) with age ranging from 26-35 years ( $M = 29.66$  years,  $SD = 3.71$ ) having average job experience of 2.22 years.

Third focus group was held with six participants representing second level management of the SWH including chief executive officer ( $n = 2$ ) and head of development ( $n = 4$ ). Participants were male employees with age range 38-49 years ( $M = 43.22$  years,  $SD = 4.39$ ) having an average job experience of 14 years.

Fourth focus group was performed with ten participants from entry / first level management of SWH. Participants (men = 6; women = 4) included system analysts ( $n = 3$ ), software engineers ( $n = 3$ ), web developers ( $n = 2$ ), graphic designers ( $n = 2$ ); with age range of 28-34 years ( $M = 31.04$ ,  $SD = 2.58$ ) and having average job experience of 2.45 years.

The average duration of each focus group was about an hour and all the chief factors of the study were separately discussed in each group. Hence, four diverse samples

have contributed in understanding the native perceptions of PAL, PsyCap, WRF, and CWB.

*Procedure.* Initially, participants were formally introduced so as to facilitate interaction in the group discussion. A thorough briefing about the objectives of the group discussion was shared with the participants of each group. They were further ensured about the confidentiality and privacy of the personal information provided by them. In addition to that, it has been further ascertained by the researcher that their official affiliations and interests would not be reflected in the interpretation of the discussions. Participants were given concise and standard descriptions of each constructs of the study. A semi-structured focus group guideline (see annexure B) was used to initiate the discussion. Participants were asked to narrate their individual perceptions and instances in relation to their official working. The researcher acted as a moderator and took notes during and at the end of the session.

As each focus group comprised of participants of the similar work setting and level of management, hence, it was much convenient to express and share as many illustrations of each construct as possible. Participants were also asked to relate different examples to the different dimensions of that construct. While concluding each discussion, participants of focus groups were graciously appreciated for their valuable intellectual input and temporal effort in the conduction of the present study. Afterwards, individual letter of thanks (see annexure C) were sent to each participant and researcher has shared the email contact for any further query or concern.

*Results.* The technique of content analysis was employed to evaluate transcribed data. On the basis of analyzing the data, relevant codes were generated to determine its coherence and consistency with the original theoretical explanations of each variable (see Table 1).

Table 1  
*Major Themes Identified on Study Constructs through FGDs*

Constructs & Dimensions	Major Themes
Perceived Authentic Leadership	
<b>Relational Transparency</b>	<ul style="list-style-type: none"> <li>Leader presents his/her authentic self to others</li> <li>Openly shares information</li> <li>Openness in relations</li> </ul>
<b>Balanced Processing</b>	<ul style="list-style-type: none"> <li>Objective analysis of the information</li> <li>Explicit and constant rules in taking decisions</li> </ul>
<b>Internalized Moral Perspective</b>	<ul style="list-style-type: none"> <li>Setting constant standards for moral and ethical principles</li> <li>Decisions and behaviors consistent with inner moral values</li> </ul>
<b>Self-awareness</b>	<ul style="list-style-type: none"> <li>Awareness of one's strengths and limitations</li> <li>His / her impact on others</li> <li>Perceptions of others about him/her</li> </ul>

*Continued...*

<b>Constructs &amp; Dimensions</b>	<b>Major Themes</b>
<b>Psychological Capital</b>	
<b>Self-efficacy</b>	<ul style="list-style-type: none"> <li>Conviction about oneself to use personal potential and resources</li> <li>Self confidence</li> <li>Belief in one's own abilities and capacities</li> <li>Perseverance in facing obstacles</li> </ul>
<b>Hope</b>	<ul style="list-style-type: none"> <li>Positive motivational state</li> <li>Determining pathways to achieve goals</li> <li>Focusing energy on the set pathways</li> </ul>
<b>Resilience</b>	<ul style="list-style-type: none"> <li>Reviving energy and efforts in case of difficulties and hardships</li> <li>Moving on after failures and setbacks</li> <li>Endurance, tolerance, and flexibility to deal with complex life pressures</li> </ul>
<b>Optimism</b>	<ul style="list-style-type: none"> <li>Positive attribution of events</li> <li>Healthy and constructive way of perceiving people, objects, and events</li> <li>Finding a ray of sunshine even in case of failure and disappointments</li> </ul>
<b>Work-Related Flow</b>	
<b>Absorption</b>	<ul style="list-style-type: none"> <li>State of total concentration</li> <li>Total immersion in work</li> <li>Altered perceptions of time (time passes quickly)</li> <li>Low self-awareness and forget everything around them.</li> </ul>
<b>Work Enjoyment</b>	<ul style="list-style-type: none"> <li>Inherent enjoyment of one's work and feel happy</li> <li>Make positive judgments about the quality of one's working life.</li> <li>Pleasure from the involvement in the work</li> </ul>
<b>Intrinsic Work Motivation</b>	<ul style="list-style-type: none"> <li>Work-related activity triggered by internal urge</li> <li>Internal satisfaction from the activity</li> <li>Involving in activity which is equally difficult yet emotionally satisfying</li> </ul>
<b>Creative Work Behavior</b>	
	<ul style="list-style-type: none"> <li>Process of coming up with fresh ideas to improve existing techniques, procedures, and mechanisms</li> <li>Creative potential is manifest</li> <li>Other employees can also apply these ideas in their own work</li> <li>Incidences through which creative potential is reflected</li> <li>New but potentially useful ideas about organizational products or services</li> </ul>



Findings showed that each of the variable is reasonably explained along with its core dimensions. The frequency and incidence of each theme was coded and recorded. The data for all the constructs (PAL, PsyCap, WRF, and CWB) did not generate any new category which would have deviated from the existing dimensions or link up any new dimension to the study variables.

Consequently, FGDs with Pakistani employees indicated that constructs of the current study are dimensionally analogous to the original theoretical models. However, for the construct of perceived authentic leadership, one instance of *admitting the mistake openly and publicly* was not reflected by the participants. This observation was jointly reported by the employees of both work settings. Another aspect of the same construct was *expressing emotions in line with the feelings* was also not reflected by the participants. The researcher noted these two instances and anticipates gauging the pattern of dimensions in confirmatory factor analyses which were performed in the subsequent phase of the pilot study.

## **Phase II: Selection and Try-out of Instruments**

In the second phase of study 1, the key focus was two pronged, that is, on one hand, to select the appropriate instruments in relation to the study variables and on the other, to determine the suitability and pertinence of the instruments with reference to the target samples.

**Objectives.** The following objectives were phrased for the second phase:

1. To select the theory based instruments which are in close proximity to the themes of FGDs.
2. To capture general understanding and comprehension of the respondents regarding the instruments.
3. To determine the appropriateness of instruments in relation to content, language, format, instructions, and time.
4. To identify the related demographics of the targeted sample to be included in demographic sheet (that would be used in the subsequent phase).

In order to acquire the proposed objectives; Phase II was further comprised of three parts:

**Part I: Selection of instruments.** Themes identified in the previous phase of FGDs were quite in close proximity to the theoretical models of the relevant constructs of the study. Therefore, it gives an additional support in the selection of theory driven scales to assess these constructs. In this regard, measures of Perceived Authentic Leadership Questionnaire (PALQ; based on the authentic leadership theory, Avolio et al., 2007), Psychological Capital Questionnaire (based on psychological capital model, Luthans et al., 2007), Work-Related Flow Scale (based on flow at work theory, Bakker, 2008), and Creativity Scale (based on creative work behavior model, Zhou & George, 2001) were selected to appraise the related constructs. In addition, measure of Social Desirability Scale (Stober, 2002) was also selected to test the problem of social desirability and as a control of common method variance (see chapter V). The elaborative details of these instruments are given below:

*Authentic Leadership Questionnaire.* To appraise employees' perceptions of their leader (immediate boss), Authentic Leadership Questionnaire (ALQ; Avolio et al. 2007; see Annexure D) was used. ALQ consisted of four subscales spanned over 16 statements to be opinionated along 5-point scale (1 = *not at all* to 5 = *always*). Four subscales with individual items were Relational Transparency (5 items: 1, 2, 3, 4, & 5); Internalized Moral Perspective (4 items: 6, 7, 8, & 9); Balanced Processing (3 items: 10, 11, & 12); and Self-awareness (4 items: 13, 14, 15, & 16). Respondents express their level of agreement in relation to 16 behaviors or attitudes which their leaders manifest at workplace. Possible score range can vary from 16 to 80 and higher score indicates more favorable perceptions of authenticity regarding the immediate boss.

Reported alpha coefficients in earlier investigations (for instance, .87, Gardner et al., 2005 and .91, Walumbwa et al., 2008), indicated the ALQ as dependable tool of the said construct. Studies conducted in Pakistan employing ALQ, found the measure as dependable and reliable estimate of the said construct. For instance, Hassan et al. (2013) and Adil and Kamal (2016) reported internal consistency coefficient of .78 and .96 (respectively) for the total ALQ among university teachers of public and private sector. Similarly, Kiyani et al. (2013) found ALQ ( $\alpha = .83$ ) as reliable instrument for the employees of telecommunication companies operating in Pakistan. In addition to that, Abid et al. (2012) reported alpha coefficient of .78 for the total ALQ among employees of small and medium enterprises. Additional evidences ( $\alpha = .82$ , Dar, 2014;  $\alpha = .74$ , Dawood, 2016) of psychometric adequacy of ALQ was also found among employees of public sector organizations.

Authors (Avolio et al., 2007) reported that ALQ is used equally as self report measure of personal practices of authentic leadership and / or perceptions of employees towards authentic leadership style of their leaders. In the present study, ALQ has been used to assess perceived authentic leadership as experienced by the employees about their immediate boss. Permission to use ALQ in the present study was acquired from Mind Garden Publishers (see annexure L).

***Work-Related Flow Scale.*** The Work-Related Flow Scale (WRFS; Bakker, 2008; see Annexure E) constituted 13 items and three subscales that assess different aspects of the flow experience at work. The subscales with respective items included Absorption (4 items: 1, 2, 3, & 4); Work Enjoyment (4 items: 5, 6, 7, & 8); and Intrinsic Work Motivation (5 items: 9, 10, 11, 12, & 13). Respondents can indicate their degree of agreement along 7-point rating scale (1 = *never* to 7 = *always*). Bakker (2008) asserted sufficiently adequate indicators of internal consistency for the subscales (i.e., Absorption = .90; Intrinsic Work Motivation = .85; Work Enjoyment = .79). Likewise, Bakker (2014) further provided evidence of good test-retest reliability (.79) of WRFS. Later studies also indicated sound reliability indices for WRFS (e.g., .89, Bakker, 2015; .91, Poutsma, Heijden, Bakker, & Bruijn, 2014). Permission to use WRFS was acquired from the original author through personal correspondence (see Appendix L).

***Psychological Capital Questionnaire.*** To assess PsyCap, the present study used 24 item Psychological Capital Questionnaire (PCQ; Luthans et al., 2007; see Annexure

F). Responses were acquired on to be rated on 6-point scale (*strongly disagree* = 1 to *strongly agree* = 6). PCQ comprised of four subscales that is Self-efficacy (1, 2, 3, 4, 5, & 6); Hope (7, 8, 9, 10, 11, & 12); Resilience (13, 14, 15, 16, 17, & 18); and Optimism (19, 20, 21, 22, 23, & 24). Three items (13, 20, and 23) were negatively phrased; therefore, these were reverse scored where *strongly agree* was marked as 1 and *strongly disagree* as 6.

Reliability indices reported by authors ( $\alpha = .86$ ; Avey, Luthans, & Youssef, 2010;  $\alpha = .94$ ; Avey et al., 2011) render the scale as dependable measure of PsyCap. Prior studies conducted in Pakistan also reported higher and satisfactory reliability estimates of PCQ. For instance, Adil and Kamal (2016) acquired alpha of .86 for the total PCQ for the sample of university teachers. Abbasi (2015) achieved adequate alpha coefficient for total PCQ (.90) as well as for subscales of Resilience (.78), Optimism (.76), Self-efficacy (.79), and Hope (.72) among the sample of small business entrepreneurs. Another study (Shaheen, 2015) conducted on Pakistani employees of multinational organizations also reported alpha of .84 for the total PCQ. In the present study, copyright permission to use PCQ was attained from Mind Garden Publishers (see Appendix L).

***Creativity Scale.*** Zhou and George (2001) developed an instrument of Creativity Scale which entails cognitive and behavioral manifestations of general creativity at work. In the current study, Creativity Scale (Zhou & George, 2001, see Annexure G) was used as an index of personal perceptions of creative work behavior of employees. The 13 item scale could be marked on 5-point Likert options (*not at all* = 1 to *a great extent* = 5).

Prior studies exhibit sufficiently adequate indices of internal consistency (for example, .92, Rego et al., 2012 and .96, Zhou & George, 2003).

Prior investigations have employed Creativity Scale both in the capacity of ratings acquired from the immediate supervisors or boss of the employee (Dansereau & Yammarino, 2000) as well as self-report appraisal of employee's own perceptions of creativity at work (Zhou et al., 2012). However, supervisor's ratings has an inherent problem that supervisors had to rate more than one employee, there would be a risk that the creativity rating scores of individual employees are contingent on the personal identity of the rater (Darini et al., 2011). Therefore, in the current exploration, perceived reflections of the employees about their creative expressions at workplace were gauged through the Creativity Scale. Zhou and George (2003) reviewed creativity literature, conceptual work on process models, and accounts of creative endeavors in the workplace and their origins, had identified five routes through which creative behavior may originate and proceed in the organization; that is identifying a problem or an opportunity, gathering information and resources, generating ideas, and implementing ideas. They further proposed that these routes are not necessarily sequenced in a predetermined order; therefore, once creativity has been initiated through one of these routes, other routes also come into play. Permission to use CS for the present study was obtained from the original author through personal correspondence (see Annexure L).

***Social Desirability Scale-17.*** In the present study, all the instruments were self-report measures of the constructs of the study. Ample research (Dalal, Zawada, Jolly, Moxham,

& Taylor, 2010; Neuberger, 2016; Tomassetti, Dalal, & Kaplan, 2016) has shown that social desirability had been an inevitable part of self-report measures; therefore, SDS-17 was used to determine the impact of social desirability of the respondents. The Social Desirability Scale-17 (SDS-17; Stober, 2001; see Annexure H) comprised of 16 items. The SDS-17 captures the tendency to describe oneself with socially desirable attributes in the sense of Paulhus' (1986) construct of impression management. Originally, the SDS-17 contained 17 items, thus its name (Stober, 1999). Further validation studies, however, showed that one item on drug use consistently showed item-total correlations near zero (Stober, 2001) so the revised scale contained only 16 items. Responses could be obtained as *true* or *false* (dichotomous response options); whereas 6 items were reverse scored. Each *true* response on items 2, 3, 4, 7, 8, 9, 11, 12, 13, and 15 and each *false* response on items 1, 5, 6, 10, 14, and 16 was awarded 1 point. Then points were summed up across items and raw score could range from 0-16.

The convergent validity of SDS-17 scores showed correlations between .72 and .85 with other measures of social desirability; for instance, Eysenck Personality Questionnaire-Lie Scale (Eaves & Eysenck, 1975) and Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960). Moreover, scores were highly sensitive to social-desirability provoking instructions (job-application instruction). Finally, with respect to the Balanced Inventory of Desirable Responding (Paulhus, 1994), SDS-17 scores showed a unique correlation with impression management, but not with self-deception. In sum, SDS-17 is a reliable and valid measure of social desirability, suitable for adults of 18 years and above (Stober, 2001). In the present study, Social Desirability

Scale-17 is also used as a common marker variable to assess common method variance (see Chapter V). Original author of SDS has provided consent to use this scale for the present study through personal correspondence (see Appendix L).

*Demographic sheet.* Sample specific demographic sheet (see Annexure I) was developed tailored to the sociological attributes of the ultimate sample. The demographic sheet included both personal and organizational characteristics of the respondents. The personal traits related to gender, age, highest academic degree, and marital status was included. On the other hand, organizational characteristics included type of organization, organization size, job designation, overall job experience, job period in the present organization, average working hours, and monthly income.

*Informed Consent form.* An elaborative consent form (See Annexure J) specifying an introductory note about the broader objectives of the present study was designed to be presented in the beginning of the questionnaire booklet. The consent form also educates the respondents about their ethical rights as participants in social survey. It further addresses the ethical considerations related to informed consent, confidentiality, and avoidance of coercion which are essentially to be shared with the respondents. At the end, researcher's contact details were also given for any query or concern to be shared by the respondents.



**Part II: Tryout of measures.** The theory driven instruments that have been selected in the previous part were tried out on a small sample of employees of both organizational groups.

*Sample.* In this part, major instruments of the study have been tried on an independent sample ( $N = 25$ ) comprising both employees of SWH ( $n = 14$ ; including system analyst = 5, web developers = 3, computer programmers = 2, software engineers = 4) and banks ( $n = 11$ ; including marketing operation managers = 3, credit marketing manager = 5, business development officer = 3) from Islamabad. Respondents included both male ( $n = 19$ ) and female ( $n = 6$ ) participants. Age of the respondents fluctuated from 29-40 years ( $M = 33.21$ ,  $SD = 2.3$ ); having mean job experience of 4.67 years in their present organizations. The try out of measures on the present sample assisted in the identification of concerns of the respondents while attempting the instruments.

*Measures.* The instruments described on page 69 were tried on the related samples.

*Procedure.* Certified and authorization consent was obtained from the respective heads of each organization. Employees were contacted on individual basis at their workplaces. Respondents were briefed about the purpose of try out by narrating that they would provide their feedback regarding the content and sample appropriateness of the said measures. They were also asked about their perceptions for the suitability of work related behaviors given in the questionnaires and whether they also experience the same

behaviors in their daily work routines. Moreover, respondents were also encouraged to reflect any of their concern regarding content, expression, and phrasing of statements. Finally, particular constraints of time related issues in filling the questionnaires that should also be expressed.

**Results.** Respondents shared their concern for the time required in the completion of questionnaires which would be approximately 20 minutes. They also express their concern for altering or adding the term *my immediate boss* along with the term *leader* so as to make it more clear and relevant in Authentic Leadership Questionnaire. Respondents also identified few words or phrases of the statements of various questionnaires which need further clarification (see Table 2).

**Part III: Expert opinion.** In this part, SMEs were involved in order to acquire their review and feedback on the instruments.

**Sample.** At this level, opinion of SMEs has been sought regarding the instruments of the study. Subject experts ( $N = 6$ ) comprised of professors of psychology ( $n = 2$ ) and Ph.D scholars ( $n = 4$ ) with extensive research experience. Review of SMEs has been acquired at two levels; that is content and process:

*Content SMEs.* Subject experts have been requested to review the instruments in the context of cultural and sample appropriateness. Moreover, concerns related to the content and language difficulty were also evaluated by them.

*Process SMEs.* Concerns regarding description of instructions and time required for the completion of all measures have also been evaluated by the experts. Feedback received by the experts was finalized through committee approach.

*Measures.* Instruments described on page 69 along with demographic sheet have been evaluated by the subject experts.

*Results.* Review received by the experts has further helped in identifying few words and phrases which either need to be rephrased or parallel simpler terms were proposed to enhance lingual and thematic understanding of the statements. Few (difficult to comprehend) words and phrases that have been identified by the respondents in the try out phase were modified by the SMEs and as per their suggestions, alternate and simple terms were mentioned within the parenthesis so as to keep the stimulus statements in the original form and easier to reply; simultaneously. The recommendations were incorporated as given in Table 2.

As shown in Table 2, there are two statements of the Perceived Authentic Leadership Questionnaire, and one statement each in Work-Related Flow Scale and

Creativity Scale that have been modified in a way that simpler terms are also added in parenthesis to enhance the understanding of the respondents.

Table 2

*Modifications in Scale Items of the Questionnaires*

Item #	Scale Title	Recommended Term / Word
<b>Authentic Leadership Questionnaire</b>		
7	Makes decisions based on his or her <b>core</b> ( <i>fundamental / central</i> ) values.	
10	<b>Solicits</b> ( <i>ask for</i> ) views that challenge his or her deeply held positions.	
<b>Work-Related Flow Scale</b>		
4	I am totally <b>immersed</b> ( <i>absorbed</i> ) in my work.	
<b>Psychological Capital Questionnaire</b>		
7	If I should find myself in a <b>jam</b> ( <i>stuck / blocked</i> ) at work, I could think of many ways to get out of it.	
16	I usually handle stressful thing at work with a <b>stride</b> ( <i>without getting upset</i> ).	
24	I approach this job that <b>sun is always shining</b> ( <i>with a ray of hope in my mind</i> ).	
<b>Creativity Scale</b>		
8	At my workplace, I am able to promote and <b>champions</b> ( <i>support</i> ) ideas of others.	
<b>Social Desirability Scale</b>		
1	I sometimes <b>litter</b> ( <i>carelessly scatter trash / debris, throw garbage</i> ).	
11	I would never <b>live off</b> ( <i>financially dependent on</i> ) other people.	
13	During arguments I always stay objective and <b>matter-of-fact</b> ( <i>straight forward</i> ).	

*Note.* Simpler terms / words are given as italicized within parenthesis.

Likewise, three statements each from Psychological Capital Questionnaire and Social Desirability Scale are provided with alternate easier terms which can be readily comprehended by the respondents. Overall, only those terms have been identified and modified which are less conventionally used in non-native speakers of English language.

**Discussion.** Intention of undertaking study I was to develop the pragmatic grounds for the indigenous relevance and understanding of the research constructs. At the outset, four FGDs were conducted with employees of both tall (banks) and flat (SWH) organizations so as to capture the essence and meaningfulness of each variable in the Pakistani perspective. FGDs were conducted with employees of first and second level management of flat organization (SWH); while, in case of tall organization (banks) the same exercise was carried out with the first and middle level management. Purpose of approaching and gathering information from varying levels of management is to capture the diversity of opinion and judgment of responses from assorted angles from the people working at different levels of the organization.

Results of the FGDs revealed that individual dimensions of internalized moral perspective, self-awareness, relational transparency, and balanced processing representing the overall theoretical construct of authentic leadership have been well reflected by the respondents. However, two statements of the relational transparency that is the *leader is admitting mistakes openly / publicly* and *expressing feelings in line with the emotions* have not been expressed by the respondents. Therefore, these two indicators of relational transparency were decided to be gauged in the subsequent phases of the study. On the other hand, dimensions of psychological capital (hope, self-efficacy, resilience, and optimism) and work-related flow (absorption, work enjoyment, and intrinsic work motivation) have been adequately expressed and endorsed by the respondents. Similarly, indicators of creativity at workplace have been sufficiently

articulated by the participants of FGDs. The themes emerged in FGDs were in close harmony to the theoretical descriptions of these constructs and therefore, conferred rational basis for the equivalence of cognitive and behavioral expressions of these constructs.

The information gathered from FGDs paved the way to the selection of appropriate instruments related to these constructs. In this regard, theory driven measures of Perceived Authentic Leadership Questionnaire (Avolio et al., 2007), Psychological Capital Questionnaire (Luthans et al., 2007), Work-Related Flow Scale (Bakker, 2008), and Creativity Scale (Zhou & George, 2001) were opted to assess each variable; respectively.

Later, these instruments were tried on a small sample of employees (from banks and SWH) to evaluate the respondents' viewpoint in determining the appropriateness and comprehension of the measures. In the try out phase, respondents pointed out few terms and phrases in the instruments which were difficult to be comprehended equally by all the respondents having varying levels of education and experience. Respondents also highlighted the concerns related to time required for filling out the questionnaires; which were considered in designing instructions for attempting the scales.

Finally, expert opinion was sought to further evaluate these measures for cultural appropriateness and comprehension of content as well as instructions. Experts recommended alternate simpler terms for those phrases which have been highlighted by the respondents in the try out phase. Experts further suggested keeping the stimulus statements as such which would not hamper the logical flow of the statement; however,

to mention easier words in parenthesis would maximize the comprehension of the respondents. Experts further gave suggestions regarding the content of the instructions to make it more reader friendly and simple to follow.

### **Conclusion**

All these efforts invested in study I is to assure that there is absolute pertinence of measures with the Pakistani sample (in general) and employees of SWH and banks (in particular). In addition, findings of this part of the study reflect firm basis for the cognitive and behavioral equivalence of the research protocols. These procedures also facilitated in enhancing clarities about lingual expression, instructions to fill the questionnaires, and time for completing the questionnaires. These measures are now all set for further empirical testing and psychometric estimation of reliability and validity indices which is narrated in next chapter.

**STUDY II****PSYCHOMETRIC ESTIMATES OF INSTRUMENTS**

After the initial reviewing of the measures and incorporating the recommended observations of the subject experts and the representatives of the relevant samples, psychometric estimation of the measurement protocols was executed in the pilot study. The primary purpose of the pilot study was two-fold; that is to determine the psychometric estimates (reliability and validity) of the instruments and confirmation of the measurement models.

**Objectives**

The major objectives were as follows:

1. To determine psychometric properties (indices of internal consistency and validity estimates in terms of intra-scale correlations) of the instruments of the study.
2. To assess the measurement models and determine the factor structure through confirmatory factor analysis of PAL, PsyCap, WRF, and CWB.
3. Inter-scale correlations would be tabulated to examine the data trends among principle variables of the current investigation.



## Sample

A purposively convenient sample comprising of adult regular employees ( $N = 277$ ) working in SWH as well as banks operating in private sector of Islamabad and Rawalpindi was acquired. Initially 300 questionnaire booklets were distributed among employees of both types of organizations, but owing to the missing data, 23 questionnaires were eliminated, yielding 277 usable questionnaires (Table 3).

Table 3

*Descriptive Statistics of the Sample (N = 277)*

Variables	<i>f</i>	%	Variables	<i>f</i>	%	
<b>Type of Organizations</b>			<b>Job Designations: SWH (132)</b>			
SWH	132	47.65	Computer Programmers	46	34.84	
Banks	145	52.35	System Analysts / Integrators	24	18.10	
<b>Gender</b>			Software Engineers	21	16.01	
Men	195	70.40	Senior Software Engineers	11	8.33	
Women	82	29.60	Web Designers	20	15.15	
<b>Education</b>			Software developers	10	7.57	
Graduation	38	13.72	<b>Job Designations: Banks (145)</b>			
Masters	126	45.48	Marketing Managers	34	23.44	
MS/ M.Phil	82	29.60	Managers Credit Marketing	31	21.37	
Ph.D	31	11.20	Senior Marketing Managers	27	18.62	
<b>Job Experience</b>			Managers Marketing Operations	25	17.24	
2 – 6 years	102	36.82	Business Development Officers	28	19.33	
6.1 – 12 years	92	33.21	<b>Organization Size</b>			
12.1 – 18 years	83	29.97	SWH (132) $\geq$ 20-40	77	58.33	
<b>Job Period in Present Organization</b>				36-50	55	41.67
1 – 6 years	158	57.03	Banks (145) $\geq$ 20-35	81	55.86	
6.1 – 12 years	119	42.97		36-50	64	44.14

Respondents included male and female participants, with age range of the employees of SWH varied from 24 – 39 years ( $M = 32.04$ ,  $SD = 6.12$ ), and age of bank

employees ranged from 29 – 49 years ( $M = 37.02$ ,  $SD = 5.55$ ). However, overall age bracket of the total sample varied from 24 – 49 years ( $M = 34.75$ ,  $SD = 5.27$ ).

Job designations of the participants were categorized according to the nature of the organization. In case of banks, participants included managers from main marketing section, credit marketing unit, and marketing operations as well as business development officers. On the other hand, respondents from SWH included web designers, computer programmers, software developers, system analysts, software engineers, and senior software engineers.

**Equivalence of job designations.** In the present study, job designations of the banks and SWH are specified as per requirement of the organization. However, these job titles are matched and equalized on those indicators which have been pointed out by the organizational researchers in global perspective (Garvin, 2017; Hao et al., 2012; Kappagoda, 2013; Lunnan et al., 2019) as well as in Pakistan (Chodary, 2016; Faisal & Jan, 2015; Masood & Malik, 2010). This step was also imperative to control the confounding that may penetrate owing to the diversity of nature of working of both occupations. In this regard, the following indicators were used:

**Managerial level.** All the employees of both organizational setups are working at first level or entry level management of marketing departments of banks and SWH (Hertal et al., 2003; Iveroth, 2014).

*Job specification.* The basic premises of the job content included designing, production, developing client strategies, creating products and services in accordance to the customized needs of the clients as well as crafting promotional products (Iqbal & Raza, 2009; Jex, 2015; Khan et al., 2013).

*Execution of task.* Employees of both organizational work settings (marketing departments of banks and SWH) are required to execute their task in the form of teams and task groups which work in close coordination with the team lead who is the representative of the team. Nonetheless, all the decisions regarding operations, mechanisms, and procedures to be followed must be taken in the form of task team with mutual input and contribution (Masood & Malik, 2010; Santra & Giri, 2016; Shaikh, 2008; Zameer et al., 2015).

*Potential consumers.* The direct recipients of the products and services of marketing section of banks and SWH included clientele from both national and international origins comprising individuals, corporate groups, investment companies, business enterprises, consultation firms, and public sector organizations (Davis & Lawrence, 2015; Kaplan & Norton, 2016; Khan, Ferguson, & Pérez, 2015).

These aforementioned indicators not only helped in developing comparable, yet, similar basis for the functioning of employees in the context of marketing departments of banks and SWH, but also laid grounds for equating the operational procedures of SWH

and marketing department of banks. In addition, the equating indicators promote facilitation in drawing meaningful inferences in relation to major constructs of the study.

**Inclusion criteria.** Respondents working in private sector SWH and banks operating in Islamabad and Rawalpindi were included in the sample. Employees with overall job experience of minimum 2 years with at least 1 year job period in the present organization were approached for data collection.

Major reason of acquiring sample from two occupations (banks and SWH) was pooling individuals with different occupations contributes to the generalizability of the findings. Moreover, focusing on a multiple job positions would enhance the variance of the variables, thereby elevating the capacity to detect associations between constructs. This practice was much in accordance to the other studies (e.g., Coelho et al., 2011; Spencer & Muchnick, 2015) which also followed the similar sampling strategy.

### **Instruments**

The instruments which were reviewed and modified in study I were employed in the pilot study. Details of the measures have been mentioned previously on page 69.

### **Procedure**

Consent to gather data from the employees was attained from head projects of the SWH and branch managers of banks. Personal visits were scheduled on the basis of prior

appointments from each participant. Individual informed consent was acquired from the respective respondent and brief orientation was also narrated regarding nature of the data collection. In addition, personal queries of the respondents were also clarified and any concern regarding the output of data was satisfactorily replied. All the ethical obligations were strictly observed by complying with the considerations of informed consent, confidentiality, and debriefing of the respondents. All the ethical, humane, and practical considerations were taken into account during data collection.

## **Results**

The preliminary purpose of pilot study is to establish psychometric estimates (indices of internal consistency, validity estimates in terms of intrascale correlations) of ALQ (Avolio et al., 2007), PCQ (Luthans et al., 2007), WRFS (Bakker, 2008), CS (Zhou & George, 2001), and SDS-17 (Stober, 2001). It was also intended to confirm the measurement models and validate the factor structure through confirmatory factor analyses of PAL, PsyCap, WRF, and CWB.

**Descriptives and reliability estimates.** Initially Cronbach's alpha coefficients were tabulated to determine the reliability of measures. Indicators of skewness and kurtosis were determined to establish the normal distribution of the data. Moreover, potential and actual score ranges obtained on the measures were also reported along with average scores and standard deviations.

Table 4 shows means, standard deviations, coefficients of skewness and kurtosis as well as Cronbach's alpha reliability coefficients of all the scales and subscales.

Table 4

*Descriptive Statistics and Alpha Reliability Coefficients for Scales and Subscales (N = 277)*

Scales	No. of items	$\alpha$	$M$	$SD$	Kurt.	Skew.	Range	
							Potential	Actual
<b>ALQ Total</b>	16	.71	45.14	10.33	-.23	.16	16 – 80	22 – 60
RT Subscale	5	.44	16.27	3.14	-.05	.11	5 – 25	9 – 22
IMP Subscale	4	.75	12.37	2.82	-.13	.09	4 – 20	10 – 14
BP Subscale	3	.69	9.27	1.36	.18	.14	3 – 15	6 – 12
SA Subscale	4	.74	10.29	4.11	.10	.08	5 – 20	8 – 14
<b>WRFS Total</b>	13	.87	58.64	11.42	-.28	-.14	13 – 91	25 – 84
Absorption Subscale	4	.77	18.67	3.24	-.11	-.09	4 – 28	9 – 26
WE Subscale	4	.75	16.23	2.43	.32	-.13	4 – 28	6 – 22
IWM Subscale	5	.79	24.48	4.57	.17	-.12	5 – 35	12 – 32
<b>PCQ Total</b>	24	.89	92.71	16.41	.46	-.14	24 – 144	55 – 128
SE Subscale	6	.81	22.96	4.87	.25	-.12	6 – 36	12 – 36
Hope Subscale	6	.76	23.93	5.15	.17	-.13	6 – 36	12 – 35
Resilience Subscale	6	.79	22.11	4.50	.26	-.19	6 – 36	13 – 32
Optimism Subscale	6	.74	23.72	3.88	.18	-.08	6 – 36	16 – 36
<b>Creativity Scale</b>	13	.83	37.66	5.37	.34	-.12	13 – 65	18 – 52
<b>SDS-17</b>	16	.78	4.38	2.12	.13	-.05	0 – 16	2 – 8

*Note.* Skew = Skewness; Kurt = Kurtosis; ALQ = Authentic Leadership Questionnaire; WRFS = Work-Related Flow Scale; PCQ = Psychological Capital Questionnaire; RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-awareness; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; SE = Self-efficacy.

As evident from the Table 4, all the coefficients were deemed acceptable, since they have exceeded the cutoff value of .70 as recommended by Pallant (2013). Cronbach's alphas were high for Work-Related Flow Scale, Psychological Capital Questionnaire, and Creativity Scale; however it was satisfactory for Social Desirability Scale-17. Similarly, the reliability coefficients of subscales of PCQ and WRFS were also found above .70 indicating that all the measures were dependable and reliable instruments of the said variables. Conversely, index of internal consistency for Authentic

Leadership Questionnaire (.71) was quite marginal. In addition to this, the subscale of Relational Transparency exhibited quite low alpha coefficient (.44); therefore, it need to be further explored in the confirmatory factor analysis (discussed in the subsequent section). Values of skewness and kurtosis were within the acceptable range of +1 to -1, thereby indicating the normality distribution of data. These coefficients further strengthen the low influence of social desirability.

**Validity estimates.** Validity of the measures was assessed through factorial validity. As all the measures used in the pilot study were theory driven, therefore, it was essential to empirically confirm the dimensionality of the PAL, PsyCap, WRF, and CWB.

The measurement models of the instruments were examined through confirmatory factor analyses (CFA). CFAs were tabulated to establish the factor structures of PAL, PsyCap, WRF, and CWB with respect to Pakistani perspective. Therefore, these instruments need to be cross validated in the domain of Pakistani organizations.

According to Byrne (2013), CFAs used the traditional chi-square value, the goodness-of-fit index (GFI) and the root mean square error of approximation (RMSEA). As a rule of thumb, a  $GFI \geq .90$  and  $RMSEA \leq .06$  indicate a reasonable fit of the model to the data (Pearl, 2012). In the light of the criteria set by researchers (Dattalo, 2013; Duncan, Duncan, & Strycker, 2013; Hoyle & Isherwood, 2013) for the appropriate model fit indices in social sciences include the values of RMSEA which are usually categorized and interpreted as close fit (.00 – .05), fair fit (.05 – .08), mediocre fit (.08 – .10), and poor fit (over .10); while the incremental indices such as non-normed fit index (NNFI),

the incremental fit index (IFI), and the comparative fit index (CFI) should have values of .90 or higher. As per recommendations of Cohen (2013) and Monecke and Leisch (2012), the sample size of 277 was quite good for the confirmatory factor analysis as it met the criteria of N:p ratio which in this case is 1:5. In the following section, factor structures of the major instruments of the study analyzed by confirmatory factor analyses are presented.

*Confirmatory Factor Analysis of Authentic Leadership Questionnaire.* The factor structure of ALQ was appraised with CFA. Table 5 presents model fit indices of first order and second order factor structure of this scale; while Figure 4 showed first order and second order factor structure of 16 item ALQ.

Table 5

*Goodness Indices for CFA of Authentic Leadership Questionnaire (N = 277)*

Models	$\chi^2$	<i>df</i>	$\chi^2/df$	GFI	CFI	NFI	RMSEA	RMR	$\Delta\chi^2$	$\Delta df$
Model 1 (16 items, First Order)										
	1660.33	226	7.34	.77	.61	.79	.15	.11	126.21	98
Model 2 (16 items, Second Order)										
	1589.76	221	7.19	.82	.75	.81	.12	.10	114.32	84

*Note.*  $\chi^2 / df = \leq 4$ , RMSEA =  $\leq .06$ , CFI =  $\geq .90$ , TLI =  $\geq .90$ , AGFI =  $\geq .90$  (Hayduk, 2015; Kline, 2013)

Table 5 and Figure 4 present the fit indices of the CFA model of ALQ. Model 1 comprised of 16 items constituting four factors of relational transparency, internalized moral perspective, self-awareness, and balanced processing. However, model 1 showed higher chi-square to *df* ratio and poor model fit indices. Likewise, Model 2 was further



proposed on the basis of authentic leadership theory (Avolio et al., 2007) where 16 statements in terms of indicators merged on their particular first order factor structure; while, four individual dimensions conglomerate on the super-ordinate factor of authentic leadership. The ratio of chi square to *df* value was still quite high which was above the recommended value of 5 (Kline, 2013) thereby, presenting a poor model fit.

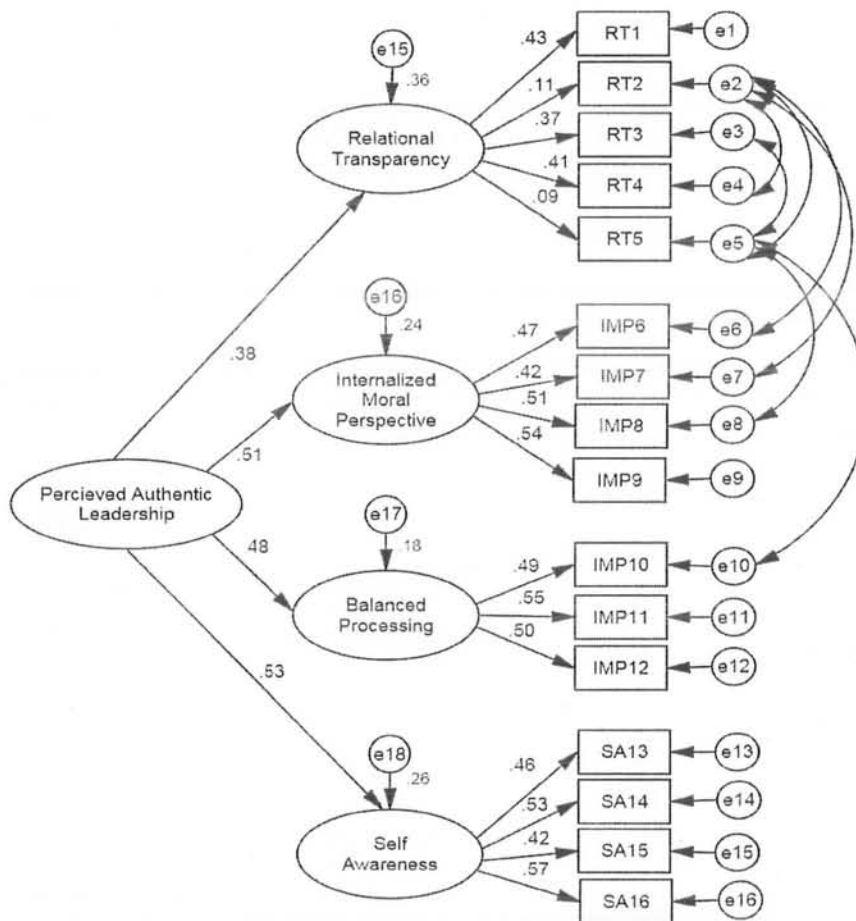


Figure 4. Measurement Model of Authentic Leadership Questionnaire

On these grounds, it was more appropriate to explore the factor structure at a more basic level; therefore, Exploratory Factor Analysis (EFA) was performed for the Authentic Leadership Questionnaire.

Nevertheless, EFA revealed similar to original factor structure of four factors with following items loaded on Relational Transparency (items 1, 3, and 4), Internalized Moral Perspective (items 6, 7, 8, and 9), Balanced Processing (items 10, 11, and 12), and Self-awareness (items 13, 14, 15, and 16). However, two items of Relational Transparency Subscale, that is, item 2 (.16) and item 5 (.07) showed poor loadings on all the subscales. As EFA does not contribute any new information or change in the overall factor structure of ALQ (other than two items of single subscale showing poor factor loadings); therefore, on parsimonious grounds, step wise model fit testing was conducted. This has been done in pursuance of recommendations of researchers (Byrne, 2008; Brown, 2015; Brown & Moore, 2012; Purdon, 2015; Schulz & Fraillon, 2011) asserting that it is more prudent to determine the inclusion or exclusion of a particular item/s of a single subscale through this process. Table 6 presents the sequential model fit indices and chi square to *df* ratio until the attainment of good model fit.

Table 6 showed that the step wise model fit testing of authentic leadership is assessed through first order CFA (where dimensions of balanced processing, relational transparency, self-awareness, and internalized moral perspective) are classified as first order dimensions as well as second order CFA in which 16 individual statements or indicators are substantially loaded on the particular first order factor; while four dimensions as first order factors tend to converge on the super-ordinate authentic leadership construct (proposed on the basis of authentic leadership theory, Avolio et al., 2007).

Table 6  
*Stepwise Model Fit Indices for Factor Model of Authentic Leadership Questionnaire*  
*(N = 277)*

Models	$\chi^2$	df	$\chi^2/df$	GFI	CFI	NFI	RMSEA	RMR	$\Delta\chi^2$	$\Delta df$
<b>Model 1 (16 items: first order)</b>	1660.33	226	7.34	.77	.61	.79	.15	.12	426.21	98
<b>Model 2 (16 items: second order)</b>	1589.76	221	7.19	.82	.75	.81	.12	.10	314.32	84
<b>Model 3 (15 items: first order after excluding item 2)</b>	1372.58	205	6.69	.85	.81	.85	.09	.11	226.21	78
<b>Model 4 (15 items: second order after excluding item 2)</b>	1145.36	198	5.78	.89	.88	.89	.07	.09	103.24	73
<b>Model 5 (14 items: first order after excluding item 5)</b>	806.75	181	4.45	.92	.91	.93	.05	.05	47.00	52
<b>Model 6 (14 items: second order after excluding item 5)</b>	592.33	155	3.82	.98	.97	.96	.03	.02	2.75	1

*Note.*  $\chi^2 / df = \leq 4$ , RMSEA =  $\leq .06$ , CFI =  $\geq .90$ , TLI =  $\geq .90$ , AGFI =  $\geq .90$  (Hayduk, 2015; Kline, 2013)

Table 6 showed that first two models (model 1 & 2) of first order and second order factor structure with 16 items indicating poor model fit and all the incremental and absolute indices revealed much below the acceptable ranges. However, when item 2 of Relational Transparency Subscale which has shown poor loading (see Figure 4) has been excluded in first order factor structure (model 3, Table 6) and second order factor structure of ALQ where authentic leadership is given as a super ordinate construct (model 4, Table 6), the fit indices gets little improved with slightly better values of absolute and incremental indices. But still the values do not meet the criteria of acceptance. Therefore, model 5 is further proposed with the exclusion of item 5 of Relational Transparency Subscale (having poor factor loading, see Figure 4), this resulted in improved and excellent fit indices; while, model 6 (Table 6) as second order factor structure where

authentic leadership is accounted as a super-ordinate construct showed further enhanced indices of the model fit. On these grounds, ALQ with 14 item solution is recommended by the model fit indices and revised model is given in Figure 5.

The chi square value is reduced to 3.82 which is within the recommended value of 2–5 (Kline, 2013). Model fit indices of absolute and incremental values further provide an evidence in favor of reasonable fit between the model and data; for instance, values of RMSEA and standardized RMR offer strong basis for ascertaining the second order factor structure of ALQ and Chi square difference ( $\Delta\chi^2 = 2.75, p = ns$ ) indicated that the model fit the data reasonably.

Table 7 and Figure 5 revealed factor structure of authentic leadership. All the acquired factor loadings met the minimum criteria of  $\geq .40$  as well as  $t$  values are  $\geq 1.96$  and significant at .001. Similarly regression weights of the covariances among the dimensions are above .40. Table 7 showed lambda coefficients of first order factor structure with 14 item solution of Authentic Leadership Questionnaire – Modified version and second order factor structure where 14 items solution converged for super-ordinate construct of authentic leadership.

Table 7 also depicts covariances among the dimensions of authentic leadership indicating significant positive association among relational transparency, internalized moral perspective, balanced processing, and self-awareness; thereby providing evidence for the discriminant validity of the various dimensions of authentic leadership.

Table 7

*Factor Loadings of First and Second Order Factor Structure of 14 Item Solution of Authentic Leadership Questionnaire*

Items	First Order		Second Order		Items	First Order		Second Order	
	$\lambda$	SE	$\lambda$	SE		$\lambda$	SE	$\lambda$	SE
Relational Transparency					Balanced Processing				
1	.78	.057	.78	.057	8	.72	.048	.72	.048
2	.87	.052	.87	.052	9	.87	.047	.87	.047
3	.51	.049	.51	.049	10	.77	.043	.77	.043
Internalized Moral Perspective					Self-Awareness				
4	.51	.046	.51	.046	11	.70	.045	.70	.045
5	.80	.052	.80	.052	12	.85	.046	.85	.046
6	.87	.049	.87	.049	13	.87	.041	.87	.041
7	.80	.053	.80	.053	14	.80	.055	.80	.055
Covariance	$\Phi$				Covariance	$\Phi$			
RT $\leftrightarrow$ IMP	.64	.060			SA $\leftrightarrow$ BP	.54	.051		
IMP $\leftrightarrow$ BP	.48	.055			RT $\leftrightarrow$ BP	.54	.054		
SA $\leftrightarrow$ IMP	.65	.059			SA $\leftrightarrow$ RT	.66	.057		

*Note.* RT = Relational transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-Awareness.

CFA has shown authentic leadership as a multidimensional construct with four dimensions which are relational transparency, balanced processing, internalized moral perspective, and self-awareness. All these dimensions are not only positively associated with each other but significantly positively associated with the main construct of authentic leadership.

Findings indicated that Cronbach alpha of Relational Transparency Subscale with three items turned out to be .70 (improved from previously .44; see Table 4); and the reliability of the total ALQ-Modified also elevate up to .89 (from .77; see Table 4); thereby reciprocating the evidences of factorial structure. ALQ-Modified with 14 items (see Annexure K) will be used in the subsequent phase of the study.

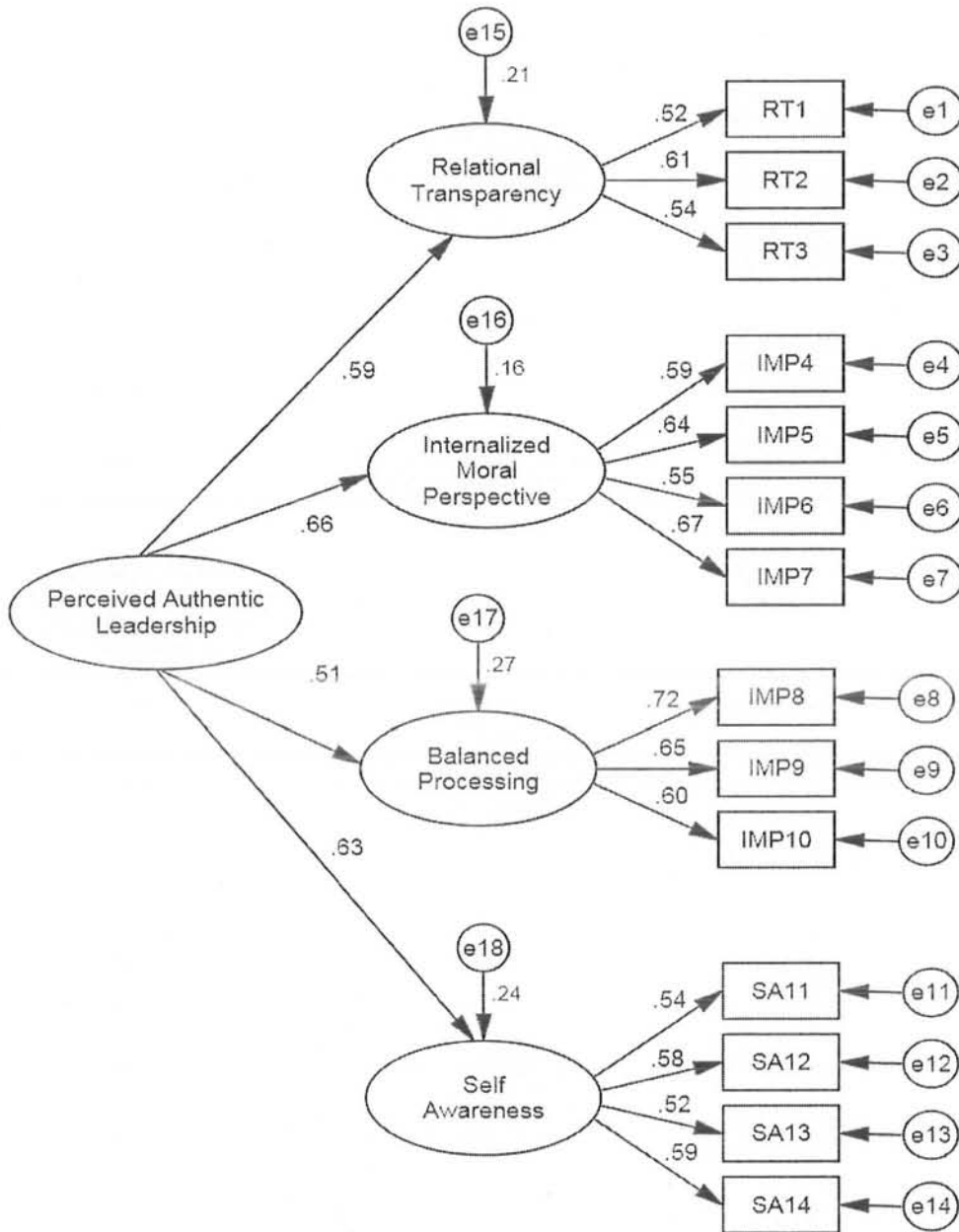


Figure 5. Measurement Model of Authentic Leadership Questionnaire (Modified)

*CFA of Psychological Capital Questionnaire.* The measurement model of Psychological Capital Questionnaire was assessed with CFA. Table 8 presents fit indices of the model.

Table 8

*Goodness Indicators for CFA of Psychological Capital Questionnaire (N = 277)*

Models	$\chi^2$	<i>df</i>	$\chi^2/df$	GFI	CFI	NFI	RMSEA	RMR
Model 1 (24 items: First Order)	982.77	255	3.85	.92	.91	.93	.05	.05
Model 2 (24 items: Second Order)	478.42	199	2.40	.95	.94	.96	.03	.04

*Note.*  $\chi^2 / df = \leq 4$ , RMSEA =  $\leq .06$ , CFI =  $\geq .90$ , TLI =  $\geq .90$ , AGFI =  $\geq .90$  (Hayduk, 2015; Kline, 2013)

Table 8 revealed that the first model comprising of 24 indicators of Psychological Capital Questionnaire emerged as first order model yielding initial fit where all the incremental and absolute fit indices of the model were at the edge of the acceptance range.

This model was redesigned by allowing the error variances (of item 22 and 24) to covary in accordance to the permissible error modification indices (see model 1) which resulted in improvement in the chi-square to *df* ratio as well as subsequent model fit indices. However, model 2 (Table 8) was further proposed (on the basis of PsyCap theory; Luthans et al., 2007) where 24 indicators and four first order components were conveniently converged on the total PsyCap construct. This resulted in chi-square to *df* ratio of 2.40 which was within range of 2-5 (Hoyle & Isherwood, 2013). Similarly, other model fit indices were all above .90 and absolute indices were below the value of .05 (RMSEA and RMR).



Table 9

*Factor Loadings of First and Second Order Factor Structure of Psychological Capital Questionnaire (N = 277)*

Items	First Order		Second Order		Items	First Order		Second Order	
	$\lambda$	SE	$\lambda$	SE		$\lambda$	SE	$\lambda$	SE
Self-efficacy					Resilience				
1	.61	.040	.61	.040	13	.64	.042	.64	.042
2	.75	.041	.75	.041	14	.57	.050	.57	.050
3	.73	.043	.73	.043	15	.65	.041	.65	.041
4	.59	.046	.59	.046	16	.71	.060	.71	.060
5	.66	.042	.66	.042	17	.59	.042	.59	.042
6	.68	.054	.68	.054	18	.62	.042	.62	.042
Hope					Optimism				
7	.64	.045	.64	.045	19	.54	.040	.54	.040
8	.58	.052	.58	.052	20	.51	.062	.51	.062
9	.71	.046	.71	.046	21	.56	.051	.56	.051
10	.62	.032	.62	.032	22	.67	.066	.67	.066
11	.53	.051	.53	.051	23	.51	.050	.51	.050
12	.60	.046	.60	.046	24	.53	.043	.53	.043
Covariances:	$\Phi$				Covariances	$\Phi$			
SE $\leftrightarrow$ HO	.74	.052			HO $\leftrightarrow$ RES	.75	.055		
SE $\leftrightarrow$ RES	.80	.044			OPT $\leftrightarrow$ HO	.71	.061		
OPT $\leftrightarrow$ SE	.64	.053			OPT $\leftrightarrow$ RES	.65	.046		

Note. SE = Self-efficacy, HO = Hope, RES = Resilience, OPT = Optimism

Factor structure of Psychological Capital Questionnaire is presented in Table 9 and Figure 6. All the Lambda coefficients were equal to or greater than .40 and all  $t$  values were  $\geq 1.96$  and significant at .001. Similarly regression weights of the covariances (Phi Coefficients) among the dimensions were also above .40. CFA has shown that lambda coefficients provide an index of convergent validity and phi indices provide an evidence of discriminant validation.



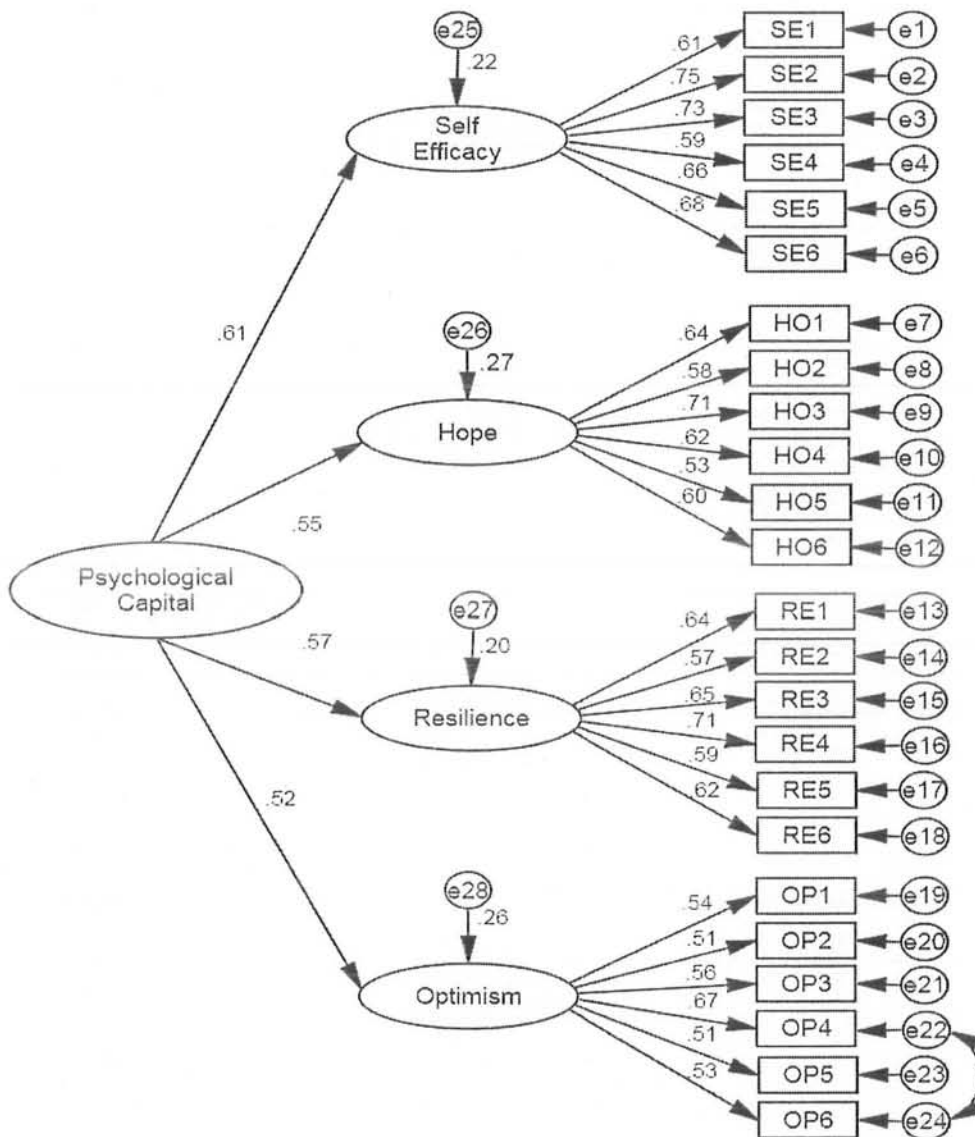


Figure 6. Measurement Model of Psychological Capital Questionnaire

*Confirmatory Factor Analysis of Work-Related Flow Scale.* CFA was employed to determine the instrumental model of WRF. Table 10 indicate fit indices of step wise model testing and Table 11 show factor loadings.

Table 10  
*Goodness Indices for CFA of Work-Related Flow Scale*  
( $N = 277$ )

Models	$\chi^2$	$df$	$\chi^2/df$	GFI	CFI	NFI	RMSEA	RMR
Model 1 (13 items: First Order)	869.55	257	3.38	.92	.90	.91	.05	.04
Model 2 (13 items: Second Order)	412.19	172	2.39	.95	.94	.96	.03	.02

*Note.*  $\chi^2 / df \leq 4$ , RMSEA =  $\leq .06$ , CFI =  $\geq .90$ , TLI =  $\geq .90$ , AGFI =  $\geq .90$  (Hayduk, 2015; Kline, 2013)

The indices for stepwise model fit based on CFA of Work-Related Flow Scale are presented in Table 10. The basic appraisal representation of Work-Related Flow Scale was estimated through a first order CFA with three components of Absorption (4 items), Work Enjoyment (4 items), and Intrinsic Work Motivation (5 items) as first order dimensions (see model 1, Table 10). Overall the model consist of 13 indicators with error variances between item 2 and 3 of Absorption Subscale as well as item 6 and 8 of Intrinsic Work Motivation Subscale (see Figure 7).

Derivations based on first model of WRF where 13 individual representations or indicators (with error modification indices) yielded satisfactory picture with an acceptable ratio of less than 5 between chi square to  $df$ . Similarly, additional indices of CFI, GFI, AGFI, and NFI also indicated good fit. Model 2 in Table 10 explain the outcome of CFA in which 13 individual indicators are satisfactorily loaded on their

correspondent first order dimensions; whereas three first order components merged on the super-ordinate construct of WRF; hence meeting the criteria of chi-square to *df* ratio which was in the suggested range of 2–5 (Kline, 2013). Model fit indices of CFI, GFI, AGFI and NFI were all above .90; while values of RMSEA and RMR were well below the cut off point of .05 also verified a superb correspondence between the acquired data and the attained model. Table 11 and Figure 7 showed factor structure of work-related flow.

Table 11

*Factor Loadings of First and Second Order Factor Structure of Work-Related Flow Scale (N = 277)*

Items	First Order		Second Order		Items	First Order		Second Order	
	$\lambda$	<i>SE</i>	$\lambda$	<i>SE</i>		$\lambda$	<i>SE</i>	$\lambda$	<i>SE</i>
Absorption					Work Enjoyment				
1	.55	.033	.55	.033	9	.77	.051	.77	.051
2	.62	.033	.62	.033	10	.79	.048	.79	.048
3	.68	.036	.68	.036	11	.73	.049	.73	.049
4	.72	.046	.72	.046	12	.68	.050	.68	.050
Intrinsic Work Motivation					13	.74	.042	.65	.042
5	.66	.049	.66	.049	Covariance		$\varphi$		
6	.56	.049	.56	.049	IWM↔WE		.51	.15	
7	.63	.050	.63	.050	IWM↔ABS		.43	.14	
8	.55	.047	.55	.047	ABS↔WE		.47	.13	

*Note.* IWM = Intrinsic Work Motivation, ABS = Absorption, WE = Work Enjoyment

All these dimensions were not only positively associated with each other but significantly positively associated with the main construct of work-related flow. Hence, lambda coefficients provide an index of convergent validity and phi indices provide an evidence of discriminant validation. All the Lambda coefficients were equal to or greater

than .40 and all  $t$  values were  $\geq 1.96$  and significant at .001. Similarly regression weights of the covariances (Phi Coefficients) among the dimensions were also above .40. CFA has shown work-related flow as a multidimensional construct with three dimensions which were absorption, work enjoyment, and intrinsic work motivation.

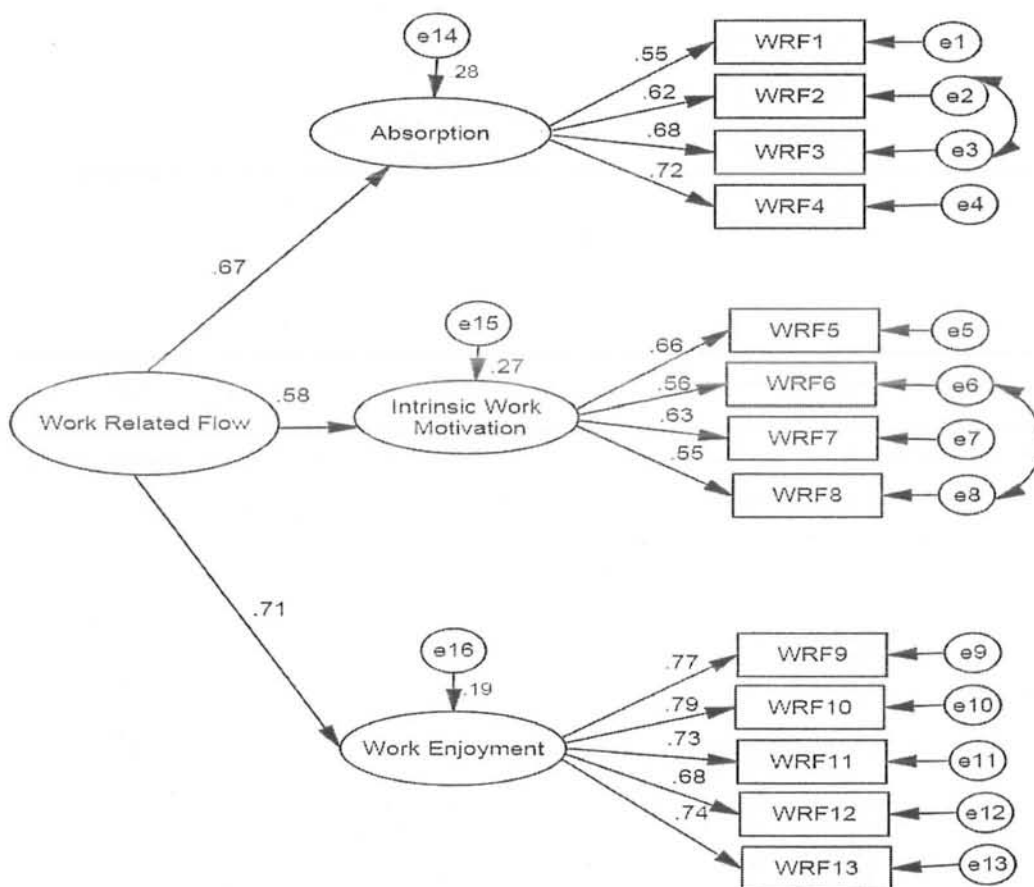


Figure 7. Measurement Model of Work-Related Flow Scale

**Confirmatory Factor Analysis of Creativity Scale.** The factor composition of creativity variable as a uni-dimensional construct is assessed through CFA. Table 12 presents model fit indices. Table 12 presents indices of model fit for CFA of Creativity Scale. The unique appraisal model comprised of 13 indicators. The first model of creativity where the 13 indicators without any error co variances resulted in chi-square to *df* ratio of 4.55 (Cohen, 2013). Although indices of AGFI, GFI, NFI, and CFI indicated moderate fit, however, value of RMR indicated marginal fit. Nevertheless, model 2 with error modification indices generate a better model with enhanced fit indices.

Table 12  
*Goodness Indicators for CFA of Creativity Scale (N = 277)*

Models	$\chi^2$	<i>df</i>	$\chi^2/df$	GFI	CFI	NFI	RMSEA	RMR
Model 1 (13 items without error covariance)	955.63	210	4.55	.90	.91	.90	.05	.06
Model 2 (13 items with error modification indices)	684.31	189	3.62	.95	.94	.97	.03	.04

Note.  $\chi^2 / df \leq 4$ , RMSEA =  $\leq .06$ , CFI =  $\geq .90$ , TLI =  $\geq .90$ , AGFI =  $\geq .90$  (Hayduk, 2015; Kline, 2013)

Figure 8 indicated the factor model of creative work behavior. All the Lambda coefficients were equal to or greater than .40 and all *t* values were  $\geq 1.96$  and significant at .001. CFA has shown creative work behavior as a uni-dimensional construct.

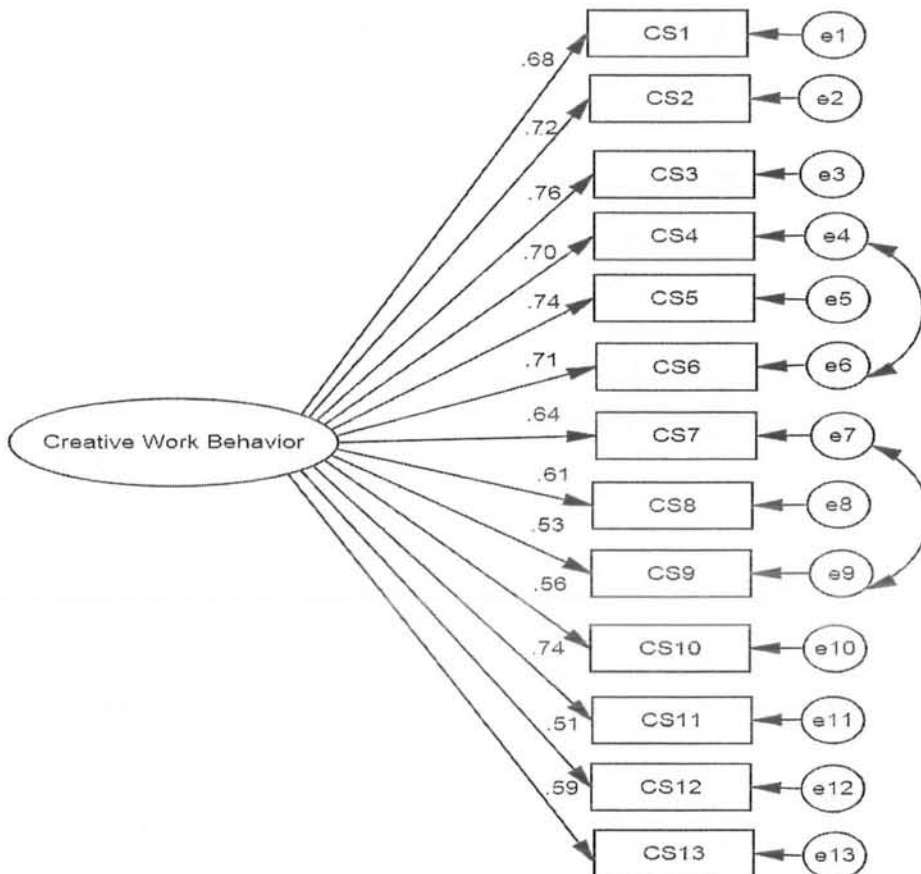


Figure 8. Measurement Model of Creativity Scale

*Confirmatory Factor Analysis of Social Desirability Scale-17.* The Table 13 presents model fit indices of CFA of Social Desirability Scale-17.

Table 13 showed the model summary of the Goodness of Fit indices for first order factor model of social desirability

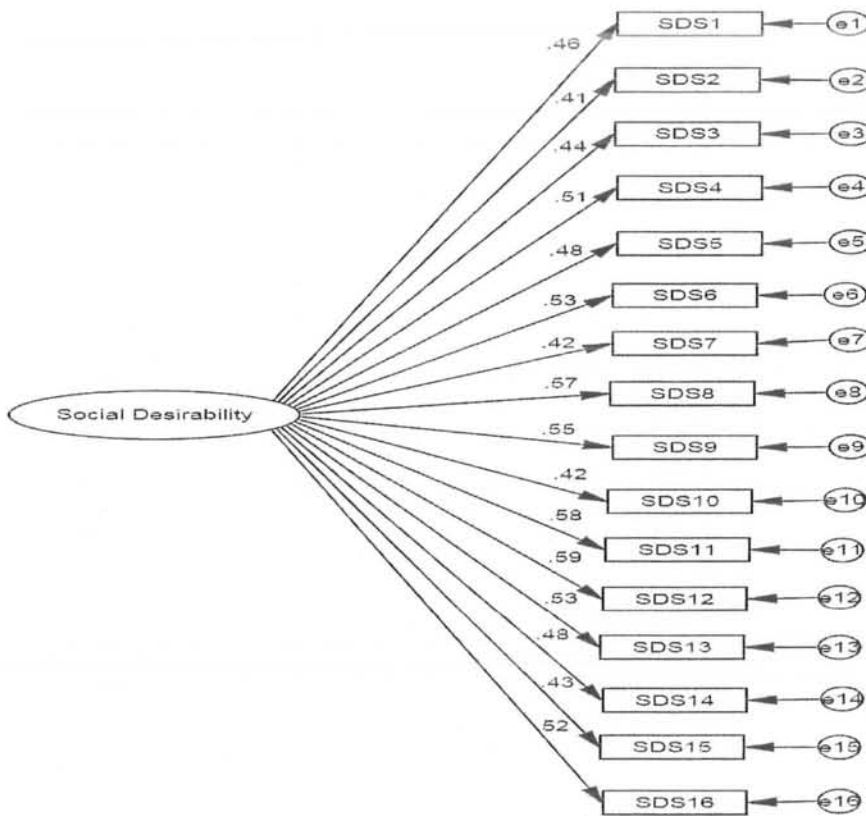
Table 13

*Goodness Indicators for the Social Desirability Scale-17 (N = 277)*

Variable	$\chi^2$	<i>df</i>	$\chi^2 / df$	RMSEA	CFI	TLI	AGFI
Social Desirability Scale	706.44	242	2.67	.04	.95	.94	.96

*Note.*  $\chi^2 / df \leq 4$ , RMSEA =  $\leq .06$ , CFI =  $\geq .90$ , TLI =  $\geq .90$ , AGFI =  $\geq .90$  (Hayduk, 2015; Kline, 2013)

It has been found that ratio between  $\chi^2$  and *df* was within the acceptable range of  $\leq 5$  (Duncan et al., 2013). Moreover, absolute (RMSEA), incremental (CFI and TLI), and parsimonious (AGFI) indices were all in the acceptable ranges (Bentler & Hu, 2012). Figure 9 indicated the factor model of social desirability as a unidimensional construct where the Lambda coefficients were greater than .40.



*Figure 9.* Measurement Model of Social Desirability Scale-17

**Construct validity.** Intrascade correlations were tabulated with the intention of determining construct validity of the primary variables of the current study. It assisted in establishing validation at two levels, that is, alliance of individual construct and their dimensions with each other as well as with the basic construct. Therefore, construct validity of ALQ, WRFS, and PCQ was determined.

Table 14

*Construct Validity of Authentic Leadership Questionnaire (N = 277)*

Variables	Relational Transparency	Int. Moral Perspective	Balanced Processing	Self- awareness	ALQ Total
Relational Transparency	-	.34**	.31**	.37**	.41***
Int. Moral Perspective		-	.27**	.43***	.49***
Balanced Processing			-	.21**	.36***
Self-Awareness				-	.48***
ALQ Total					-

*Note.* Int. = Internalized; ALQ = Authentic Leadership Questionnaire

\*\* $p < .01$ . \*\*\* $p < .001$ .

Table 14 shows intrascade correlations of Authentic Leadership Questionnaire. All subscales of Authentic Leadership Questionnaire are considerably positively connected with individual dimensions as well as with the total construct. This pattern also provides an evidence of construct validation of authentic leadership, thereby indicating that each subscale is an index of overall construct.



Table 15

*Construct Validity of Work-Related Flow Scale (N = 277)*

Variables	Absorption	Work Enjoyment	Intrinsic Work Motivation	WRFS
Absorption Subscale	-	.34**	.39***	.49***
Work Enjoyment Subscale		-	.42***	.54***
Intrinsic Work Motivation Subscale			-	.41***
Work-Related Flow Scale				-

\*\* $p < .01$ . \*\*\* $p < .001$ .

Table 15 shows intrascale correlations of Work-Related Flow Scale. All subscales of Work-Related Flow Scale are highly positively related with each individual component and the total scale. This pattern also provides an evidence of construct validation of Work-Related Flow Scale, thereby indicating that each subscale is related to the broader variable.

Table 16

*Construct Validity of Psychological Capital Questionnaire (N = 277)*

Variables	Self-efficacy	Hope	Resilience	Optimism	PCQ Total
Self-efficacy	-	.33**	.41***	.29**	.55***
Hope		-	.31**	.37**	.46***
Resilience			-	.26**	.51***
Optimism				-	.42***
PCQ Total					-

Note. PCQ = Psychological Capital Questionnaire

\*\* $p < .01$ . \*\*\* $p < .001$ 

Table 16 shows intrascale correlations of PCQ. All the subscales of PCQ are notably allied in positive direction with individual respective dimensions and same pattern existed for the overall factor of PsyCap. This pattern also provides a preliminary

evidence of construct validation of psychological capital, thereby indicating that each subscale is an indicator of the core construct.

### Initial Pattern of Relationships Among Variables of the Study

Pearson Product Moment Correlation was tabulated in order to gauge the data trends and preliminary outline of interactions among the major variables of the current study. Results given in Table 17 show the inter-construct associations in relation to primary variables. It has been found that PAL was significantly positively associated with WRF, PsyCap, and CWB in relation to total sample of employees.

Table 17

*Correlation Matrix for All Study Variables in Collective Sample of Employees (N = 277)*

Variables	Perceived Authentic Leadership	Psychological Capital	Work-Related Flow	Creative Work Behavior
Perceived Authentic Leadership	-	.36***	.29**	.31***
Psychological Capital		-	.34***	.35***
Work-Related Flow			-	.40***
Creative Work Behavior				-

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Moreover, WRF and PsyCap were extensively positively aligned with each other. It has been further established that PsyCap and WRF exhibited significant positive association with creative work behavior. However, all the correlations ranged from low to moderate values thereby indicating discriminant validity of the individual factors of the current investigation.

Table 18  
*Interscale Correlations among all Study Variables for Employees of Banks and SWH*  
 (N = 277)

Variables	Perceived Authentic Leadership	Psychological Capital	Work-Related Flow	Creative Work Behavior
Perceived Authentic Leadership	–	.42**	.37**	.42**
Psychological Capital	.24*	–	.39**	.47**
Work-Related Flow	.28*	.30**	–	.52**
Creative Work Behavior	.33**	.36**	.40**	–

*Note.* Values above diagonal = SWH; values below diagonal = banks

\* $p < .01$ . \*\* $p < .001$ .

Table 18 showed correlation matrix for the individual samples of banks and SWH. On the whole, it has been observed that same linear positive relationship existed among all the major constructs of the study. It is further observed that PAL, PsyCap, and WRF are positively associated with CWB across samples of banks and SWH. However, the strength of association is stronger in case of employees of SWH as compared to the employees of marketing departments of banks. Moreover, perceived authentic leadership is also positively linked with psychological capital and work-related flow.

**Discussion.** The psychometric estimates of the instruments have been determined in study II that would be used in the main study, that is, Psychological Capital Questionnaire (Luthans et al., 2007), Creativity Scale (Zhou & George, 2001), Authentic Leadership Questionnaire (Avolio et al., 2007), Social Desirability Scale-17 (Stober, 2001) and Work-Related Flow Scale (Bakker, 2008), in the context of Pakistani organizational settings. Psychometric analysis helped in yielding the dimensionality and

reliability estimates of the instruments to be adapted for the indigenous perspective of tall and flat organizations.

In pilot study, empirical estimates of the instruments were done in terms of reliability and validity indices. Validity was determined both at construct validation and factorial structure. CFA was done to establish the factor structure in the indigenous population owing to the novelty of concepts of PAL, PsyCap, WRF, and CWB. The modified measures (as done in study I) were tested on a sample of 277 regular employees of marketing section of banks and SWH of Rawalpindi and Islamabad.

Reliability indices have shown that all the measures were dependable and reliable instruments of the related constructs. All the scales and subscales were empirically reliable as their alpha coefficients were in the acceptable range of above .70 (Cohen, 2013). Earlier evidences on ALQ (Avolio et al., 2007), PCQ (Luthans et al., 2007), WRFS (Bakker, 2008), CS (Zhou & George, 2001), and SDS-17 (Stober, 2001) have provided an empirical and pragmatic verifications of the internal consistency of the scales and subscales for the associated variables.

The items of the assessment protocols were analyzed on the basis of CFA so as to confirm the factor structure and dimensionality of the measures. Since, all the instruments used in the present study are based on theoretical models, hence, CFA assisted in establishing the factor structure of the measurement tools. Findings of the CFA revealed that majority of the factorial structure were in accord theory, for instance to the respective theories of psychological capital, work-related flow, and creative work behavior have shown similar factor structure with the relevant theoretical backgrounds.

On the other hand, initial CFA of authentic leadership revealed poor model fit. Therefore, preliminary factor structure was determined through EFA which yielded same four factor model (relational transparency, internalized moral perspective, balanced processing, and self-awareness) contributing towards the perceived authentic leadership with the exception of two items of Relational Transparency Subscale which showed poor factor loadings. Therefore, stepwise model fit testing was done which generated 14 item solution with four factors converging on super-ordinate construct of authentic leadership after excluding the two items (item 2 and 5) of Relational Transparency Subscale. Previous studies (Kernis & Goldman, 2005; Neider & Schriesheim, 2011; Wang et al., 2013) concluded on the basis of CFA that authentic leadership is a second-order factor model with four dimensions loading on the super-ordinate construct of authentic leadership.

Walumbwa et al. (2008, p. 101) concluded that “there is substantial convergent validity among the four dimensions of authentic leadership and that self-awareness, relational transparency, internalized moral perspective, and balanced processing converge to form a higher-order factor that is indicated by and explains the relationships among the lower-level measures”. In addition, evidences around the globe (e.g., Cerne et al., 2013; Wong & Cummings, 2009; Gardner et al., 2011) as well as indigenous studies (Adil & Kamal, 2016; Dawood, 2016; Kiyani et al., 2013) have provided ample support in relation to four dimensions of the authentic leadership; whereas, each component (of relational transparency, balanced processing, internalized moral perspective, and self-awareness) is contributing additive variance to the total construct of authentic leadership.

Therefore, higher-order construct of authentic leadership can offer good conceptual explanation with its underlying components (Hmieleski et al., 2012). In addition to that, individual factors do not add any meaningful incremental validity beyond the common core higher factor, thus suggesting that the variance attributable to overall authentic leadership is more important than the variance imputable to each individual dimension of the authentic leadership construct (Spitzmuller & Ilies, 2010).

However, in the present study, perceived authentic leadership had yielded somewhat different structure within the Subscale of Relational Transparency. It was found that item 2 (*admits mistake openly and publicly*) and item 5 (*express feelings in line with inner beliefs*) of Relational Transparency Subscale were incongruent with the total construct of authentic leadership. Therefore, these two items were not included in the final version of the ALQ. The possible reason for the lack of fair loadings of these two items on the relevant construct would be more understandable in the backdrop of cultural perspective. In Pakistani society, it is little under practice for the person working at a senior level to acknowledge errors and fault at a communal level. In addition to that, this pattern is probably also associated with social embarrassment that might result in admitting one's mistake overtly and in a candid manner. Similarly, the tendency to express emotions in line with inner feelings is also a culturally determined factor. In Pakistani perspective, it is quite reasonable to assume that emotional expressions are frequently attuned with the social and environmental situation rather than as a channel of personal expression. Interestingly, similar pattern of factor structure has also been found among the Portuguese sample of employees working in commerce organizations (Rego et



al., 2012) whereby these two items were not found culturally relevant. Therefore, the concept of perceived authentic leadership reveals few concerns for the characteristics of the authentic leader which may not be functional in the context of local organizations.

For the present sample, CFA establish the three factor model of work-related flow (absorption, work enjoyment, and intrinsic work motivation) which is in line with the former confirmations of factorial validity. For example, Bakker (2008) asserted that dimensions of work-related flow (absorption, work enjoyment, and intrinsic work motivation) are theoretically and empirically related to each other as well as with the total construct of work-related flow. Later studies (Bakker, 2015, 2016; Poutsma et al., 2014) provide further confirmation of three dimensional model of work-related flow on diverse samples of employees including reporters, consultants, self-employed trainers, and human service professionals. Similarly, results derived from multi-group CFA revealed that three-factor model of work-related flow display good model fit as compared to unidimensional model where all the items are loaded on a single factor (Breevaart et al., 2015).

The three dimensions of work-related flow are conceptually related with each other. For instance, several studies (e.g., Van den Heuvel, Demerouti, & Bakker, 2014; Siu et al., 2014) have concluded that three dimensions of flow must be taken together as employees who are deeply involve in their work are intrinsically driven and motivated by their internal drive; thereby resultantly experience happiness and enjoyment from their work.. Similarly, Bakker (2015) incorporated the three flow dimensions in structural

equation model by treating the three flow dimensions as indicators of overall latent construct of flow.

In the current investigation, CFA of psychological capital provides an empirical evidence of the four factor structure (self-efficacy, hope, resilience, and optimism) of the said construct. For instance, PsyCap is considered as a second order factor (e.g., Sweetman, Luthans, Avey, & Luthans, 2011) meaning each item loads on its respective component and each of the components is fitted to the overall latent psychological capital factor; thus, psychological capital is the shared variance of the four components. According to Avey et al. (2011), theoretically, the entire combination of psychological assets (in terms of self-efficacy, hope, resilience, and optimism) is likely to exert better valuable influence than its individual dimensions, as the connections among these psychological resources would be helpful for the person to cope with stress and any undesirable consequences at work. Hence, psychological capital is conceptualized as a second-order construct constituting the shared variance of four positive psychological resources of efficacy, optimism, hope, and resilience.

Later studies (Lorenz, Beer, Putz, & Heinitz, 2016; Newman et al., 2014) further declared that psychological capital as a second-order construct which can predict work-related outcomes better than its individual components. Moreover, evidences surfaced in native studies (e.g., Abbasi, 2015; Saleem, 2016) also empirically supported that psychological capital is a best modeled as a second-order construct.

Confirmatory factor structure of creative work behavior exhibited unitary and single factor model of the construct which is in accordance to the prior findings (Darini et



al., Zhou et al., 2012) that signifies the uni-dimensionality of the CWB to appraise the individual's perceptions regarding generating unique yet, pragmatically implementable ideas. Additionally, this pattern is quite in harmony with the earlier evidences based on empirical data (Shalley et al., 2004) deliberating that Creative Scale is a uni-dimensional assessment of CWB. Thus, it would reflect an assortment of different creative ideas inclusive of idea generation, idea facilitation, practical verification, implementation, and experimenting with new techniques and procedures (Wu et al., 2012).

In relation to types of samples, construct validity and factorial validity were determined at two levels; initially for the independent samples of SWH and banks; and collectively for the composite sample of pilot study. Results indicated that all the measures were found adequate in terms of reliability and validity for both organizational structures. Though the nature of work and organizational structure was different for banks and SWH; but both occupations shared the common feature of being service providers (Dust et al., 2014; Spencer & Muchnick, 2015). Moreover, both occupations are likely to design their products keeping in view the needs of the market, corporate clients, and business groups (Rishipal, 2014).

Finally, intra-scale correlations expressed baseline prototype of interactions with regard to primary variables of the current study. PsyCap was found to be positively aligned with PAL, WRF, and CWB. It was also found that PsyCap was positively linked with the WRF and CWB. These findings are in line with the presumed assumptions of the current exploration and provide baseline evidence in regard to the study constructs.

## **Conclusion**

The present study was designed to explore the interaction of PAL with PsyCap, WRF and CWB among employees of tall and flat organizations. For that purpose, at the initial level, psychometric estimation of measures were carried out. Results of the pilot study revealed adequacy and aptness of the measures in terms of psychometric estimates and showed adequate dependability and validity indices for the target population to be used in the main study, that is, hypotheses testing. The conduction of pilot study also sets the ground for the initiation of main study (model and hypotheses testing) which focused on testing the assumed relations among the variables as well as to test the models to develop in-depth understanding of the phenomena at hand. It further facilitates the empirical evidence of the appropriateness of the type of samples (banks and SWH) that would be acquired in the next phase of the study. The subsequent chapter provides description of major assumptions of models, method specifications, and results followed by the discussion of major findings of the main study.

## WORK-RELATED OUTCOMES OF PERCEIVED AUTHENTIC LEADERSHIP

Main study was conducted in lieu of previous phases of the study to determine the role of perceived authentic leadership in job-related experiences and behaviors. The broader aim of the main study was three-fold which is, firstly, to test the proposed models of direct and indirect effects (mediation and moderation) of major constructs of the study among workers rendering their services in banks and SWH. Secondly, it was also intended to examine the hypothesized relationships in relation to personal and organizational demographic variables that would function in the context of comparative organizational settings. Thirdly, to examine the accumulative path models in the context of collective sample of employees as well as individual organizational structures.

### Objectives

In accordance to the major paradigm of the present study, the following broader objectives of the present study were outlined:

1. To determine the role of PAL as predictor of PsyCap, WRF, and CWB among employees of banks and SWH.
2. To investigate the indirect effect in terms of mediating role of PsyCap and WRF in the relationship between PAL and CWB among employees of banks and SWH.

3. To examine the indirect effect of organizational structure (as a moderator) in predicting PsyCap, WRF, and CWB from PAL among workers of tall and flat organizations.
4. To explore the group differences along various personal demographics (gender, education) and organization related factors (job designation, work experience, job duration, and type of organization) in relation to study variables.

### **Conceptual and Operational Definitions of Variables**

The focal variables of the current study are conceptually and operationally defined as follows:

**Perceived authentic leadership.** According to Avolio and Gardner (2014) authentic leadership is characterized by four central themes, including objective processing of information, self awareness, internal moral values and transparency in interpersonal relationships. In the present study, ALQ (Avolio, Gardner, & Walumbwa, 2007) was used as a measure of the said construct. ALQ comprised of four subscales, that is, Self-awareness, Relational Transparency, Internalized Moral Perspective, and Balanced Processing. Elevated scores on the Self-awareness Subscale indicate that the leader has comprehensive understanding and faith in his/her opinions, sentiments, reasoning, and principles; while enhanced scores on Relational Transparency Subscale reflect better ability of the leader to achieve and cherish honesty and sincerity in one's

immediate relationships. In addition, high score on Internalized Moral Perspective Subscale express the leader's augmented skill to act based on one's true preferences and values; whereas elevated scores on Balanced Processing Subscale indicate that the leader is highly capable of neutrality and acceptance of one's positive and negative characteristics. High score on the total scale reflect better perceptions of authenticity in immediate leader under whom the employee is working.

**Psychological capital.** It is defined as being made up of the positive organizational behavior criteria meeting capacities of self-efficacy, optimism, hope, and resiliency (Youssef & Luthans, 2015). In the present study, Psychological Capital Questionnaire (Luthans et al., 2007) was used to assess the said construct. Psychological capital components are indicated as subscales of Self-efficacy, Hope, Resilience, and Optimism. High score on the subscale of Self-Efficacy indicate higher levels of one's belief on personal abilities to achieve the goals and challenges; while high score on Hope Subscale reflect better ability of the individual to have energy and vigor directed towards the goal and ability to channelize the pathways to meet those goals. Enhanced scores on Resilience Subscale specify the individual's improved ability to rebound from hardships and misfortunes and to strive for constructive and challenging tasks; whereas high score on the Optimism Subscale express higher inclinations of the individual to attribute positive events to individual, enduring, and persistent reasons; while interpret negative events in terms of external, transient, and situation-specific factors. On the whole, high

score on the total Psychological Capital Questionnaire indicate elevated levels of overall PsyCap.

**Work-related flow.** Flow at work is the mental state of operation in which a person in an activity is fully immersed in a feeling of energized focus, full involvement, and success in the process of the activity (Bakker, 2015). Flow at work is reflected in people's ability to overcome a problem to achieve a task with a purpose, the outcome of which is called an optimal experience (Lu, Yang, Zhu, Chen, & Chen, 2009). In the present study, Work-Related Flow Scale (Bakker, 2008) was employed to assess the said construct constituted three subscales: Absorption, Work Enjoyment, and Intrinsic Work Motivation. High score on the Absorption Subscale revealed complete absorption and immersion of the employee in his/her work; while high score on Work Enjoyment Subscale reflect augmented feelings of happiness and making positive judgments about the quality of one's work life. On the other hand, elevated score on Intrinsic Work Motivation Subscale reveal increased tendency of the individual to perform a certain work-related activity with the aim of experiencing the inherent pleasure and satisfaction in the activity. Overall, high score on total Work-Related Flow Scale reflect increased levels of the flow experiences at work.

**Creative work behavior.** Creativity in organizations has been simply described as the process of coming up with fresh ideas for changing products, services, and processes so as to better achieve the organization's goals (Zhou, 2007). Creative work

behavior is regarded as production of original (potentially) useful ideas and solutions for the existing processes and / or procedures (Zhang & Bartol, 2010). In the present empirical investigation, CS (Zhou & George, 2001) is employed to appraise the CWB. Creativity Scale is a unidimensional measure and offers assessment both at novelty and resourceful ideas including searching parallel options, working out practical solutions for existing problems, designing new mechanisms, and devising sustainable procedures (Rego et al., 2012). High scores attained on the entire scale designate augmented intensity of CWB at workplace.

### **Hypotheses**

In accordance to the aforementioned objectives, major assumptions were formulated and each assumption was tested in the context of both organizational structures (banks and SWH) to determine the similarities as well as differences. The following specific hypotheses were phrased:

#### **Direct Effects**

1. Perceived authentic leadership is positively linked with PsyCap and WRF.
2. PsyCap is positively related with WRF.
3. PAL, PsyCap, and WRF are positive predictors of CWB of employees working in tall and flat organizations.

### Indirect Effects

4. Work-related flow mediates the relationship between perceived authentic leadership and employee creative work behavior.
5. Psychological capital mediates the relationship between perceived authentic leadership and creative work behavior.
6. Organizational structure type (tall versus flat) acts as a moderator in predicting CWB, PsyCap, and WRF.
  - 6a. There is indirect effect of organizational structure type (tall versus flat) in the relationship between PAL and CWB.
  - 6b. There is an indirect effect of style of organizational structure in the relationship between PAL and PsyCap.
  - 6c. There is an indirect effect of style of organizational structure in the relationship between PAL and WRF.
  - 6d. There is an indirect effect of style of organizational structure in the relationship between PsyCap and CWB.
  - 6e. There is an indirect effect of style of organizational structure in the relationship between WRF and CWB.
  - 6f. There is an indirect effect of style of organizational structure in the relationship between PsyCap and WRF.



### Group Differences

7. Male employees are more likely to express favorable perceptions of PAL, elevated levels of PsyCap and WRF, as well as augmented CWB in comparison to female participants.
8. Employees of flat organizations (SWH) would indicate enhanced judgments of PAL and increased levels of PsyCap, WRF, and CWB in comparison to employees of tall organizations (banks).
9. Employees with higher level of education are likely to exhibit better acuity of PAL and stately levels of PsyCap, WRF and CWB in comparison to employees with lesser educational skills.
10. Employees with extended job experience would express enhanced discernment of PAL and regal intensity of PsyCap, WRF and CWB in comparison to employees with lesser job experience.
11. Employees having more job period in the same organization would express enhanced acuity of PAL and elevated levels of PsyCap, WRF and CWB in contrast to employees with lesser job duration.
12. Employees in higher income group are likely to reflect positive expressions of PAL and enhanced experiences of PsyCap, WRF, and CWB as compared to those in the low income groups.

## Sample

A convenient purposive sample comprising of regular employees ( $N = 1180$ ) was acquired from banks ( $n = 600$ ) and SWH ( $n = 580$ ) of Islamabad, Rawalpindi, and Lahore. Initially 1300 questionnaire booklets were distributed among employees of both types of organizations, but owing to the missing data, 120 questionnaires were eliminated, yielding 1180 usable questionnaires. Elaborative details of the sample composition with frequency and percentages are presented in Table 19.

Table 19 further showed that respondents included both women ( $n = 405$ ) and men ( $n = 775$ ), while academic qualification of the respondents included graduation, masters, and MS/M.Phil/Ph.D. On the whole, work experience of the respondents varies from 2.5–18 years; whereas job duration in the current workplace ranged from 1.5–16 years.

Job designations of the respondent employees were categorized in accordance to nature of the organization (see Table 19). In relation to SWH ( $N = 580$ ), job designation of the participants included web designers, software engineers, computer programmers, system analysts / system integrators, and software developers. On the other hand, participants ( $N = 600$ ) from banks included employees working as marketing managers, managers credit marketing unit, marketing operations managers, and business development officers. Job designations of the employees of banks and SWH were equalized on the indicators which have been explained in elaborative manner in study II (please see page 84).

Table 19

*Descriptive Statistics of the Sample of Main Study (N = 1180)*

Variables	<i>f</i>	%	Variables	<i>f</i>	%
<b>Organization Type</b>			<b>Job Designations in SWH</b>		
SWH	580	49.0	Computer Programmers	126	21.72
Banks	600	51.0	System Analysts / Integrators	94	16.20
<b>Education</b>			Software Engineers	130	22.42
Graduation	478	40.50	Software Developers	108	18.63
Masters	533	45.16	Web Developers / Designers	122	21.03
MS/ M.Phil	124	10.50	<b>Job Designations in Banks</b>		
Ph.D	45	3.84	Marketing Managers	158	26.33
<b>Gender</b>			Managers Credit Marketing	174	29.00
Men	775	65.68	Senior Marketing Managers	92	15.33
Women	405	34.32	Marketing Operations Managers	70	11.66
<b>Organization Size</b>			Business Development Officers	106	17.68
SWH 20-40	365	62.94	<b>Job Experience</b>		
	41-65	215	2-6 years	481	40.78
Banks 20-40	324	54.00	6.1-12 years	438	37.11
	26-60	276	12.1-18 years	261	22.11

**Inclusion criteria.** Respondents working in private sector SWH and banks operating in Islamabad, Rawalpindi, and Lahore were included in the sample. Employees with overall job experience of minimum 2 years with at least 1 year of job period in the present organization were approached for data collection. Other criterions used for inclusion in the sample are organization size, gender of the leader, and organizational structure.

**Organization size.** In the present study, size of the organization must be minimum 20 for both the organizational structures. According to Billet (2016) and Hao et al. (2012), organizational size of at least 20–22 employees has been considered as a

reasonable number to present an appropriate context in which interpersonal interactions, communication patterns, leadership practices, conflict management styles, decision making patterns can be effectively manifested. However, other organizational researchers (Chintaloo & Mahadeo, 2013; Karatepe, 2013; Santra & Giri, 2008) have asserted that minimum organizational size of 15–18 is also regarded practical enough to manifest the interplay of contextual factors. But recent evidences (Davis & Lawrence, 2017; Hamel & Zanini, 2017) strongly recommend that functional teams can only operate when the organization should have minimum of 20 or more employees.

*Gender of the leader.* In addition, substantial evidences showed that gender of the leader does influence the perceptions, attitudes, and behaviors of the followers working under male or female leaders (Avolio & Walumbwa, 2014; Bashir, Jianqiao, Jun, Ghazanfar, & Khan, 2011; Brock & Lippe, 2013; Choi, 2004; Hoogh & Den Hertog, 2008). Therefore, in the present study, gender of the leader is specified as male only. This has been done in congruence to the actual ratio of gender of the leader in the context of banks and SWH. In case of marketing departments of banks, employees of first level management do work under the female boss or leaders; while in case of SWH, there were only two incidences in the whole sample where the employees would be getting directions from the female leader/boss. Therefore, in the present research, technique of balancing (following recommendations of Hamel & Zanini, 2017) is used so as to keep the gender of the leader constant for both the occupational setting in order to control the

confound that may influence the perceptions of authentic leadership as a result of specific gender of the immediate boss.

*Organizational structure.* According to Hao et al. (2012), nature of organization is an important indicator to classify any organization as flat or tall. As per considerations of empirical evidences of organizational structures, SWH are considered as flat organizations (Mughal & Trimzi, 2015; Sohail, 2013; Zitek & Jordan, 2016); while banks are regarded as formalized and tall organizations (Rehman & Ahmed, 2008; Hao et al., 2012; Zameer et al., 2015). Hence, contextual factors included span of control (that is how many personnel is working under each manager), delegation of authority (in terms of decision making), communication patterns (vertical versus horizontal trends), and interpersonal relationships between leader-follower were different for both SWH and banks. In the present case, SWH were identified as flat organizations with few layers of management, high span of control where employees are given more autonomy in decision making. In addition, communication flow is primarily horizontal and more rigorous in nature with instant and straight interface between the leader and the employee (Chodary, 2016; Spencer & Muchnick, 2015). Conversely, banks are considered as tall organizations with more formalized structure of hierarchy, few personnel is working under each manager; while, decision making is primarily decentralized, higher prevalence of vertical communication trends with more formalized and indirect interaction between leader and employee (Kaura et al., 2015).

The sample included varied occupations (employees of banks and SWH); that is, pooling individuals with different occupations contributes to the generalizability of the findings. Moreover, focusing on a single job position would reduce the variance of the variables, lowering the capacity to detect associations between constructs. This practice adopted in the present study is much in accordance to the other studies (e.g., Coelho et al., 2011; Kennedy & Anderson, 2017; Kunze & Menges, 2016) which also followed the similar sampling strategy.

**Demographic sheet.** A rigorous demographic sheet was designed to gather details regarding age, gender, education, monthly income, job designation, over all job experience, job duration in the present organization, organization size, title of organization, and type of organization of participants (see Annexure I).

**Informed consent form.** A customized consent form was used to inform the participants about the general purpose of the study; their right to quit at any time during administration of questionnaires, assurance of confidentiality, and agreement to participate in the study duly signed by them (see Annexure J).

**Instruments.** Measures (modified and validated in Study I and Study II) were used to collect data for the main study. Description of the measures is previously given on page 69 (see Annexures E, F, G, H, & K).

## **Procedure**

All the procedural protocols adopted in the Study II (modification and validation of instruments) were also employed during this study. Ethical considerations and moral obligations (as given on page 89) were also followed in this study.

## **Results of the Main Study**

Findings obtained on the basis of analysis derived from main study are presented in four distinctive, yet allied parts. In the first part, issues of analysis of missing values, detection of outliers, and data cleaning are discussed. In the second part, assessment of common method variance is done so as to rule out the alternative explanations. In the third part, hypotheses testing in terms of structural models (direct and indirect effects) as well as impact of personal and organizational demographics of the employees have been analyzed through bivariate and multivariate analysis. In last part, path models are tested for respective samples as well as overall sample of the study.

### **Part 1: Data Screening and Detection of Outliers**

Firstly, accuracy of the whole data set inclusive of 1300 cases was examined and outliers (univariate as well as multivariate) of various constructs of the current study were identified. The correctness of the data was determined through tabulating frequency and occurrence rate of acquired responses on every variable and resultant array of responses

was also tabulated. There were errors in data sets of 3% cells of data set which is corrected in accordance to the original copies of the manually filled booklet of these cases.

At subsequent step, univariate outliers were identified through the scrutinization of box plots. These outliers were identified on perceived authentic leadership ( $n = 6$ ), psychological capital ( $n = 8$ ), work-related flow ( $n = 4$ ), and CWB ( $n = 4$ ); consequently, these identified cases are removed from the data file.

In the present study, outliers were identified prior to any kind of data analyses as per suggestions of Altman and Krzywinski (2016) as outliers can significantly influence the results based on multivariate analyses; for instance, distortion of correlation coefficients (Osborne & Overbay, 2004), crafting problems in regression analysis, and even indicating the presence of collinearity among the predictor variables in multiple regression (Krzywinski & Altman, 2015). Distortions to the correlation may, in turn, lead to biased sample estimates, as outliers artificially impact the degree of linearity present between a pair of variables (Osborne & Overbay, 2004). Moreover, presence of outliers may also negatively influence the statistical analyses primarily based on correlation coefficient, for example, factor analysis and structural equation modeling (Brown, 2012). Similarly, mean differences based on ANOVA can be seriously hampered by the presence of outliers as these may generate bias in group means (Krzywinski & Altman, 2015).

The present study adopted the most commonly recommended approach for multivariate outlier detection that is  $D^2$  based on a measure of multivariate distance



(Mahalanobis as cited in Johnson & Wichern, 2002). The value of  $D^2$  for each respondent of the sample was calculated and compared  $D^2$ 's and  $\chi^2$  distribution with  $p$  degrees of freedom and considered as an outlier if its value exceeds the quantile for inverse probability ( $p > .05$ ; Tabachnick & Fidell, 2007).

Keeping in line with this technique, multiple regressions were used to regress the primary variables of the current study on dummy coded demographic variables. Mahalanobis  $D^2$  was calculated to assess the multivariate outliers. Hence, any case would be identified as an outlier with larger value of Mahalanobis  $D^2$  with corresponding smaller probability value. The analysis identified 18 outliers (multivariate), that are removed from the data file; thereby resulting in data set of 1180 which is finally considered for further analysis.

Later, missing values were identified in the cleaned data set and 156 cases (13%) were identified in the data set where minimum one reply is at least omitted on a particular construct. Resultantly, it has been found that missing values on primary variables of the current study ranged from 0.4% to 16.3% with maximum missing values were found on item 13 of Psychological Capital Questionnaire (16.3%) chased by item 12 of Work-Related Flow Scale (5.2%); while missing values were less than 5% on the Perceived Authentic Leadership Questionnaire, Creativity Scale, and Social Desirability Scale. The Little's Completely Missing At Random Test (MCAR; Little, 1988) was non significant [ $\chi^2 (32719) = 2269.42, p = 1.00$ ], thereby revealing that data is missing in a random manner and as such there is absolute absence of any notable methodical archetype in the missing data. Thereby, indicating that there is no relationship between the missingness of

the data and any values (observed or missing) and missing data points are a random subset of the data (Madden, Vicente, Rappoport, & Banerjee, 2017).

In the present study, technique of *t*-test (separate variance) is employed to tabulate missing values. Subsequently, mean values are computed for each construct and are contrasted before and after accrediting item 13 of Psychological Capital Questionnaire and item 12 of Work-Related Flow Scale which showed nonsignificant differences in relation to all the prime factors of the present study. As per recommendations of Graham (2012), Expectation Maximization (EM) technique was used to impute the missing values with deduction derived on the model of maximum likelihood.

## **Part 2: Estimation of Common Method Variance**

The present study employed mono-method approach (Podsakoff et al., 2016) based on self report assessment from single source for the exploration of relationships among variables. The self-report survey research inherently bear the problem of common method variance. Common method variance is the amount of spurious correlation between variables that is created by using the same method or collecting data from the single source (often a survey) to measure each variable (Podsakoff, MacKenzie, Lee, & Podsakoff, 2012). Method biases can be a serious problem as these may become a source of measurement error. Consequently, measurement error may hamper the legitimacy of the inferences about the relationships between variables and may project random and systematic error variance in measurement (Coenen & Bulck, 2016; Craighead, Ketchen,

Dunn, & Hult, 2011). However, systematic measurement error poses more critical problem because it provide grounds for alternative explanation (opposing to the hypothesized association) of the observed relationships among measures of major constructs of the study (Cohen, 2013).

Moreover, in the present study, certain methods also affect the results from the fact that the information about the predictor variable and criterion variable is obtained from the same person. This sort of self-report partiality may result in any spurious alliance between the predictor and criterion variable produced merely by the fact that information is sought from the same person on these variables (Richardson, Simmering, & Sturman, 2009). In the present study, as all the measures are self report in nature and the information about predictors (PAL, WRF, and PsyCap) and criterion (CWB) variables is collected form the single source; therefore there is likelihood of the presence of method effects. In order to curtail the problem of common method variance, broadly two types of remedies are taken into account; that is procedural and statistical. Details of these remedies are given as follows:

**Procedural remedies.** The basic assumption of using procedural remedies in monitoring and regulating the method variance is to identify the commonalities of the measures of predictor and criterion variables and minimizing those commonalities through the outset of the study design. The bond between the predictor and criterion variable may originate from three sources; that is, the respondent, contextual cues, and peculiar wording / format of the scale. The contextual cues may include the environment

in which measurement is being done or even within the questionnaire itself. Therefore, the following four requisites are considered in the research plan of the current exploration.

*Temporal separation of measurement.* Firstly, a potential remedy that is done in the present study is the time separation of the measurement of the predictor and criterion variables. Temporal separation is accomplished by introducing a time lag between the measurement of the predictor (PAL, PsyCap and WRF) and the criterion (CWB) variables. The data regarding PAL, PsyCap, and WRF (predictor variables) is collected at a given time while the responses on CWB (criterion variable) has been gathered after an interval of two weeks.

Podsakoff et al. (2012) suggested several beneficial effects of temporal separation of the measuring protocols. First, it reduces partiality in the retrieval of the pattern of responses based on any contextual cues. Second, it would inhibit the tendency and motivation of the respondents to use preceding responses to fill the gaps in recall for inferring missing details. Third, creating a temporal interval also reduce predisposition in the response reporting by making former responses less influential, relevant, or salient. According to Coenen and Bulck (2016), this reduces the respondent's impulse and ability to use his or her prior responses to answer successive questions, consequently dropping the tendency of demand characteristics and uniformity in response pattern.

*Protecting respondent anonymity.* A second procedural remedy employed in the present study is to ensure the respondent's anonymity and apprehension of evaluation. This additional procedure is used so as to reduce the method bias at the stage of reporting of responses (Podsakoff et al. 2012). Firstly, respondents are ascertained that their answers would be kept anonymous. Secondly, respondents are also assured that there is no right or wrong answers and they should answer questions as genuinely as possible. According to Craighead et al. (2011), these procedures would reduce people's apprehension of being evaluated and make them less likely to edit their responses to be more socially desirable, lenient, acquiescent, and consistent with how they think the researcher wants them to respond.

*Inter-construct randomization.* Third procedural remedy used by employing inter-construct randomization (Duncan et al., 2013) with reference to predictor variables. This is done by presenting the measures of perceived authentic leadership, work-related flow, and psychological capital in a random order to all the participants. This procedure would help in reducing the priming effect and order effect of the scales related to particular constructs of the study. However, intra-construct randomization is not followed in the present study as per recommendation of Dattalo (2013) which may interrupt the valid sequencing of the scale items and may also disturb the funneling procedure that is progressing logically from general to specific questions.

*Improving scale items.* Fourth, effort is made to reduce the method biases through the careful construction of the items themselves. Although in the present study, previously constructed scales are employed; however, issues of comprehension, avoidance of ambiguity, familiarity with terms, specificity, and problems of syntax are cautiously addressed in study I (see chapter III) and study II (see chapter IV) in accordance to the recommendations of Craighead et al. (2011). Scale anchors are not changed and reverse scoring is also limited (only 3 items of Psychological Capital Questionnaire are reverse scored) because of the risk of reducing scale validity (Coenen & Bulck, 2016). The survey instruments are also pre-tested by a representative group of raters (practitioners and academics) to validate the instrument's readability, clarity, length, and its appropriateness for the sample frame (see Chapter III). Raters are prompted for feedback and suggested improvements and where appropriate, changes to the instrument are implemented. Pre-testing also supported the instrument's content validity (Podsakoff et al., 2012).

**Statistical remedies.** Even though aforementioned procedural remedies would minimize, if not totally eliminate, the potential effects of common method variance on the findings of this research; certain statistical remedies are also employed on the sample of the main study. In this regard, two particular techniques are used as post-hoc analysis; that is Herman's Single Factor Test (Harman, 1976) and Common Marker Variable (Williams, Hartman, & Cavazotte, 2010). Further elaborations of these tests are given as under:

*Harman's single factor test.* One of the most widely used techniques by researchers (Podsakoff, Mackenzie, & Podsakoff, 2016; Weijters, Geuens, & Schillewaert, 2014; Williams & O'Boyle, 2015) to address the issue of common method variance is Harman's one-factor (or single-factor) test. This test is based on the technique to load all variables of the study into an Exploratory Factor Analysis and examine the unrotated factor solution to determine the number of factors that are necessary to account for the variance in the variables. Hence, total 64 items of all the constructs (perceived authentic leadership = 14 items, work-related flow = 13 items, psychological capital = 24 items, and creative work behavior = 13 items) in the present study are included into an exploratory factor analysis to determine whether the majority of the variance could be accounted for by one general factor.

Table 20

*Exploratory Factor Analysis with Unrotated Factor Solution for all the Constructs of the Study (N = 1180)*

Factors	Eigen Values	% Variance	Cumulative %
Factor 1	59.84	28.47	28.47
Factor 2	21.69	13.26	41.73
Factor 3	9.08	10.88	52.61
Factor 4	4.75	9.41	62.02
Factor 5	2.81	9.03	71.05
Factor 6	1.68	7.56	78.61
Factor 7	1.07	4.88	83.49

From the output given in Table 20, it can be seen from the first row that the Harman's Single Factor technique estimates the common method variance to be 28.47% which is much below the commonly accepted threshold of 50% (Podsakoff et al., 2016;

Williams & O'Boyle, 2015); this suggested that common method bias would not be a problem with the dataset of the present study.

The basic assumption of this technique is that if a substantial amount of common method variance is present, either a single factor will emerge from the factor analysis or one general factor will account for the majority of the covariance among the measures (Weijters et al., 2014). Although Harman's single factor test has been used extensively in Psychology using exploratory factor analysis; however, it may not be able to identify small to moderate levels of common method variance (Lindwall et al., 2012; Williams et al., 2016). Therefore, Confirmatory Factor Analysis is further employed in the present study as a robust technique to gauge the differences between the one-factor model versus multifactor model through chi-square difference test (Craighead et al., 2011).

Table 21

*Goodness-of-Fit Indices for the Harman's Single Factor Test*

Variables	$\chi^2$	<i>Df</i>	$\chi^2 / df$	RMSEA	CFI	TLI	AGFI
7 Factor Model	1090	446	2.44	.04	.97	.96	.96

*Note.*  $\chi^2 / df = \leq 5$ , RMSEA =  $\leq .05$ , CFI =  $\geq .90$ , TLI =  $\geq .90$ , AGFI =  $\geq .90$  (Hayduk, 2015; Kline, 2013)

Table 21 showed the model summary of the Goodness of Fit indices for confirmatory factor analysis of multiple factor model of Harman's test. It has been found that  $\chi^2$  is significant whereby *df* indicates the parameters for each construct. Therefore, ratio between  $\chi^2$  and *df* is tabulated as  $\chi^2 / df$  which is found within the acceptable range of  $\leq 5$  (Hayduk, 2015). Moreover, absolute (RMSEA), incremental (CFI and TLI), and



parsimonious (AGFI) indices are all in the acceptable ranges for multiple factor model of Harman's test (Bentler & Hu, 2012).

*Common marker variable.* Second statistical remedy used in the present study is common marker variable. The marker variable technique has been broadly used for the control of common method variance in a variety of disciplines such as psychology (Williams et al., 2010), business ethics, and education (Lindwall et al., 2012). The marker variable technique (Weijters et al., 2014) is based on incorporating additional variable into the study that should be theoretically unrelated to (at least one) other variables of the study. In the present study, social desirability is used as a common marker variable which is theoretically unrelated to all the constructs of the study, that is, PAL, WRF, PsyCap, and CWB. Common method variance is evaluated based on the correlations between the theoretically unrelated variable. The correlations between social desirability (marker variable) and perceived authentic leadership, work-related flow, and psychological capital (predictor variables) as well as creative work behavior (criterion variable) are calculated.

Interscale correlations presented in Table 22 showed that social desirability has non significant correlations with PAL, PsyCap, WRF, and CWB in relation to total sample as well as individual samples of SWH and banks (see Table 22).

Table 22

*Interscale Correlations of Social Desirability as Common Marker Variable with all the Study Constructs (N = 1180)*

Variables	Total Sample (N = 1180)	SWH (n = 580)	Banks (n = 600)
Relational Transparency	.08	.04	.07
Internalized Moral Perspective	.05	.03	.04
Balance Processing	.08	.07	.06
Self-awareness	.07	.02	.05
<b>Perceived Authentic Leadership (Total)</b>	.12	.10	.11
Self-efficacy	.09	.06	.07
Hope	.08	.05	.06
Resilience	.09	.03	.08
Optimism	.10	.02	.09
<b>Psychological Capital (Total)</b>	.13	.10	.12
Absorption	.04	.01	.03
Work Enjoyment	.07	.04	.05
Intrinsic Work Motivation	.08	.03	.06
<b>Work-Related Flow (Total)</b>	.11	.08	.09
<b>Creative Work Behavior</b>	.12	.06	.10

These patterns of findings reflect the genuineness of responses on the self-report measures of the study. Moreover, respondents overall responses on Social Desirability Scale are below the cut off score ( $M = 7.38$ ,  $SD = 2.12$ ) and within the acceptable range of 0-8. Hence, it could be conveniently concluded that respondents have expressed their responses genuinely.

On a concluding note, it is said that both procedural and statistical common method variance remedies have been employed in the present study. It should be noted that procedural and statistical remedies are not mutually exclusive (Podsakoff et al., 2016). Combining statistical and procedural methods have been considered as ideal situation (Williams & O'Boyle, 2015) because it helps to overcome the limitations inherent in each approach and provides additional validation to the research conclusions.

### Part 3: Hypotheses Testing

In this part, results of model based hypotheses testing are presented. The third part is further segmented into four subunits focusing on different aspects of analysis and model testing. In the first subunit, descriptive statistics, correlation matrices, and regression models are presented and interpreted. Second subunit comprised of multiple regression models to determine the mediating role of WRF and PsyCap appraised for employees of both organizational structures. On the other hand, the third subunit entailed description of indirect effect of nature of organizational structure that is tall versus flat (as a moderator) in relation to primary variables of the study. Last subsection comprised of results of group differences across gender, education, job experience, job period, and type of organization in explaining the relationships among PAL, PsyCap, WRF, and CWB for employees of SWH and banks.

**Descriptive statistics.** Initially, it would be more appropriate to discuss the descriptive statistics of the sample which would provide basis for reliable conclusions. Table 23 shows initial psychometric analysis, using Cronbach's alpha coefficients yielded an internal consistency coefficient for the entire ALQ, WRFS, PCQ, CS, and SDS-17; respectively. This indicates that the degree of homogeneity among the items is consistent with the degree of homogeneity theoretically expected for the aforementioned constructs (George & Mallery, 2003). According to Pallant (2013), alphas greater than .80 are considered as good; however, alpha coefficient greater than .70 are also considered as adequate. Similarly, alpha coefficients tabulated for all the subscales of the major instruments lie in the array of .70 to .90 which is regarded as adequately acceptable

values of reliability. Reliability indices were also tabulated for the individual samples of SWH and banks which also yielded higher alpha coefficients for all the scales and subscales; however, on parsimonious basis, descriptives are mentioned for the collective sample of employees.

Table 23

*Descriptive Statistics and Alpha Reliability Coefficients of Scales (N = 1180)*

Scales and Subscales	No. of items	$\alpha$	$M$	$SD$	Skew.	Kurt.	Range	
							Potential	Actual
<b>Authentic Leadership Questionnaire</b>	14	.85	55.38	10.16	-.16	-.17	14 – 70	24 – 66
Relational Transparency Subscale	3	.71	17.34	4.50	.20	.16	3 – 15	9 – 12
Internalized Moral Perspective Subscale	4	.72	13.11	3.21	.05	-.48	4 – 20	10 – 18
Balanced Processing Subscale	3	.70	10.47	2.25	-.30	-.28	3 – 15	6 – 12
Self-Awareness Subscale	4	.73	14.45	3.04	-.06	-.66	4 – 20	8 – 19
<b>Work-Related Flow Scale</b>	13	.91	54.92	14.03	-.06	-.54	13 – 91	25 – 84
Absorption Subscale	4	.81	15.63	5.61	.04	-.50	4 – 28	9 – 26
Work Enjoyment Subscale	4	.86	18.07	5.04	-.21	-.58	4 – 28	6 – 22
Intrinsic Work Motivation Subscale	5	.83	21.23	6.00	-.03	-.67	5 – 35	12 – 32
<b>Psychological Capital Questionnaire</b>	24	.89	102.72	17.58	-.18	-.03	24 – 144	55 – 128
Self-efficacy Subscale	6	.80	26.95	6.07	-.55	-.19	6 – 36	12 – 34
Hope Subscale	6	.78	25.77	5.21	-.41	-.18	6 – 36	12 – 31
Resilience Subscale	6	.77	25.06	4.60	.07	-.39	6 – 36	13 – 33
Optimism Subscale	6	.72	24.96	4.64	.43	-.59	6 – 36	16 – 36
<b>Creativity Scale</b>	13	.90	46.86	9.57	-.04	-.75	13 – 65	18 – 52
<b>Social Desirability Scale-17</b>	16	.82	4.49	2.44	-.41	.14	0 – 16	2 – 8

*Note.* Skew. = Skewness, Kurt. = Kurtosis

Table 23 shows that values of skewness and kurtosis fall within the range of +1 to -1 (Hayduk, 2015) indicated that majorly data is normally distributed and it is not

unreasonably skewed in either direction. Moreover, the disparity between population and sample means is quite coherent and distribution of sample is symmetric (Cohen, 2013).

**Relationship pattern among prime variables.** In the main study, samples comprised of regular employees from tall organizations, that is banks as well as flat organizations that is SWH. Keeping in view, the diversity of sundry nature of work, hierarchical organization, and other job related multiplicity factors it had been considered appropriate to estimate the pertinence of measures in relation to the collective sample and also in the backdrop of independent samples of flat and tall organizations.

In the following section, therefore, all the analyses are tabulated and presented in the milieu of overall collective sample of workers from both organizational compositions and separate groups of employees from SWH and banks. This prototype of presenting the findings assisted in grasping the pattern of relationships from multiple perspectives and also helped in deriving similarities and differences in the working of both organizational structures.

Interscale correlations are tabulated for all the major constructs of the study across collective sample (see Table 24) as well as individual samples of both groups of employees (see Table 25). This would also provide tangible evidence of the construct validation of the measures in the context of present sample.

Table 24

*Correlation Matrix for All the Study Variables for the Total Sample of Employees (N = 1180)*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. RT	–	.47**	.44**	.50**	.66***	.27*	.22*	.25*	.23*	.26*	.32**	.22*	.25*	.35**	.30**
2. IMP		–	.49**	.45**	.61***	.26*	.24*	.21*	.23*	.27*	.28*	.26*	.29**	.30**	.28*
3. BP			–	.41**	.63***	.23*	.29**	.25*	.24*	.30**	.20*	.22*	.24*	.32**	.39***
4. SA				–	.59***	.27**	.22*	.29**	.26*	.32**	.28*	.26**	.30**	.27*	.35**
<b>5. PAL (T)</b>					–	.37**	.30**	.35***	.33**	.38**	.32**	.39***	.31**	.43**	.47***
6. Self-efficacy						–	.40**	.41***	.45***	.68***	.38**	.34**	.23*	.35**	.38***
7. Hope							–	.48***	.43***	.66***	.51***	.39**	.42***	.30**	.33**
8. Resilience								–	.46***	.55***	.40***	.33**	.49***	.38***	.40**
9. Optimism									–	.52***	.43***	.31**	.26*	.34**	.31**
<b>10. PC (T)</b>										–	.49***	.46***	.43**	.52**	.43***
11. ABS											–	.42***	.51***	.78***	.31**
12. WE												–	.73***	.76***	.38***
13. IWM													–	.79***	.35**
<b>14. WRF (T)</b>														–	.46***
<b>15. CWB</b>															–

*Note.* RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-Awareness; PAL (T) = Perceived Authentic Leadership (Total); PC (T) = Psychological Capital (Total); ABS = Absorption; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; WRF (T) = Work-Related Flow (Total); CWB = Creative Work Behavior.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

Table 25

*Correlation Matrix across Study Variables among Employees of Flat (SWH = 580) and Tall (Banks = 600) Organizations*

Variables	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. RT	–	.42**	.51***	.40**	.66***	.27**	.21*	.29**	.23*	.20*	.22*	.32**	.26*	.32**	.30**
2. IMP	.34*	–	.42**	.35**	.61***	.20*	.27**	.25*	.26*	.23*	.31**	.22*	.28**	.36**	.32**
3. BP	.34*	.45**	–	.51**	.63***	.21*	.19*	.26*	.20*	.30**	.20*	.37**	.34**	.39**	.39**
4. SA	.41**	.38**	.52***	–	.71***	.24*	.18*	.33**	.24*	.22*	.21*	.39**	.31**	.34**	.25*
5. PAL (T)	.63***	.62***	.68***	.72***	–	.31**	.20*	.23*	.27**	.38**	.24*	.30**	.37**	.49***	.47**
6. SE	.34*	.20*	.35**	.26*	.36**	–	.60***	.61***	.55***	.78***	.28**	.24*	.33**	.25*	.41**
7. Hope	.21*	.22*	.14	.20*	.25**	.46**	–	.68***	.53***	.76***	.41**	.33**	.42**	.27**	.36**
8. Res.	.24*	.28**	.23**	.27**	.31**	.45**	.53***	–	.56***	.65***	.30**	.43**	.41**	.38**	.40**
9. Opt.	.25*	.19*	.11	.21*	.33**	.49**	.43***	.47***	–	.52***	.33**	.39**	.36**	.35**	.31**
10. PC (T)	.28*	.26**	.31**	.25*	.37**	.65***	.59***	.62***	.67***	–	.39**	.41**	.43**	.52***	.51***
11. Abs.	.19*	.21*	.18*	.20*	.22*	.35**	.23*	.38**	.19*	.32**	–	.48**	.51***	.78***	.44**
12. WE	.23*	.21*	.26**	.24*	.36**	.43**	.26*	.29**	.23*	.25*	.44**	–	.73***	.76***	.49***
13. IWM	.18*	.28**	.30**	.27**	.31**	.41**	.29**	.34**	.22*	.33**	.48**	.63***	–	.69***	.38**
14. WRF (T)	.25*	.34**	.33**	.30**	.33**	.42**	.28**	.39**	.30**	.44**	.77**	.73***	.76***	–	.55***
15. CWB	.21*	.20*	.23*	.24*	.37**	.39**	.27**	.33**	.28**	.42**	.35**	.36**	.31**	.43**	–

*Note.* RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-Awareness; PAL (T) = Perceived Authentic Leadership (Total); SE = Self-efficacy; Res. = Resilience; Opt. = Optimism; PC (T) = Psychological Capital (Total); Abs. = Absorption; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; WRF (T) = Work-Related Flow (Total); CWB = Creative Work Behavior.

**Correlation values above diagonal** = Employees of Software Houses; **Correlation values below diagonal** = Bank Employees.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$

Results presented in Table 24 and 25 indicated correlation pattern across PAL, PsyCap, WRF, and CWB among employees of SWH (correlation values above diagonal). It has been found that perceived authentic leadership and its dimensions that is, relational transparency, internalized moral perspective, balanced processing, and self-awareness are significantly positively associated with psychological capital and all of its components. Similarly, perceived authentic leadership along with its components has exhibited significant positive relationship with work-related flow and its dimensions. Consequently these results offer absolute support for Hypothesis 1 (i.e., perceived authentic leadership is positively linked with psychological capital and work-related flow) in the context of total sample and across separate samples of banks and SWH.

Moreover, dimensions of optimism, self-efficacy, resilience, and hope, as well as overall psychological capital display significant positive alliance with WRF and all the dimensions of WRF (Table 24 and 25); thereby supporting the Hypothesis 2 (i.e., PsyCap is positively related with WRF). An interesting finding has been emerged which shows that constructs of PAL, PsyCap, and WRF along with all their dimensions are significantly positively related with CWB. These patterns of relationship supported Hypothesis 3 (i.e., PAL, PsyCap, and WRF are positive predictors of CWB of employees). All the aforementioned hypotheses found to be supported for the collective sample as well as in individual samples of both organizational structures.

Table 25 further revealed correlation patterns regarding PAL, PsyCap, WRF and CWB among employees of banks and SWH (correlation values above and below the diagonal in Table 25). Similar prototype has been observed that is, relational



transparency, internalized moral perspective, self-awareness, and overall perceived authentic leadership has reflected significant positive association with self-efficacy, hope, resilience, optimism and overall psychological capital. However, in case of bank employees, balanced processing (dimension of PAL) showed significant relationship with self-efficacy and resilience but indicated non significant link with hope and optimism (dimensions of PsyCap). Likewise, authentic leadership along with its dimensions has shown significant positive association with WRF and all the components of WRF; thereby providing partial support for Hypothesis 1 (i.e., perceived authentic leadership is positively linked with psychological capital and work-related flow) in relation to employees of banks and SWH.

In addition to that, self-efficacy, resilience, hope, optimism and overall psychological capital reveal significant positive alliance with all the dimensions of work-related flow as well as with total construct of work-related flow; thereby offering reasonable support for Hypothesis 2 (i.e., PsyCap is positively related with WRF). The most amazing detection of the finding is that PAL, PsyCap, and WRF along with their individual dimensions are significantly positively linked with CWB. This particular trend of findings favorably supports Hypothesis 3 (i.e., PAL, PsyCap, and WRF are positive predictors of CWB of employees) has received complete support in the individual samples of banks and SWH.

In addition to that, Table 24 and 25 also indicated that across both samples, core components of PAL (relational transparency, internalized moral perspective, balanced processing and self-awareness) are notably positively allied with the total construct of PAL as well as with the dimensions of PAL; thereby indicating construct validity of the entire construct. Similarly, individual dimensions of psychological

capital (self-efficacy, hope, resilience, and optimism) are significantly positively allied with each other and with the overall PsyCap. This pattern also provides an evidence of construct validation of the core construct of psychological capital. Likewise, intrascale correlations of work-related flow illustrating that all facets of WRF are significantly positively related with entire construct of WRF as well as in relation to individual dimensions. Hence, expressing construct validity of work-related flow and that each dimension is an indicator of the whole construct.

**Regression models predicting CWB in employees of SWH and banks.** To predict employees' CWB by PAL, PsyCap, and WRF, multiple hierarchical regression analysis is conducted through enter method.

In this model, gender, age, education, organization size, and social desirability were entered as control variables so as to determine the variance of multiple predictors of creative work behavior for the total sample of employees.

Table 26 revealed that PAL accounted highest contribution in the whole model with 32% variance in relation to overall sample of the employees. On the other hand, the whole model tends to explain 38% variance in CWB across collective sample of employees where PAL, PsyCap, and WRF as predictors contributed differential variance in the outcome (i.e., CWB). Hence, Hypothesis 3 (i.e., PAL, PsyCap, and WRF are positive predictors of CWB of employees) has received substantial support from these findings in relation to the total sample of employees.

Table 26

*Multiple Hierarchical Regression Analysis Predicting Creative Work Behavior for Total Sample of Employees (N = 1180)*

Variables	Creative Work Behavior				
	<i>B</i>	<i>SE</i>	$\beta$	$R^2$	$\Delta R^2$
<b>Step 1</b>					
Constant	49.62	4.43			
Age	.13	.08	.10		
Social Desirability	.07	.15	.03		
Organization Size	.08	.84	.06		
Gender	.29	.66	.25*		
Education	.23		.21*		
<b>Perceived Authentic Leadership (Total)</b>	.44	.05	.41***	.34	.32
Relational Transparency	.38	.12	.36***		
Internalized Moral Perspective	.39	.68	.37***		
Balanced Processing	.31	.53	.29**		
Self-awareness	.34	.05	.33***		
<b>Step 2</b>					
Constant	44.15	3.83			
<b>Psychological Capital (Total)</b>	.35	.08	.32***	.25	.23
Self-efficacy	.31	.10	.28**		
Hope	.27	.15	.25*		
Resilience	.31	.12	.30**		
Optimism	.24	.01	.23*		
<b>Step 3</b>					
Constant	36.57	3.91			
<b>Work-Related Flow (Total)</b>	.30	.02	.28**	.19	.17
Absorption	.27	.06	.25*		
Work Enjoyment	.24	.08	.22*		
Intrinsic Work Motivation	.26	.07	.23*		
		$R^2$	.42	$\Delta R^2$	.38

*Note.* Age, social desirability, organization size, gender, and education are controlled variables  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

Predicting role of PAL, PsyCap, and WRF for CWB among employees of SWH is presented in Table 27.

Subsequent control of age, education, social desirability, gender, and organization size (Table 27); it has been found that PAL and PsyCap and all the individual dimensions of these constructs significantly positively predict CWB among employees of SWH. In addition, work-related flow along with its components has

emerged as a strong predictor of creative work behavior by explaining 30% variance in the context of flat organization (SWH).

Overall, the entire model explains 36% variance in CWB where PAL, PsyCap, and WRF as predictors accounted variance in the outcome. Hence, Hypothesis 3 (i.e., PAL, WRF, and PsyCap are positive predictors of CWB of employees) has received additional affirmed support from these findings in relation to flat organizational structure.

Table 27

*Multiple Hierarchical Regression Analysis Predicting CWB among Employees of SWH (N = 580)*

Variables	Creative Work Behavior				
	<i>B</i>	<i>SE</i>	$\beta$	$R^2$	$\Delta R^2$
<b>Step 1</b>					
Constant	66.71	3.15			
Age	.20	.14	.17		
Social Desirability	.10	.19	.07		
Organization Size	.08	.02	.05		
Gender	.27	.14	.25*		
Education	.29	.13	.21*		
<b>Perceived Authentic Leadership (Total)</b>	.31	.53	.33**	.23	.21
Relational Transparency	.29	.08	.28**		
Internalized Moral Perspective	.27	.10	.25*		
Balanced Processing	.20	.15	.18*		
Self-awareness	.28	.12	.26*		
<b>Step 2</b>					
Constant	57.31	5.06			
<b>Psychological Capital (Total)</b>	.36	.08	.33***	.26	.24
Self-efficacy	.33	.09	.31***		
Hope	.28	.08	.26*		
Resilience	.30	.02	.29**		
Optimism	.22	.06	.20*		
<b>Step 3</b>					
Constant	51.29	4.27			
<b>Work-Related Flow (Total)</b>	.41	.53	.39***	.31	.30
Absorption	.38	.08	.37***		
Work Enjoyment	.32	.10	.30***		
Intrinsic Work Motivation	.36	.15	.35***		
		$R^2$	.38	$\Delta R^2$	.36

*Note.* Age, social desirability, organization size, gender, and education are controlled variables  
 \* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

Predictors of CWB in relation to tall organizational structure (banks) are given in Table 28. At the initial level, that age, social desirability, organization size, gender, and education are entered as control variables. Algebraic sign of beta values designate direction of relationship and positive beta coefficients reflect that these constructs positively predicted CWB.

Table 28

*Multiple Hierarchical Regression Analysis Predicting CWB among Bank Employees (N = 600)*

Variables	Creative Work Behavior				
	B	SE	$\beta$	R <sup>2</sup>	$\Delta R^2$
<b>Step 1</b>					
Constant	58.29	3.44			
Age	.16	.11	.13		
Social Desirability	.09	.02	.04		
Organization Size	.18	.04	.15		
Gender	.33	.18	.31**		
Education	.26	.09	.24*		
<b>Perceived Authentic Leadership (Total)</b>	.30	.03	.28**	.22	.20
Relational Transparency	.25	.06	.24*		
Internalized Moral Perspective	.29	.15	.27**		
Balanced Processing	.26	.18	.23*		
Self-awareness	.24	.13	.21*		
<b>Step 2</b>					
Constant	41.29	6.03			
<b>Psychological Capital (Total)</b>	.39	.19	.37***	.27	.24
Self-efficacy	.36	.07	.34***		
Hope	.26	.10	.25*		
Resilience	.34	.08	.33***		
Optimism	.29	.17	.23*		
<b>Step 3</b>					
Constant	37.48	4.56			
<b>Work-Related Flow (Total)</b>	.29	.10	.27**	.18	.15
Absorption	.26	.04	.24*		
Work Enjoyment	.21	.06	.19*		
Intrinsic Work Motivation	.25	.02	.23*		
		R <sup>2</sup>	.31	$\Delta R^2$	.29

Note. Age, social desirability, organization size, gender, and education are controlled variables  
\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$

Table 28 shows that PsyCap surfaced as a significant predictor of CWB within the framework of vertical organization (i.e., banks) by explaining maximum variance (24%); whereas, the total model explains 29% variance in CWB among bank employees; thereby advocating strong empirical support for Hypothesis 3 (i.e., PAL, PsyCap, and WRF are positive predictors of CWB of employees) in the context of tall organizational structure.

**Mediating role of work-related flow and psychological capital.** In this section, mediating role of PsyCap and WRF is discussed. Mediation regression analysis is performed in accordance to the steps suggested by Preacher and Hayes (2013). Indirect effect is normally skewed as in the case of present study because the sample is large enough. In addition, Sobel test is further employed to determine the corroboration of mediation.

Employees' perceptions of authentic leadership cultivate flow experiences at workplace among them which in turn makes them to reveal elevated creative performance. Similarly, employees' perceptions of authenticity in the leaders also enhance their PsyCap which results in elevation of their creative output at workplace.

To test the aforementioned assumptions, mediating role of WRF, PsyCap, and its dimensions in the relationship between PAL and CWB are analyzed among employees of both organizations (Table 29), flat organizational structure (SWH, Table 30), and tall organizational structure (banks, Table 31).

Table 29

*Mediating Role of Work-Related Flow and Psychological Capital in Predicting CWB in Collective Sample (N = 1180)*

Criterion Variable	Predictor Variable	$\beta$	<i>p</i>	95% CI	
				<i>LL</i>	<i>UL</i>
<b>Direct Effects</b>					
CWB	PAL	.49	.00	1.22	4.30
Work-Related Flow	PAL	.37	.00	1.11	5.44
Psychological Capital	PAL	.41	.00	2.06	5.39
Self-efficacy	PAL	.32	.00	-1.49	-0.27
Hope	PAL	.28	.00	1.52	6.33
Resilience	PAL	.30	.00	2.61	4.09
Optimism	PAL	.25	.00	-0.91	-0.11
CWB	Work-Related Flow	.39	.00	1.64	4.28
CWB	Psychological Capital	.42	.00	0.93	2.55
CWB	Self-efficacy	.36	.00	1.37	5.55
CWB	Hope	.32	.00	0.66	3.97
CWB	Resilience	.35	.00	-1.39	-0.20
CWB	Optimism	.25	.00	1.68	3.62
<b>Indirect Effects</b>					
CWB	PAL through Work-Related Flow	.05	.61	-.47	.12
CWB	PAL through Psychological Capital	.11	.88	-.10	.07
CWB	PAL through Self-efficacy	.09	.72	-.25	.10
CWB	PAL through Hope	.13	.67	-.33	.19
CWB	PAL through Resilience	.07	.56	-.78	.15
CWB	PAL through Optimism	.12	.47	-.63	.14

Table 29 showed both direct and indirect effects to predict CWB from PAL, WRF and PsyCap and individual dimensions of each primary variable of the study. Results further indicated that all the direct paths are positively significant as in accordance to the theory based evidences. For instance, perceived authentic leadership positively predicts CWB, PsyCap (and its dimensions of resilience, self-efficacy, optimism, and hope), and WRF. In addition, both mediators, that is, PsyCap (along with its dimensions) and WRF are also positively aligned with creative work behavior.

However, when indirect paths of WRF and PsyCap (as well as their dimensions are introduced), then all direct paths becomes non significant; thereby establishing the mediating role of these constructs in the relationship between PAL and CWB. These finding offer pragmatic support for Hypothesis 4 (i.e., PsyCap mediates the relationship between PAL and CWB) and Hypothesis 5 (i.e., WRF mediates the relationship between PAL and CWB) in the backdrop of collective sample of employees.

Table 30 present the direct and indirect effects of WRF and PsyCap along with its dimensions among employees of SWH. Results showed that direct path from PAL to CWB and all the direct paths of PAL, WRF, and PsyCap (and their individual dimension) with CWB are significant. However, when indirect paths of WRF and PsyCap (as well as their individual dimensions) are introduced; consequently, all the direct paths becomes non significant (Table 30); thereby expressing mediating role of PsyCap and WRF in predicting CWB from PAL in relation to flat organizational structure (SWH). These pattern of findings offer substantial support for Hypothesis 4 and 5 (i.e., PsyCap and WRF mediates the relationship between PAL and CWB) in the context of flat organizational structure (SWH).

In case of bank employees, total construct of PsyCap with its dimensions of self efficacy, hope, and resilience showed complete mediation; while, optimism reflected partial mediation in predicting CWB from perceived authentic leadership; hence presented empirical support for Hypothesis 4 (i.e., PsyCap and its dimensions mediates the relationship between PAL and employee CWB).



Table 30

*Mediating Role of Work-Related Flow and Psychological Capital in Predicting CWB among SWH Workers (N = 580)*

Criterion Variables	Predictor Variables	$\beta$	$p$	95% CI	
				LL	UL
<b>Direct Effects</b>					
CWB	PAL	.24	.00	1.13	4.36
Work-Related Flow	PAL	.48	.00	2.31	6.66
Psychological Capital	PAL	.77	.00	1.59	2.95
Self-efficacy	PAL	.27	.00	3.20	5.34
Hope	PAL	.17	.00	1.11	3.23
Resilience	PAL	.14	.00	2.08	5.20
Optimism	PAL	.15	.00	1.11	4.20
CWB	Work-Related Flow	.31	.00	3.24	6.39
CWB	Psychological Capital	.34	.00	2.29	5.39
CWB	Self-efficacy	.77	.00	1.60	2.94
CWB	Hope	.99	.00	1.79	4.19
CWB	Resilience	1.18	.00	2.98	6.38
CWB	Optimism	1.03	.00	1.82	3.24
<b>Indirect Effects</b>					
CWB	PAL through Work-Related Flow	.09	.59	-1.01	1.20
CWBCWB	PAL through Psychological Capital	.07	.63	-2.34	1.16
CWB	PAL through Self-efficacy	.04	.76	-1.06	2.15
CWB	PAL through Hope	.07	.46	-1.13	1.17
CWB	PAL through Resilience	.08	.39	-0.69	1.18
CWB	PAL through Optimism	.10	.45	-1.55	1.20

On the other hand, indirect effect of WRF becomes less significant indicating partial mediating role of WRF in predicting CWB from PAL (thereby supporting Hypothesis 5) in the context of tall organizational structure (banks).

Table 31

*Mediating Role of WRF and PsyCap in Predicting CWB in Bank Employees (N = 600)*

Criterion Variable	Predictor Variable	$\beta$	<i>p</i>	95% CI	
				<i>LL</i>	<i>UL</i>
<b>Direct Effects</b>					
CWB	PAL	.29	.00	2.11	4.27
WRF	PAL	.37	.00	1.26	5.49
PsyCap	PAL	.59	.00	1.44	3.74
Self-efficacy	PAL	.22	.00	2.17	5.27
Hope	PAL	.14	.00	1.10	4.19
Resilience	PAL	.29	.00	3.04	6.14
Optimism	PAL	.27	.00	1.03	6.11
CWB	WRF	.33	.00	2.28	4.39
CWB	PsyCap	.31	.00	2.27	4.36
CWB	Self-efficacy	.62	.00	1.50	5.74
CWB	Hope	.82	.00	2.66	4.97
CWB	Resilience	.55	.00	1.39	4.70
CWB	Optimism	.87	.00	1.76	5.08
<b>Indirect Effects</b>					
CWB	PAL through WRF	.28	.05	-1.22	2.04
CWB	PAL through PsyCap	.14	.23	-1.75	1.39
CWB	PAL through Self-efficacy	.11	.29	-0.54	1.22
CWB	PAL through Hope	.16	.20	-1.94	2.35
CWB	PAL through Resilience	.13	.24	-0.82	2.64
CWB	PAL through Optimism	.22	.05	-1.52	3.66

**Moderating role of organizational structure.** Another fundamental aim of the current investigation is to assess the moderating role of type of organizational structure (that is vertical versus flat) in predicting PsyCap, WRF, and CWB. This is done to establish the assumption that how organizational structure moderates the direct relationships of PAL and CWB; PAL and PsyCap; PAL and WRF; PsyCap and CWB; WRF and CWB; and PsyCap and WRF. These moderating patterns have been tested in the backdrop of the conceptual model given in chapter I based on the

assumption that flat versus tall organizational structures influence the direct relationships among major constructs of the study.

To determine the moderating role of organizational structure, interaction term of organizational structure, PAL, PsyCap, and WRF are created discretely. The generation of interaction term is followed by entering variables in multiple regression analysis through enter block method in order to gauge for impact of interaction between the predictor and criterion variables. Organizational structure is a categorical variable; therefore, it is dummy coded; however, remaining variables are continuous in nature so centering through mean is done to control error variance (Baron & Kenny, 1986).

In hierarchical regression analysis, PAL, organizational structure and interaction between these two are entered by means of enter block method (representing independent method) and CWB, PsyCap, WRF as dependent variable. Results presented in Table 32 showed the interaction effect of type of organization in all the direct paths of the relationships in predicting CWB, PsyCap, and WRF from perceived authentic leadership; thereby providing support for Hypothesis 6 (i.e., type of organizational structure acts as a moderator in predicting CWB, PsyCap, and WRF).

Table 32

*Organizational Structure Type Acting as a Moderator in Predicting PsyCap, WRF, and CWB (N = 1180)*

Criterion Variables	<i>B</i>	<i>SE</i>	$\beta$	$R^2$	Adj $R^2$	<i>F</i>	Slope ( <i>t</i> -Value)
Constant	45.26	.81					
Perceived Authentic Leadership	1.57	.54	.26	.22	.21	100.83*	2.30(1.90)
Type of Organizational Structure	2.30	.07	.22				3.87(2.89)
PAL x TOS (Predicting CWB)	1.57	.54	.14				
Constant	41.44	.64					
Perceived Authentic Leadership	7.94	.46	.45	.20	.19	97.66*	7.94(11.97)
Type of Organizational Structure	.90	.93	.12				9.50(7.10)
PAL x TOS (Predicting PC)	1.56	.47	.08				
Constant	4.38	.88					
Perceived Authentic Leadership	.28	.08	.29	.25	.23	87.67*	6.07(9.04)
Type of Organizational Structure	-.05	.05	.21				6.25(3.77)
PAL x TOS (Predicting WRF)	.11	.05	.16				
Constant	46.05	.73					
PsyCap	5.25	.49	.54	.47	.45	248.91*	5.25(6.36)
Type of Organizational Structure	.47	.49	.24				6.25(3.77)
PC x TOS (Predicting CWB)	1.00	.49	.15				
Constant	41.80	.67					
WRF	4.97	1.30	.34	.27	.26	100.64*	4.97(6.95)
Type of Organizational Structure	-.88	.86	.17				6.65(4.63)
WRF x TOS (Predicting CWB)	1.68	.86	.09				
Constant	45.53	.90					
PsyCap	5.19	.27	.27	.29	.28	119.78*	5.19(7.12)
Type of Organizational Structure	.94	.55	.04				5.75(3.92)
PC x TOS (Predicting WRF)	.56	.27	.06				

*Note.* PAL = Perceived Authentic Leadership; PC = PsyCap; WRF = WRF; CWB = CWB; TOS = Type of Organizational Structure.

\* $p < .001$

Findings presented in Table 32 further provide substantial evidence that relationship of PAL with CWB, PsyCap, and WRF is significantly moderated by the type of organizational structure; thereby laying empirical grounds for the support of Hypothesis 6a (i.e., organizational structure moderates the relationship between PAL and CWB); Hypothesis 6b (i.e., organizational structure moderates the relationship between PAL and PsyCap); and Hypothesis 6c (i.e., organizational structure

moderates the relationship between PAL and WRF). Similarly, relationships of PsyCap and WRF with CWB are also significantly moderated by the variations in the organizational structures; hence providing substantial support for Hypothesis 6d (i.e., organizational structure moderates the relationship between PsyCap and CWB); and Hypothesis 6e (i.e., organizational structure moderates the relationship between WRF and CWB). Finally, the interaction effect of organizational structure in the path of PsyCap and WRF is also found significant; thus Hypothesis 6f (i.e., organizational structure moderates the relationship between PsyCap and WRF) received adequate empirical support.

As all the interactions have been found significant in relation to the moderating role of organizational structure; therefore, modgraphs are generated to depict the nature of interaction for each path. In the subsequent section, each path is separately presented.

*Perceived authentic leadership predicting creative work behavior.* As the Figure 10 shows that there is linear relationship between PAL and CWB for both tall and flat organizations. However, the strength of this relationship is much strong in case of flat organizations (SWH) as indicated by the steep lines; whereas it is of lesser degree in case of banks.

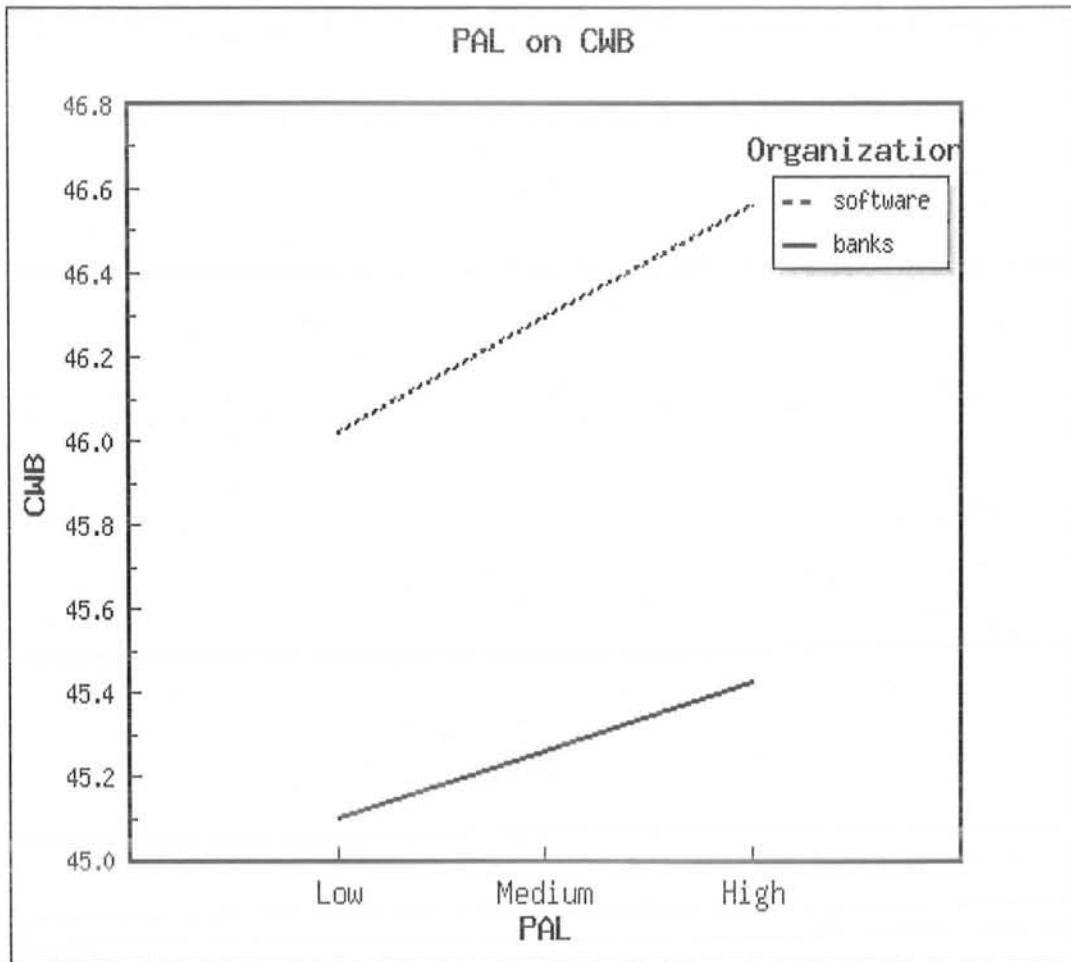


Figure 10. Indirect Effect of Organizational Structure in Predicting CWB from Perceived Authentic Leadership

*PAL predicting PsyCap.* Figure 11 shows modgraph for the moderation of organizational structure for PAL and PsyCap. Slope computation through modgraph is done to determine significance of organizational structure in moderating role of perceived authentic leadership. The relationship between PAL and CWB is positively directed and organizational structure is sufficiently moderating this correlation and slope for SWH showed more sharp increase as compared to banks. In case of banks this increase in slope value is not that much rapid. In relation to flat structure (SWH)

as PAL increases, from low to high their PsyCap also increases continuously and rapidly; while this trend is relatively plane in case of vertical organization (banks).

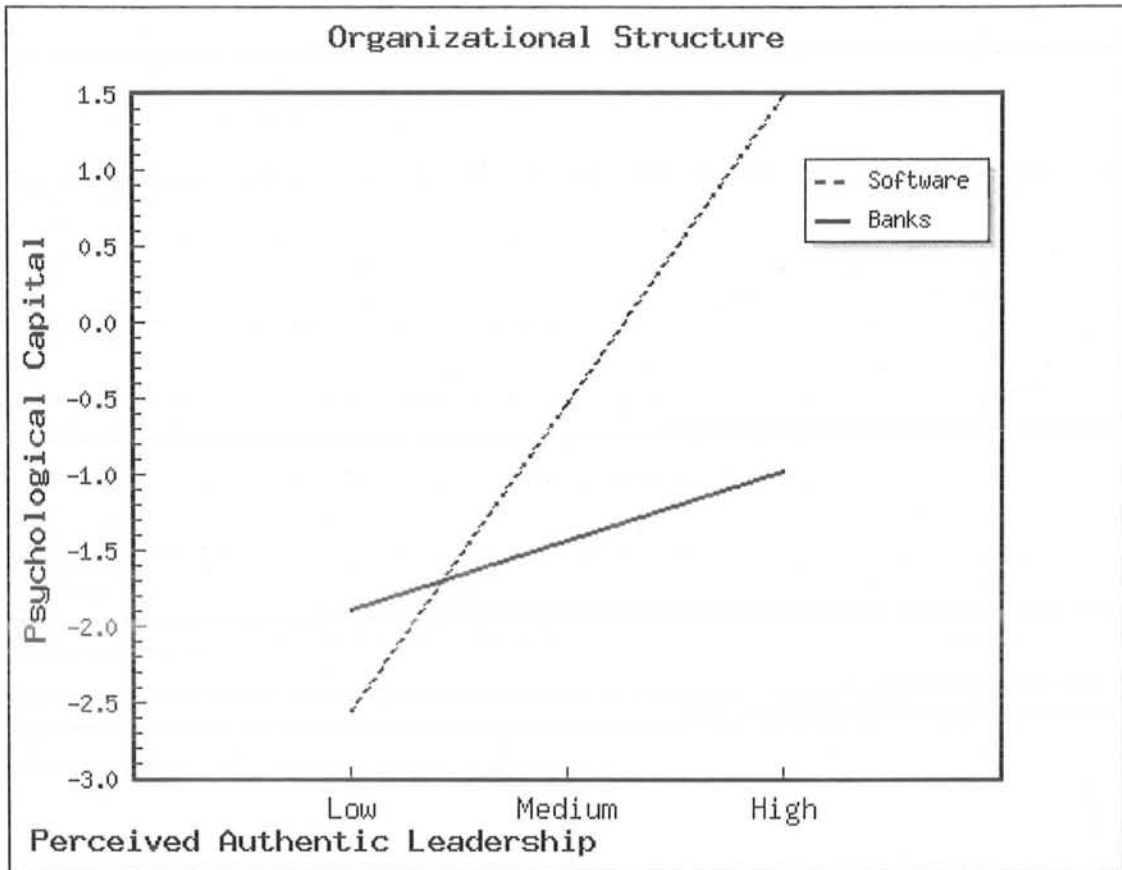


Figure 11. Indirect Effect of Organizational Structure in Predicting PsyCap from Perceived Authentic Leadership

**PAL predicting WRF.** The Figure 12 shows modgraph for the moderation of organizational structure for PAL in predicting WRF. The relationship between PAL and CWB is positive and organizational structure is enhancing this relationship and slope for flat structure (SWH) showed sharper and steep increase as compare to tall organization (banks).

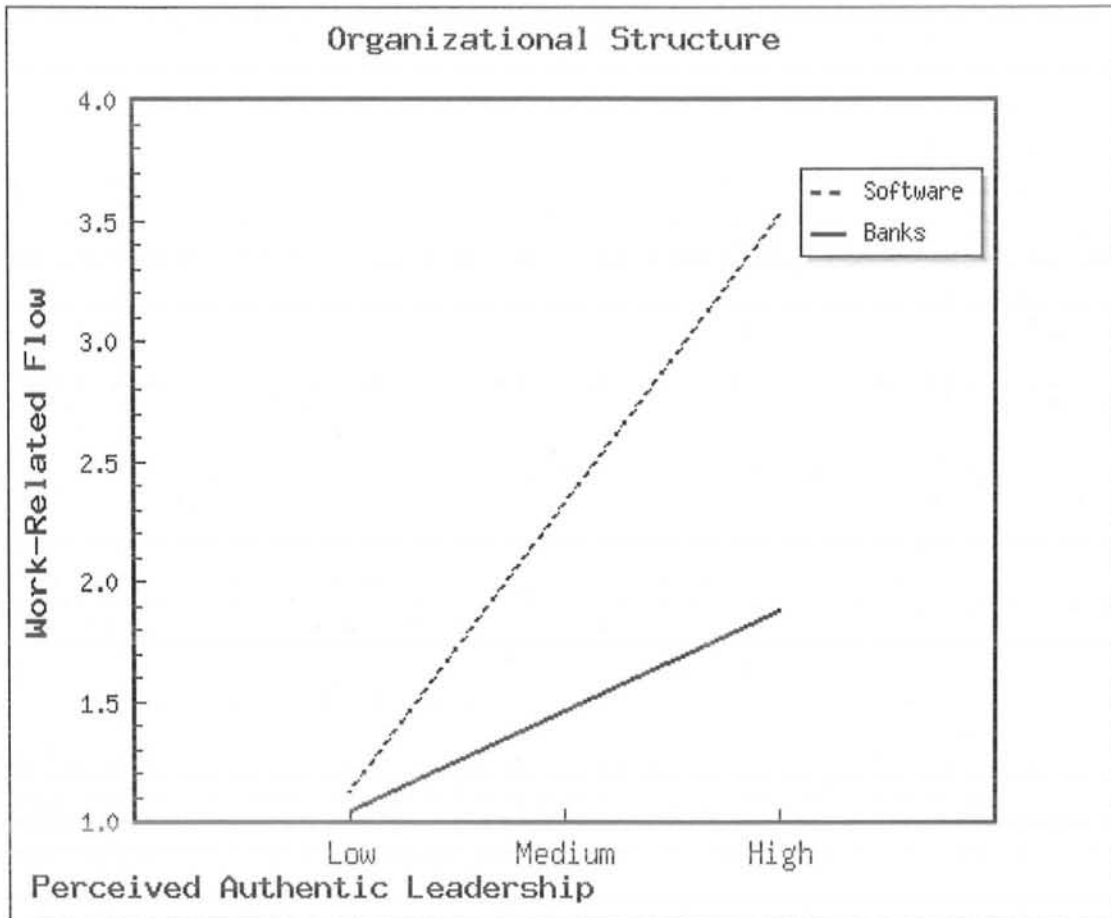


Figure 12. Indirect Effect of Organizational Structure in Predicting WRF from Perceived Authentic Leadership

*PsyCap predicting CWB.* Modgraph for the moderation of organizational structure in predicting CWB from PsyCap is depicted in Figure 13. This graph showed the direction of relationship and interaction terms. The relationship is significant positive and slope for flat structure (SWH) is more pointed than vertical structure (banks).



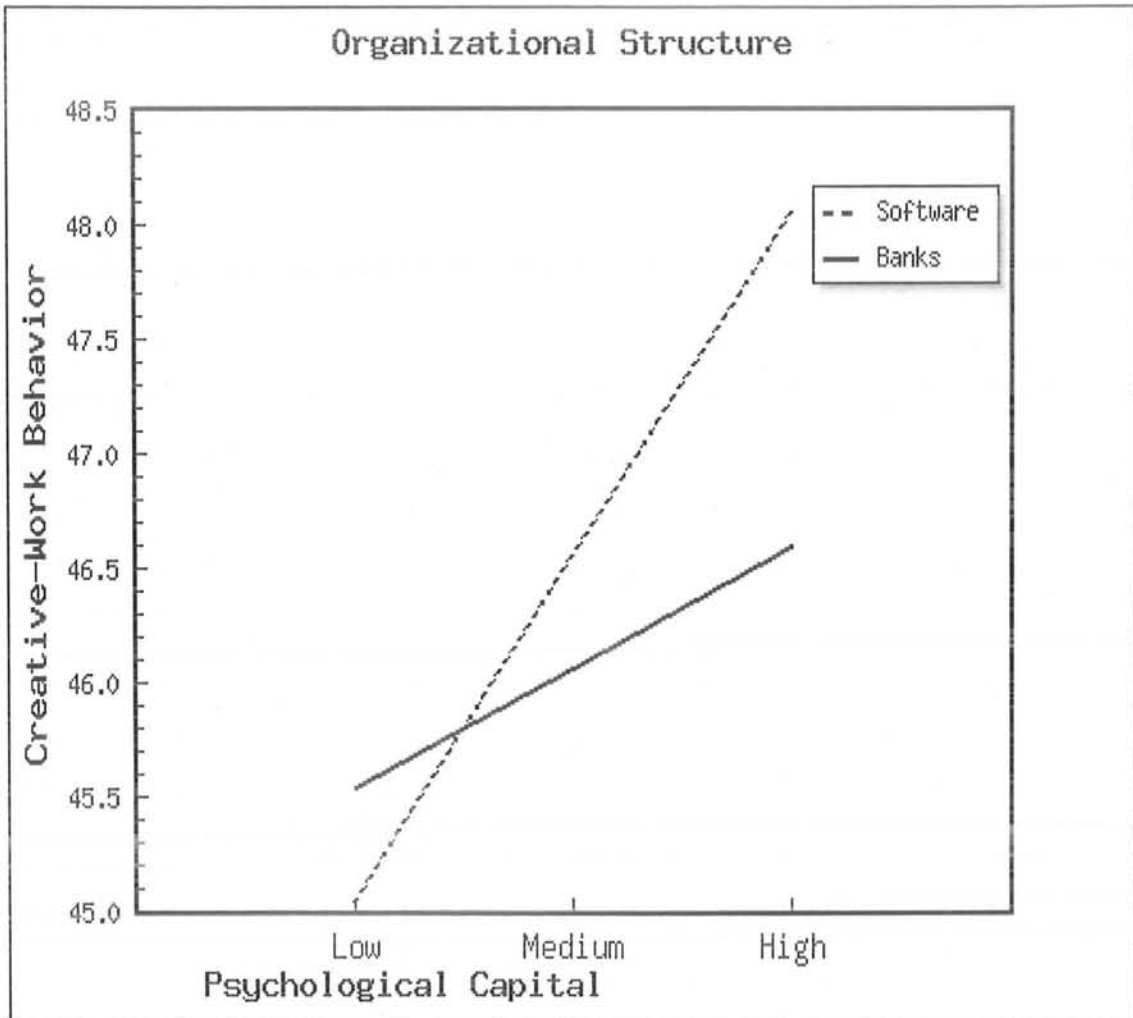


Figure 13. Indirect Effect of Organizational Structure in Predicting CWB from PsyCap

*WRF predicting CWB.* The Figure 14 shows that moderating effect of the organizational structure in predicting CWB from WRF. The value and shape of slope for both vertical and flat structures reflected enhancing relationship between predictor and outcome. However, the slope line is far steep and sharp in case of SWH as compared to banks depicting that relationship between WRF and CWB is increasing continuously, but this effect is quite leveled in case of tall structures (banks).

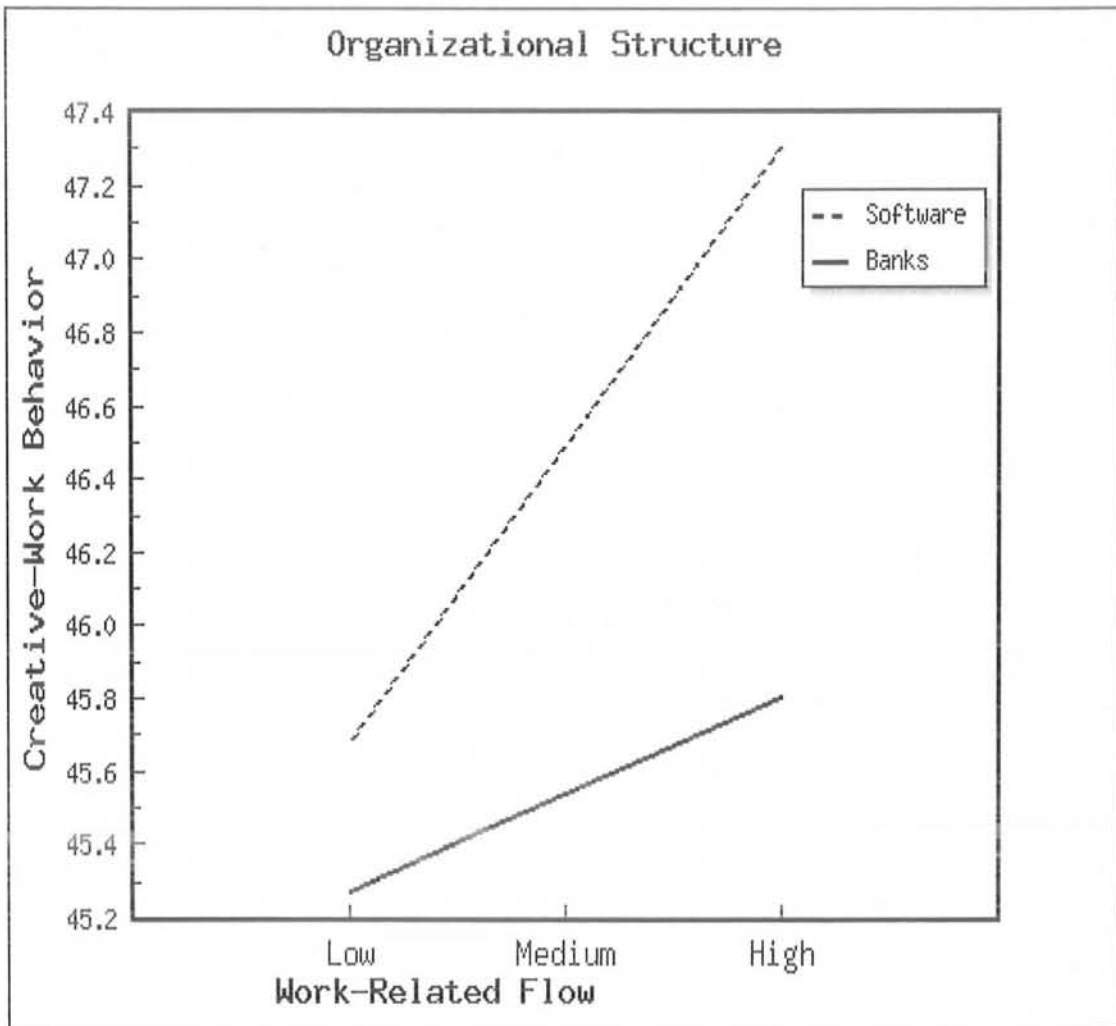


Figure 14. Indirect Effect of Organizational Structure in Predicting CWB from WRF

*PsyCap predicting WRF.* The Figure 15 shows that moderation of organizational structure is enhancing to predict WRF from PsyCap. However, the graph depicts comparatively higher trends of this enhancing relationship in case of SWH as compared to banks.

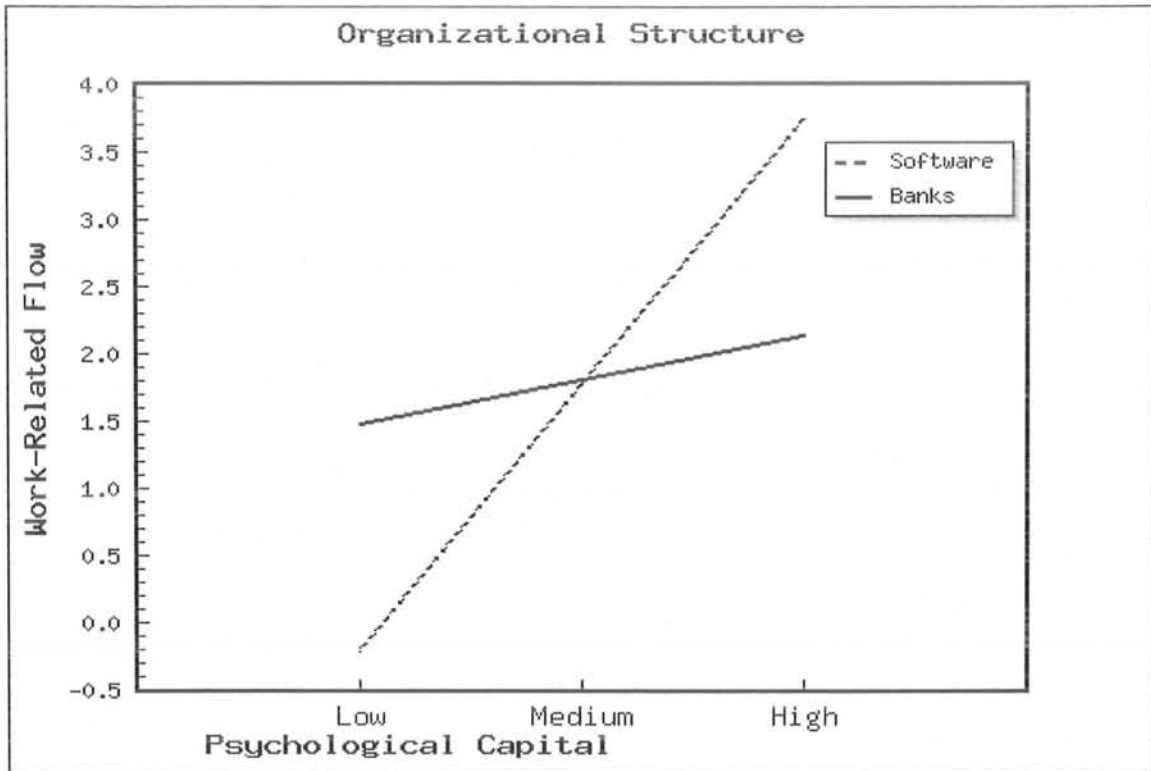


Figure 15. Indirect Effect of Organizational Structure in Predicting WRF from PsyCap

### Demographic Differences Across Study Variables

To assess the group differences across gender and type of organization, independent sample t-test is employed in relation to prime constructs of the current study. According to Cohen's (2003) recommended guiding principle for interpreting effect size in social sciences; the following three ranges are utilized, that is, small effect size = .1 – .30; medium = .30 – .37; large = .38 or larger. One-way Analysis of variance is applied to appraise the differences across education, job experience, job period, and job designations along all variables of study. In case of significant effect, an additional Post Hoc analysis (based on pair-wise comparisons) is further tabulated. As per recommendations of Field (2013), post hoc comparison facilitate to control

type I error by employing Bonferroni correction; which in turn, make certain that the cumulative type I error is below .05.

**Gender.** Group differences across both samples, in relation to gender are determined for collective sample as well as separately among employees of SWH and banks. Moreover, effect size was also tabulated to establish the significance of group differences.

Gender differences are presented in Table 33 regarding employees of SWH and banks. Results showed significant gender differences in relation to collective sample where men expressed favorable perceptions of authentic leadership (and all dimensions), WRF (along with individual dimensions), PsyCap (and its components), and CWB as compared to female employees. However, there are marginal gender differences on the construct of WRF.

Findings depicted significant gender differences on the parameters of perceived authentic leadership, PsyCap, and CWB among employees of SWH. It has been found that men expressed positive perceptions of authentic leadership (along with its dimensions), augmented levels of PsyCap (and its individual dimensions), and enhanced CWB as compared to women working in SWH. However, non significant gender differences have been observed among employees of SWH on the construct of WRF and its components of intrinsic work motivation, absorption, and enjoyment.

Table 33

*Gender Differences on All Study Variables among Employees of SWH and Banks (N = 1180)*

Total Sample Variables	Men (n = 775)		Women (n = 405)		t	p	95% CI		Cohen's D
	M	SD	M	SD			LL	UL	
<b>PAL (T)</b>	48.11	9.38	46.09	11.01	4.06	.01	3.05	7.19	.55
RT	16.15	5.14	14.38	6.17	2.17	.05	1.25	4.67	.33
IMP	13.34	3.24	12.43	2.97	2.54	.03	0.78	1.60	.34
BP	10.73	2.11	8.76	2.40	3.61	.01	0.64	1.91	.38
SA	14.85	2.91	11.59	3.12	4.32	.01	0.88	3.77	.39
<b>PC (T)</b>	105.82	17.33	96.88	17.39	5.75	.00	4.92	8.52	.49
SE	27.80	5.86	25.58	6.08	4.63	.00	1.43	3.51	.44
Hope	26.48	4.94	24.31	5.33	3.82	.01	0.71	4.24	.36
Res.	26.04	4.50	22.69	4.34	5.11	.00	1.05	3.35	.45
Opt.	25.59	4.82	24.11	4.21	3.90	.01	0.44	3.42	.38
<b>WRF (T)</b>	40.33	10.71	42.45	11.10	2.52	.04	-1.19	-0.22	.32
Abs.	17.24	7.07	15.81	6.35	2.04	.05	-1.24	-0.37	.34
WE	19.70	6.29	16.54	7.22	3.01	.02	-1.48	-0.12	.36
IWM	18.28	7.44	17.01	6.36	2.54	.03	-2.55	-0.58	.35
<b>CWB</b>	48.31	9.27	43.65	10.38	8.24	.00	2.33	5.70	.51
<b>SWH (n = 580)</b>	<b>Men (n = 377)</b>		<b>Women (n = 203)</b>						
<b>PAL (T)</b>	56.97	9.38	52.11	11.01	4.38	.00	2.57	6.78	.47
RT	17.85	4.04	16.40	4.71	3.17	.01	0.55	2.35	.33
IMP	13.34	3.24	12.43	2.97	2.88	.03	0.29	1.53	.31
BP	10.73	2.11	8.76	2.40	4.18	.00	0.51	1.42	.42
SA	14.85	2.91	11.59	3.12	4.32	.00	0.69	1.84	.41
<b>PC (T)</b>	105.82	17.33	96.88	17.39	5.08	.00	5.48	12.40	1.27
SE	27.80	5.86	25.58	6.08	3.78	.01	1.06	3.37	.37
Hope	26.48	4.94	24.31	5.33	4.35	.00	1.19	3.15	.42
Res.	26.04	4.50	22.69	4.34	7.45	.00	2.46	4.23	.75
Opt.	25.59	4.82	24.11	4.21	3.38	.01	0.61	2.33	.32
<b>WRF (T)</b>	45.12	13.61	44.94	12.30	.96	.39	-0.16	1.17	.06
Abs.	16.09	5.69	15.77	4.97	1.23	.23	-0.24	.40	.03
WE	18.90	4.95	18.45	4.63	0.73	.56	-0.48	.41	.01
IWM	17.54	5.67	17.73	5.40	0.64	.98	-0.71	.90	.02
<b>CWB</b>	49.49	8.94	40.81	8.58	9.84	.00	6.94	10.41	.99

*Continued...*

Banks ( <i>n</i> = 600)	Men ( <i>n</i> = 398)		Women ( <i>n</i> = 202)		<i>t</i>	<i>p</i>	95% CI		Cohen's <i>D</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			<i>LL</i>	<i>UL</i>	
<b>PAL (T)</b>	56.76	10.64	52.20	13.10	3.81	.01	2.20	6.91	.38
RT	18.09	6.29	16.25	7.91	2.59	.02	0.44	3.23	.31
IMP	13.31	3.28	11.60	3.08	2.33	.03	0.11	1.30	.32
BP	10.65	2.21	8.87	2.41	3.53	.01	0.34	1.21	.35
SA	14.71	2.98	12.49	3.11	4.21	.00	0.65	1.79	.40
<b>PC (T)</b>	104.71	17.53	97.60	18.50	3.99	.01	3.61	10.60	.39
SE	27.28	6.02	25.09	8.23	3.02	.01	0.76	3.61	.35
Hope	26.25	5.12	24.08	5.53	4.25	.00	1.16	3.18	.40
Res.	25.84	5.48	23.51	5.40	4.40	.00	1.29	3.37	.42
Opt.	25.24	4.70	23.72	3.93	3.83	.01	0.73	2.29	.35
<b>WRF (T)</b>	57.28	14.14	47.89	13.53	6.98	.00	6.74	12.02	.67
Abs.	16.29	5.68	14.14	5.16	4.14	.00	1.13	3.16	.39
WE	19.00	5.45	15.61	4.69	6.77	.00	2.41	4.37	.66
IWM	22.15	6.47	18.16	5.76	6.71	.00	2.81	5.14	.65
<b>CWB</b>	47.99	9.23	41.29	8.93	7.72	.00	4.99	8.39	.73

*Note.* PAL (T) = PAL(Total); RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-awareness; PC (T) = PsyCap (Total); SE = Self-efficacy; Res. = Resilience; Opt. = Optimism; WRF (T) = WRF (Total); Abs. = Absorption; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; CWB = CWB; SWH = SWH.

Findings given in Table 33 showed significant gender differences among bank employees across PAL, WRF, PsyCap, and CWB; thereby indicating that men reflected healthier perceptions of authenticity of their leaders, and enhanced PsyCap, WRF (along with the individual dimensions of these constructs), and CWB. These findings provide complete support for Hypothesis 7 (i.e., male employees are more likely to reflect better perceptions of perceived authentic leadership, PsyCap, WRF, and CWB as compared to female employees) in the context of collective sample and tall structures (bank employees); whereas Hypothesis 7 received partial support in case of flat organizational structure (SWH).

**Organizational structure.** Table 34 presents group differences along perceived authentic leadership, PsyCap, WRF, and CWB to offer inclusive depiction

of the differences among employees of SWH and banks. Moreover, effect size is also tabulated to establish the significance of group differences. Table 34 depicted analysis regarding group comparison across two types of organizations. Results revealed notable differences on all the prime variables of the study across banks and SWH.

Table 34

*Differences on Type of Organizational Structure in Relation to Variables of the Study (N = 1180)*

Variables	Banks (n = 600)		SWH (n = 580)		t	p	95% CI		Cohen's D
	M	SD	M	SD			LL	UL	
<b>PAL (T)</b>	46.72	6.71	55.73	9.99	17.66	.00	-2.99	-0.02	1.09
RT	13.13	3.24	17.52	4.25	9.68	.00	-4.82	-3.95	.86
IMP	10.44	2.28	13.13	3.21	6.39	.00	-3.00	-2.36	.96
BP	10.11	3.06	14.39	2.22	8.78	.00	3.57	4.18	.45
SA	11.63	11.49	14.56	3.01	8.58	.00	1.09	4.04	.88
<b>PC (T)</b>	95.72	5.61	103.73	17.78	10.42	.00	-4.57	-2.44	.67
SE	25.69	5.29	28.28	5.98	4.78	.00	-2.24	-0.93	.48
Hope	25.26	5.53	27.97	5.12	3.25	.01	1.33	3.09	.43
Res.	24.85	4.55	28.27	4.69	5.53	.00	0.96	2.11	.47
Opt.	19.91	11.00	22.25	14.74	2.60	.02	6.06	9.25	.38
<b>WRF (T)</b>	46.27	9.58	55.14	14.15	12.37	.00	-1.26	-0.45	.73
Abs.	15.12	5.45	18.58	5.61	7.78	.00	1.89	3.18	.55
WE	18.13	6.52	21.10	5.06	8.80	.00	2.34	3.69	.61
IWM	21.84	14.55	26.44	5.96	5.55	.00	2.10	4.70	.53
<b>CWB</b>	41.73	10.80	47.48	9.59	13.54	.00	-6.53	-4.95	.92

*Note.* PAL (T) = PAL(Total); RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-awareness; PC (T) = PsyCap (Total); SE = Self-efficacy; Res. = Resilience; Opt. = Optimism; WRF (T) = WRF (Total); Abs. = Absorption; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; CWB = CWB

Findings given in Table 34 indicated that workers of SWH (as rendering their services in flat organization) illustrated favorable reflections of authentic leadership (and its dimensions of relational transparency, internalized moral perspective, balanced processing, and self-awareness) and enhanced expression of PsyCap (as well as on dimensions of self-efficacy, hope, resilience, and optimism), WRF (along with

its dimensions of absorption, intrinsic work motivation, and work enjoyment), and CWB in comparison to the staff performing their duties in vertical organizational structures (that is banks). These patterns of findings thereby offering substantiating support for Hypothesis 8, that is, employees of flat organizations (SWH) would indicate enhanced judgments of PALand heightened levels of PsyCap, flow, and creativity at work in comparison to employees of tall organizations (banks).

**Education.** Differences along varying educational groups across both occupational groups are investigated through one way ANOVA. Initially, educational groups are classified on the basis of sample distribution across both organizational structures. The first group comprised graduates with minimum 14 years of formal education, while second group comprises masters with 16 years of formal schooling, and third group include individuals with higher and specialized level of education. Besides, differences are tabulated separately for the employees of SWH and banks.

Table 35 shows comparative occupational differences on three levels of education that is, graduates, masters, and higher specialized education along the study variables. Results showed that employees of highly educated group in relation to collective sample as well as subsamples of employees performing official responsibilities in vertical and horizontal organizations (that is banks and SWH, respectively) reflected favorable observation of authentic leadership practices and increased intensity of PsyCap at workplace.



Table 35

*Differences on Education Level of Employees of SWH and Banks across Major Constructs of the Study(N = 1180)*

Total Sample Variables	Graduation (n = 595)		Masters (n = 393)		MS / M.Phil / Ph.D (n = 192)		F	p	$\eta^2$
	M	SD	M	SD	M	SD			
<b>PAL (T)</b>	54.48	9.90	55.09	9.21	58.82	9.56	6.12	.00	.14
RT	16.21	6.54	17.02	7.55	19.33	3.68	3.31	.02	.05
IMP	12.44	3.09	13.19	3.51	15.40	2.57	2.06	.05	.02
BP	11.52	2.32	11.08	2.06	13.64	2.21	3.52	.01	.04
SA	13.81	2.99	13.72	3.22	16.55	2.32	4.66	.00	.05
<b>PC (T)</b>	81.65	15.95	85.20	17.84	88.71	16.17	10.33	.00	.12
SE	24.83	6.74	27.19	6.13	30.55	5.14	9.61	.00	.08
Hope	23.57	5.05	24.18	5.06	27.84	6.13	5.55	.00	.09
Res.	25.32	5.75	27.91	4.55	30.73	3.95	8.66	.00	.07
Opt.	23.15	4.04	24.60	5.00	26.89	4.81	6.57	.00	.10
<b>WRF (T)</b>	57.86	13.47	59.20	14.01	62.44	15.82	12.09	.00	.08
Abs.	14.55	5.49	16.47	5.85	18.65	4.99	4.93	.01	.04
WE	16.47	5.54	18.82	4.90	20.41	5.07	6.62	.00	.06
IWM	19.46	6.55	21.55	5.92	24.22	6.70	8.26	.00	.08
<b>CWB</b>	44.33	9.02	46.38	8.93	49.76	7.16	11.72	.00	.15
<b>SWH (n = 580)</b>	<b>Graduation (n = 267)</b>		<b>Masters (n = 188)</b>		<b>MS / M.Phil / Ph.D (n = 125)</b>				
<b>PAL (T)</b>	54.48	9.90	57.09	9.21	64.82	9.56	17.05	.00	.12
RT	17.15	6.54	18.48	7.55	20.55	3.68	4.82	.01	.04
IMP	13.15	3.09	12.59	3.51	15.75	2.57	12.06	.00	.08
BP	10.24	2.32	10.71	2.06	12.96	2.21	9.35	.00	.06
SA	14.20	2.99	14.52	3.22	16.55	2.32	7.81	.00	.04
<b>PC (T)</b>	99.73	15.95	109.78	17.84	125.28	16.17	42.44	.00	.13
SE	25.73	6.74	28.60	6.13	31.34	5.14	18.14	.00	.09
Hope	24.85	5.05	27.01	5.06	30.27	6.13	22.19	.00	.10
Res.	24.59	5.75	26.11	4.55	30.03	3.95	16.11	.00	.07
Opt.	24.11	4.04	25.95	5.00	26.00	4.81	2.01	.05	.03
<b>WRF (T)</b>	52.89	13.47	54.73	14.01	55.00	15.82	2.48	.03	.05
Abs.	15.33	5.49	16.19	5.85	18.75	4.99	2.83	.02	.01
WE	17.46	5.54	17.51	4.90	20.48	5.07	3.62	.01	.03
IWM	20.35	6.55	22.33	5.92	23.58	6.70	12.72	.04	.03
<b>CWB</b>	45.33	9.02	46.65	8.93	49.03	7.16	44.98	.05	.04

*Continued...*

Banks ( <i>n</i> = 600)	Graduation ( <i>n</i> = 328)		Masters ( <i>n</i> = 205)		MS / M.Phil / Ph.D ( <i>n</i> = 67)		<i>F</i>	<i>p</i>	$\eta^2$
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
<b>PAL (T)</b>	54.65	11.56	56.38	10.87	66.48	8.02	13.42	.00	.04
RT	17.15	6.54	18.48	7.55	20.55	3.68	4.82	.00	.01
IMP	13.15	3.09	12.59	3.51	15.75	2.57	12.06	.00	.03
BP	10.24	2.32	10.71	2.06	11.96	2.21	9.35	.00	.03
SA	14.20	2.99	14.52	3.22	16.55	2.32	7.81	.00	.02
<b>PC (T)</b>	99.48	16.58	108.06	18.09	124.48	16.11	33.86	.00	.11
SE	25.73	6.74	28.60	6.13	31.34	5.14	18.14	.00	.05
Hope	24.85	5.05	27.01	5.06	30.27	6.13	22.19	.00	.07
Res.	24.59	5.75	26.11	4.55	30.03	3.95	16.11	.00	.05
Opt.	24.11	4.04	25.95	5.00	30.00	4.81	28.01	.00	.08
<b>WRF (T)</b>	66.94	14.18	67.90	14.18	66.07	14.41	1.35	.23	-
Abs.	15.33	5.49	15.19	5.85	15.75	4.99	1.33	.21	-
WE	17.46	5.54	16.51	4.90	16.48	5.07	1.62	.18	-
IWM	20.35	6.55	21.33	5.92	20.58	6.70	1.22	.37	-
<b>CWB</b>	49.38	8.93	49.22	9.26	50.96	8.39	1.76	.11	-

*Note.* PAL (T) = PAL(Total); RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-awareness; PC (T) = PsyCap (Total); SE = Self-efficacy; Res. = Resilience; Opt. = Optimism; WRF (T) = WRF (Total); Abs. = Absorption; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; CWB = CWB; SWH = SWH.

However, unique pattern of differences are found on WRF and CWB across educational groups (Table 35). In case of collective sample and SWH' employees with higher educational skills reflected augmented experiences of WRF and better creative output at workplace. Conversely, non significant educational differences emerged on the constructs of WRF and CWB among bank employees. Therefore, Hypothesis 9 (i.e., employees with higher level of education are likely to exhibit better acuity of PALand increased experience of PsyCap, flow, and creative performance in comparison to employees with lesser educational skills) received complete support among collective sample and flat organizational structure (SWH); while, partial support in relation to tall organizational structure (banks).

As significant group differences existed on the parameter of education; therefore, post hoc analysis is also computed to determine mean differences across varying groups (see Table 36).

Table 36

*Post Hoc Differences on Educational Groups among Employees of SWH and Banks  
(N = 1180)*

Variables	Total Sample (N = 1180)			95% CI	
	<i>i - j</i>	<i>D (i - j)</i>	<i>p</i>	<i>LL</i>	<i>UL</i>
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	10.33	.01	-8.88	-2.79
Relational Transparency	3 > 1, 2; 2 > 1	2.64	.00	-1.53	-0.66
Internalized Moral perspective	3 > 1, 2; 2 > 1	2.60	.01	1.88	4.58
Balanced Processing	3 > 1, 2; 2 > 1	7.72	.00	-1.97	-0.45
Self-awareness	3 > 1, 2; 2 > 1	5.33	.00	1.66	4.32
<b>PsyCap</b>	3 > 1, 2; 2 > 1	9.62	.00	-2.45	-0.71
Self-efficacy	3 > 1, 2; 2 > 1	3.05	.00	-7.28	-3.36
Hope	3 > 1, 2; 2 > 1	4.22	.00	-1.80	-0.59
Resilience	3 > 1, 2; 2 > 1	6.77	.00	3.36	7.28
Optimism	3 > 1, 2; 2 > 1	5.03	.00	-1.66	-0.09
<b>WRF</b>	3 > 1, 2; 2 > 1	11.02	.00	1.59	3.80
Absorption	3 > 1, 2; 2 > 1	8.23	.00	4.09	6.66
Work Enjoyment	3 > 1, 2; 2 > 1	5.83	.00	-1.01	-0.44
Intrinsic Work Motivation	3 > 1, 2; 2 > 1	2.10	.00	-1.60	-0.55
<b>CWB</b>	3 > 1, 2; 2 > 1	7.81	.00	1.37	4.00
<b>SWH (n = 580)</b>					
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	7.90	.00	-4.24	-2.80
Relational Transparency	3 > 1, 2; 2 > 1	4.22	.00	-1.27	-0.36
Internalized Moral perspective	3 > 1, 2; 2 > 1	5.01	.00	1.87	5.25
Balanced Processing	3 > 1, 2; 2 > 1	2.65	.00	-1.33	-0.39
Self-awareness	3 > 1, 2; 2 > 1	3.82	.00	2.36	5.70
<b>PsyCap</b>	3 > 1, 2; 2 > 1	9.45	.00	4.28	6.77
Self-efficacy	3 > 1, 2; 2 > 1	6.20	.00	-1.59	-0.57
Hope	3 > 1, 2; 2 > 1	4.44	.00	-3.24	-1.53
Resilience	3 > 1, 2; 2 > 1	5.09	.00	2.46	4.48
Optimism	3 > 1, 2; 2 > 1	3.26	.00	-2.09	-1.62
<b>WRF</b>	3 > 1, 2; 2 > 1	8.05	.00	1.74	3.13
Absorption	3 > 1, 2; 2 > 1	4.91	.00	4.66	6.05
Work Enjoyment	3 > 1, 2; 2 > 1	3.56	.00	-1.15	-0.08
Intrinsic Work Motivation	3 > 1, 2; 2 > 1	5.73	.00	-1.38	-0.25
<b>CWB</b>	3 > 1, 2; 2 > 1	10.22	.00	-0.80	-0.01

*Continued...*

Variables	<i>i-j</i>	<i>D (i-j)</i>	<i>p</i>	95% CI	
				<i>LL</i>	<i>UL</i>
<b>Banks (n = 600)</b>					
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	9.72	.00	-4.74	-1.47
Relational Transparency	3 > 1, 2; 2 > 1	2.82	.00	-1.79	-0.87
Internalized Moral perspective	3 > 1, 2; 2 > 1	1.72	.00	2.33	5.77
Balanced Processing	3 > 1, 2; 2 > 1	3.09	.00	-1.38	-0.06
Self-awareness	3 > 1, 2; 2 > 1	2.82	.00	1.87	2.68
<b>PsyCap</b>	3 > 1, 2; 2 > 1	10.09	.00	-1.85	-0.82
Self-efficacy	3 > 1, 2; 2 > 1	8.58	.00	-0.70	-0.04
Hope	3 > 1, 2; 2 > 1	4.99	.00	-1.71	-0.63
Resilience	3 > 1, 2; 2 > 1	8.58	.00	-1.08	-1.39
Optimism	3 > 1, 2; 2 > 1	3.41	.00	-0.44	-0.10
<b>WRF</b>	-	-	-	-	-
Absorption	-	-	-	-	-
Work Enjoyment	-	-	-	-	-
Intrinsic Work Motivation	-	-	-	-	-
<b>CWB</b>	-	-	-	-	-

Note. 1 = Graduation; 2 = Masters; 3 = MS/M.Phil/Ph.D

Post Hoc analysis given in Table 36 indicated that employees (of SWH and banks) having highest educational qualification (group 3) exhibited highly favorable perceptions of PAL and elevated levels of PsyCap than those with relatively lesser educational skills. On the constructs of WRF and CWB; highest educated group of respondents working in SWH (only) showed amplified creativity at workplace. On the contrary, non significant differences existed on education in relation to WRF and CWB among bank employees.

**Job experience.** One way ANOVA was tabulated to determine the differences along varying levels of overall job experience across both occupational groups. On the basis of individual distribution of job experience, three exclusive groups are identified which include the minimum and maximum range of job experience.

For instance, group 1 includes minimum job experience of 2 years and maximum 6 years; while group 2 ranged from 6.1 up to 12 years; and the last group

ranged from 12.1 – 18 years. Hence, group differences are worked out for collective sample and also individually for the employees of SWH and banks.

Table 37

*Differences on Job Experience of Employees of Banks and SWH in Relation to Study Constructs (N = 1180)*

Total Sample Variables	2-6 years (n = 481)		6.1-12 years (n = 438)		12.1-18 years (n = 261)		F	p	$\eta^2$
	M	SD	M	SD	M	SD			
<b>PAL (T)</b>	51.00	11.69	53.82	11.98	57.35	10.95	11.27	.00	.11
RT	15.23	6.34	17.85	9.28	19.87	4.88	4.74	.05	.03
IMP	13.07	3.18	14.33	3.26	16.28	3.10	5.59	.00	.05
BP	11.65	2.29	13.22	2.09	15.18	2.30	6.18	.00	.06
SA	13.44	3.33	15.65	2.86	17.74	2.88	6.33	.04	.02
<b>PC (T)</b>	98.25	17.87	102.45	18.09	106.55	17.27	12.72	.00	.09
SE	24.63	7.52	26.81	6.65	29.63	5.20	8.04	.00	.06
Hope	22.01	5.05	24.53	4.95	26.82	5.41	7.08	.00	.07
Res.	26.44	5.05	29.58	4.49	32.22	7.36	10.61	.00	.08
Opt.	23.17	4.22	25.40	5.06	27.63	4.71	6.45	.01	.04
<b>WRF (T)</b>	48.47	12.30	49.71	13.10	50.44	12.26	1.47	.34	-
Abs.	12.32	5.61	13.83	4.98	13.09	5.15	1.77	.28	-
WE	15.26	5.00	16.39	6.32	16.94	4.61	1.06	.41	-
IWM	18.45	6.62	19.36	6.06	19.20	6.06	1.15	.39	-
<b>CWB</b>	44.55	9.26	47.77	8.44	50.57	8.92	12.85	.00	.12
<b>SWH (n = 580)</b>	<b>2-6 years (n = 226)</b>		<b>6.1-12 years (n = 208)</b>		<b>12.1-18 years (n = 145)</b>				
<b>PAL (T)</b>	53.45	11.69	55.80	11.98	59.26	10.95	9.99	.00	.11
RT	16.93	6.34	17.96	9.28	18.76	4.88	2.94	.05	.03
IMP	12.58	3.18	12.94	3.26	14.47	3.10	4.48	.00	.05
BP	10.05	2.29	10.31	2.09	12.16	2.30	5.97	.00	.06
SA	14.07	3.33	14.34	2.86	16.83	2.88	2.41	.04	.02
<b>PC (T)</b>	99.64	17.87	106.16	18.09	109.94	17.27	13.81	.00	.09
SE	25.81	7.52	27.20	6.65	28.75	5.20	7.70	.00	.06
Hope	24.40	5.05	26.94	4.95	27.71	5.41	11.40	.00	.07
Res.	24.38	5.05	25.96	4.49	27.26	7.36	11.35	.00	.08
Opt.	24.40	4.22	25.22	5.06	25.81	4.71	4.06	.01	.04
<b>WRF (T)</b>	47.88	12.30	48.26	13.10	48.78	12.26	1.68	.26	-
Abs.	13.97	5.61	13.83	4.98	13.02	5.15	0.77	.54	-
WE	16.76	5.00	16.28	6.32	17.88	4.61	1.41	.39	-
IWM	19.75	6.62	18.25	6.06	19.91	6.06	1.08	.44	-
<b>CWB</b>	43.44	9.26	49.48	8.44	52.48	8.92	19.52	.00	.15

*Continued...*

<b>Banks</b> ( <i>n</i> = 600)	<b>2-6 years</b> ( <i>n</i> = 255)		<b>6.1-12 years</b> ( <i>n</i> = 230)		<b>12.1-18 years</b> ( <i>n</i> = 116)				
<b>PAL (T)</b>	53.45	11.69	55.80	11.98	59.26	10.95	9.99	.00	.08
RT	16.93	6.34	17.96	9.28	18.76	4.88	2.94	.05	.02
IMP	12.58	3.18	12.94	3.26	14.47	3.10	4.48	.01	.03
BP	10.05	2.29	10.31	2.09	12.16	2.30	5.97	.00	.04
SA	14.07	3.33	14.34	2.86	17.83	2.88	4.41	.01	.03
<b>PC (T)</b>	99.64	17.87	106.16	18.09	109.94	17.27	13.81	.00	.12
SE	25.81	7.52	27.20	6.65	28.75	5.20	7.70	.00	.06
Hope	24.40	5.05	26.94	4.95	27.72	5.41	6.40	.00	.05
Res.	24.38	5.05	25.96	4.49	27.26	7.36	11.35	.00	.07
Opt.	24.40	4.22	25.22	5.06	27.81	4.71	4.06	.01	.02
<b>WRF (T)</b>	60.05	13.79	60.50	13.99	61.67	13.99	1.87	.19	-
Abs.	13.97	5.61	13.83	4.98	13.02	5.15	1.22	.28	-
WE	16.76	5.00	16.28	6.32	16.88	4.61	1.01	.36	-
IWM	19.75	6.62	19.25	6.06	19.91	6.06	1.08	.31	-
<b>CWB</b>	43.78	9.22	47.95	9.42	50.62	9.59	23.80	.00	.08

*Note.* PAL (T) = PAL(Total); RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-awareness; PC (T) = PsyCap (Total); SE = Self-efficacy; Res. = Resilience; Opt. = Optimism; WRF (T) = WRF (Total); Abs. = Absorption; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; CWB = CWB; SWH = SWH.

Analysis of variance given in Table 37 showed comparison along different groups of job experiences among employees of SWH and banks. Results showed much similar trend along collective sample as well as individual organizational structures. It has been found that employees of SWH and banks with maximum years of job experience reflected favorable perceptions of perceived authentic leadership, higher expression of PsyCap, and augmented CWB. Conversely, total sample as well as individual organizational groups displayed non significant differences on the construct of WRF in relation to varying job experiences; hence, Hypothesis 10 (i.e., employees with extended job experience would express better perceptions of PAL and higher PsyCap, more experiences of WRF with enhanced CWB in comparison to

employees with lesser job experience) received partial support in the context of both organizational structures (i.e., SWH and banks) as well as total sample.

As notable between group differences are observed on the demographic of job experience; consequently, post hoc comparison was further performed to verify the mean group differences. Results (presented in Table 38) showed that as the level of job experience proceeds upward, employees of both organizational structures express positive deliberations regarding practices of authentic leadership, superior skills of PsyCap, and more creativity at workplace. However, on relational transparency (dimension of authentic leadership) significant differences existed only in group 3; while there are non significant differences between group 1 and 2.

Table 38

*Post Hoc Differences on Job Experience among All Employees of SWH and Banks  
(N = 1180)*

Variables	<i>i - j</i>	<i>D (i - j)</i>	<i>p</i>	95% CI	
				<i>LL</i>	<i>UL</i>
<b>Total Sample (1180)</b>					
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	7.47	.00	-1.50	-0.77
Relational Transparency	3 > 1, 2	1.81	.05	-3.38	-1.05
Internalized Moral perspective	3 > 1, 2; 2 > 1	3.13	.00	2.53	6.91
Balanced Processing	3 > 1, 2; 2 > 1	4.32	.00	-4.95	-1.72
Self-awareness	3 > 1, 2; 2 > 1	2.46	.04	5.05	9.35
<b>PsyCap</b>	3 > 1, 2; 2 > 1	8.15	.00	1.72	6.84
Self-efficacy	3 > 1, 2; 2 > 1	6.73	.00	-1.00	-0.47
Hope	3 > 1, 2; 2 > 1	3.10	.00	-1.66	-0.51
Resilience	3 > 1, 2; 2 > 1	5.58	.00	2.47	5.00
Optimism	3 > 1, 2; 2 > 1	4.36	.01	-2.21	-1.85
<b>WRF</b>	-	-	-	-	-
Absorption	-	-	-	-	-
Work Enjoyment	-	-	-	-	-
Intrinsic Work Motivation	-	-	-	-	-
<b>CWB</b>	3 > 1, 2; 2 > 1	8.11	.00	.58	5.41

*Continued...*

Variables	<i>i - j</i>	<i>D (i - j)</i>	<i>p</i>	95% CI	
				<i>LL</i>	<i>UL</i>
<b>SWH (580)</b>					
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	6.03	.00	-1.21	-0.51
Relational Transparency	3 > 1, 2	2.11	.05	-1.91	-0.75
Internalized Moral perspective	3 > 1, 2; 2 > 1	5.37	.00	1.03	4.36
Balanced Processing	3 > 1, 2; 2 > 1	3.29	.00	-1.88	-0.08
Self-awareness	3 > 1, 2; 2 > 1	3.55	.04	2.75	4.70
<b>PsyCap</b>	3 > 1, 2; 2 > 1	7.25	.00	0.08	3.52
Self-efficacy	3 > 1, 2; 2 > 1	5.16	.00	-1.42	-0.92
Hope	3 > 1, 2; 2 > 1	2.88	.00	-1.26	-0.04
Resilience	3 > 1, 2; 2 > 1	5.43	.00	1.92	4.12
Optimism	3 > 1, 2; 2 > 1	2.18	.01	-1.29	-0.63
<b>WRF</b>	-	-	-	-	-
Absorption	-	-	-	-	-
Work Enjoyment	-	-	-	-	-
Intrinsic Work Motivation	-	-	-	-	-
<b>CWB</b>	3 > 1, 2; 2 > 1	6.81	.00	1.44	5.26
<b>Banks (600)</b>					
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	6.52	.00	-2.43	-1.90
Relational Transparency	3 > 1, 2	2.35	.05	-1.26	-0.31
Internalized Moral perspective	3 > 1, 2; 2 > 1	1.43	.01	1.75	5.52
Balanced Processing	3 > 1, 2; 2 > 1	3.83	.00	-1.35	-0.10
Self-awareness	3 > 1, 2; 2 > 1	4.57	.01	2.31	5.15
<b>PsyCap</b>	3 > 1, 2; 2 > 1	6.74	.00	0.10	4.26
Self-efficacy	3 > 1, 2; 2 > 1	4.16	.00	0.96	4.84
Hope	3 > 1, 2; 2 > 1	2.78	.00	1.05	3.17
Resilience	3 > 1, 2; 2 > 1	5.29	.00	0.85	2.82
Optimism	3 > 1, 2; 2 > 1	3.71	.01	1.19	4.91
<b>WRF</b>	-	-	-	-	-
Absorption	-	-	-	-	-
Work Enjoyment	-	-	-	-	-
Intrinsic Work Motivation	-	-	-	-	-
<b>CWB</b>	3 > 1, 2; 2 > 1	7.23	.00	2.96	5.95

Note. 1 = 2-6 Years; 2 = 6.1 – 12 Years; 3 = 12.1 = 18 Years

**Job period.** One way ANOVA is tabulated to determine the differences along varying levels of job period in the present organization across both professional groupings and total samples. First and foremost, on the basis of individual distribution of job period, three groups are identified which include the minimum and maximum range (1 - 16 years) of work experience in the existing organization. For instance,



group 1 includes minimum job duration of 1 year and maximum 5 years; while group 2 ranged from 5.1 up to 10 years; and the last group ranged from 10.1 – 16 years. Hence, group differences are tabulated for total sample and separately for the employees of SWH and banks.

Analysis of variance given in Table 39 showed comparison along different groups of job period among employees of SWH and banks. Results showed quite differential group differences in both organizational settings.

Table 39

*Differences on Job Period in the Present Organization among Employees of Banks and SWH along Study Variables (N = 1180)*

Total Sample Variables	1-5 years (n = 488)		5.1-10 years (n = 417)		10.1-16 years (n = 275)		F	p	$\eta^2$
	M	SD	M	SD	M	SD			
<b>PAL (T)</b>	63.46	9.64	64.20	8.48	66.88	10.76	10.44	.00	.14
RT	16.50	7.20	17.72	8.16	19.34	5.54	5.00	.00	.09
IMP	11.32	3.26	12.67	2.80	16.22	3.42	8.90	.00	.06
BP	9.18	2.25	11.52	2.36	13.11	2.35	6.27	.00	.08
SA	13.31	3.28	15.29	2.89	17.56	2.99	6.90	.00	.02
<b>PC (T)</b>	101.78	18.10	102.48	18.95	104.49	16.52	4.46	.01	.10
SE	26.33	7.62	27.57	6.55	29.50	5.09	3.41	.03	.04
Hope	24.67	5.17	25.47	5.04	27.91	5.43	2.06	.05	.03
Res.	22.29	4.82	23.76	4.47	25.57	8.11	2.47	.03	.06
Opt.	23.66	4.46	24.18	5.30	25.37	4.33	2.21	.04	.03
<b>WRF (T)</b>	40.53	13.65	41.39	10.94	44.06	10.27	3.55	.02	.13
Abs.	13.61	5.39	14.89	4.75	16.77	5.21	2.85	.04	.04
WE	16.79	5.15	17.04	4.82	18.44	6.78	2.10	.05	.07
IWM	17.66	5.87	19.90	8.02	21.61	6.46	3.23	.03	.03
<b>CWB</b>	45.52	9.36	47.16	10.71	49.75	9.30	6.44	.00	.04
<b>SWH (n = 580)</b>	<b>1-5 years (n = 225)</b>		<b>5.1-10 years (n = 210)</b>		<b>10.1-16 years (n = 145)</b>				
<b>PAL (T)</b>	53.75	9.64	58.00	8.48	60.77	10.76	19.32	.00	.14
RT	17.40	7.20	18.16	8.16	20.65	5.54	10.17	.00	.09
IMP	12.62	3.26	13.50	2.80	15.71	3.42	7.82	.00	.06
BP	10.15	2.25	12.41	2.36	14.08	2.35	9.54	.00	.08
SA	14.25	3.28	15.10	2.89	16.67	2.99	3.86	.02	.02

Continued...

SWH ( <i>n</i> = 580)	1-5 years ( <i>n</i> = 225)		5.1-10 years ( <i>n</i> = 210)		10.1-16 years ( <i>n</i> = 145)				
<b>PC (T)</b>	102.60	18.10	105.54	18.95	107.49	16.52	9.81	.00	.10
SE	26.33	7.62	27.57	6.55	29.50	5.09	6.65	.00	.04
Hope	25.58	5.17	27.56	5.04	29.42	5.43	5.06	.00	.03
Res.	25.29	4.82	27.76	4.47	29.57	8.11	7.47	.00	.06
Opt.	24.70	4.46	25.29	5.30	27.49	4.33	4.21	.01	.03
<b>WRF (T)</b>	51.59	13.65	53.34	10.94	56.34	14.44	10.71	.00	.13
Abs.	14.61	5.39	15.59	4.75	17.41	5.21	6.35	.00	.04
WE	17.47	5.15	18.85	4.82	20.83	6.78	8.03	.00	.07
IWM	20.76	5.87	22.72	8.02	23.0	6.46	4.36	.01	.03
<b>CWB</b>	45.52	9.36	47.16	10.71	49.75	9.30	6.44	.00	.04
<b>Banks (<i>n</i> = 600)</b>	<b>1-5 years (<i>n</i> = 263)</b>		<b>5.1-10 years (<i>n</i> = 207)</b>		<b>10.1-16 years (<i>n</i> = 130)</b>				
<b>PAL (T)</b>	54.45	11.47	56.30	12.40	58.10	11.96	10.76	.00	.11
RT	17.40	7.20	19.16	8.16	22.65	5.54	9.17	.00	.07
IMP	12.62	3.26	15.50	2.80	17.71	3.42	7.32	.00	.06
BP	10.15	2.25	13.41	2.36	15.08	2.35	8.54	.00	.08
SA	14.25	3.28	15.10	2.89	17.67	2.99	4.86	.01	.04
<b>PC (T)</b>	102.60	18.10	102.54	18.95	103.49	16.52	1.81	.11	-
SE	26.33	7.62	26.57	6.55	27.50	5.09	1.65	.10	-
Hope	25.58	5.17	26.56	5.04	26.42	5.43	1.61	.11	-
Res.	25.29	4.82	25.76	4.47	25.57	8.11	1.47	.25	-
Opt.	22.70	4.46	23.29	5.30	23.49	4.33	1.21	.21	-
<b>WRF (T)</b>	52.55	13.69	52.84	14.73	53.27	15.62	1.27	.18	-
Abs.	14.61	5.39	14.59	4.75	14.41	5.21	1.05	.34	-
WE	17.47	5.15	17.85	4.82	17.83	6.78	1.33	.26	-
IWM	20.76	5.87	21.72	8.02	21.10	6.46	1.36	.24	-
<b>CWB</b>	40.52	8.02	42.24	9.08	44.57	8.98	7.02	.00	.08

*Note.* PAL (T) = PAL(Total); RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-awareness; PC (T) = PsyCap (Total); SE = Self-efficacy; Res. = Resilience; Opt. = Optimism; WRF (T) = WRF (Total); Abs. = Absorption; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; CWB = CWB; SWH = SWH.

Results presented in Table 39 showed that workforce delivering their services in the current organization for longer period of time expressed satisfaction in terms of existing authentic style of their leaders and subsequently reported amplified experiences of PsyCap and WRF, and displayed increased creative performance at work in relation to total sample as well as employees of flat organizational structure (SWH). On the other hand, in case of vertical organization (banks), workers

performing their responsibilities in the current organization with extended temporal duration articulated non significant differences on the constructs of PsyCap and WRF. Nevertheless, significant difference does exist on PAL and CWB indicating that workers with sufficiently longer job duration in the present workplace showed favorable perceptions of authenticity of their leaders and hoisted level of creativity at work. Hence, Hypothesis 11 (i.e., employees having longer job period in the current organization would articulate enhanced acuity of PAL and elevated levels of PsyCap, WRF, and CWB in comparison to employees with lesser job duration) received complete support in the context of total sample and flat organizational structure (SWH); and partial support in relation to tall organizational structure (banks).

Post hoc analysis presented in Table 40 showed more detailed picture of the group differences in relation to job period. It has been found that in case of total sample, employees with maximum job period in the current organization expressed elevated scores on PAL and CWB. However, significant group differences have been found only in group 3 on overall PsyCap (and its dimensions) as well as WRF (and its components); while there are non significant differences between group 1 and 2. Moreover, employees working in flat organization (SWH) with maximum job duration in the current organization displayed highly favorable perceptions of authentic leadership, enhanced states of PsyCap, elevated levels of WRF, and CWB; in contrast to those with least levels of job duration.

In contrast, employees working in banks (vertical organization) revealed no difference in relation to their temporal stay in the same organization along PsyCap and WRF. In addition, bank employees with maximum duration in the present organization expressed supportive and healthier opinion regarding authenticity of their leaders and augmented display of CWB in comparison to those with average and minimum job duration.

Table 40

*Post Hoc Differences on Job Period in the Current Organization among Employees of SWH and Banks (N = 1180)*

Variables	Total Sample (1180)			95% CI	
	<i>i - j</i>	<i>D (i - j)</i>	<i>p</i>	<i>LL</i>	<i>UL</i>
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	6.05	.00	-2.70	-0.78
Relational Transparency	3 > 1, 2; 2 > 1	3.33	.00	-1.94	-0.10
Internalized Moral perspective	3 > 1, 2; 2 > 1	3.29	.00	1.78	5.55
Balanced Processing	3 > 1, 2; 2 > 1	2.43	.00	1.03	3.39
Self-awareness	3 > 1, 2; 2 > 1	1.72	.00	4.10	9.02
<b>PsyCap</b>	3 > 1, 2	5.31	.01	2.64	4.19
Self-efficacy	3 > 1, 2	3.68	.03	1.55	4.61
Hope	3 > 1, 2	1.46	.05	1.97	5.78
Resilience	3 > 1, 2	3.06	.03	4.07	6.32
Optimism	3 > 1, 2	2.50	.04	1.29	4.54
<b>WRF</b>	3 > 1, 2	4.24	.02	5.74	9.97
Absorption	3 > 1, 2	2.17	.04	3.47	8.18
Work Enjoyment	3 > 1, 2	4.24	.05	1.16	4.33
Intrinsic Work Motivation	3 > 1, 2	2.09	.03	3.75	6.24
<b>CWB</b>	3 > 1, 2; 2 > 1	7.02	.00	4.34	5.15
<b>SWH (580)</b>					
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	6.54	.00	1.45	5.53
Relational Transparency	3 > 1, 2; 2 > 1	4.85	.00	0.74	2.64
Internalized Moral perspective	3 > 1, 2; 2 > 1	5.77	.00	1.42	5.09
Balanced Processing	3 > 1, 2; 2 > 1	2.31	.00	-1.03	-0.11
Self-awareness	3 > 1, 2; 2 > 1	2.85	.02	-1.34	-0.70
<b>PsyCap</b>	3 > 1, 2; 2 > 1	6.22	.00	2.22	5.16
Self-efficacy	3 > 1, 2; 2 > 1	3.48	.00	-0.95	-0.01
Hope	3 > 1, 2; 2 > 1	2.53	.00	2.70	5.36
Resilience	3 > 1, 2; 2 > 1	2.40	.00	2.76	3.55
Optimism	3 > 1, 2; 2 > 1	1.99	.01	-1.06	-0.38
<b>WRF</b>	3 > 1, 2; 2 > 1	5.74	.00	-1.74	-0.20
Absorption	3 > 1, 2; 2 > 1	2.62	.00	-1.25	-0.29
Work Enjoyment	3 > 1, 2; 2 > 1	1.14	.00	-0.77	-0.11
Intrinsic Work Motivation	3 > 1, 2; 2 > 1	1.75	.01	-1.50	-0.03
<b>CWB</b>	3 > 1, 2; 2 > 1	3.33	.00	-2.73	-1.49

*Continued...*

Variables	Banks (600)			95% CI	
	<i>i - j</i>	<i>D (i - j)</i>	<i>p</i>	<i>LL</i>	<i>UL</i>
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	4.23	.00	-1.20	-0.32
Relational Transparency	3 > 1, 2; 2 > 1	2.24	.00	-1.17	-0.60
Internalized Moral perspective	3 > 1, 2; 2 > 1	2.71	.00	-2.32	-1.84
Balanced Processing	3 > 1, 2; 2 > 1	3.68	.00	-1.45	-0.36
Self-awareness	3 > 1, 2; 2 > 1	1.15	.01	-1.60	-0.17
<b>CWB</b>	3 > 1, 2; 2 > 1	8.24	.00	-2.97	-1.26

Note. 1 = 1–5 Years; 2 = 5.1 – 10 Years; 3 = 10.1 – 16 Years

**Income groups.** One way ANOVA is tabulated to determine the differences along varying income groups across both occupational groups. Primarily, on the basis of individual distribution of monthly income, three groups are identified which include the minimum PKR 25,000/- and maximum PKR 1,15,000/- range of job income. Moreover, differences are tabulated separately for the employees of SWH and banks. Group 1 comprised of respondents having monthly earnings ranging from PKR 25,000 - 55,000; Group 2 include respondents with monthly income range of PKR 55,001 – 85,000 per month, and Group 3 constituted respondents with income band of PKR 85,001 – 1,15,000 per month.

Table 41

*Differences on Income Groups among Employees of SWH and Banks along Study Variables (N = 1180)*

Total Sample Variables	Group 1 (n = 505)		Group 1 (n = 387)		Group 1 (n = 288)		F	p	$\eta^2$
	M	SD	M	SD	M	SD			
<b>PAL (T)</b>	48.31	10.70	51.14	8.70	51.32	8.29	3.88	.03	.05
RT	14.47	5.00	16.15	6.32	17.78	8.77	2.34	.05	.03
IMP	11.53	3.32	13.78	2.96	13.24	3.17	3.91	.02	.06
BP	8.02	2.35	10.49	2.13	10.14	2.21	2.98	.04	.04
SA	11.29	3.15	14.22	3.07	15.45	2.88	3.56	.03	.05
<b>PC (T)</b>	95.02	16.67	95.51	14.93	96.75	16.29	1.43	.23	-
SE	25.23	6.21	26.47	7.73	26.26	5.48	1.15	.32	-
Hope	23.93	5.07	23.93	4.73	23.07	5.21	1.05	.37	-
Res.	21.76	4.29	20.56	5.20	21.10	6.73	.94	.41	-
Opt.	23.95	4.08	23.98	4.62	24.10	4.86	1.27	.26	-
<b>WRF (T)</b>	47.82	13.37	46.64	12.39	46.38	12.19	.79	.68	-
Abs.	14.12	5.63	15.78	5.26	15.10	5.08	.98	.55	-
WE	16.64	5.30	16.21	4.74	17.22	5.69	1.02	.39	-
IWM	19.58	7.15	20.15	5.41	19.35	6.02	1.07	.38	-
<b>CWB</b>	43.28	8.81	46.54	8.87	50.54	9.81	31.39	.00	-
<b>SWH (n = 580)</b>	Group 1 (n = 270)		Group 2 (n = 198)		Group 3 (n = 112)				
<b>PAL (T)</b>	51.88	10.70	54.23	8.70	65.41	8.29	35.28	.00	.13
RT	15.58	5.00	17.04	6.32	18.89	8.77	13.46	.00	.09
IMP	10.64	3.32	12.88	2.96	14.13	3.17	11.75	.00	.05
BP	10.08	2.35	12.36	2.13	13.09	2.21	10.25	.00	.04
SA	13.30	3.15	15.11	3.07	16.83	2.88	3.56	.03	.02
<b>PC (T)</b>	95.02	16.67	95.51	14.93	96.75	16.29	1.43	.23	-
SE	25.23	6.21	26.47	7.73	26.26	5.48	1.15	.32	-
Hope	23.93	5.07	23.93	4.73	23.07	5.21	1.05	.37	-
Res.	21.76	4.29	20.56	5.20	21.10	6.73	.94	.41	-
Opt.	23.95	4.08	23.98	4.62	24.10	4.86	1.27	.26	-
<b>WRF (T)</b>	47.82	13.37	46.64	12.39	46.38	12.19	.79	.68	-
Abs.	14.12	5.63	15.78	5.26	15.10	5.08	.98	.55	-
WE	16.64	5.30	16.21	4.74	17.22	5.69	1.02	.39	-
IWM	19.58	7.15	20.15	5.41	19.35	6.02	1.07	.38	-
<b>CWB</b>	43.28	8.81	46.54	8.87	50.54	9.81	31.39	.00	-

Continued...

<b>Banks (n = 600)</b>	<b>Group 1 (n = 235)</b>		<b>Group 2 (n = 189)</b>		<b>Group 3 (n = 176)</b>				
<b>PAL (T)</b>	53.50	10.66	54.41	10.82	54.27	12.17	1.08	.34	-
RT	16.58	5.00	17.04	6.32	16.89	8.77	1.46	.25	-
IMP	12.64	3.32	12.88	2.96	12.13	3.17	.75	.57	-
BP	10.08	2.35	10.36	2.13	11.09	2.21	1.05	.36	-
SA	14.30	3.15	14.11	3.07	14.83	2.88	1.16	.27	-
<b>PC (T)</b>	96.42	16.44	96.70	17.28	97.57	17.16	.97	.62	-
SE	25.23	6.21	26.47	7.73	25.26	5.48	1.15	.34	-
Hope	23.93	5.07	23.93	4.73	23.07	5.21	.85	.58	-
Res.	20.76	4.29	19.56	5.20	20.10	6.73	.74	.61	-
Opt.	18.95	4.08	19.98	4.62	18.10	4.86	.88	.57	-
<b>WRF (T)</b>	49.94	14.30	48.94	12.52	49.89	14.01	.45	.99	-
Abs.	14.12	5.63	15.78	5.26	14.10	5.08	.80	.64	-
WE	16.64	5.30	17.21	4.74	16.22	5.69	.92	.57	-
IWM	19.58	7.15	20.15	5.41	20.35	6.02	1.47	.29	-
<b>CWB</b>	50.28	8.81	50.54	8.87	51.54	9.81	1.39	.33	-

*Note.* Group 1 = PKR/ pm; Group 2 = PKR/pm; Group 3 = PKR/pm; PAL (T) = PAL(Total); RT = Relational Transparency; IMP = Internalized Moral Perspective; BP = Balanced Processing; SA = Self-awareness; PC (T) = PsyCap (Total); SE = Self-efficacy; Res. = Resilience; Opt. = Optimism; WRF (T) = WRF (Total); Abs. = Absorption; WE = Work Enjoyment; IWM = Intrinsic Work Motivation; CWB = CWB; SWH = SWH

Table 41 shows differences in relation to monthly income along all variables of the study across collective sample and individual organizational groups. It has been observed that in case of total sample and employees working in SWH with higher income group reflected enhanced perceptions of authentic leadership as compared to those identified in lower income groups; whereas non significant differences on the same construct has been found for the bank employees. Table 41 further showed that there are non significant differences regarding PsyCap, WRF, and CWB across all the income groups of employees working in tall (banks) and flat (SWH) organizations. Hence, Hypothesis 12 (i.e., employees in higher income group are likely to reflect positive perceptions of PAL and elevated experiences of PsyCap, WRF, and CWB as compared to those in the low income groups) obtained fractional empirical support in relation to total sample and separate samples from both organizational structures.

As significant differences were observed only on PAL among employees of SWH; therefore, post hoc differences are tabulated only on this construct (see Table 42). Results given in Table 42 showed that in case of total sample, employees with lowest income level (group 1) displayed least favorable perceptions of authentic leadership as compared to other two groups (group 2 and 3). However, group 2 does not differ from group 3 in their perceptions regarding authentic leadership among employees. On the other hand, all the three groups significantly differ from each other in relation to perceptions of authentic leadership among employees working in flat organization (SWH).

Table 42

*Post Hoc Differences on Income Groups among Employees of SWH and Banks (N = 1180)*

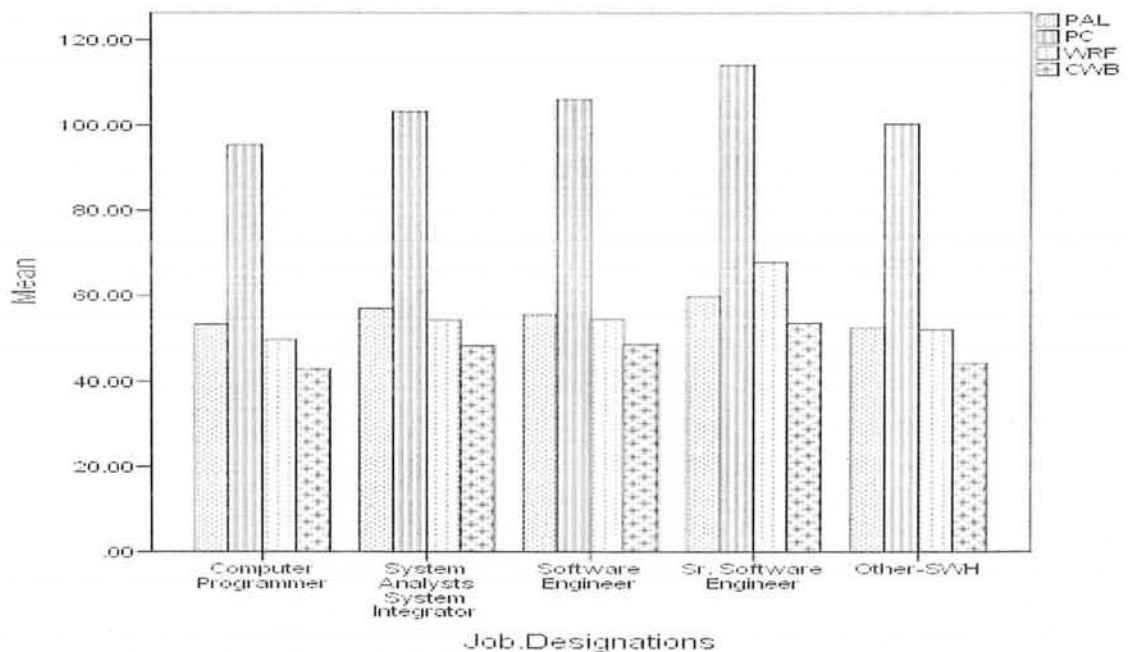
Variables	Total Sample (1180)			95% CI	
	<i>i - j</i>	<i>D (i - j)</i>	<i>p</i>	<i>LL</i>	<i>UL</i>
<b>Perceived Authentic Leadership</b>	2, 3 > 1	1.35	.03	-3.64	-1.93
Relational Transparency	2, 3 > 1	7.52	.05	-1.01	-0.51
Internalized Moral perspective	2, 3 > 1	2.33	.02	-1.26	-0.98
Balanced Processing	2, 3 > 1	5.06	.04	-0.86	-0.07
Self-awareness	2, 3 > 1	2.67	.03	-9.72	-5.33
<b>SWH (580)</b>					
<b>Perceived Authentic Leadership</b>	3 > 1, 2; 2 > 1	3.33	.00	-3.64	-0.22
Relational Transparency	3 > 1, 2; 2 > 1	2.81	.00	-9.72	-5.33
Internalized Moral perspective	3 > 1, 2; 2 > 1	2.54	.00	-1.93	-0.69
Balanced Processing	3 > 1, 2; 2 > 1	2.19	.00	-1.44	-0.42
Self-awareness	2, 3 > 1	4.15	.03	-0.99	-0.11
<b>Banks (600)</b>					
<b>Perceived Authentic Leadership</b>	-	-	-	-	-
Relational Transparency	-	-	-	-	-
Internalized Moral perspective	-	-	-	-	-
Balanced Processing	-	-	-	-	-
Self-awareness	-	-	-	-	-

*Note.* 1 = PKR 25,000 - 55,000; 2 = PKR 55,001 - 85,000; 3 = PKR 85,001 - 1,15,000 per month.

**Job designations.** Group differences along varying job designations across both occupational groups are investigated through one way ANOVA. Job



designations are identified in accordance to the exclusive nature of each organization. Therefore, web designers, system integrators, software engineers, software developers, system analysts, computer programmers, senior software engineers are acquired from SWH; while, managers from marketing department, credit marketing unit, and marketing operations as well as business development officers are taken from banks. Therefore, job designation differences are computed discretely for the employees of SWH and banks.

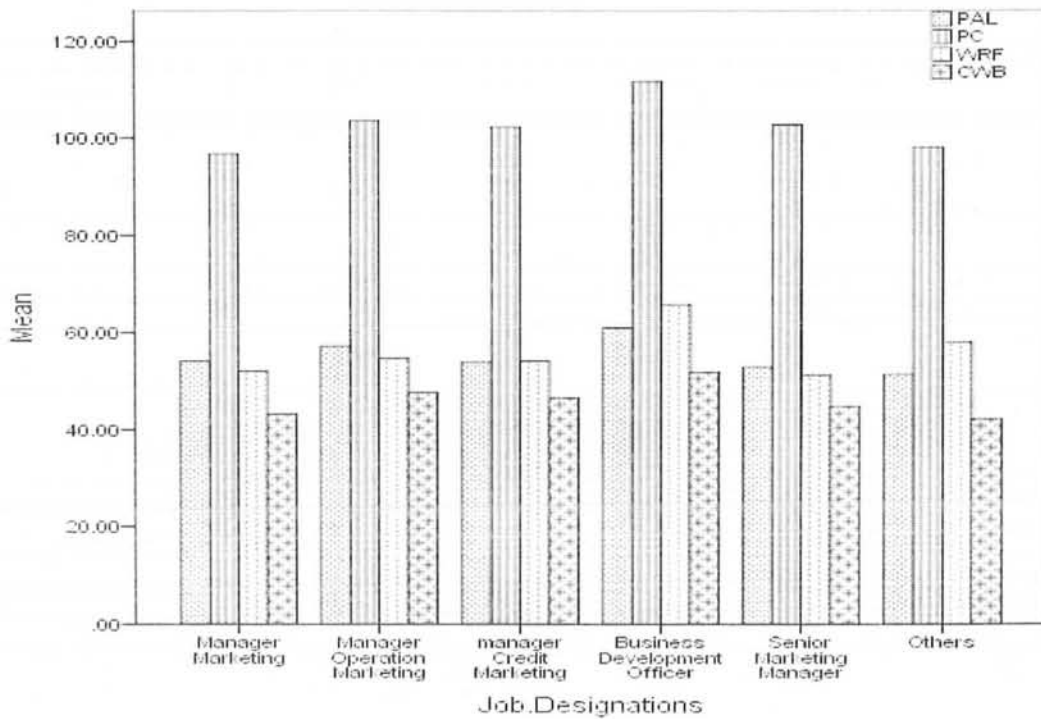


Note. PAL = Perceived Authentic Leadership, PC = PsyCap, WRF = WRF, CWB = CWB

Figure 16. Group Differences on Job Designations of Employees of SWH

Results presented in Figure 16 showed mean differences across different job designations among employees of SWH. Findings indicated that senior software engineers exhibited reasonable satisfaction in terms of authenticity of the immediate leaders, and mounted intensities of PsyCap, WRF and CWB in comparison to other

job holders. Similarly, software developers also reflected positive perceptions of authentic leadership, and increased levels of WRF, PsyCap, and CWB. The least reflections of PAL and CWB is reflected by personnel working as computer programmers.



Note. PAL = Perceived Authentic Leadership, PC = PsyCap, WRF = WRF, CWB = CWB

Figure 17. Group Differences on Job Designations of Bank Employees

Mean differences across various job designations among bank employees are presented in Figure 17. Results showed that employees holding designation of senior marketing managers and managers' credit marketing unit displayed heightened perceptions of authentic leadership and increased possession of PsyCap, WRF and CWB as compared to other job holders. Conversely, personnel working in the capacity of marketing managers reflected least favorable perceptions of authentic leadership style and poor expression of PsyCap, WRF and creativity at workplace.

### Further Evidences

Group differences across gender, education, and job experience revealed striking differences along both organizational structures in relation to major constructs of the study. Therefore, additional exploration is done to determine the interaction effects of these demographics in the possible paths of predicting PsyCap, WRF, and CWB from perceived authentic leadership.

**Gender as moderator.** The moderating effect of gender is appraised in all the possible paths of relationships among perceived authentic leadership, PsyCap, WRF, and CWB. In addition to that moderating role of gender is also tested across both tall (banks) and flat (SWH) organizations. However, significant interaction effect of gender is found in relation to certain paths and distinctively for either of the type of organizational structure. Therefore, in the following subsection, elaborative details are given in relation to banks and SWH. On the parsimonious grounds, modgraphs are presented for the significant moderating paths only.

Table 43

*Moderating Role of Gender in Predicting CWB and PsyCap from PAL Among Employees of SWH (N = 580)*

Criterion Variables	<i>B</i>	<i>SE</i>	$\beta$	<i>R</i> <sup>2</sup>	Adj <i>R</i> <sup>2</sup>	<i>F</i>	Slope ( <i>t</i> -value)
Constant	47.16	.42					
Perceived Authentic Leadership	4.86	.42	.49	.38	.37	76.29*	4.86(6.22)
Gender	-3.18	.45	-.31				4.10(2.61)
PAL x Gender (Predicting CWB)	-.76	.39	-.08*				
Constant	103.21	.85					
Perceived Authentic Leadership	9.46	.83	.54	.31	.29	52.00*	9.64(12.99)
Gender	-2.-7	.91	-.11				8.08(5.44)
PAL x Gender (Predicting PC)	-1.56	.77	.09*				

*Note.* PAL = Perceived Authentic Leadership; PC = PsyCap; WRF = WRF; CWB = CWB

\**p* < .001

Findings given in Table 43 showed that gender notably moderated predicting CWB and PsyCap from PAL among employees of SWH. Corresponding modgraphs are presented below.

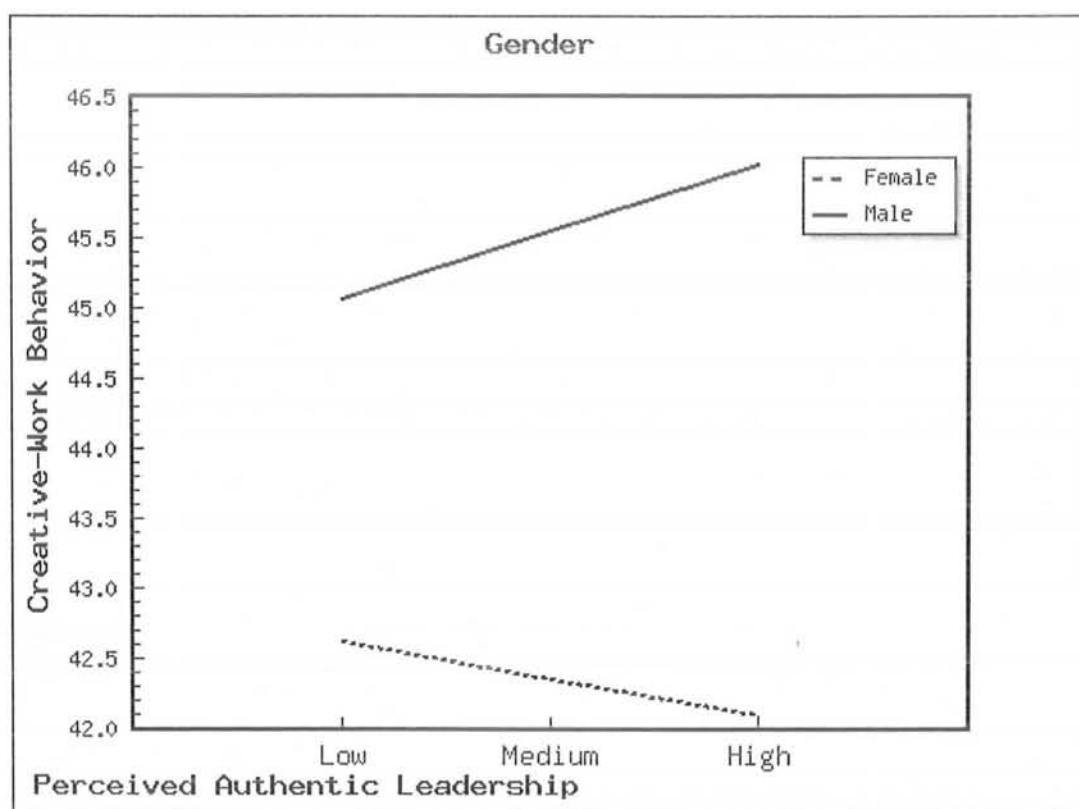


Figure 18. Interaction Effect of Gender in Predicting CWB from PAL among Employees of SWH

Figure 18 shows that male employees reflected linear relationship between PAL and CWB. However, female employees depicted quite inverse pattern in terms that their favorable perceptions of authentic leadership does not elevate their CWBs.

Modgraph presented in Figure 19 indicated a unique pattern of indirect effect of gender in predicting PsyCap from perceived authentic leadership. Male employees revealed enhancing pattern of relationship between encouraging opinion of authentic leadership and amplified expressions of creative potential in carrying out their official tasks. Conversely, female employees expressed relatively inverse bond between authentic practices of immediate leaders and PsyCap, that is, even though they shared their satisfaction regarding display of authenticity among their leaders but displayed lesser experience of PsyCap in SWH.

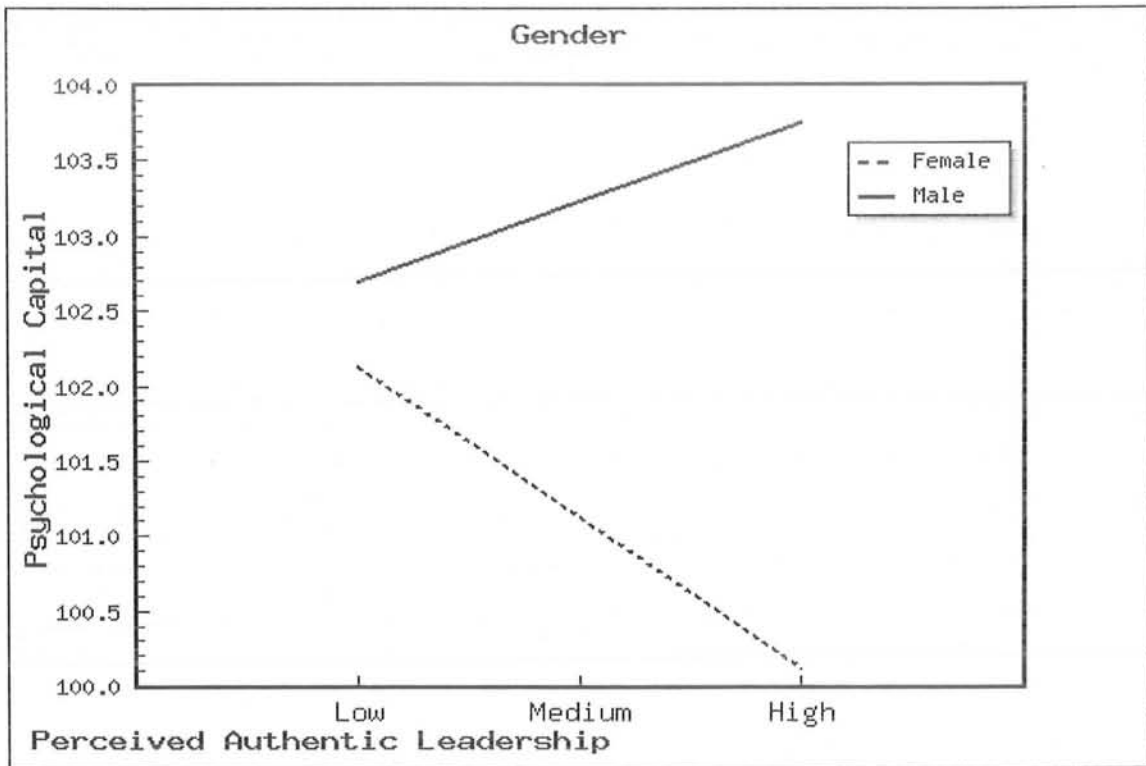


Figure 19. Interaction Effect of Gender in Predicting PsyCap from PAL among Employees of SWH

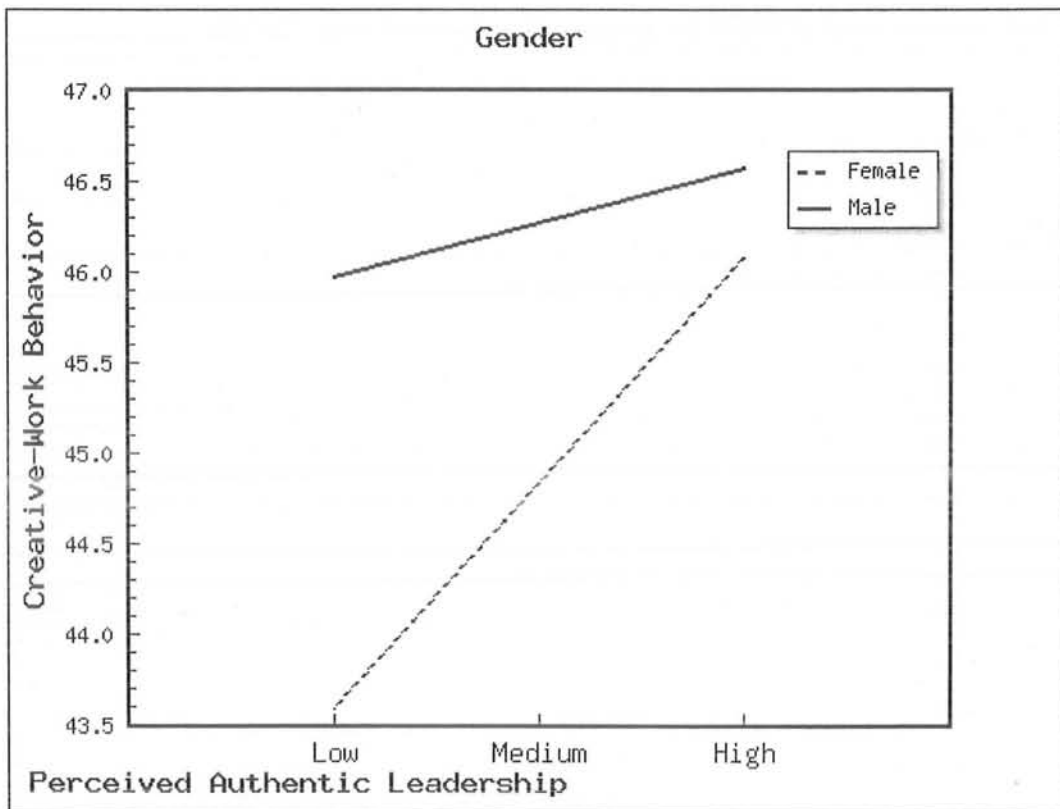
Table 44

*Moderating Role of Gender in Predicting CWB from PAL and PsyCap among Bank Employees (N = 600)*

Criterion Variables	B	SE	$\beta$	$R^2$	Adj $R^2$	F	Slope (t-value)
Constant	46.26	.47					
Perceived Authentic Leadership	2.99	.48	.31	.18	.17	26.20*	2.99(4.66) M
Gender	-1.45	.49	-.15				3.95(3.04) F
PAL x Gender (Predicting CWB)	.96	.46	.10*				
Constant	46.35	.41					
PsyCap	5.91	.41	.61	.17	.16	80.92	4.32(6.83) M
Gender	-1.06	.43	-.11				5.79(4.53) F
PC x Gender (Predicting CWB)	1.47	.70	.11*				

Table 44 showed moderating role of gender in predicting CWB among bank employees. Indirect interaction effect of gender has been found significant only in two

direct paths, that is, in predicting CWB from PAL and PsyCap. Therefore, modgraphs (Figure 20 and 21) are generated for only these two paths.



*Figure 20.* Interaction Effect of Gender in Predicting CWB from PAL among Bank Employees

The Figure 20 shows that overall male employees reflected encouraging and satisfying perceptions concerning dependable and authentic style of their immediate leaders and correspondingly expanded display of creative manifestations at workplace. However, female employees showed marked increase in the linear relationship between PAL and subsequent work creativity.

The Figure 21 shows that overall PsyCap of male employees resulted in elevated levels of CWBs. Conversely, women are low on PsyCap and their CWB progressively decline, even when their PsyCap is high.

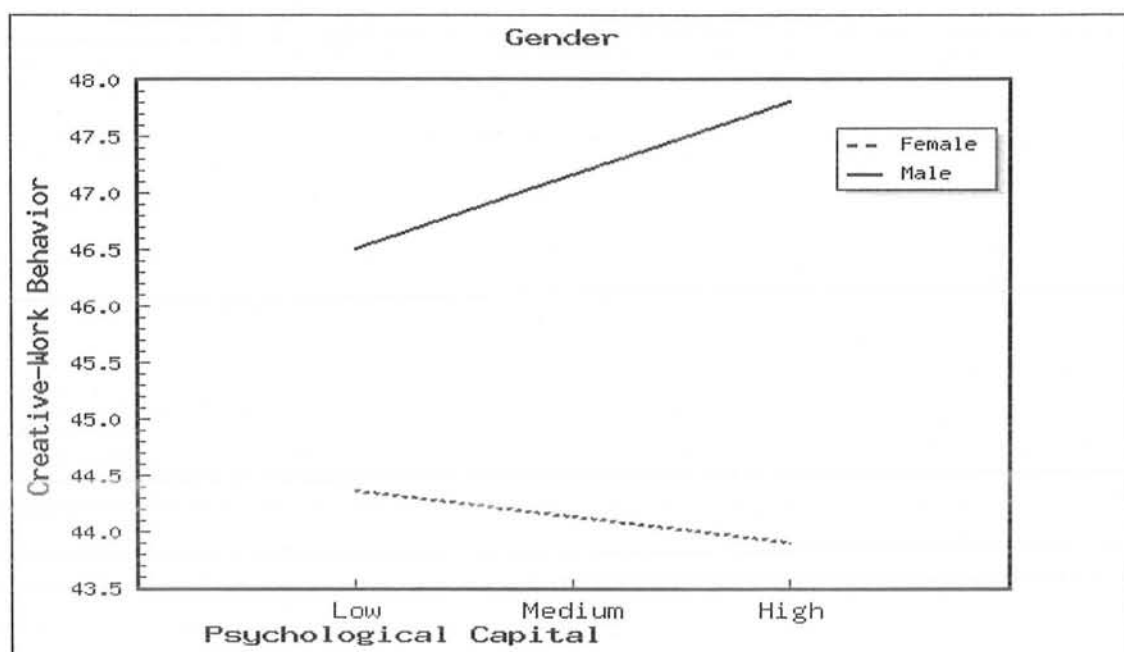


Figure 21. Interaction Effect of Gender in Predicting CWB from PsyCap among Bank Employees

**Combined effect of gender and organizational structure.** As both gender and type of organizational structure has significantly moderated in predicting PsyCap, WRF, and CWB; therefore their combined effect is tabulated through 2x2 ANOVA.



The Figure 21 shows that overall PsyCap of male employees resulted in elevated levels of CWBs. Conversely, women are low on PsyCap and their CWB progressively decline, even when their PsyCap is high.

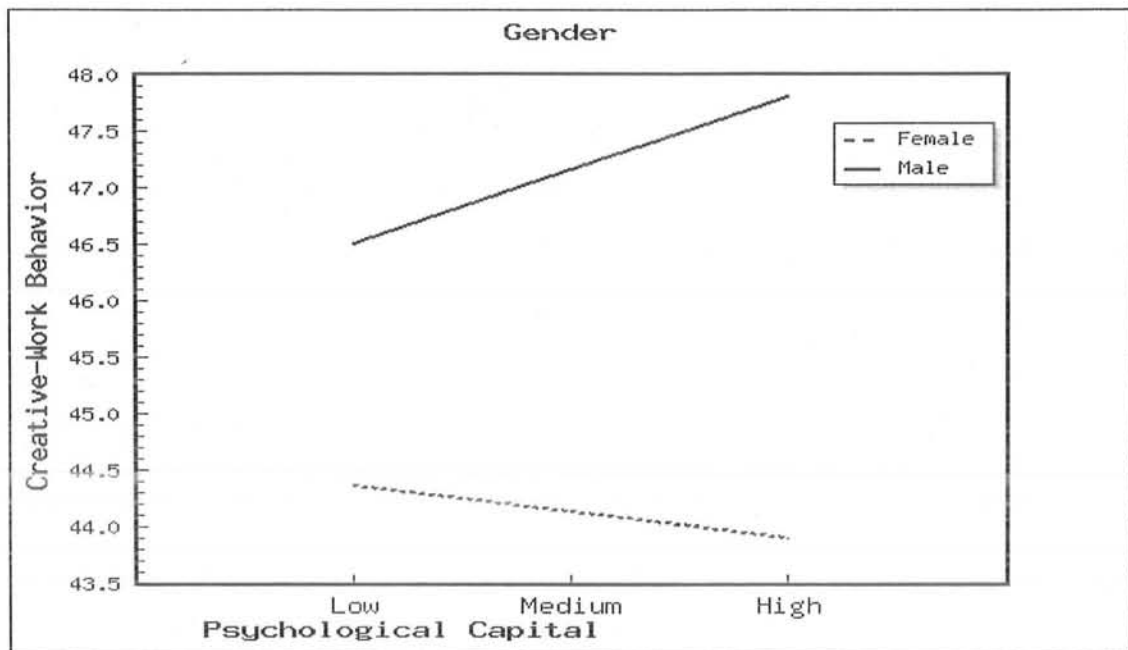


Figure 21. Interaction Effect of Gender in Predicting CWB from PsyCap among Bank Employees

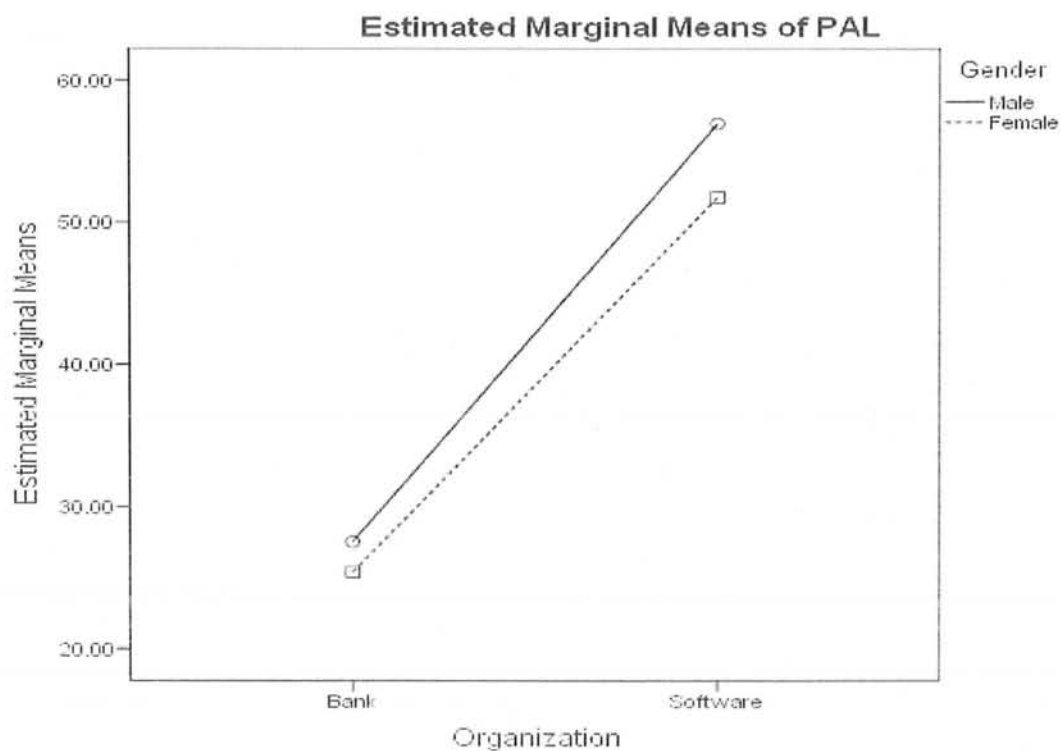
**Combined effect of gender and organizational structure.** As both gender and type of organizational structure has significantly moderated in predicting PsyCap, WRF, and CWB; therefore their combined effect is tabulated through 2x2 ANOVA.

Table 45  
 2 × 2 Analysis of Variance for Gender and Organizational Structure on All Study Variables (N = 1180)

Source	Dependent Variable	Sum of Squares	df	Mean Squares	F	p	$\eta^2$
<b>Gender</b>							
	Authentic Leadership	432936.26	3	144312.08	2166.22	.00	.03
	PsyCap	3265.75	1	3265.75	20.84	.00	.02
	WRF	9324.18	1	9324.18	86.94	.00	.07
	CWB	13724.21	1	13724.21	101.10	.00	.09
<b>Type of Organization</b>							
	Authentic Leadership	301033.39	1	301033.39	4518.73	.00	.81
	PsyCap	1089519.53	1	1089519.53	6955.44	.00	.87
	WRF	206165.41	1	206165.41	1922.48	.00	.65
	CWB	10539.18	1	10539.18	77.63	.00	.07
<b>Gender X Organization</b>							
	Authentic Leadership	786.91	1	786.91	11.81	.00	.01
	PsyCap	1321.51	1	1321.51	8.43	.00	.00
	WRF	943.02	1	943.02	8.79	.00	.00
	CWB	759.23	1	759.23	5.59	.01	.00
<b>Error</b>							
	Authentic Leadership	67951.40	1020	66.61			
	PsyCap	159775.57	1020	156.64			
	WRF	109383.74	1020	107.23			
	CWB	138463.22	1020	135.74			
<b>Total</b>							
	Authentic Leadership	1659269.00	1024				
	PsyCap	5533506.00	1024				
	WRF	1845121.00	1024				
	CWB	2854574.00	1024				

Table 45 reflects outcome of multivariate analysis carried out to appraise the combined impact of gender and organization type on PAL, PsyCap, WRF, and CWB. The *F* values for both main effect as well as combined effect turned out to be significant; hence, inferring that organization type when coupled with gender characterize considerable change in PAL, PsyCap, WRF, and CWB of employees. The interactive effect of gender with organization type that is, how male and female employees with different organization type vary in perceived authentic leadership,

PsyCap, WRF, and CWB has been illustrated in Figure 22, 23, 24, and 25; respectively.



*Figure 22.* Combined Effect of Gender and Organizational Structure on Perceived Authentic Leadership

As depicted in Figure 22, SWH employees inclusive of male and female participants scored higher on PAL in comparison to bank employees. Moreover, female employees from bank and SWH show less PAL than male employees.

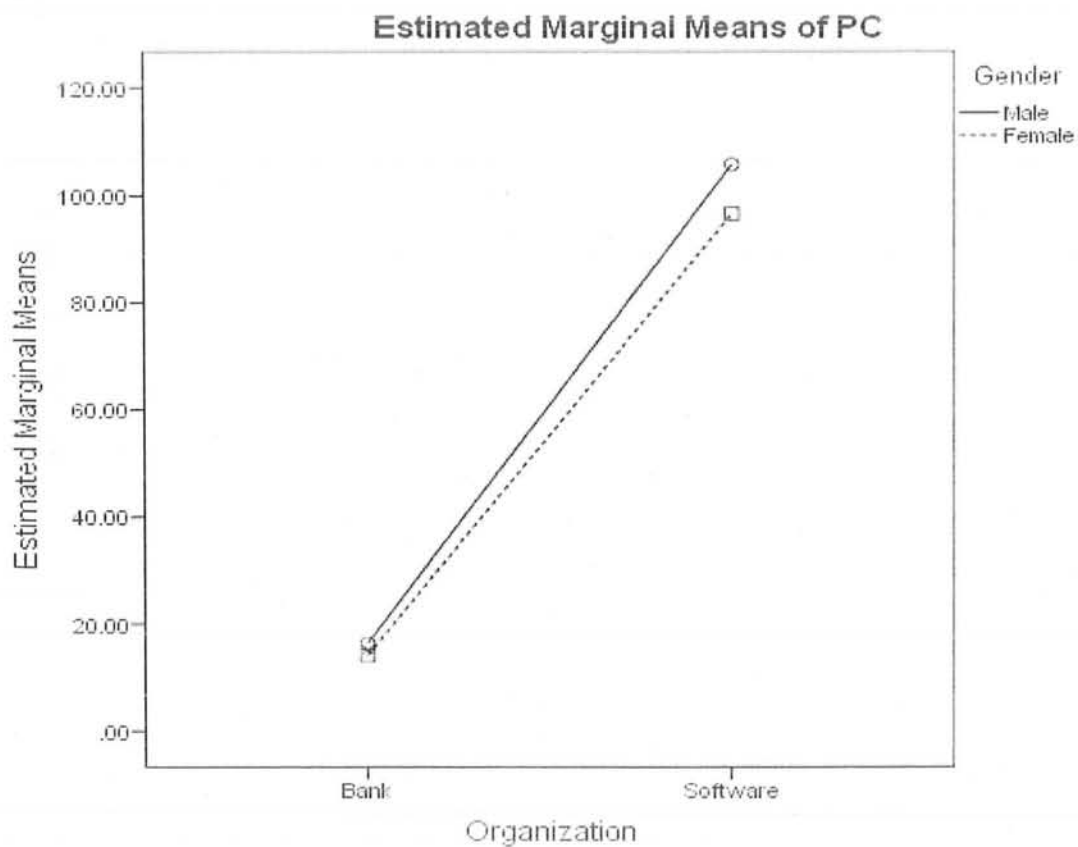
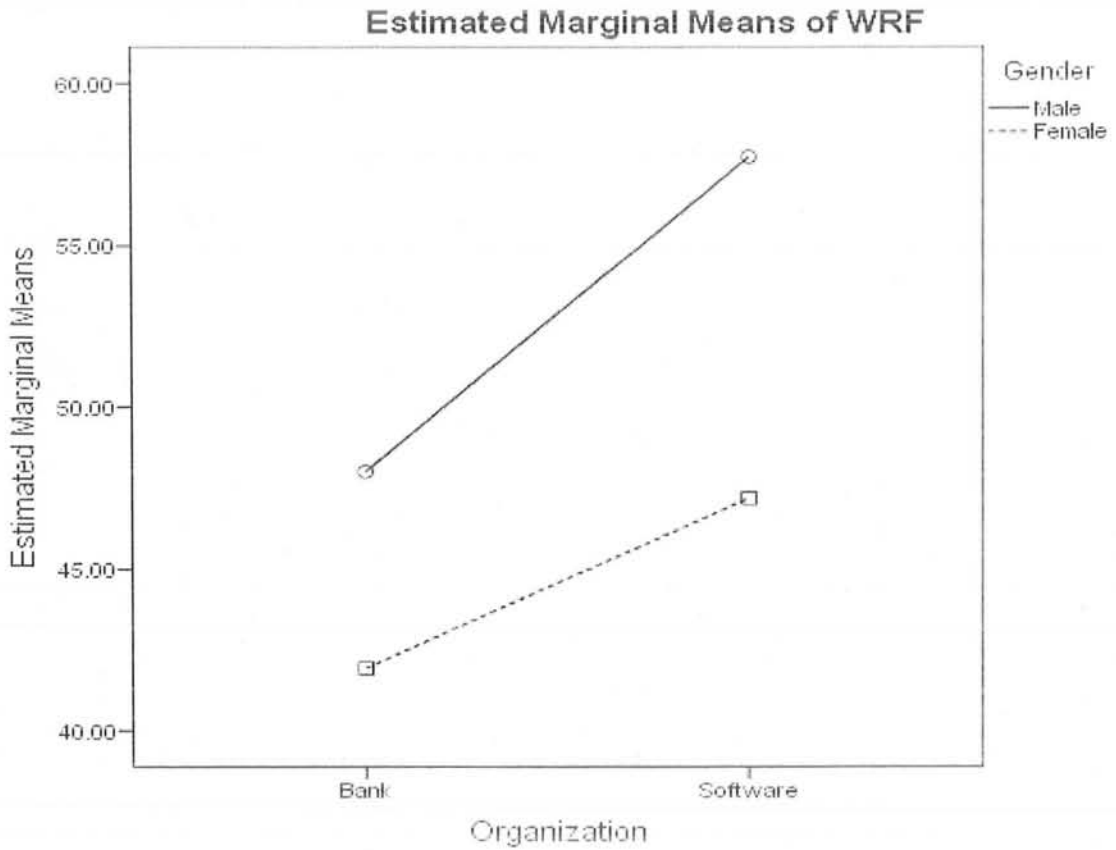


Figure 23. Combined Effect of Gender and Organizational Structure on PsyCap

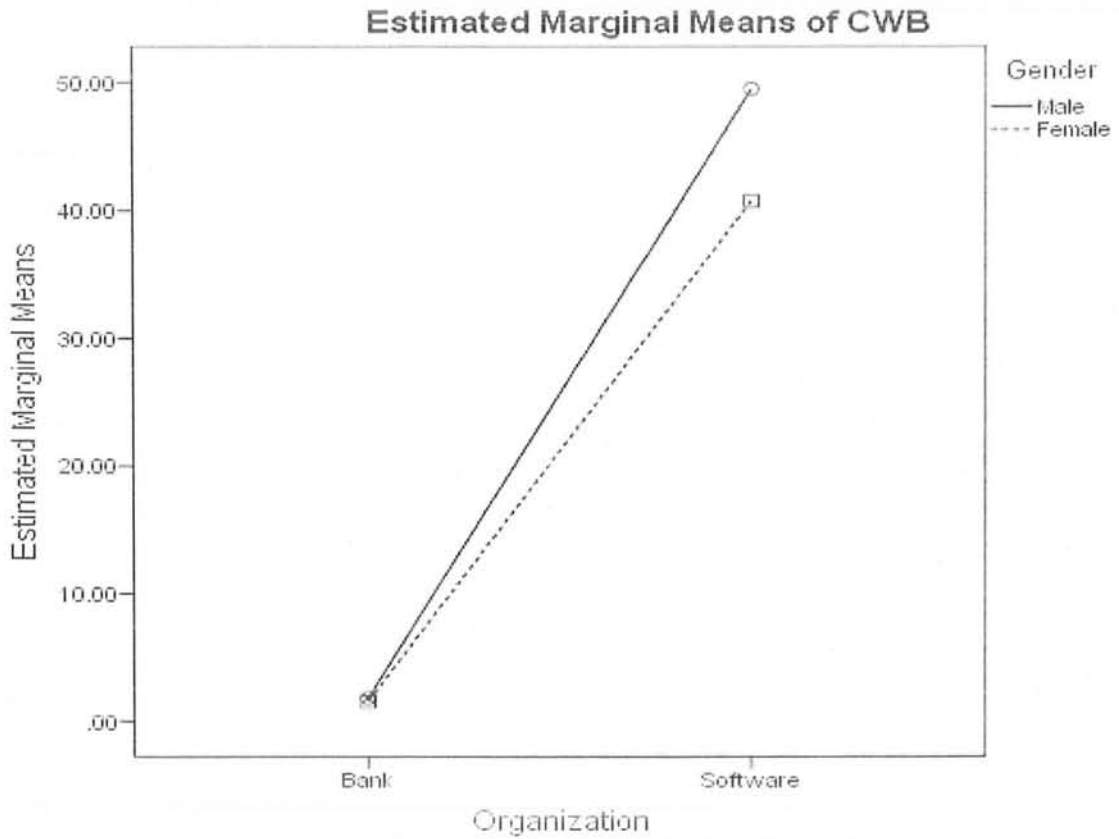
Figure 23 depicts that SWH employees comprising of men and women attained elevated score on PsyCap in contrast to bank employees. Besides, results indicated that male employees show more PsyCap as compared to female employees.



*Figure 24.* Combined Effect of Gender and Organizational Structure on WRF

Figure 24 depicts that men and women working in SWH (horizontal organization) achieved scores on upper end in relation to WRF in contrast to bank employees. In addition, results indicated that male employees experience more WRF as compared to female employees.

Figure 25 depicts that SWH employees including both male and female score higher on CWB as compared to bank employees. Moreover results indicated that male employees show more CWB as compared to female employees.



*Figure 25.* Combined Effect of Gender and Organizational Structure on CWB

**Moderated mediation of job experience and PsyCap on PAL and creative work-behavior.** In order to determine the moderated mediating function of job experience, technique of multi group analysis is executed by employing structural model in which PsyCap is incorporated as a mediator. The reparation of the said procedure provides an opportunity to explain the effect of moderator variable (which is job experience) within a structural model that contains the mediator (PsyCap) variable. Given that, it is reasonably to infer that the vigor of this technique is valuable and significant in presenting in-depth understanding in regard to the approach of structural equation modeling. Goodness indices illustrated a adequate fit in terms of nonsignificant chi-square value 9.20 ( $p = .081$ ). Additional fit indices also

able to meet the acceptable criteria (e.g., CFI = .92, GFI = .98, AGFI = .95, NFI = .91, RMSEA = .03, RMR = .01). Estimates are derived in favor of individual group of employees working in vertical and horizontal organizations (i.e., banks and SWH). Standardized regression coefficients representing direct and indirect effects for banks and SWH are presented in the Table 46.

Table 46

*Standardized Path Coefficients for Direct and Indirect Effects of PsyCap on PAL and CWB among Male and Female Employees of Banks and SWH (N= 1180)*

Criterion Variables	Predictor Variables	Men (n = 775)				Women (n = 405)			
		$\beta$	p	CI 95%		$\beta$	p	CI 95%	
				LL	UL			LL	UL
<b>Direct Effects</b>									
CWB	PAL	.59	.03	0.07	0.15	.43	.00	1.27	3.51
Self-Efficacy	PAL	.44	.00	2.13	2.42	.39	.00	1.01	4.60
Hope	PAL	.26	.00	-1.20	-0.82	.24	.01	2.05	5.16
Resilience	PAL	.38	.00	-0.78	-0.53	.27	.00	0.98	1.44
Optimism	PAL	.19	.00	2.23	2.28	.21	.02	0.20	1.93
CWB	Self-Efficacy	.56	.00	-0.48	-0.23	.45	.00	-0.55	-0.21
CWB	Hope	.25	.01	-1.92	-1.62	.20	.02	-0.87	-0.11
CWB	Resilience	.41	.00	-0.21	-0.18	.33	.00	-0.91	-0.14
CWB	Optimism	.22	.01	0.24	0.98	.26	.01	1.20	3.22
<b>Indirect Effects</b>									
CWB	PAL through SE	.02	.47	-0.20	0.96	.09	.49	-0.33	0.86
CWB	PAL through Hope	.02	.51	-0.80	1.08	.11	.35	-0.26	0.77
CWB	PAL through Res.	.03	.21	-3.50	1.10	.05	.28	-0.38	0.50
CWB	PAL through Opt.	.02	.30	-0.70	1.03	.08	.29	-0.94	1.25

*Note.* CWB = CWB; PAL = Perceived Authentic Leadership; SE = Self-efficacy; Res. = Resilience; Opt. = Optimism

Table 46 represent mediated path through dimensions of PsyCap in predicting CWB from perceived authentic leadership. Results showed that direct effects of individual components of PsyCap, that is resilience, self-efficacy, optimism, and hope with PAL and CWB becomes completely non significant when indirect effects of these dimensions are introduced. Hence, mediating role of all the dimensions of

PsyCap has been found for both men and women working in the context of tall (banks) and flat (SWH) organizational structures. These results further showed the moderation of job experience in the mediating role of individual components of PsyCap in the relationship between PAL and CWB.

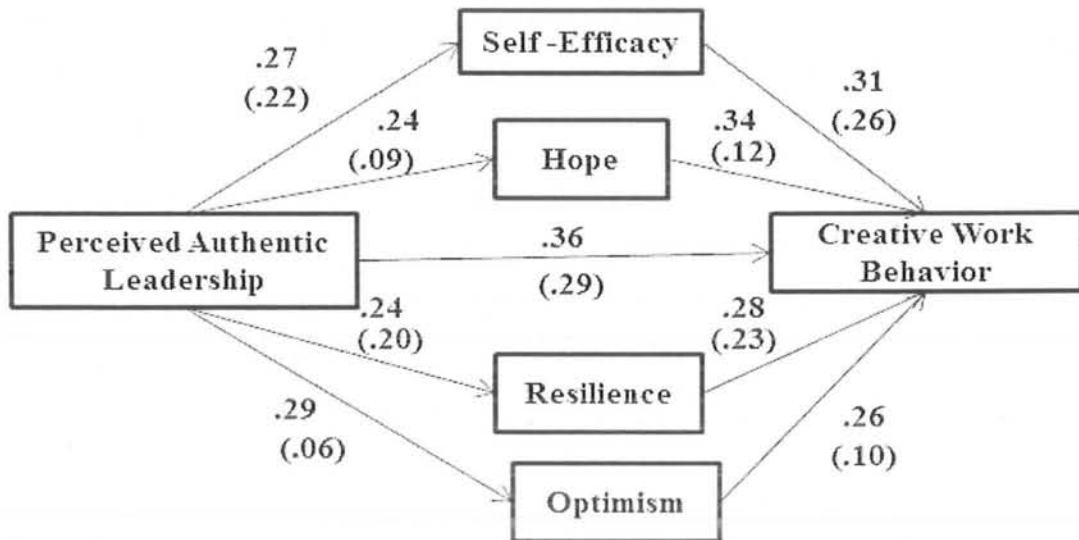


Figure 26. Role of Job Experience on Direct and Indirect Effect of PAL on CWB through Dimensions of PsyCap

Figure 26 exhibit standardized beta values for female (in parentheses) and male employees (without parentheses) for moderating function of job experience in explaining the mediating relationship of PsyCap dimensions between PAL and CWB. Results indicated that male employees with extended job experience are more inclined to reflect self-efficacy, hope, resilience, and optimism in order to express higher creativity at workplace. However, this model offer partial explanation for the female employees; as moderating role of job experience is identified only on the dimensions of self-efficacy and resilience. This means that female employees with extended job experience are more inclined to reflect self-efficacy and resilience in order to express higher creativity at workplace through the mediating path of PsyCap. Conversely,



women workers showed nonsignificant moderating role of job experience in the mediating path of hope and optimism (dimensions of PsyCap).

#### **Part 4. Path Models**

In lieu to the abovementioned analysis, much exclusive as well as few similar patterns have been observed in the backdrop of organizational structures. Nonetheless, it is evenly imperative to gauge the best explanation which can be offered for the optimal understanding of the major functioning of the constructs. Similarly, it is equally effective for overall organizational framework inclusive of flat and tall organizational structures. Given that it would facilitate in capturing the essence of similar grounds that function for both organizational setups. On the other hand, it also helps in generating a convenient picture to understand the interplay of variables.

Therefore, multiple path analysis is performed in AMOS where all the variables were entered simultaneously (after controlling age and social desirability) along the collective sample of the present study. Standardized path coefficients are generated to depict the predictability of each variable as well as its individual dimensions. Personal and organizational demographics are further entered in the model to determine their impact in explaining the relationships in relation to the prime variables of the current study.

Path analysis is a straightforward extension of multiple regression. Its aim is to provide estimates of the magnitude and significance of hypothesized causal connections between sets of variables. Structural equation modeling is a multivariate statistical analysis technique that is used to analyze structural relationships. This technique is the combination of factor analysis and multiple regression analysis, and it is used to analyze the structural relationship between measured variables and latent constructs (Monecke & Leisch, 2012). The structural model is the part that relates

latent variables to one another. Statistically, the model is evaluated by comparing two variance/covariance matrices. In the context of approach based on structural equation modeling, path coefficients are represented in terms of unvarying linear regression values that are employed in determining the probable contributory relation among all the statistical variables.

Before executing path analysis, three basic assumptions as outlined by Wright (as cited in Wuensch, 2016) of the method are explicitly complied. Firstly, the assumption of linearity, that is, all relationships between variables are linear (which is completely met in the present sample as perceived authentic leadership, PsyCap, WRF, and CWB are in linear relationship with each other). The assumption of a linear model seems valid as a wide variety of non-linear functions are well approximated by linear ones particularly within a limited range. Secondly, causal closure, that is, all direct influences of one variable on another must be included in the path diagram. Hence, the existence of an arrow between two variables means that it is assumed that these two variables are directly related. The formal completeness of the diagram requires the introduction of residual variables if they are not represented as one of the ultimate variables, unless there is reason to assume complete additivity and determination by the specified factors. Thirdly, unitary variables, that is variables may not be composed of components that behave in different ways with different variables in the system, but they should vary as a whole. In case of present study, all the four variables, perceived authentic leadership, PsyCap, and WRF, and their individual components are positively correlated with each other as well as with dimensions of other variables.

Each oval represents a variable and there is data on each variable for each subject. In this diagram (Figure 27), internalized moral perspective, self awareness, balanced processing, and relational transparency (dimensions of PAL); resilience,

self-efficacy, optimism and hope (dimensions of PsyCap); and work enjoyment, built-in work enthusiasm, and immersion (dimensions of WRF) are considered to be exogenous variables and their variance is assumed to be caused entirely by variables not in the causal model. The connecting line with arrows at both ends indicates that the correlation between these variables (that is, dimensions of perceived authentic leadership, PsyCap, and WRF) will remain unanalyzed because we choose not to identify one variable as a cause of the other variable and any correlation among dimensions of each variable may actually be sharing common causes.

Figure 27 depicted the path coefficients for the collective sample of both organizational structures (that is banks and SWH). The path coefficients are the  $\beta$  weights from the multiple regression analyses which indicate standardized beta coefficients of PAL and its dimensions of internalized moral perspective, self awareness, relational transparency, and balanced processing in predicting PsyCap with its subscales of optimism, hope, self-efficacy, and resilience; WRF and its components of absorption, work enjoyment, and intrinsic work motivation; and CWB. Results showed that each path significantly contributed variance in each of the criterion variables and this holds valid for the total sample of the study for both organizational structures.

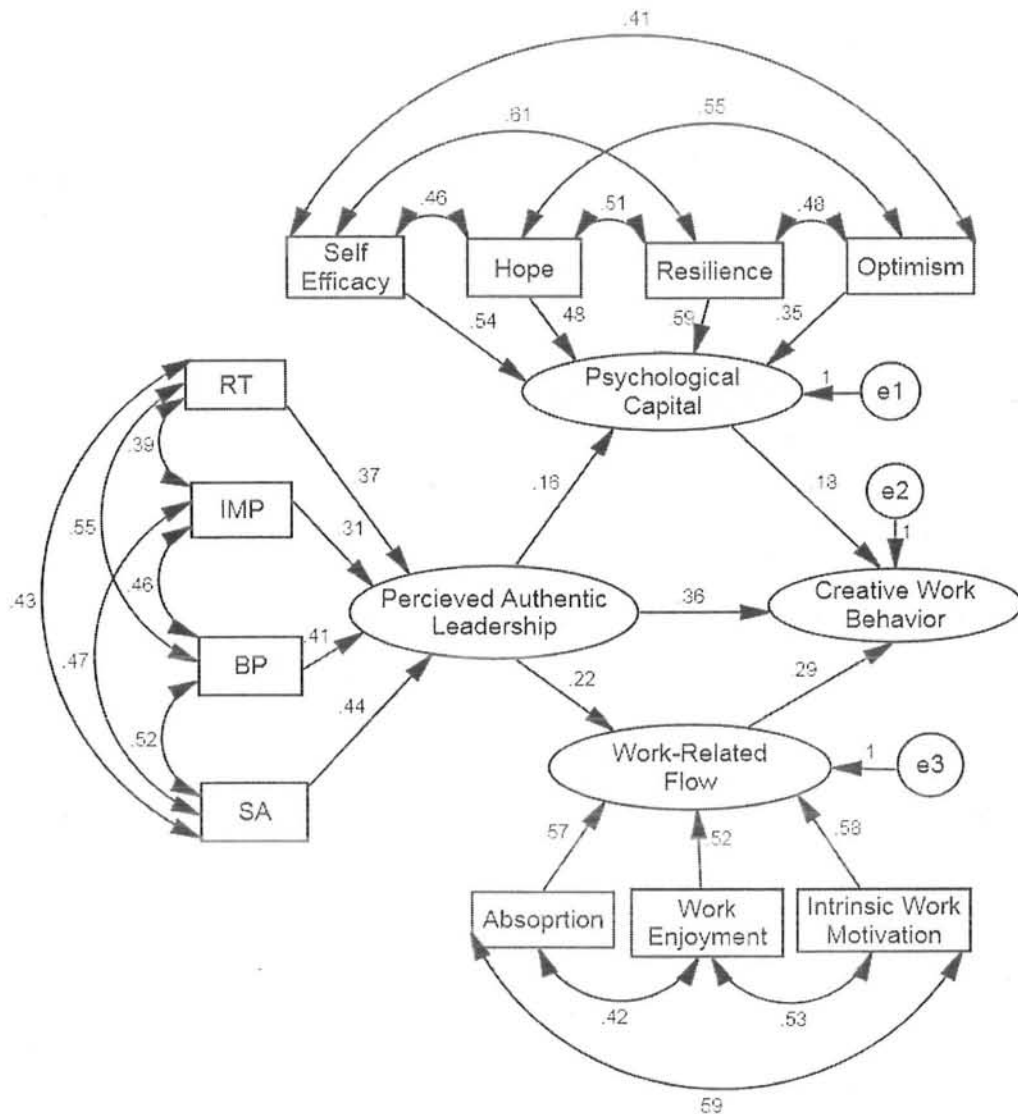


Figure 27. Path Model for Predictors of CWB for Total Sample ( $N = 1180$ )

Robustness of the model is further depicted by the fit indices for the model showing predictors of CWB in relation to collective sample of the present study revealed that ratio between  $\chi^2$  and  $df$  was tabulated as  $\chi^2 / df$  which was found to be 2.44 (within the acceptable range of 2-5; Duncan et al., 2013). Moreover, absolute (RMSEA = .04), incremental (CFI = .97 and TLI = .96), and parsimonious (AGFI = .96) indices were determined to verify the goodness of fit. Results has shown that

Root Mean Square Error Approximation ( $\leq .06$ ), Comparative Fit Index ( $\geq .90$ ), Tucker-Lewis Index ( $\geq .90$ ), and Adjusted Goodness-of-Fit Index ( $\geq .90$ ) were all in the acceptable ranges for all the predictors of CWB (Bentler & Hu, 2012).

**Role of personal and organizational demographics.** A sequence of path analysis has been done to determine the role of various personal and organizational factors that play an important role in their relation with the prime variables of the current study. It is also intended to determine the significance of each factor in the backdrop of specific organizational structure as well as total sample.

*Collective sample of employees.* Subsequently, demographic variables including gender, education, type of organization, job experience, job period in the current organization, and income groups are simultaneously entered in the path analysis (Figure 28). The values of standardized path coefficients showed that all personal and organizational demographics contributed significantly in the relationship of variables. Maximum variance of 27% has been explained by the factor of organizational structure followed by work experience (24%) and gender (21%). Conversely, minimum variance is explained by job duration in the present organization (15%); while least variance in the model is accounted by income (2% variance). Robustness of the model showed that ratio between  $\chi^2$  and  $df$  is 3.18 (within the acceptable range of 2-5; Kline, 2013). Moreover, absolute (RMSEA = .03), incremental (CFI = .95 and TLI = .97), and parsimonious (AGFI = .96) indices showed good model fit.

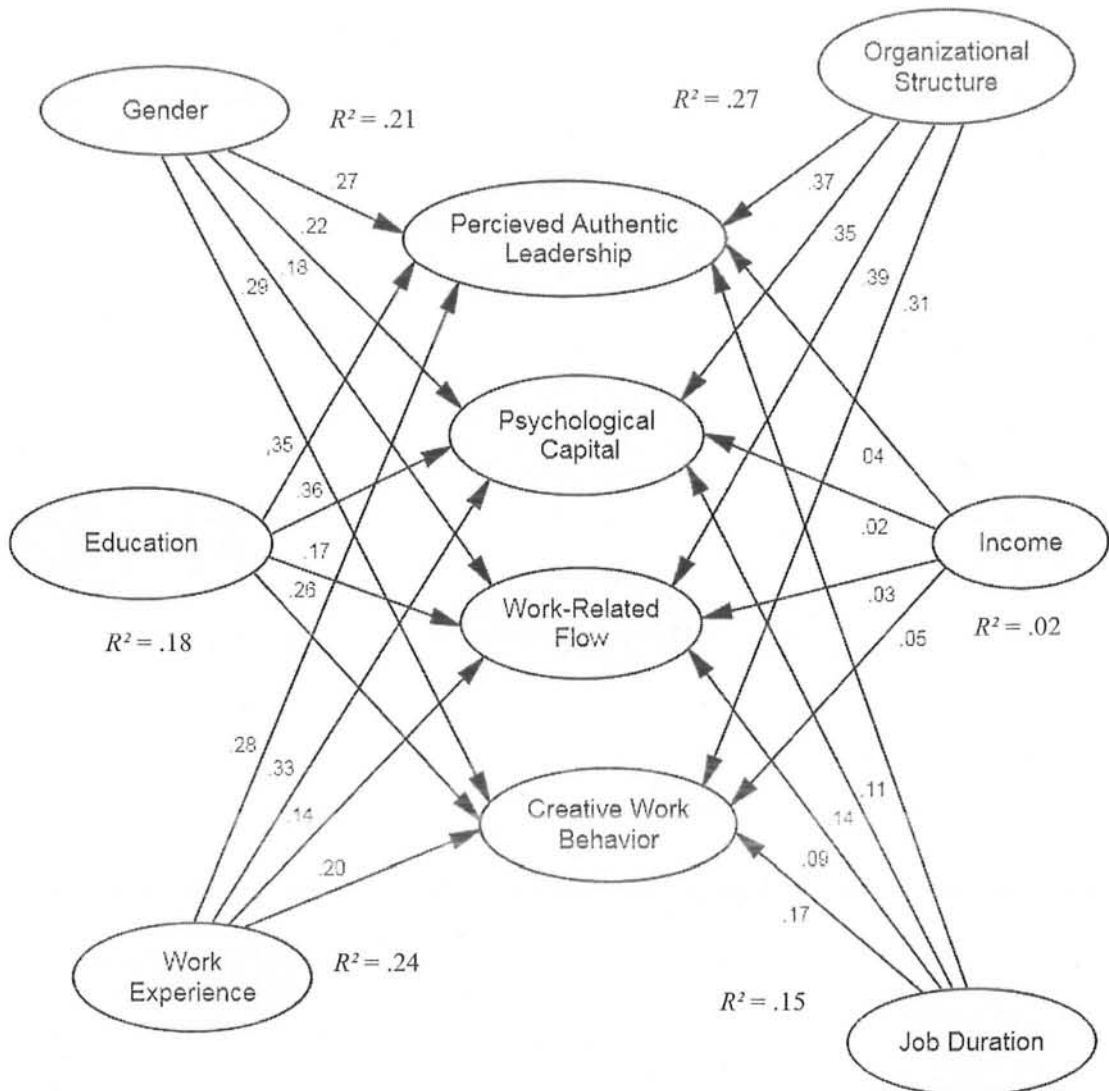


Figure 28. Path Model for Demographics in Relation to Major Constructs for the Total Sample ( $N = 1180$ )

**Flat organizational structure.** Figure 29 showed path model for organizational and personal demographics in relation to employees of flat organization, that is, SWH. Results showed that maximum variance is accounted by job duration in the present organization (25%) followed by education (17%) and gender (14%). On the other hand, 12% variance is explained by overall work experience; whereas most minimum variance is accounted by income (only 2%). In addition, closer glance at the model also showed that gender and work experience

exhibited non significant beta coefficients on WRF. This pattern of findings is much in line to the non significant gender differences on WRF across employees of SWH.

In addition, individual path coefficients on the indicators of job period in the current organization and education displayed higher beta values in predicting perceptions of authentic leadership, PsyCap, WRF, and CWB (see Figure 29).

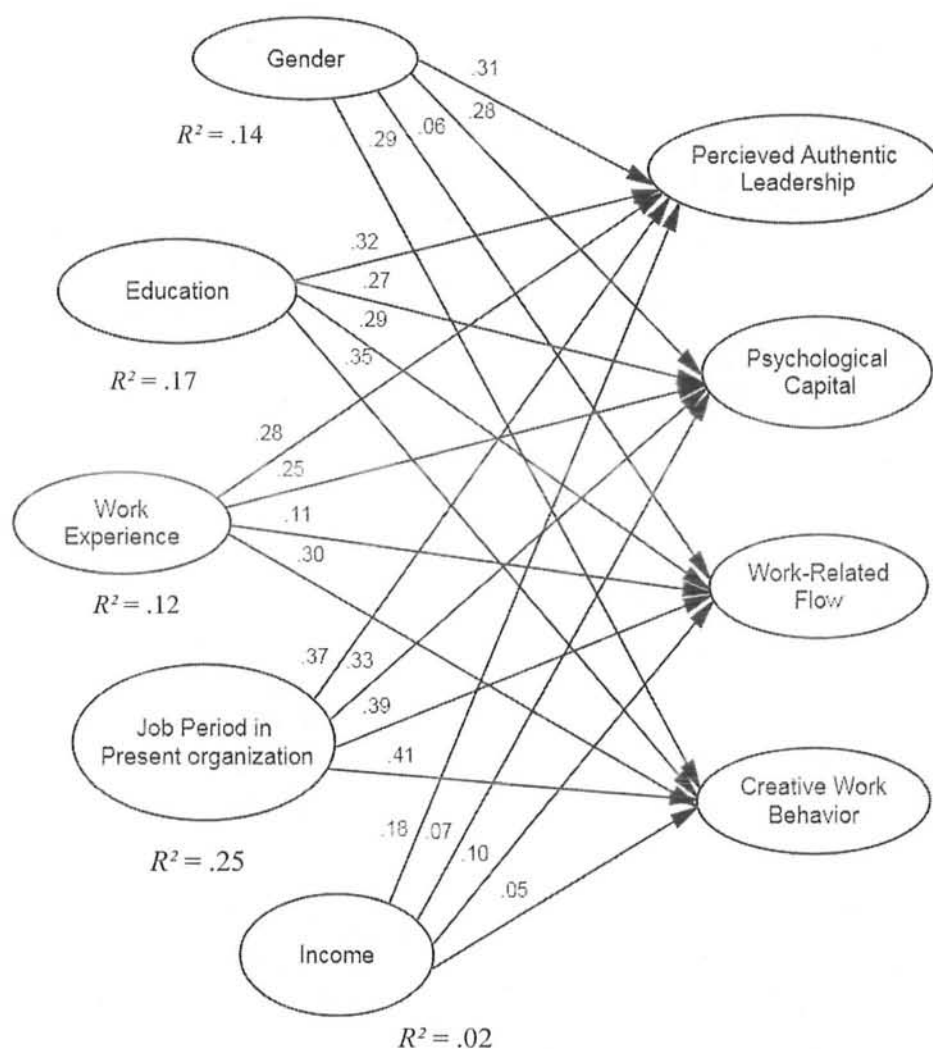


Figure 29. Path Model for Demographics in Relation to Major Constructs for the Employees of SWH ( $N = 580$ )

*Tall organizational structure.* Path model presented in Figure 30 depicted psychosocial determinants for employees of tall organizational structure that is, marketing departments of banks. It has been found that among bank employees, gender emerged as the most significant determinant by explaining the maximum variance (23%) followed by overall work experience (variance explained = 16%) in relation to authentic leadership, PsyCap, WRF, and CWB. In addition, education accounted for 13% variance in the whole model. On the other hand, job duration in the current organization explained 10% variance; while lowest variance is explained by income (8%). Conversely, job period in the present organization showed non significant beta coefficients with PsyCap and WRF.



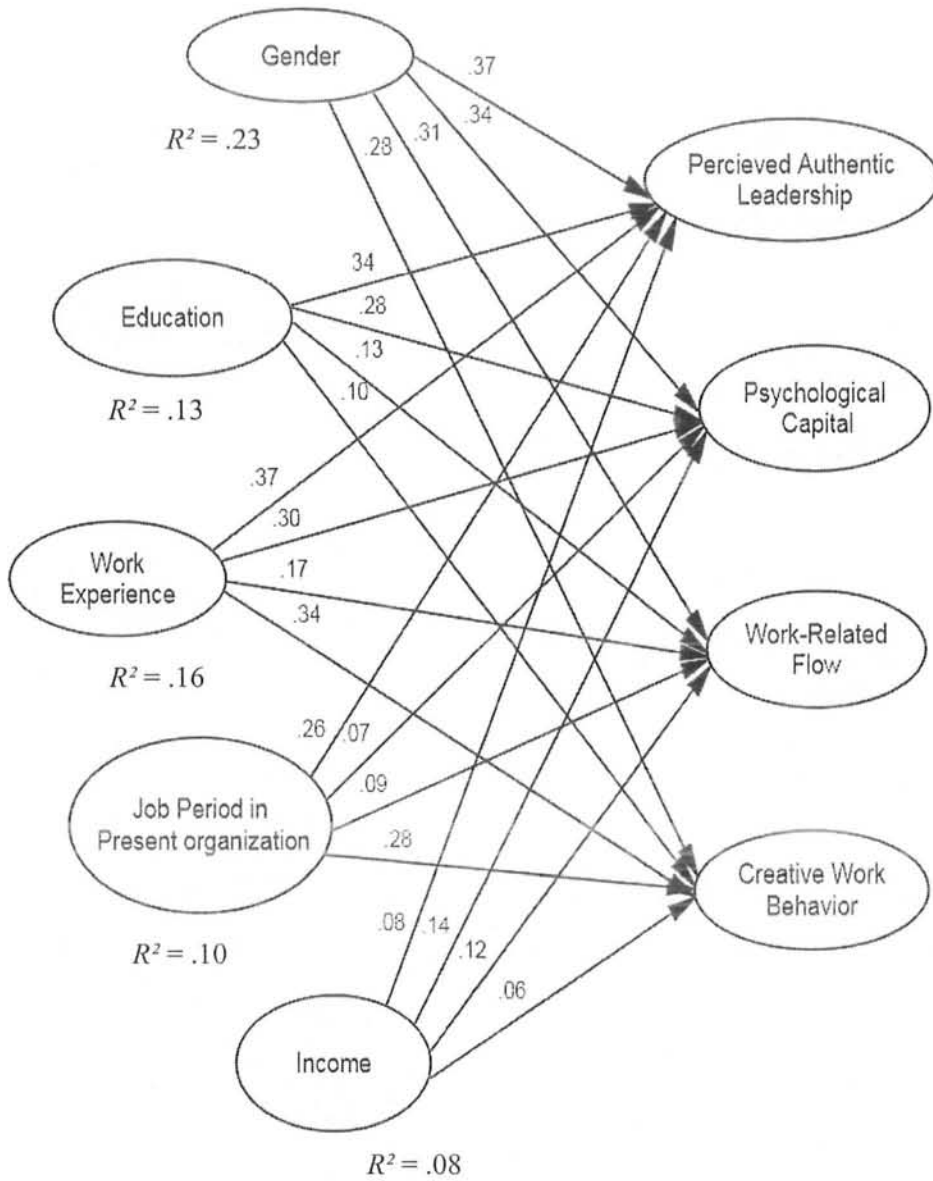


Figure 30. Path Model for Demographics in Relation to Major Constructs for the Bank Employees ( $N = 600$ )

At the end of results section, it can be fairly concluded that rigorous and meticulous techniques have been employed to analyze the data sets in order to test the assumed relationships along perceived authentic leadership, PsyCap, WRF, and CWB among employees of tall (banks) and flat (SWH) organizations. In the following section, these results are discussed in detail to draw meaningful and considerable inferences along both organizational structures.

## **Discussion**

The main study based on model and hypotheses' testing is designed to determine the direct as well as indirect effects of PAL on the CWBs of employees. Employees working in flat (SWH) and tall (banks) organizations are the focal respondents of the study. Measures of Authentic Leadership Questionnaire, PsyCap Questionnaire, WRF Scale, and Creativity Scale are the core protocols used to appraise the major constructs of the study.

Numerous techniques have been applied to analyze the data of the main study pertaining to various objectives and hypotheses of the main study. Therefore, major inferences of the study are broadly discussed in eight distinctive, yet, interlinked subsections. Primarily the sequence is as follows: initially, psychometric indices and measurement models of the main study are discussed followed by direct effects in terms of correlation matrices. Afterwards, regression models are conferred both at linear and hierarchical levels; leading up to the discussion of interaction effects (moderation) of organizational structure are justified in the context of relevant literature. Subsequently, demographic differences are discussed along bivariate and

multivariate dimensions of personal and organizational variables. Additional findings regarding interaction effect of gender, combined effect of organizational structure with gender, and moderated mediating role of job experience are further discussed. Finally, a comprehensive model regarding overall predictors of CWB is discussed in relation to tall and flat organizational structures.

#### **Psychometric estimation and confirmatory measurement models.**

Although psychometric estimates of the prime constructs of the current study are previously established in the validation study; however, it is fruitful to gauge the reliability and validity indicators of the larger set of data acquired in the main study. Reliability indices of all the measures are found to be adequate and within the acceptable range (i.e.,  $\geq .70$ ; George & Mallery, 2003). Serbetar and Sedlar (2016) states that Cronbach alpha values above .70 are considered acceptable, although values above .80 are, generally, more preferable. Moreover, indices of normal distribution showed that data is normally distributed and is not skewed in either direction (as per criteria of Pallant, 2013). Intrascale correlations are also tabulated to ascertain the construct validity of the measurement tools. Subscales of ALQ (internalized moral perspective, self awareness, balanced processing, and relational transparency) display positive alliance in regard to the individual dimensions and the entire construct of authentic leadership. Correspondingly, subscales of PsyCap (e.g., resilience, optimism, hope, and self-efficacy) exhibited linear positive linkage with the core PsyCap and across individual dimensions of the PsyCap. Additionally, WRF subscales comprising of intrinsic work motivation, immersion, and enjoyment

demonstrate unidirectional positive alliance among the central factor of WRF and its components.

### **Direct Effects**

Findings based on Pearson Product Moment Correlations depicted magnitude and direction of associations prime variables of the current study as well as in relation to the major dimensions of these constructs.

Interscale correlations projected significant positive associations of PAL with PsyCap and WRF. Moreover, PsyCap is also related in linear direction with WRF. This pattern also stands valid for all the dimensions of these constructs (such as balanced processing, self awareness, internalized moral perspective, and relational transparency of authentic leadership; resilience, optimism, hope and self-efficacy, of PsyCap; and intrinsic work motivation, work enjoyment, and absorption of WRF). These findings holds true for the employees of SWH and banks (with few exceptions) which are discussed below.

Marketing section of banks on a global level (Alalwan et al., 2016) as well as in Pakistan (Faisal & Jan, 2015) are continuously facing ever changing needs and challenging goals to meet the demands of the customers. On comparable grounds, software companies operating across the world (Peters & Widenbeest, 2011) specifically in Pakistan (Chodary, 2016; Mughal & Trimzi, 2015) are in a highly transit phase of assiduous progress and development. In such evolving circumstances, optimum leadership practices along with psychological resources of the employees would assist in achieving desired organizational outcomes. For instance, perceptions

of authentic leadership helped the employees in enhancing their positive psychological states in terms of hardiness, job related efficacy, perseverance, resilience, and optimistic attributions for the surrounding circumstances as well as positive emotions (such as sense of complete immersion and experiences of happiness and enjoyment); which in turn, provoke the employees for higher self-set goals and internally driven to face the challenges and obstacles at workplace (Dawood, 2016; Khan, 2010). Moreover, authenticity of the leaders portray the positive psychological states that accompany optimal self-esteem and psychological well-being, such as confidence, optimism, hope, and resilience, to model and promote the development of the similar states in their followers (Wang et al., 2013). Hoogh and Den-Hartog (2008) further added that authentic leaders inspire employees' positive states by being good role models and developing a sense of identification with their leaders and encouraging their productive feelings. Furthermore, transparent communication, ethical conduct, and balanced processing (components of genuine leadership) by the leaders also promote enjoyment, intrinsic involvement and absorption (components of WRF) among the followers (Salanova et al., 2006; Siu et al., 2014).

Nevertheless, few correlations were non significant among bank employees; for example, balanced processing (dimension of authentic leadership) revealed insignificant linkage with optimism and hope (subcomponents of PsyCap). Gardner et al. (2011) and Fredrickson (2013) offer a likely reasoning for these findings by asserting that balanced processing is further related to the intentional and purposeful examination of pertinent information and data prior to the formulation of any decision hence, its primary focus is on readily accessible higher order mental operations and cognitive processes; whereas optimism and hope are relatively highly concerned with

the temporally advanced goals that are set in terms of explicit work behaviors. Hence, these dimensions may have exhibited little congruency with each other. Specifically, further native evidences (Saeed, 2015; Zameer et al., 2015) inferred that leadership styles in Pakistani banks are more concerned with the task oriented rather than people oriented style; therefore, bank employees are more likely to perceive their leader's balanced processing in terms of here and now than to relate it with futuristic aspirations.

An interesting trend has been observed in instances of CWB, which has proven to be significantly positively associated with perceived authentic leadership, PsyCap, and WRF as well as with all distinct dimensions of these constructs. This trend has been meticulously verified from earlier findings (e. g., Lyubormirsky et al., 2006; Sweetman et al., 2011; Zhou et al., 2012), which illustrated the vital functions that these constructs play in initiating and sustaining resourceful and CWB. Similarly, various studies inferred that authenticity in leadership style (by providing contextual framework) and PsyCap (by providing psychological assets) facilitate in attaining desirable work behaviors including work engagement (Abbasi, 2015), job satisfaction of followers, organizational commitment (Giallonardo et al., 2010), and work-related creativity (Wong & Cummings, 2009). Likewise, assets like resilience, self-efficacy and hope (dimensions of PsyCap) may foster skills and experience of flow with an element of personal development and remarkable feelings of worth and proficiency (Jex, 2006).

### **Work-Related Outcomes of Perceived Authentic Leadership**

Hierarchical regression analysis showed incredible patterns in relation to outcomes of PAL at workplace. Overall, PAL significantly predicted PsyCap, WRF,

and CWB with varying amount of variance. Nevertheless, in case of SWH' employees, all these predictors accounted more variance in CWB by explaining maximum variance in the outcome variable. On the other hand, PsyCap has been the strongest predictor of CWB among bank employees. These results can be best explained through the evidences based on former investigations; for example, authenticity of the leaders may encourage creative talent and potential of the employees through processes and mechanisms such as enhancing the value of social exchange between the leader and follower; consequently, escalating the element of conviction and confidence in the employees to present original ideas, and voice conflicting opinions without any feelings of humiliation and embarrassment (Hassan et al., 2013; Giallonardo et al., 2010; Siu et al., 2014). Employees may also experience psychological safety and are willing to take proactive approach in solving problems and exploring creative alternatives (Prati et al., 2003). Several researchers (Jyoti & Dev, 2015; Lorenz et al., 2016; Wu et al., 2012) identified agentic psychological resources (e.g., optimism, resilience, efficacy) and intrinsic work motivation as instrumental to achieve creatively useful output. Similarly, this pattern of relationship is also endorsed by Adil and Kamal (2016) inferring the predictive function of positive emotional resources in generating healthier attitudes toward the organization and marked with exponential increase in work performance.

### **Indirect Effects**

Primarily, two types of indirect effects have been measured in the current investigation. Firstly, to establish the parallel mediating function of PsyCap and WRF in predicting CWB from PAL; and secondly, indirect effect of organizational

structures (as a moderator) in the direct paths of associations across major variables of the current study. In the following section, each indirect effect is individually analyzed.

**Mediating role of PsyCap and WRF.** The baseline objective of the current exploration is to determine the mediating impact of PsyCap and WRF in explaining the association between PAL and CWB. For the sample of SWH and banks, PsyCap and WRF emerged as parallel mediators in explaining the relationship between PAL and CWB. Regression analyses revealed similar, yet, notable mediating models for both types of samples; hence each mediator is discussed separately in the context of both organizational structures.

*Mediating role of PsyCap.* Results revealed that the relationship between PAL and CWB is mediated by PsyCap among employees of SWH and banks. Type of indirect effect of PsyCap is best explained by Luthans et al. (2010) asserting that workers who are equipped with the availability of greater psychological reserves in terms of PsyCap would be able to perform with highest level of deliverables. This becomes possible owing to the facilitating impact of these reserves which in turn amplify the cognitive and motivational assets required in a specific situation. There is also a proliferation in literature that supports inference that PsyCap can successfully arbitrate the association of employee performance with organizational support and climate as sustained by the leaders (Luthans et al., 2014). Hirst et al. (2015) also pointed out that authentic leaders serve as role models to promote virtuosity and positive psychological states among their followers which helps them in achieving



better job performance. In addition, Saeed (2015) found that authentic leaders nurture desirable outcomes among employees such as lower burn out and more innovative output through enhanced internal locus of control. Michie and Gooty (2005) asserted that authenticity of the leaders encourage employees' psychological resources by being transparent with employees, self-aware, steered by internal ethical standards, and able to factually analyze the relevant information. According to Wang and Cheng (2010), authentic leaders helps to build trust and respect in their followers as being positive role models; which in turn, enable the followers to experience greater emotional safety and feel free to propose unconventional ideas and introduce conflicting opinions without fear (Rego et al., 2014; Wang et al., 2013). Moreover, authentic leaders employ mechanisms of social exchange with their followers in a productive manner; thereby, inspiring their followers to work with added excitement and enthusiasm (Kiyani et al., 2013; Kunze & Menges, 2016). These constructive sentiments can inflate cognitive ability of focused concentration by increasing the level of mental awareness which necessitate the creative operations. In addition, positive emotions also facilitate the provision of enhance g the depth and availability of cognitive elements which are rightful precursors for seeking creative solutions for the problem at hand (Frederickson, 2013).

*Dimensions of PsyCap as mediators.* Findings of the current study showed that PsyCap components comprising of resilience, hope, optimism, and self-efficacy mediates in elucidating the alliance between PAL and employee creativity for employees working in tall and flat organizations (banks and SWH). These findings

received substantial support in earlier pragmatic conclusions; hence these are comprehensively discussed.

*Self-efficacy.* This facet of PsyCap plays as a resource in stimulating self-confidence and faith in individuals to strive for the personal and collective objectives by depending on individual assets and capabilities (Newman et al., 2014). Self-efficacious individuals have faith in their abilities to mobilize the cognitive resources, motivation and actions essential for successfully performing a certain task within a given context (Lorenz et al., 2016). These individuals are prone to face challenging tasks, keep trying in difficult times, and employ their motivational resources and efforts to achieve their goals (Cetin & Basim, 2011). This amalgamation of perseverance, stimulating goals and motivational energy instigates individuals to suggest new, yet, solutions for the attainment of their goals. Özkalp (2009) suggests that self-efficacy is a psychological asset (as it work generatively) is vital for creative productivity; whereas Van-den Heuvel et al. (2014) claims it as a personal belief of one's ability to exhibit skills and potential for creative output in work sphere.

*Hope.* According to Luthans et al. (2014), being a component of PsyCap, hope acts as a catalyst in setting futuristic goals and also paving the road to achieve these goals. Being unyielding in pursuing goals, optimistic employees are inclined towards to risk-taking and search for substitute paths when the old ones are jammed (Liu et al., 2017). Mostly, hopeful individuals like to pursue their goals, as they are driven by intrinsic motivation and look for the practical and functional ways of implementing their cognitive skills and capabilities (Breevaart et al., 2014). In case of failure,

hopeful individuals tend to use feedback to improve their mechanism of attaining the goals and are willing to explore substitutes and novel ways to overcome the hurdles (Keles, 2011); conclusively, hope feeds creativity at work (Coelho et al., 2011).

*Resilience.* The most powerful component of PsyCap is resilience of the individuals (Youssef, 2016) because resilient individuals are capable of overcoming complications by bouncing back from adversities and pursuing new horizons in their lives while striving for enhancing their well-being (Youssef & Luthans, 2015). Resilience assists in achieving innovation and creativity (Chintaloo & Mahadeo, 2013) since resilient people have approach life with zest and energy, are inquisitive to challenging situations (Tugade & Frederickson, 2004) and extemporize in uncertain and dynamic situations (Wu et al., 2012). As such, resilient employees are likely to develop new methods of performing assigned tasks when facing failures, difficulties and opportunities. They are more capable of recuperating from negative emotional experiences and more prone to experience positive emotions during stressful circumstances (Williams et al., 2016).

*Optimism.* This component of PsyCap acts as a mediator in generating creativity among employees through the mechanism of making differential attributions about positive and negative events. Optimistic people perceive positive events as a result of their personal efforts, which in turn, enhance their self-esteem, thereby, enabling them to greater creative output (Newman et al., 2014; Lyubomirsky et al., 2006). Individuals high on optimism tend to opt a reserved approach while facing negative and discouraging situations, thereby, reducing the likelihood of

experiencing damaging emotions like remorse, depression, and hopelessness. Subsequently, optimistic individuals would not prefer to discontinue their struggle to overcome the problematic scenarios and likely to adhere to their positive stance on taxing circumstances, to tolerate difficulties, to feel positive emotions and to look for innovative ways of solving complications and benefitting from opportunities (Youssef & Luthans, 2015).

Conclusively, underlying assumptions of PsyCap suggest that individual components of PsyCap induce sustainable and facilitative impact on work related outcomes as plenty of empirical evidence suggested positive psychological emotions and resources to be related to creativity (Karatepe, 2013; Van-den Heuvel et al., 2014). In addition, ample indigenous work verified the mediating role of PsyCap as well as its specific components of hope, self-efficacy, resilience, and optimism in forecasting desirable work outcomes such as employee achievement (Siddiqua, 2016); organizational citizenship behavior (Shaheen, 2015); psychological ownership (Adil & Kamal, 2016); life satisfaction of employees (Farhan, 2015); and psychological empowerment (Arefin, Arif, & Raquib, 2015).

***Mediating role of WRF.*** The mediating play of WRF in forecasting CWB from PAL is reinforced by past empirical work (Debus, Sonnentag, Deutsch, & Nussbeck, 2014; Engeser & Baumann, 2016) demonstrating that effective and affective involvement accompanied with eternal feelings of pleasure as an experience of flow serve as a catalyst for productive and original productivity in the organizational atmospheres. Specifically, with reference to leadership approach, recent evidences (Delle-Fave & Zager-Kocjan, 2017; Rheinberg & Engeser, 2017)

indicated that supportive and encouraging style of leadership boosts the frequency of experiences at task related innovation, productivity, and professional growth. Similarly, it is further observed that transitory stream of flow at work presage behavioral actions such as resolving task based quandary, planning, and evaluation (Peifer, Schulz, Schächinger, Baumann, & Antoni, 2014) and experiential flow enhances the optimal performance based on pragmatic approach in the domains of scientific and artistic creativity (Schüler, Brandstätter, & Sheldon, 2014). Demerouti and Fullagar (2013) asserted that opportunities of self-growth and supportive leadership are in linear relationship with each of the dimensions of flow at work. Furthermore, employees who are granted more flexibility and freedom and are trusted by their leaders in taking autonomous decisions, the pace at which they work, and the method they employ to get the job done, experience more contentment at work, are often more indulged in their work, and are more intrinsically motivated. Engeser and Baumann (2016) also stated that WRF and its components fundamentally centered on the contemporary status along with conditions of participation and indulgence. Similarly, proneness to be indulged in the state of flow requires experiential condition of concentration and curiosity (Delle-Fave & Zager-Kocjan, 2017; Moneta, 2012), which is aided by authentic leadership styles and results in more unique and innovative work behaviors (Debus et al., 2014).

**Moderating role of organizational structure (tall versus flat).** Findings of the main study revealed a remarkable pattern in terms of enhancing effect of type of organizational structure in all direct paths of associations in relation to the primary variables of the current study. It has been found that organizational structure (either

horizontal or vertical) significantly moderates the following relationships: PAL predicting CWB; PsyCap; and WRF. It also moderated the paths of PsyCap leading to CWB; WRF predicting CWB; and PsyCap predicting WRF. As there are multiple paths of interaction effect of type of organization, so it would be more meaningful to explain each path as follows.

*PAL predicting CWB.* The indirect effect of PAL on CWB is moderated by type of organization. It has been found that relationship between PAL and CWB is strongly linear in case of flat organization that is SWH; whereas, this relationship is relatively less prominent in case of tall organization (banks). These results can be reasonably explained through the model of mechanistic structure originally proposed by Weber (as cited in Senior & Swailes, 2010). Organization that have highly specialized jobs and where the division of labor is well defined, predominantly dependent on the defined roles of the management, often with a single chain of command running across the entire organizational frame usually initiating from pinnacle moving to the base structure; hence, allowing fewer alternatives for distributive and equity style of management (Wang et al., 2013). On the other hand, horizontal organizations with nominal stratum of administration promote and encourage translucent pattern of immediate control and leadership; hence, fostering transparency, objectivity, and authenticity based on realism in supervisor-subordinate interactions (Vidyarthi, Erdogan, Anand, Liden, & Chaudhry, 2014). Likewise, Senior and Swailes (2010) also articulated that organizations marked with predominantly vertical pattern of management are inclined to practice impersonal and uncongenial rules which have lesser margin for the freedom of task executions and taking

decisions; thereby facilitating job performance on mundane tasks but may culminate the encouraging expression of innovative potential. In contrast, horizontal administration as organic structures supports flexibility in system regulations and promotes distributive design of control and guidance which renders highest levels of empowerment to the personnel working at primary echelon of organization, which in turn, offer enormous boundaries for the manifestation of creative and resourceful work behaviors. Earlier investigations (e.g., Dust et al., 2014; Northouse, 2013; Vidyarthi et al., 2014) too inferred that leadership (both in terms of guidance and control) and direction styles are variably exercised in case of vertical and horizontal systems of management; by this means manipulate a wide range of occupational and professional behaviors. Given this, it has been rigorously established that horizontal managerial administrations rendered accelerated support and facilitation in maximizing organizational loyalty and less turnover intentions (Bohem, 2012); task-related efficacy, creativity, and performance (Choi, 2004); professional contentment (Santra & Giri, 2008); and career growth (Fabi, Lacoursiere, & Raymond, 2015).

*PAL predicting PsyCap.* Results of the present study demonstrated that enhancing interaction effect of flat organization in explaining the relationship between PAL and PsyCap. Much sound explanation for this finding gets support from the work of Biloslavo et al. (2012) as well as Kennedy and Anderson (2017) which has shown that leader-member relations, role clarity, and job related outcomes (organizational citizenship behavior, job performance) are shaped by the structure of organization; thereby, affecting the psychological capacities of the employees. PsyCap and organizational socialization resources are determined by leadership styles and

hierarchical structures (Maqsood, 2012). Moreover, employees of flat organizations reflected elevated levels of efficacy, psychological ownership, and resilience. These findings are explained in the context of person-environment transactional process (Henricks, 2005) and person-organization fit model (Cheng, 2014). Flat organizations motivate their employees to engage in the behaviors that would help them to perform well in the workplace. The major attributes of the people functioning in flat organizations (specifically IT companies) reported better task related efficacy, work-related optimism, and resiliency (Iveroth, 2012). However, it has been found that hope and optimism are collectively grouped as a single entity in the perceptions about transparency and good moral practices of their leaders working in organizations with minimal hierarchical structures (Sinclair, 2016). A relevant example of Silicon Valley is extensively reported to highlight the role of organizational structure. When started with flatter structures have been more successful but when these transformed into tall organizations had to face multiple losses in decision making and efficacy of their employees (Wang et al., 2013). Another perspective that explains the possible moderating role of type of organizations is in terms of goal setting and performance based approach where flat organizations encourage higher performance goals originating from employees who have high levels of self-efficacy, internal locus of control, and career resiliency (Anand, Vidyarthi, & Park, 2015; Vidyarthi et al., 2014). Consequently, it would lead to higher levels of job performance from an employee which is critical for many organizations in an era of high competition. Authentic leaders working as middle level managers in organizations having wide span of control with lesser layers of decision making powers (flat organizations) is



also associated with workplace optimism which could be a very positive force in the workplace (Blanchard, 2008).

*PAL predicting WRF.* It has been found that PAL predicted WRF through different types of organizational structure; where, flat organizational structure (in case of SWH) played enhancing role in predicting WRF as compared to tall organizations (banks). A small number of available studies have explored the probable link between authentic leadership and WRF in relation to specific organizational structure, possibly because these are emerging areas of investigation in two distinctive domains. However, some empirical evidence has, certainly, provided support for the moderating role of organizational structure between the two constructs through work engagement. For instance, Leavitt (2005) and Zameer et al. (2015) declared that tall structures are characterized by more rigid and bureaucratic configuration that help the companies to achieve efficiency but, lesser flexibility for internal drive and motivation. On the other hand, flat structures, which are decentralized and flexible, aid employees to be driven by personal interest and work engagement.

Similarly, employees working in flat organizations reported more positive leader-member relations, happiness, and work-life satisfaction (Biloslavo et al., 2012; Bloisi et al., 2007); while leaders with greater authenticity and standards of morality and ethics are likely to have unbiased negotiations with their followers; hence, promoting work absorption of their followers (Gardner et al., 2011). According to Northouse (2013), in more formally (tall) structured organizations, leaders usually fail to be honest about company; resulting in employees experiencing a sharp decline in their perceptions about their leaders for being genuine and objective in interpersonal

interactions. This may induce lower motivation and work engagement among the employees. The probable buffering effect of organizational structure could be understood in terms of dual leadership in organic organizations characterized by loose partition of labor and small middle management, which brings the leadership delegating quality and gives intrinsic work motivation (Jyoti & Dev, 2017).

Additionally, employees working in organizations with lesser layers exhibited greater intrinsic work motivation, job related well being, and work engagement (Kaura et al., 2015). Flat organizations allow (by their very nature of lesser hierarchical layers) middle managers to communicate technical and conceptual skills, and goal decision with personnel rules (Baloch & Khalil, 2016; Lu, Akinola, & Mason, 2017). This allows the leaders to impart greater confidence in the skills of their employees enabling them to be intrinsically driven to achieve higher organizational goals. Moreover, they are also likely to receive cooperation, support, assistance and collaboration from their peer colleagues; and capable of overcoming the difficulty through internal work motivation. This has been reported even if virtually there is no supervisor to monitor the performance of employees (Sinclair, 2016).

***PsyCap predicting CWB.*** Organizational structure also moderated the path to predict CWB from PsyCap. Results showed that flat organizational structure sharply enhances the relationship between PsyCap and creativity at workplace. This finding is more understandable in the backdrop of interplay of psychological resource theory (Hobfoll, 2002); Weber's model of organizational design (as cited in Senior and Swales, 2010); and job demands-resources model (Schaufeli & Taris, 2014). Mostly,

tall structures are characterized by vertical communication patterns, closed supervisory style of leadership, and lesser autonomy in decision making; thereby, rendering more job demands for the employees and their psychological resources would be less effective in manifesting positive work outcomes. On the other hand, flatter organizations permit greater involvement of employees in decision making, fluid communication patterns, and supportive leadership; hence, psychological assets of the employees are not only maximized but also facilitate in acquiring best possible work outcomes. Moreover, the psychological states of the person serves as resources such as resilience, optimism, self-efficacy and hope which results in more desirable behaviors; for instance, job related psychological empowerment (Adil & Kamal, 2016); organizational citizenship behavior (Saleem, 2016; Shaheen, 2015); and professional quality of life (Haleem, 2016). In flat structures, as the employees have more liberty and autonomy in terms of expression and use of their psychological resources, are subsequently, more inclined to express desired behaviors at workplace (Bloisi et al., 2007).

On the contrary, the same equation does work (to some extent) in tall structures; however, the use of psychological resources may be hindered because of controlled and closely monitored supervision and subsequently the influence of psychological strengths on the desired outcomes may become less visible (Cao et al., 2013). In addition, flatter structures would also permit exploration of alternatives and space to play with one's potential; however, the same channel may become obstructed in the plethora of managerial layers; thereby, may end up in lesser expression of creative output at work (Caldwell & Hayes, 2016).

***WRF predicting CWB.*** Coming to this path, organizational structure (in this case flat structure that is SWH) acts as an enhancer in predicting CWB from WRF. This finding can be optimally explained by the model given by Delle-Fave and Zager-Kocjan (2017) stating that WRF is contingent upon the easiness of expressing and experimenting with one's novel ideas, compatible skills, and difficulty level of the challenges. In this regard, that freedom is more permutable within the framework of the organizations with minimal hierarchies rather than with closed and tall structures (Debus et al., 2014). In flat organizations, mainly tasks are assigned as per expertise of the employees and it is more team oriented where employees act both as providers and recipients of skill based information; which enables the workers to enjoy their occupation and work as compared to those working in tall organizations. Likewise, flat workplaces such as SWH have assigned jobs according to the potential of the employees (Sohail, 2013); whereas, in tall structures (such as banks) mainly, experiences of WRF and happiness are over shadowed by the decentralized autonomy and narrow span of control (Kashif et al., 2016; Zameer et al., 2015).

***PsyCap predicting WRF.*** Findings of the present study additionally indicated that configuration of the organization (in terms of being vertical or horizontal) moderates the association between PsyCap with WRF; where flat structure enhances this relationship. The most visible pattern of relationship is evident in this path as psychological states and resource may function in the form of channel to enhance experience of intrinsic work motivation and happiness at work. Several factors play a pivotal role in enhancing happiness (Hughes, 2008), work engagement, and intrinsic motivation (Demerouti & Fullagar, 2013) such as autonomic use of efficacy,

resilience, and optimism (Hoogh & Den Hartog, 2008). Similarly, less layers of management gives more opportunity to play with one's potential and skills as compared to tall structures (Alawan et al., 2016); while decentralized decision making gives more autonomy in work and involvement with the tasks at hand. Consequently, psychological states are contingent upon the organizational structure; thereby influencing the flow experience at work.

### **Demographic Differences on Perceived Authentic Leadership, PsyCap, WRF, and CWB**

Bivariate analysis and multivariate analysis revealed significant group differences in relation to gender, education, income, type of organization, overall job experience, and job period in the current organization across both organizational structures along primary variables of the current investigation. In the following subsections, initially, findings of the bivariate analysis on gender and type of organization will be discussed followed by results of multivariate analysis on education, job experience, job period in the current organization, and income will be narrated.

**Gender.** Results showed significant gender differences across both types of samples; where male employees reflected more favorable perceptions of authentic leadership, PsyCap, and elevated magnitude of creative behavioral manifestations in contrast to the women workers. However, on the construct of WRF, a differential pattern is observed, that is, male bank employees showed more experience of flow at

work than their female counterparts; while, non significant gender difference emerged in relation to WRF among employees of SWH. These pattern of findings received substantial empirical support from Western investigations (Andony et al., 2016; Wu et al., 2012; Yammarino & Dansereau, 2008) and Pakistani studies (Farhan, 2015; Haleem, 2016; Siddiqua, 2016) inferring that male managers tend to be high on job efficacy, internal drive to work, and behavioral expressions of creative potential in comparison to female managers. On similar note, Kawabata, Mallet, and Jackson (2008) draw an inference that women working in the capacity of software designers expressed more cognitive obstructions and hindrances in solving technical problems and correspondingly fewer creative solutions in comparison to male software designers. Jackson and Eklund (2002) observed that men athletes reported higher prevalence of experiential condition of flow predominantly focusing on present and immediate state of involvement accompanied with sense of concentration and captivation as compared to women athletes. Likewise, Kawabata et al. (2008) declared that young girls enrolled as college students shared fewer experiences of activity based flow in comparison to young boys.

Numerous investigations concluded that male white collar workers elicited enormously more task related hardiness, perseverance, creativeness, and productivity in contrast to corresponding female staff (e.g., Hassan et al., 2013; Lu et al., 2017). Adil and Kamal (2016) further observed that male administrative staff and faculty of the universities are reasonably higher on the facets of occupational enthusiasm, job satisfaction, and psychological ownership. On similar lines, multiple studies observed notable gender differences inferring that men working in corporate sector are advantageous than women in terms of job efficiency (e.g., Pradhan, Jena,

Bhattacharya, & Nisar, 2016), managerial skills (Karatepe & Vatankhah, 2014), and optimistic attributions (Kawabata et al. 2008). However, few studies indicated non significant gender differences in relation to perceptions of leadership styles and innovative work behavior. Likewise, Lorenz et al. (2016) and Rego et al. (2014) also endorsed non significant gender differences on PsyCap and its components. In indigenous perspective, there are certain evidences of gender discrepancies in relation to authentic leadership (Dar, 2014), PsyCap (Adil & Kamal, 2016; Maqsood, 2012), and innovation at work (Saeed, 2015) indicating that male employees with extensive work experience exhibited more agreement regarding authenticity of their leaders, adequate availability of psychological reserves, showcasing their creative talent at workplace. These evidences further strengthen the present findings in the backdrop of cultural perspective and normative similarities.

On the other hand, in present study, non significant gender differences emerged on the construct of WRF among employees of flat organizational structure (SWH). These findings can be sufficiently elucidated through Demerouti and Fullagar's (2013) framework of flow, which states that people usually experience flow in situations where there is equilibrium between the challenging task and their personal skills to combat that challenge, and have autonomy to experiment with their personal skills which is more feasible in organizations with lesser managerial layers. Further studies brought to light the additional role of certain factors that may also affect the experience of flow at work such as acquaintance with work, intricacy of the task, and total practice time (Engeser & Baumann, 2016). Similarly, Rheinberg and Engeser (2017) further asserted that employees (irrespective of their gender) are prone to experience flow when their job requirements are compatible with their professional

expertise. According to person-environment fit model (Cheng, 2014), employees who have an adequate amount of resources in their work (for instance, constructive performance feedback, support from colleagues, supervisory mentoring, essential equipment, and work experience) are likely to enjoy their work and experience WRF (Schüler et al., 2013).

**Type of organizational structure.** Findings of the present study indicated that employees of flat organization (SWH) displayed positively boosted opinion about the authentic practices of their immediate supervisor or boss accompanied with heightened occurrences of PsyCap and WRF along with maximized amount of CWB as compared to bank employees. These results are heavily supported by rich empirical literature available on the effective functioning of flat organizations and specific underlying factors which may enable the flat organizations to perform better. On a global front, these findings can be understood in the backdrop of various historical models of organizational structures (Weber as cited in Hmeleiski et al., 2012; Hofsted as cited in Jyoti & Dev, 2015). The degree to which a company is centralized and formalized, the number of levels in the company hierarchy, and the type of departmentalization the company uses are key elements of a company's structure. These elements of structure affect the degree to which the company is effective and innovative as well as determining employees' attitudes and behaviors at work. These elements come together to create mechanistic and organic structures (Voccaro et al., 2012). Rigid and bureaucratic, mechanistic structures help organizations to achieve efficiency, while organic structures, which are decentralized and flexible, aid organizations in achieving innovativeness.



Additionally, as per Weber's model (as cited in Senior & Swailes, 2010), tall organizations usually follow transactional style of leadership; where the primary focus is often on impersonal relationship between the leader and the employees due to the heavy dependency on the written rules of conduct; moreover, the multi-layered hierarchical structure dictates that the lowest common superior is the one to turn to. Another factor that relates to type of organization is the prevailing communication patterns. Moreover, efficiency of communication decides how the instructions are being passed along the chain of command (Kunze & Menges, 2016), thus defining the speed of daily processes and necessary changes. Communication is seriously hampered in the multiple hierarchical (tall) structures which may affect decision making and creative performance (Bloisi et al., 2007).

On the other hand, horizontal communication mostly prevailing in flat structures, often cut across departments and provides immediate support, coordination, and cooperation more efficiently thereby promoting creative performance of employees (Dust et al., 2014). This type of communication is cross-referred to in environment, peer cooperation, and support subcategories, where people admitted that they receive lots of support and friendly connection from their work peers. This is further elaborated with another element of span of control as increased span of control may also inhibit development, because it is difficult for the senior manager to control so many people. Hu and Liden (2014) explain the concept of span of control as the number of people reporting to one manager. In the flatter organization, span of control consists of a larger number of people (Kappagoda, 2013) and leaders in flat organizations opted for decentralized decision-making with the broader span of control marked their followers to work with greater autonomy,

efficaciously, and optimistically on each level due to the lesser burden on the manager (Vidyarthi et al., 2014).

Likewise, authentic leaders in flatter organizations make use of both top-down and bottom-up decision making means; and ensure there has to be increased transparency around how decisions are made; hence, several tasks are given to people lower down in the organization (Hmieleski et al., 2012). Subsequently, there is more empowerment and freedom given to people and everyone in the company, especially those in lower levels of the firm, needs to know exactly the reasons on which decisions are being made because they are the ones going out into the world and advocating the cause of the company (Kashif et al., 2016; Sohail, 2013). They need to know what is happening in the marketplace and social culture, and how their organization connects to all of this. For this to happen, transparency needs to be something that happens throughout the company (Faisal & Jan, 2015). Moreover, having more transparency in a company also allows people lower down in the organization to understand the business model and think with a strategic mindset (Wang et al., 2013; Younis, 2017).

Studies (Kellerman, 2014; Hao et al., 2012) further found that employees in flat organizations tend to develop the abilities of being confident and efficacious in their skills and intrinsically driven to engage in entrepreneurial efforts. This strategic understanding enables the employees to innovate, create, and move in a rapidly paced environment (Simonton, 2015). Similarly, leaders of flat companies learn to be level-headed when their ideas are challenged by colleagues above or below them, and able to take criticisms and feedback from all angles. This, in turn, enables the employees to develop a sense of influence and participation in decision making; feelings of

ownership, which is critical to morale and growth of employees (Henricks, 2005). In addition to this, flat organizations facilitate their employees to be more innovative and entrepreneurial, by permitting extensive access to resources in different roles and areas around the company.

On a rigorous note, Ancona, Backman, and Bresman (2015) asserted that the need for easy connectivity in an organization is essential for innovation and building collaborative environment that help the workers to achieve creative collisions. Ancona et al. (2015) further added that need to connect and collide with people who have different ways of thinking, and have mechanisms that enable it to happen. Having a flat organizational culture that enables people to move freely from one part of the organization to another and having connectors in the organization who connect the people to one another are all part of creating that kind of organization. More specifically with reference to indigenous Pakistani organizations (which are evolving and competing with emerging markets); there is a need to develop understanding of dynamics of native cultural and normative values which play a pivotal role in the effectiveness of organizations.

**Education.** Results showed that employees of highly educated group working in banks and SWH reflected enhanced perceptions of authentic leadership and increased levels of PsyCap at workplace. However, SWH' employees with higher educational skills reflected augmented experiences of WRF and creativity at workplace; while non significant differences on the same constructs are surfaced among bank employees. Although, there is reasonable scarcity of empirical literature to highlight the educational differences on the parameters of the present study

specifically on authentic leadership and PsyCap, rather this would be the first study to highlight the educational differences on these constructs. However, partial support from the earlier empirical work is available from certain studies, for instance, according to Lu et al. (2017) formal educational skills facilitate personnel to function with greater work efficacy and are capable of imparting knowledge, task related skills, abilities and optimistically view their potentials under varying circumstances. Ghosh (2015) further affirmed that creativity in the workplace starts with creativity in education; as creativity is no longer an elective, rather it is essential as the world of work is changing quickly.

Leader-member exchange model (Breevaart et al., 2015) also offer partial explanation regarding highly educated employees who form the in-group with the leader for professional prosperity. Employees being equipped with educational and professional skills duly understand the alliance with the leader. They are capable of rendering their confidence, hopeful about their alternatives, and look for optimistic causal attributions for failure. According to Csikszentmihalyi (2014), educational academic skills enable the people to have the right platform to experience flow in activities for which they have the professional knowledge and skills. Certain traces of empirical investigations (Kunze & Menges, 2016; Simonton, 2016) concluded the imperative role of initial schooling and higher education in reflecting innovation and creativity at workplace and developing positive perceptions of the leadership. According to Ghosh (2015), the world of work is continuously changing and employees need to bring tech-savvy skills to their workplace in order to communicate through digital and visual media, understand ways in which problems are solved, and understand problems in new ways. Ghosh (2015) further added that higher

educational skills foster creativity which is the catalyst for innovation, and it is critical to economic growth. Therefore, hiring managers is actually seeking highly educated, skilled, and creative candidates that accentuate the importance of creativity in the workplace. Subsequently, both the marketplace and technology are changing their evaluation criteria for candidates and increasing the need for creativity at work.

**Job experience.** Findings of the main study showed that employees of both occupational settings revealed much similar pattern, that is workers with extended job experience reflected positive perceptions of authentic leadership, more PsyCap with heightened creativity at workplace. Conversely, both occupational groups displayed non significant differences on the construct of WRF in relation to varying job experiences. Earlier studies provide substantial and moderate explanation for these patterns of findings; for instance, Chintallo and Mahadeo (2013) affirmed that managers having higher job related knowledge and experience display more skills of task based efficacy, rational ability to take situational decisions, and pioneering pragmatic approach in taking risks to solve problems. Similar findings have been reported in multiple studies (Rheinberg & Engeser, 2017; Salanova, Rodríguez-Sánchez, Schaufeli, & Cifre, 2014) which concluded that WRF is in linear relationship with job related competencies and greater work experience. Furthermore, flow is directly associated with increased motivation to perform well on the demanding and difficult responsibilities assigned to the workers (Nakamura & Csikszentmihalyi, 2009).

Correspondingly, empirical evidences revealed that overall vocational skills associated with longer professional adherence to the specific firm assist in attaining

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Correspondingly, empirical evidences revealed that overall vocational skills associated with longer professional adherence to the specific firm assist in attaining

both personal and occupational benefits such as maximizing technical skills required for the execution of a particular job, task based efficacy, institutional affiliation, and diluting interpersonal disagreements in an effective manner (Cropanzano & Mitchell, 2005). On additional note, Breevaart et al. (2005) asserted that occupational expertise spanned over a longer period of time often resulted in developing sustainable and proficient leader-member relations which further act as a pulling chord to heighten the internally driven forces and widening of creative potential in achieving challenging yet attainable organizational goals. Numerous derivations (Gupta & Singh, 2014; Hassan et al., 2013) highlighted the role of job experience and psychological resource capacities (for instance, trust, hardiness, resilience, and endurance) in eliciting desired work-related outcomes in terms of vocational dedication, productive turnout, and affective commitment. These outcomes are further strengthened by the available quality of leadership and supervision control in terms of supportive organizational culture and procedural justice.

**Job period.** Derivations of the current study revealed that employees rendering their services in SWH for a longer period of time reflected positive perceptions of authenticity among their leaders, greater levels of PsyCap, WRF, and personal experiences of CWB in contrast to the personnel who have joined the current workplace in recent past. On the other hand, bank employees displayed non significant differences in relation to authentic leadership, PsyCap, and WRF along their stay in the present organization; nevertheless, on the parameter of creativity; the pattern is same as those of employees of SWH. Leader-member exchange model (Breevaart et al., 2015) and person-organization fit model (Cheng, 2014) provides

adequate rationalization and underlying assumptions to understand these findings in the context of flat structures. For instance, leader-member exchange model (Breevaart et al., 2015) assumed that leader-follower relations are shaped in due course of time, which in turn, influence several work related attitudes and behaviors. Moreover, temporal span help the employees to grasp the supervisory requisites of their leaders, communication style of their managers, and even, conflict resolving strategies of their supervisors. A thorough understanding of the leader's supervisory approach facilitate the followers to adjust their cognitions, emotions, and behaviors; and those who are successful in adapting themselves form the in-group of their leader are more likely to succeed as employees. Equally, person-organization fit model (Cheng, 2014) further asserted that employees' temporal span in the organization unvaryingly facilitate the management to grasp the personal abilities, attitudes, and adjustment skills of individual employees. On the other hand, employees grab their jobs on the basis of their present skills, knowledge, and abilities; nevertheless, their sustenance in the organization is subject to their ability to get along with management and colleagues. Longer work experience within a certain organization foster employees' understating of the organizational culture, organizational demands, and expectations (which render much informal learning on the part of the employees) thus, encourages a better fit between individual employee and the organization. This fit, subsequently, cultivates enhanced work-related self-efficacy, resilience, and optimal work experience essential for the attainment of organizational goals and professional growth of employees (Karatepe & Vatankhah, 2014).

Further literature offered rational description for non significant differences on job period in the current organization among bank employees, such as, Coelho et al.



(2011) asserted the role of human resource development in terms of potentially sound and pragmatically feasible shared and individual competencies with temporal devotion to present organization or workplace; however, supervisory and leadership practices across managerial layers does influence the shaping of psychological competencies. Similarly, Zhang, Zhu, Dowling, and Bartram (2013) inferred that front line managers rendering their official responsibilities for a longer period of time at their current workplaces are likely to develop efficacious skills, better supervisory support and opt rigorous problem solving procedures while confronting routine official challenges. However, other set of studies (Jyoti, Rani, & Gandotra, 2015) concluded that supervisors of technical staff with longer job period in the existing firm reported discontentment with work, dormant progress, turnover intentions, and minimized skills of problem solving.

**Income groups.** In relation to this parameter, significant results are surfaced only on authentic leadership; whereas non significant differences have been observed on PsyCap, WRF, and CWB across all the income groups of employees working in tall and flat organizations. In the context of Pakistani organizations, this could be reasonable to assume that higher income is usually associated with senior job designations and extended work experience with enhanced skill set. These, in turn, facilitate these employees to have a greater ability to remain realistically hopeful and trustworthy, and to gain confidence of their leaders. The reciprocal relationship between the leader and follower can enhance followers' perseverance and performance by establishing not only their confidence, but also goal accomplishment.

On additional note, non significant findings on the constructs of PsyCap, WRF, and creativity at work in relation to income levels of the employees revealed

consistent pattern across both tall and flat organizations. These results can be finely explained through the lens of Maslow's theory of hierarchical needs (Maslow as cited in Cao et al., 2013) which states that financial status and income sources primarily helped in the fulfillment of basic physical needs such as shelter, food, and other physiological needs of sleep and pain. Whereas it also facilitate in the acquisition of physical and psychological safety; however, additional needs of psychological worth and exploring one's potential is more acquired at advanced levels of esteem needs and self-transcendence needs of learning, thinking, and decision making which may not be solely dependent on the monetary status of the person.

### **Additional Findings**

As sharp and striking differences have been observed on gender; therefore, interaction effect of gender is further separately explored in relation to SWH and banks. Besides, moderated mediating role of job experience and combined effect of gender and organizational structure are also examined.

**Gender as moderator.** Results of the main study indicated gender as a significant moderator in certain paths. Acting on parsimonious grounds, only significant paths are discussed as follows. Findings showed that gender significantly moderated the relationship of PAL in predicting CWB and PsyCap among employees of SWH. Conversely, in relation to bank employees, interaction effect of gender has been found significant only in two direct paths, that is, in predicting CWB and PsyCap from perceived authentic leadership.

Broadly, organization based literature presents relatively sparing evidences about the role of gender in describing relationships among work related constructs; yet, few studies does highlighted the interaction effect of gender. For instance, Brocke and Lippe (2013) observed that gender buffers the relationship between supportive leadership style and work related stress. Moreover, another study (Saeed, 2015) reported significant gender interaction effect on perceptions of authentic leadership with burnout. However, there is scarcity of studies to determine the gender influences on leadership styles. Certain evidences reported that women had less favorable perceptions of authentic leadership and corresponding experience of psychological empowerment (Adil & Kamal, 2016). In relation to creativity at workplace, few recent evidences (Wu, Yao, & Muhammad, 2017; Zhang, Guo, & Mu, 2016) concluded that gender of the employees interacted in the relationship between supervisory control, procedural justice, and innovative work behavior; where women are more likely to be negatively influenced by supervisory control and subsequently expressed low innovation at work as compared to their male counterparts.

Coming to the opposing effect of gender in the present study, it would be more understandable in the backdrop of cultural perspective as organizations are operating within the domain of societal values and norms. Following the Hofstede model (as cited in Hoogh & Den Hartog, 2008) it is convenient to understand that organizational cultures including perceptions regarding leadership practices are shaped by the values of one's society. As patriarchic society, Pakistani organizations (while progressing through evolutionary phase) are predominantly overshadowed by the working standards which are different for the male and female employees; therefore, gender of the employees serves fundamental role in determining work-related outcomes. This

argument gets further support from multiple indigenous studies which bring forth the interaction effect of employee gender in association with supervisory patterns (Mughal & Trimzi, 2015; Saeed, 2015; Shahab, 2014) and predicting various work-related outcomes for instance, turnover intentions (Bashir et al., 2011), work motivation (Shaikh, 2008), and innovative work behavior (Rainke, 2015). Later, few studies also highlighted the moderating role of gender in explaining the relationship of authentic leadership with job stress (Dar, 2014) and work engagement (Adil & Kamal, 2016); thereby, providing reasonable grounds to infer that gender acts a significant moderator in predicting CWB.

**Combined effect of gender and organizational structure.** Results showed quite peculiar pattern in relation to the combined effect of gender and organizational structure. It has been found that overall, employees (both male and female) of SWH (in comparison to banks) and male workers (in comparison to female employees) reflected more encouraging discernment regarding PAL, elevated PsyCap, increased occurrences of WRF, and augmented levels of job creativity as compared to bank employees. A moderate rationalization for these findings can be found in the work of Aryee et al. (2008), who asserted that type of organization play an important role in shaping the work behaviors of the workers; whereby, demographic characteristics of the employees like gender, education, work experience, skill sets, and abilities play either supportive or inhibiting role in the execution of tasks at work within the framework of organizational structure. According to Baumeister et al. (2006), the expression of personal traits and demographical characteristics is, primarily,

contingent upon the contextual factors (such as leadership styles, managerial supervisory behaviors, and conflict resolution approach) of the organization.

Billet (2016) also observed that leaders in SWH are able to enhance self-efficacy and inculcating confidence in their followers by having transparency and objectivity in their communication. They also proactively impart information-sharing and knowledge with employees; thereby, broadening knowledge and acquisition of new skills of their followers. In flat organizational structures, leaders regularly sought opinions and viewpoints from different teams within the organization, which also enhance the efficacious spirit of their followers. Bashir et al. (2011) explained that male employees are more confident in their capabilities when their leader has applied their ideas in the organization. However, Avolio and Walumbwa (2014) stated that the overall self-efficacy of the employees is likely to develop through the self-fulfilling prophecy, as authentic leaders are able to help their followers in internalizing their positive qualities through vicarious modeling which is more noticeable in flat and organic organizations.

#### **Moderating role of job experience in the mediated relationship of PsyCap.**

Findings further showed moderating role of job experience in the mediating relationship of PsyCap dimensions between PAL and CWB. Results indicated that male employees with extended job experience are more inclined to reflect self-efficacy, hope, resilience, and optimism in order to express higher creativity at workplace. However, this model offer partial explanation for the female employees; as moderating role of job experience is identified only on the dimensions of self-efficacy and resilience. Hence, inferring that self-efficacy and resilience of women is

more likely to augment with their extended job experience; thereby making them enabled to reflect more CWB; and this holds true for both employees of SWH and banks. To a great extent, a rational explanation for these findings can be verified in the assertion of Cropanzano and Mitchell (2005) stating that experienced employees are better equipped in developing relations with their leaders and holding positive reflections of work-related outcomes including innovation and creativity at job.

On the other hand, researchers have adopted the social exchange approach (Breevaart et al., 2015) to explain reciprocity of followers' behaviors. Wang and Hsieh (2013) contended that reciprocity, certainly, is an essential component of the supervisor-employee relationships. Mainly, employees are more likely to be committed to their jobs and actively contribute to the organizational improvement who are monitored by authentic leaders. However, the ability to reciprocate is dependent on the temporal tenure that followers render under the supervision of their leaders, which is directly proportional to the work experience (Jyoti & Dev, 2015).

According to Hobfoll (2002) resource theory, employees with extended job experience develops better efficacious skills, career resiliency, and job related well-being; which in turn assist them to exhibit higher levels of job performance. Skilled workers with longer work experiences are more capable of showing work-related problem solving and cognitive skills (Hirst et al., 2009). Moreover, psychological resources such as task related efficacy and optimistic work attitudes are associated in linear direction with the job practice of the employees (Schaufeli & Taris, 2014). Similarly, novelty and uniqueness of ideas to a great extent are expressed by the workers with long term affiliations in a particular organization (Simonton, 2016).

## **Path Models**

At the end, four comprehensive models have been tested to determine the interplay of major constructs along total sample of the study. The first path model revealed fairly similar pattern of functioning of the primary constructs of the current investigation in relation to the collective sample of the study; where, perceived authentic leadership, PsyCap, and WRF significantly predicted CWB. The second model depicted the role of demographical factors (personal and organizational) in regard to prime variables of the current exploration in the context of whole sample from both organizational structures. The purpose of these models is to generate a rigorous framework which is equally applicable for flat and tall organizations. On the contrary, third and fourth model have been generated to test the influence of personal and organizational factors in relation to authentic leadership, PsyCap, WRF, and CWB independently across flat (SWH) and tall (banks) organizational structures.

First inference drawn on the basis of first model recommend predictive role of PAL(with contributing role of its dimensions, that is internalized moral perspective, self awareness, balanced processing, and relational transparency,); PsyCap (with resilience, hope, self efficacy, and optimism as core components); and WRF (and its dimensions of intrinsic work motivation, absorption, and enjoyment) for CWB.

Second inference (on the basis of second, third, and fourth model) can be drawn in terms of the role of demographics including both personal and organizational dynamics that play fundamental role in the functioning of the major variables of the current study specifically in the backdrop of Pakistani organizations.

*Collective sample.* It has been found that second model (for collective sample of employees) highlighted the major role of organizational structure and job experience contributing significantly in developing perceptions of leadership styles and positive psychological states as well as experiencing flow at work that results in creative output. Similarly, second path model also pointed out the relatively lesser contribution of gender, education, and job period in the current organization with respect to prime variables of this exploration.

These findings can be optimally explained through the rational system perspective (Taylor as cited in Worren, 2012) asserting that organizational efficiency is dependent on the particular form of organizational structure that may employ various mechanisms to classify the division of labor (that is dividing the tasks between managers and workers. For instance, tall structures usually focus on rewarding incentives on optimal performance, scientific training of the workers, and completion of task in time. However, this framework does not cater the individual skill set of the employees and motivational drive to accomplish their work-related goals.

On the other hand, horizontal (flat) organizations are characterized by flexible work formats and offer greater liberty to the workers to express and play with their skills in order to get the job done (Hupp, Polak, C., & Westgaard, 2016). Here, the focus is on variation of actions rather mundane procedures for the completion of task. Therefore, organizational structure and design play pivotal role in shaping the leader's behavior with corresponding influence on the psychological states of the employees and experiencing internal drive for greater output.



Job experience also emerged as significant contributing factor in the context of collective sample of employees. Undoubtedly, this is the sole criterion which is equally cherished by the tall and flat organizations. Work experience is in true sense is a reflection of employees' expertise encompassing not only technical knowledge and skills but also interpersonal competencies of the employees which are crucial in the display of leader-member relations, using psychological resources, urging internal drive and showing creativity at work (Hughes & Beatty, 2015). In the context of Pakistani perspective, the significant contribution of organizational structure and job experience in the collective sample of employees is equally meaningful. Most of the organizations operating in business sector of Pakistan have their own rational systems of operation which, in turn, determined the prevailing leadership styles, conflict resolution strategies, manifesting psychological resources, and reflecting work behaviors. Conversely, job experience of the employees always gives them a competitive edge for initially procuring the jobs and subsequent professional growth and advancement. In addition, work experience is also considered as a reflection of degree of refinement of one's knowledge and expertise essential for the execution of tasks. Therefore, this parameter supports the employees to determine their pursuance of career in specific field of expertise.

***Flat organizational structure.*** Third model specified the role of personal and organizational factors in case of flat organizational structure (for employees of SWH) by pointing out the maximum contribution of job period in the current organization and education in explaining enhanced perceptions of authentic leadership and augmented experiences of PsyCap, flow at work, and CWB. Within the context of flat organization, significant contributing role of job period in the current organization can

be reasonably explained through contingency model of organizational design (Donaldson as cited in Nadler, Tushman, & Nadler, 2017) which asserted that there is no universal or one best way to manage an organization. In addition, the organizational design and its subsystem must coordinate with the environment. Longer duration in a particular work environment helped the employees to grasp the subsystems of functioning in the organization and subsequently, easily penetrate through minimal layers of management to have maximum prospects of advancement and excellence (Hughes & Beatty, 2015). Moreover, employees with more experience at the same workplace facilitate in imparting their educational and professional skills at the maximum to prove their fit with the environment and also between its subsystems of the organization. On the same lines, educational competencies of the employees in flat organization are more likely to be visible and apparent to the higher level of management. Majorly, employees in flat organization are rendering their services in parallel to each other, hence, their relative competencies are relatively more noticeable in relation to their contemporary competitors (Sinclair, 2016). This not only provides an edge for discerning their talent and proficiency for themselves, but also for the people who are evaluating their performance at workplace. In the backdrop of Pakistani perspective, SWH (as flat organization) primarily adopt team format for the execution of tasks and projects. Extensive stay of the employees in an organization is uniformly beneficial for the workers and management, that is, both evolve and acquire the understanding of pragmatic requisites for managerial control and execution of tasks.

*Tall organizational structure.* In contrast, fourth model identify the significant role of gender and job experience in the context of tall organizational

structure (bank employees) that play an important role in shaping perceptions of authenticity about the leaders, developing PsyCap, and experiencing flow at workplace with creative output. A plausible explanation for these findings can be traced in the work of several researchers (Arefin et al., 2015; Aryee et al., 2008; Baligh, 2006; Coelho, et al., 2011; Jensen et al., 2013; Jyoti & Dev, 2017) declaring that gender differences are more visible in multilayered organizational design where women have to compete and face unpleasant obstacles such as glass ceiling and discrimination in terms of progress and promotion. On the other hand, male employees are able to avail better opportunities of stepping forward and acquiring executive positions in vertical (tall) organizations.

These findings can also be plausibly explained from the indigenous perspective. As in tall organizations there are multiple managerial layers where organizational politics and communication is strongly affected in the various levels of management. Gender of the employees greatly determines the work behaviors and reciprocal attitudes that they receive is contingent upon the leader's selective behavior towards both genders (Kashif et al., 2016; Khan et al., 2015). In Pakistan, women are making their presence felt in various bureaucratic structures and filtering through the various layers of management but still their ultimate destination is a far cry as women representation in the top level executive management is next to none (Saeed, 2015). From indigenous perspective, job experience would be an additional asset that facilitates the employees to derive through their pathways of the organizational ladder and subsequent progress.

However, a major highlight is the similar trend that has been unanimously identified in second, third, and fourth model revealing minimum role of income with

respect to the primary variables of the existing study. This unified pattern of findings can be reasonably explained through motivation-hygiene theory (Herzber as cited in Hupp et al., 2016) describing factors of motivation which may serve as an initial drive for joining the job but may not be helpful eventually in sustaining the employees in the longer run. Undoubtedly, monetary aspect is one of the primary motive that employees do consider while opting for becoming a part of certain organization (tall or flat); however, their adherence to their workplace is contingent upon many other factors. These may be inclusive of leadership styles, supervisory control, autonomy in the expression of personal strengths and abilities as well provisions of development in terms of personal professional escalation. Today, employees look for best places to work where they have more opportunity to grow and expand their skills and worth.

This finding also provide basis for the third inference that these model offers optimum explanation specifically for Pakistani banks and SWH which have been taken as case examples of tall and flat organizations; respectively. Although, previous analysis highlighted certain differences in the working of these organizations on the parameters of leadership, positive states, and flow at work as well as employee creativity; however, similarities in the operations of banks and SWH can provide more productive and fertile grounds to develop organizational interventions.

### **Limitations and Suggestions**

Although major findings of the present study are based on the empirical derivations; however, there are few potential weaknesses, which would offer caution in interpreting the findings of the study.

Firstly, the current empirical investigation has employed a cross-sectional design; which inherently do not offer causal relations among the variables. Therefore, it is difficult to determine the causalities with respect to the key variables of this existing venture. On the other hand, longitudinal design would provide better explanation regarding the sustaining pattern of relationships among variables. Moreover, experimental studies (specifically in pertinence to flow and PsyCap) would offer pragmatic evidences about casual relationships.

Secondly, present study primarily relied on the quantitative exploration of the major variables of the study; thereby, offering limited variability in the response patterns. More specifically, the experience of flow would be tapped through various mechanisms of information collection; such as in-depth interviews through which stages of flow can also be explored.

Thirdly, though numerous strategies of eradicating the impact of common method variance have been used in the present endeavor; nevertheless, it may not be completely free of common method bias. In fact, a better solution is to have cross ratings, for instance, authentic leadership would be rated by both followers and leaders themselves. In the same way, dual responses would be acquired on CWB from the supervisors as well as the employees.

Fourth, in the present study, respondents were included from two types of work settings (banks and SWH) only representing tall and flat organizations; respectively. The inclusion of only two occupations may limit the generalizability of the present findings. Therefore, it would be more appropriate to include multiple occupational settings under each of the organizational structure so as to offer in-depth understanding of the constructs.

Fifth, the present research has not focused on determining under what conditions creative ideas are more likely to be recognized and valued, and when they are overlooked or ignored. For example, creativity's success has been proposed to depend on the capabilities, pressures, resources, and socio-technical system in which employees work (e.g., Engeser & Baumann, 2016; Rheinberg & Engeser, 2017). Moreover, expanding the range of personal and contextual variables examined that might affect the incidence of creativity at work would be beneficial for a better understanding of the antecedents of creativity.

Finally, in this empirical investigation, authentic leadership is considered as predictor variable; whereas Avolio and Walumbwa (2014) declared that leadership style and leadership practices are reciprocally contingent upon contextual and organizational factors and processes in which leaders arise, function, and are shaped. Therefore, it would be more appropriate to include the organizational antecedents of authentic leadership to expand the spectrum of the phenomena.

### **Recommendations for Future Investigations**

On the basis of major inferences drawn from the present study, certain considerations are recommended for future research pursuits.

Firstly, leadership is mostly examined as an overall construct; however, it would be more meaningful if the role of substantive components of authentic leadership could be thoroughly investigated which play a pivotal role in shaping work-related attitudes (e.g., organizational commitment, job satisfaction, emotional labour) and behaviors (turnover, job performance, organizational citizenship

behavior) of followers. On similar lines, WRF which is considered as a global construct in this study should be inspected by its individual components in futuristic empirical explorations.

Secondly, interactions of job demands-resources, leader-member associations, and organizational justice procedures must be included in the conceptual models opted in the present study in order to investigate the role of job characteristics and organizational management practices in enhancing creativity at workplace.

Thirdly, it would be more informative to explore the interplay of psychological resources and personal attributes in determining work-related outcomes. For example, Schaufeli and Taris (2014) suggested that personal vulnerability factors (e.g., pessimism) should also be incorporated to enlarge the model, so that more complex organizational mechanisms can be explained through the psychological properties of the working individuals.

Fourth, in the present study, PAL is treated as the antecedent of various job outcomes and behaviors. However, the construct of leadership does not exist in a vacuum as it does get influenced by the personal attributes (e.g., personality traits and dispositions), acquired interpersonal skills (e.g., communication expertise and problem solving proficiency), as well as organizational factors (e.g., enterprising support, job autonomy, and procedural justice). Therefore, future pursuits can investigate the interplay of all these factors which possibly shape the authenticity of the leaders. Likewise, exploring the role of organizational factors such as appreciative inquiry and organizational virtuousness would be helpful in grasping the source of authentic leadership practices in a given job context. In addition, with reference to Pakistani perspective, parallel models of identification of leaders are also practiced

(for instance, leaders who are either selected from within the organization as part of recommended procedures or appointed from outside the organization with relevant technical expertise). Therefore, future explorations need to customize the definition of authenticity with reference to process of identification of leaders either through selection or appointment.

Fifth, in lieu to the previous point, it is worth mentioning that in Pakistan organizations are broadly classified in public versus private sectors which, in turn, majorly influence the overall functioning of the organizations. Hence, it is imperative to explore the underpinnings of the study constructs in organizations (banks and SWH) operating in public and private sector and organization-wise probing would be more relevant in the context of indigenous perspective. Likewise, behavioral expressions of morality and ethical principles are firmly grounded in one's cultural and normative structures. Consequently, it would be more meaningful if future studies would encompass the social and cultural context in focusing on the native reflections of authenticity.

Finally, future studies would focus on the downside of the WRF, specifically, in the context of health related outcomes. It is duly understandable that people experiencing the state of absorption (frequently immersing in one's work) for longer durations of time may suffer serious health repercussions (e.g., stationary postures can cause strain injuries). In addition, being absorbed in work for extended time period may abstain the workers from spending quality time with their family and friends; which may result in disturbed social relationships. Therefore, it is essential to identify the adverse effects of WRF on physical health and interpersonal relationships.



## Implications

As the present study has tested extensively the role of various personal and organizational factors in the impact of PAL on the work-related behaviors; therefore, there are certain possible implications of our empirical findings. Numerous probable implications are further bifurcated and identified at two levels; that is in the domain of existing theoretical models as well as in managerial practices operating in both tall and flat organizations.

**Theoretical contributions.** The present study attempted to reflect on the call of Seligman (2000) emphasizing the need for redirecting psychological research toward psychology's two most important missions of helping healthy people: to become happier and more productive. The present study contributed in developing understanding of actualizing human potential that resulted in theory building and empirical research, known as positive PsyCap psychology.

Moreover, the present study specifically highlights the importance of psychological capacities that function as WRF and PsyCap in enhancing positive outcomes (such as creativity) at workplace. These psychological capacities generally been ignored in human and social capital, and especially the developmental aspect of these powerful capacities of *what you are becoming*. Moreover, these psychological resources recognize moving (developing) from the actual self (human, social, and PsyCap) to the possible self. The positive interplay of PsyCap and WRF (as highlighted in the current study) provide basis for the identification of vast array of specific knowledge, skills, technical abilities, and experience that would make the employees and organizations to prosper at the same time.

The present study's results have important implications for theory building. As indicated, authentic leadership and PsyCap has been previously empirically demonstrated to relate to desired employee attitudes (e.g., job satisfaction, organizational commitment, job related well-being) and behaviors (e.g., organizational citizenship, turnover as well as multiple measures of performance). However, the relationship between authentic leadership and PsyCap with additional psychological resources (such as WRF) and complex processes (such as CWB) has to date not been investigated in comparative relation to tall and flat structures. Therefore, empirical derivations of the present study would fill this void and present an enhanced and broader understanding of the existing theoretical model of authentic leadership.

Another major scholastic input that has been made by the current attempt is the comparative functioning of authentic leadership and creative output mediated by psychological resources (PsyCap and WRF) in different organizational structures (tall and flat). This vital information draws attention to the imperative importance of organizational design that needs to be incorporated in the existing framework of authentic leadership and its effect on work-related behaviors. Moreover, it also emphasize the need to understand that similar constructs may function varyingly in the diverse organizational systems and there is dire need to develop different models corresponding to each type of organizational design.

**Practical implications.** Findings of the present study also offer pragmatic insinuations in relation to leadership styles, psychological resources of employees, and enjoying the work content. These inferences are more pertinent to HR

practitioners who are directly involved in the process of selection and placement as well as job design.

Firstly, selecting leaders who possess the capabilities of authenticity, morality, and fairness would be of great significance for the middle management to function effectively and enhance efficiency of the organizations. In addition, on the job training workshops can be executed to enhance the authenticity in leaders as a learned characteristic.

Secondly, HR can design intervention modules to maximize the acquisition of states of PsyCap (which in itself are developable and acquired). Acquisition of psychological resources by the employees would bear a ripple or spill over effect in terms that these would be an effective buffer against negative job-related stressors, demands, and experiences (such as extensive working hours and meeting deadlines). In this regard, interventions or trainings are recommended to be conducted for employees to foster resilience, optimism, hope, and self-efficacy and overall PsyCap in them.

Thirdly, the empirical results of the current study emphasized the importance of experiencing flow in the workplace. Flow is not only valuable to employees at the personal capacity, but also effective in acquiring organizational goals. For example, recurrent experiential WRF would pave the way to better novel productivity and affective development of the personnel. The derivations of the current study would facilitate in the identification of occupational activities that need to be nurtured and cultivated in job domains so as to give support to employees in experiencing job related flow. Therefore, future empirical explorations may focus on devising

techniques of escalating the frequency of WRF, hence, maximizing positive emotions of happiness and enjoyment in occupational settings.

Fourth inference that can be drawn from the findings of present study is in terms of role of contextual influences that boost the creativity of the employees. The emphasis on individual differences suggests that some employees may be predisposed to creative behaviors than others. Unfortunately, not all organizations have the prospect of recruiting and selecting individuals solely according to a set of desirable characteristics. Furthermore, CWB is vital not only to individuals, but for a number of jobs and industries. The present study of authentic leadership offers a focal consideration which is equally applicable in diverse work contexts. The behavioral manifestation of authentic practices of immediate boss or leader primarily bears direct influence on the work attitudes of the subordinates. It is, hence, imperative to inculcate the skills of authentic leadership through distribution of work and job design across multiple layers of administration. Subsequently, this would promote active and useful employee engagement in terms of rigorous technical decision-making skills, both in context of solving tough problems and employing accessible understanding or devising fresh resolutions to the existing problems. It also carries an additional advantage for the senior managers (as leaders) in minimizing their load of taking decisions and suggesting solutions to the problems faced by their subordinates. Human resource practitioners would focus in designing jobs which are deeply connected with the personal and cultural values of the employees. This would help in generating inspirational reasons to prepare the workers for greater responsibilities, enriched with feelings of ownership and willingness for professional growth.

General abstractions based on present findings led to the inference that WRF affect employee creativity and may also influence higher order cognitive functioning. This stream of work; hence paved the way for HR managers to incorporate this model in job design and structure the task specifications in a manner so as to foster related skills of brainstorming, problem solving, and evaluation and at a more stable level such as role clarity, influence, and cognitive demands. In addition to that, HR managers may design and implement training modules to enhance flow at work which is effective for activities such as planning, designing, and executing software development as well as introducing innovative marketing strategies.

Although major contributions of the present study are embedded in global models; nonetheless, these models can be further shaped and transformed in accordance to our own socio-political scenarios. Therefore, managers operating at executive and middle level management may need to develop strategies to exercise creative management practices by incorporating the cultural, social, and religious uniqueness of our culture. These supervisory deeds residing in their own normative behaviors may function supportively and empathetically for the followers to optimally function both at individual and organizational levels.

In the end, it is concluded on a promising note that contemporary scholarly and academic input would play an additive role in the existing managerial knowledge and working of Pakistani organizations so they would flourish to meet the pressing needs of the ever-changing local and global scenarios. Moreover, it's a high time to focus and explore the new face of leadership models which have already started to prevail in our very own organizational settings; thereby assisting the business,

financial, and corporate sector to compete and shine on the horizon of emerging markets.

As the primary premises of the present study is to determine the influence of PAL on work related behaviors in terms of organizational structures. Therefore, three types of path models are likely to be tested each designed for exclusive organizational structure (tall versus flat) as well as combined model to highlight the basic paradigm of the study. These models would serve the following three functions for future studies: Firstly, by providing rigorous understanding about the convincing role of job related demographics in relation to study variables. This may lead the potential researchers to focus on the basic characteristics of the employees while considering their behaviors in a particular organizational structure in Pakistan. Secondly, these models would endorse the similarities as well as differences of various organizational settings in Pakistan. Hence, offering substantial grounds for further exploration in the coming times to develop broader theoretical models which are equally applicable for diverse work setups in the emerging Pakistani business enterprises. Thirdly, model testing would offer empirical grounds to test newer hypotheses generated purely in the context of specific organizational structure thereby rendering better consideration about the variance caused by the organization related constructs in Pakistan.

### **Scholarly Contributions of the Present Study**

Recapitulating the major academic contributions of the present study following are the scholarly highlights of the present endeavor:

1. Findings of the present study provide pragmatic support for the parallel mediating role of WRF and PsyCap with its dimensions across in the context of tall and flat organizational structures of Pakistan.
2. Foremost and initial effort to determine the imperative importance of organizational design and structure in Pakistani perspective. Empirical findings presented the significant role of organizational structures in shaping perceptions of authentic leadership, expressing psychological states of self-efficacy, resilience, hope, and optimism. It also plays an important role in experiencing flow at work and expressing creativity at work.
3. First ever effort in Pakistan to highlight the significance of job content serving as intrinsic source of inspiration, motivation, happiness, and enjoyment to enhance desirable work behaviors of the employees.
4. SWH as a case example of flat organization has been focused for the first time in Pakistani context.
5. Findings of the present study provide empirical derivations for the notable role of organizational and personal strengths and resources in terms of PsyCap of the employees. These psychological strengths have the inherent virtue of being developed and cultivated in employees through genuine and efficient leadership practices.
6. Findings of the present study pointed out the effectiveness of emerging models of authentic leadership (serving as role models and taking responsibility) for the employees of front line management.
7. Results of this study signify the differential models which holds valid specifically for either flat or tall organizations, but also identify models which

is equally applicable to both types of organizational structures. It also ascertain the vital role of organizational structure, job experience, gender, and job period in the current organization in shaping perceptions of leadership, positive states, and creativity at workplace.

8. Employees rendering their services at first level and front line management are primarily focused in the present study. Hence, offering scientific support on the essential role of white collar employees in enhancing organizational performance.

## **Conclusion**

Descriptive and psychometric estimates of the major protocols of the present study revealed that all the measures are internally consistent and dependable tolls of the related constructs of the study. Results showed that authentic leadership, PsyCap, and WRF along with their individual dimensions are significant predictors of CWB among employees of banks and SWH. Mediating role of PsyCap and WRF in the direct effect between authentic leadership and CWB has been established in the context of both organizational structures.

Findings further depicted moderating role of organizational structure along all direct paths of the study constructs. Subsequently, demographic differences on personal and organizational factors highlighted significant variations across gender, education, organizational structure, overall job experience, job period in the current organization, and income groups of the employees working in flat and tall organizations. Moderating role of gender has also been found to function varyingly in



the context of both organizational structures. On the other hand, moderated mediating role of job experience revealed significant effect in relation to self-efficacy, hope, resilience, and optimism (dimensions of PsyCap) in predicting CWB.

In the end, path analysis is performed to determine the interplay of major variables of the study and the role of demographics in relation to the total sample and split samples of tall and flat organizational structures. Findings derived from path analysis signify the role of diverse personal and organizational variables with respect to primary constructs of the current empirical investigation.

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**Annexure A****List of Software Houses and Banks For Focus Groups****Micro Advantage ( IT Solutions ) Company**

Suite No.27, Wali Centre, 86 South, AKM Fazal-e-Haq Road, Blue Area, Islamabad,  
Pakistan

**Ovex Technologies**

Ground Floor, Evacuee Trust Complex, F-5/1, Sir Agha Khan Road, Islamabad.

**Informatics Systems & Solutions**

Office 3 & 4, 3rd Floor, Ahmad Center, I-8 Markaz, Islamabad

**DEFCON (Pvt) Ltd.**

Office No.2, Block No.21, Street # 39, I & T Centre, G-10/4, Islamabad

**ZAUSS Software House & Technologies (Pvt) Ltd.**

House No 398, Street No 167, Sector G-11/1, Islamabad

**Fides Technologies (Pvt) Ltd.**

Office# 1-B, Aneeq Plaza, I-8 Markaz, Islamabad

**Bank Alfalah (Pvt.) Ltd.**

Jinnah Avenue, Blue Area, Islamabad

**Faysal Bank (Pvt.) Ltd.**

Bhittai Road, F-7/2, Islamabad

**Standard and Chartered Bank (Pvt.) Ltd.**

Bestway, Bhittai Road, F-7 Markaz, Islamabad

**Al-Habib Bank (Pvt.) Ltd.**

Shaheed-e-Milat Road, Aabpara Chowk, Islamabad

**Summit Bank (Pvt.) Ltd.**

Jinnah Avenue, Blue Area, Islamabad

**Samba Bank (Pvt.) Ltd.**

Khayal Plaza, Jinnah Avenue, Blue Area, Islamabad

**Annexure B****Focus Group Guidelines**

Focus group discussion was conducted to explore the indigenous understanding of the major constructs of the study.

**Consent Process**

The information provided by you is completely confidential and will not identify your personal identity with your views expressed in the focus group

We would like to record the focus group content to ensure precision in capturing the thoughts, opinions, and ideas that we hear from the group. However, no names will be attached to the focus groups and notes will be discarded as soon as the data is transcribed. You may refuse to answer any question or withdraw from the discussion at any time. We will ask participants to respect each other's confidentiality.

If you have any query, please feel convenient to contact through email: [aishazubair@nip.edu.pk](mailto:aishazubair@nip.edu.pk); or may call at +92-51-9064-4052; or send fax at: +92-51-2896013.

Please indicate your consent with your signatures in the given space below:

.....

Signatures of the Participant



### **Primary Rules**

Before initiating the discussion, following primary rules of group discussion were shared with the participants.

- a) Several questions will be asked. We do not have to go in a particular order but we do want everyone to take part in the discussion. We would request only one person to speak at a time.
- b) Feel free to treat this as a discussion and respond to what other are saying whether you agree or disagree. We are interested in your opinions and whatever you have to say is fine with us. There is no right or wrong answers. We are just asking for your opinions based on your personal experiences. We are here to learn from you.
- c) Do not worry about having a different opinion than someone else. However, please do respect each other's answers and opinions.
- d) If there is any particular question that you do not wish to answer, please you do not have to.
- e) We will treat your answers as confidential. We are not going to ask for anything that could identify you and we are only going to use your first names during the discussion. We also ask you to respect each other's privacy of everyone and do not share or repeat what is said here in any way that could identify anyone in this room.
- f) Finally this discussion may take about two hours and we will greatly appreciate if you could stay for the entire time.
- g) If anyone has any question or like to share a comment will be greatly welcomed.

### **Introduction**

Participants were introduced with each other by sharing their names, designations, and organizations in which they are presently working with overall job experience.

## Group Discussion

**Perceived authentic leadership.** The concept of perceived authentic leadership was shared with the participants as follows. Authentic leadership in organizations is a process that draws from both positive psychological capacities and a highly developed organizational context, which results in both greater self-awareness and self-regulated positive behaviors on the part of leaders and associates, fostering positive self-development. The authentic leader is confident, hopeful, optimistic, resilient, transparent, moral/ethical future-oriented, and gives priority to developing associates into leaders themselves. The authentic leader does not try to coerce or even rationally persuade associates, but rather the leader's authentic values, beliefs, and behaviors serve to model the development of associates.

Probe 1. How would you describe an authentic and genuine person?

Probe 2. What specific behaviors would you identify in an honest and genuine / executive officer / chair person / project manager?

Probe 3. How these behaviors lead you and your colleagues to positive self development?

Probe 4. If you were to perceive that your leader is committed to highest standards of moral values, what qualities or behaviors you are likely to identify in his or her conduct with the followers?

a) How these behaviors create a just, fair, and supportive work environment?

b) How can these qualities of your leader foster hope, efficacy, optimism, and resilience and other positive attributes in you and your colleagues?

**Work-related flow.** The concept of work related flow was shared with the participants as follows. When flow is applied to the work situation, it can be defined as a short-term peak experience at work that is characterized by absorption, work enjoyment and intrinsic work motivation. Absorption refers to a state of total

concentration, whereby employees are totally immersed in their work and time passes quickly, and they forget everything around them. Employees who enjoy their work and feel happy make positive judgments about the quality of their working life. This enjoyment or happiness is the outcome of cognitive and affective evaluations of the flow experience. Intrinsic motivation refers to performing a certain work-related activity with the aim of experiencing the inherent pleasure and satisfaction in the activity

Probe 1. Which features of your work gets you immersed in it?

Probe 2. Have you experience the *Zone* or *hack mode*, when working in an undistracted state?

Probe 3. Have you ever gone through some tasks during which time flees and you were so absorbed in it that you could hardly notice how much time has passed by?

- a) How did you feel about that task?
- b) Why could you not notice how much time was elapsed?
- c) When you have strong interest in some task, how would you pursue that?

**Psychological capital.** The concept of psychological capital was shared with the participants as follows. Psychological capital is defined as being made up of the positive organizational behavior criteria meeting capacities of self-efficacy, optimism, hope, and resiliency. However, psychological capital goes beyond just the categories of these capacities as it is a higher order core construct that integrates the various positive organizational behavior criteria-meeting capacities, not only additively but also perhaps, synergistically. Thus, the resulting impact of investing in, developing, and managing overall psychological capital on performance and attitudinal outcomes is expected to be larger than the individual, positive psychological capacities that comprise it. In other words, the whole psychological capital may be greater than the sum of its parts that is self-efficacy, optimism, hope, and resilience.

Probe 1. Do you think that self efficacy, hope, resilience, and optimism meet the inclusion criteria of psychological capital?

Probe 2. What other attributes meeting the inclusion criteria can be included in psychological capital?

Probe 3. What are your own experiences of occurrences of positive psychological states at work?

Probe 4. How does bank or software company can develop this in their staff?

Probe 5. How these attributes help in achieving work related behaviors?

**Creative work behavior.** The concept of creative work behavior was shared with the participants as follows. Creative behaviors in organizations has been described as the process of coming up with fresh ideas for changing products, services, and processes so as to better achieve the organization's goals. Creative performance involves the behaviours through which one's creative potential is manifest. When employees exhibit creativity at work, they produce novel, potentially useful ideas about organizational products, practices, services or procedures. The presence of these creative ideas increases the likelihood that other employees will apply the ideas in their own work, further develop the ideas, and then transfer them to other individuals in the organization for their own use and development.

Probe 1. What are the general indicators of creative work behavior?

Probe 2. What particular incidences through which you have reflected your creative potential at workplace?

Probe 3. What are the general factors that may lead to employee's creativity at workplace?

Probe 4. How does your management acknowledge creative work behaviors?

Probe 5. What are the particular scenarios under which you were able to reflect creative work behaviors?

At the end, comments and reviews of the participants were discussed. Finally vote of thanks was presented by the moderator.

**Annexure C****Letter of Thanks**

Dear Participant,

On behalf of National Institute of Psychology, Quaid-i-Azam University, we extend our gratitude to you and your organization for the support and active participation provided to make this research activity an incredible success. We, especially, wanted to thank you for being a participant and intellectual contributor in the focus group discussions. We also appreciate your cooperation before and during the discussion.

In particular, we are grateful to your management for sparing you from the official work to facilitate your presence and coordination with other group members.

We eagerly look forward to your organization's ongoing support of our future research endeavors and activities.

Thank you!

Best regards

Prof. Dr. Anila Kamal  
Director  
National Institute of Psychology,  
Quaid-i-Azam University, Islamabad  
Islamabad

Aisha Zubair  
Ph.D Scholar  
National Institute of Psychology,  
Quaid-i-Azam University,

## Annexure D

## Authentic Leadership Questionnaire

Instructions: The following survey items refer to your leader's (boss / supervisor) style, as you perceive it. Judge how frequently each statement fits his or her leadership style using the following scale.

Sr. No.	My Immediate Boss / Senior Manager:	Not at All 1	Once in a While 2	Sometimes 3	Frequently 4	Always 5
1	Says exactly what he or she means.					
2	Admits mistakes publicly when they are made.					
3	Encourages everyone to speak their mind.					
4	Tells me the hard truth.					
5	Displays emotions exactly in line with feelings.					
6	Demonstrates beliefs that are consistent with actions.					
7	Makes decisions based on his or her core (central/ fundamental) values.					
8	Asks me to take positions that support my core (central/ fundamental) values.					
9	Makes difficult decisions based on high standards of ethical conduct.					
10	Solicits (asks for) views that challenge his or her deeply held positions.					
11	Analyzes relevant data before coming to a decision.					
12	Listens carefully to different points of view before coming to conclusions.					
13	Seeks feedback to improve interactions with others.					
14	Accurately describes how others view his or her capabilities.					
15	Knows when it is time to reevaluate his or her positions on important issues.					
16	Shows he or she understands how specific actions impact others.					

## Annexure E

## Work-Related Flow Scale

The following statements refer to the way in which you experienced your work during the last two weeks. Please indicate how often you experienced each of the statements.

**Never = 1; Almost Never = 2; Sometimes = 3; Regularly = 4; Often = 5;  
Very Often = 6; Always = 7**

S #	Statements	1	2	3	4	5	6	7
1	When I am working, I think about nothing else.							
2	I get carried away by my work.							
3	When I am working, I forget everything else around me.							
4	I am totally immersed (absorbed) in my work.							
5	My work gives me a good feeling.							
6	I do my work with a lot of enjoyment.							
7	I feel happy during my work.							
8	I feel cheerful (joyful, pleasant) when I am working.							
9	I would still do this work, even if I received less pay.							
10	I find that I also want to work in my free time.							
11	I work because I enjoy it.							
12	When I am working on something, I am doing it for myself.							
13	I get my motivation from the work itself, and not from the reward for it.							

## Annexure F

### Psychological Capital Questionnaire

Below are statements that describe how you may think about yourself right now. Please circle one number for each statement that best reflects your opinion about yourself. Use the following scale to indicate your level of agreement or disagreement with each statement.

**SD = Strongly Disagree; D = Disagree; MD = Mildly Disagree; MA = Mildly Agree; A = Agree; SA = Strongly Agree**

Sr. No.	Statements	SD	D	MD	MA	A	SA
1	I feel confident analyzing a long-term problem to find a solution.						
2	I feel confident in representing my work area in meetings with management.						
3	I feel confident contributing to discussions about the organization's strategy.						
4	I feel confident helping to set targets/goals in my work area.						
5	I feel confident contacting people outside the organizations (e.g., customers, clients) to discuss problems.						
6	I feel confident presenting information to a group of colleagues.						
7	If I should find myself in a jam (Stuck / blocked) at work, I could think of many ways to get out of it.						
8	At the present time, I am energetically pursuing my work goals.						
9	There are lots of ways around any problem.						
10	Right now I see myself as being pretty successful at work.						



11	I can think of many ways to reach my current work goals.						
12	At this time, I am attaining the work goals that I have set for myself.						
13	After facing a failure in the work setting, it is difficult for me to overcome it and continue my work.						
14	I usually manage difficulties one way or another at work.						
15	If required so, I can do my work on my own.						
16	I usually handle stressful thing at work without getting upset.						
17	I can get through difficult times at work because I've experienced difficulty before.						
18	I feel I can handle many things at a time at this job.						
19	When things are uncertain for me at work, I usually expect the best.						
20	I cannot manage if something related to my work goes wrong.						
21	I always look on the bright side of things regarding my job.						
22	I'm optimistic about what will happen to me in the future as it pertains to work.						
23	In this job, things never turn out according to my expectations.						
24	I approach this job with a ray of hope in my mind.						

### Creativity Scale

The following statements reflect your perceptions about your work. Please carefully read each statement and endorse your opinion along the given continuum of response options. Please note that there are no right or wrong answers, therefore, kindly indicate your opinion as genuinely as possible.

S #	At my workplace, I am able to .....	Never	Rarely	Sometimes	Frequently	Always
1	Suggest new ways to achieve goals or objectives.					
2	Comes up with new and practical ideas to improve performance.					
3	Searched out new technologies, processes, techniques, and /or product ideas.					
4	Suggests new ways to increase quality.					
5	Be a good source of creative ideas.					
6	Be not afraid to take risks.					
7	Exhibits creativity on the job when given the opportunity to.					
8	Promotes and champions (support) ideas of others.					
9	Develops adequate plans and schedules for the implementation of new ideas.					
10	Often have new and innovative ideas.					
11	Come up with creative solutions to problems (e.g., developing programs, administrative decisions)					
12	Often have a fresh approach to problems.					
13	Suggest new ways of performing work tasks.					

## Annexure H

## Social Desirability Scale

Below you will find a list of statements. Please read each statement carefully and decide if that statement describes you or not. If it describes you, check the word "true"; if not, check the word "false".

S #	Statements	True	False
1.	I sometimes litter (carelessly scatter trash / debris, throw garbage).		
2.	I always admit my mistakes openly and face the possible negative consequences.		
3.	In traffic I am always polite and considerate of others.		
4.	I always accept others' opinions, even when they don't agree with my own.		
5.	I take out my bad moods on others now and then.		
6.	There has been an occasion when I took advantage of someone else.		
7.	In conversations I always listen attentively and let others finish their sentences.		
8.	I never hesitate to help someone in case of emergency.		
9.	When I have made a promise, I keep it (no ifs, and / or buts).		
10.	I occasionally speak badly of others behind their back.		

11.	I would never live off (financially dependent on) other people.		
12.	I always stay friendly and courteous with other people, even when I am stressed out.		
13.	During arguments I always stay objective and matter-of-fact (straight forward).		
14.	There has been at least one occasion when I failed to return an item that I borrowed.		
15.	I always eat a healthy diet.		
16.	Sometimes I only help because I expect something in return.		

## Annexure I

## Demographic Sheet

<b>Age (years)</b>			
<b>Gender</b>	<input type="checkbox"/> Male	<input type="checkbox"/> Female	
<b>Education</b>	<input type="checkbox"/> BS/MBA/M.Sc/MA/MCS	<input type="checkbox"/> MS/M.Phil	<input type="checkbox"/> Ph.D <input type="checkbox"/> Other
<b>Marital status</b>	<input type="checkbox"/> Single	<input type="checkbox"/> Married	<input type="checkbox"/> Others
<b>Total Work Timings</b>	(Hours Per Day):		
<b>Organization</b>	<input type="checkbox"/> Banks	<input type="checkbox"/> Software House	
<b>Type of Organization</b>	<input type="checkbox"/> Public	<input type="checkbox"/> Private	
<b>Organization Size</b>	(No. of employees in the present office)		
<b>Job Designation</b>	<b>Banks:</b>		<b>Software House:</b>
	<input type="checkbox"/> Senior Marketing Manager		<input type="checkbox"/> Computer Programmer
	<input type="checkbox"/> Manager Marketing Operations		<input type="checkbox"/> System Analyst
	<input type="checkbox"/> Marketing Manager		<input type="checkbox"/> System Integrator
	<input type="checkbox"/> Manager Marketing Credit Unit		<input type="checkbox"/> Software Engineer
	<input type="checkbox"/> Business Development Officer		<input type="checkbox"/> Sr. Software Engineer
	<input type="checkbox"/> Other (please specify)		<input type="checkbox"/> Other (please specify)
<b>Overall Job Experience: (years)</b>	<b>Job Period In The Present Organization: (Years)</b>	<b>Monthly Income</b> (Approximate) PKR.	

**Annexure J****Informed Consent Form**

Respected Participant,

I am a Ph.D scholar at National Institute of Psychology, Quaid-i-Azam University, Islamabad. The respondents of the present study are adult employees of banking sector and software houses of Rawalpindi and Islamabad with minimum education of graduation. As a researcher, I am interested to explore the relation among various emotional states, perceptions of leadership, and innovation practices which employees may experience at their workplaces. Additional purpose of the study is to appraise the interplay of diverse demographic factors and various organizational outcomes. Therefore, to assess the constructs of the study, few questionnaires are required to be completed (copy attached). Your valuable collaboration is vital in the completion of the attached questionnaires to reflect your perceptions and experiences at workplace.

It is ensured that data provided by the esteemed respondent will be exclusively used for research and academic purposes only. The information you would provide would be anonymously analyzed and never be used for any purpose other than research. Any personal information shared by the respondent will be kept confidential and will not be disclosed in any form or publication.

It would neither expose you to any foreseeable risk nor would this information affect any aspect of your job as all the responses will be kept confidential and any identifiable information will be deleted on the completion of study.

There is no time limit for the completion of questionnaires. However, while filling out the questionnaires, if it's inconvenient for you (for any reason); you have the right to quit and may discontinue at any stage. Your cooperation will be greatly appreciated in providing valuable and important information.

Please return this page with the survey. This page will be removed from the questionnaire booklet immediately after it is received by the researcher and will not be associated with your responses in this survey. If you like to share any feedback, suggestions, or comment, please feel convenient to correspond through any of the following contact channels (as given below).

If you are willing to provide the relevant information, kindly endorse your consent with your initials in the specified area given below.

Thanking you in anticipation!

Regards

Aisha Zubair  
National Institute of Psychology  
Quaid-i-Azam University, Islamabad  
Email: [aishazubair@nip.edu.pk](mailto:aishazubair@nip.edu.pk)  
Phone: Office: +92-51-9064-4052  
Mobile: +92-345-9740907

Participant's Signature .....

## Annexure K

**Authentic Leadership Questionnaire (Modified)**

Instructions: The following survey items refer to your leader's (boss / supervisor) style, as you perceive it. Judge how frequently each statement fits his or her leadership style using the following scale.

Sr. No.	My Immediate Boss / Supervisor/ Senior Manager:	Not at All	Once in a While	Sometimes	Frequently	Always
1	Says exactly what he or she means.					
2	Encourages everyone to speak their mind.					
3	Tells me the hard truth.					
4	Demonstrates beliefs that are consistent with actions.					
5	Makes decisions based on his or her core (fundamental or central) values.					
6	Asks me to take positions that support my core values (fundamental or central).					
7	Makes difficult decisions based on high standards of ethical conduct.					
8	Solicits (asks for) views that challenge his or her deeply held positions.					



9	Analyzes relevant data before coming to a decision.					
10	Listens carefully to different points of view before coming to conclusions.					
11	Seeks feedback to improve interactions with others.					
12	Accurately describes how others view his or her capabilities.					
13	Knows when it is time to reevaluate his or her positions on important issues.					
14	Shows he or she understands how specific actions impact others.					

**Annexure L****Copyright Permissions for Scales**

Permissions to use the scales were either acquired from the original author or publishers. Permission to use Authentic Leadership Questionnaire and Psychological Capital Questionnaire was acquired from Mind Garden Publishers. Permission to use Work-Related Flow Scale, Creativity Scale, and Social Desirability Scale was acquired from the authors through personal correspondence. Copies of agreement and emails are hereby attached.

## **Authentic Leadership Questionnaire Research Permission**

Bruce J. Avolio, William L. Gardner, and Fred O. Walumbwa

Prepared on June 13, 2017 for:  
Aisha Zubair

You completed your evaluation at 7:59 am EDT on October 22, 2013.



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## Authentic Leadership Questionnaire Research Permission

Bruce J. Avolio, William L. Gardner, & Fred O. Walumbwa

**Introduction:** The Authentic Leadership Questionnaire (ALQ) has undergone preliminary validation efforts to demonstrate that it is both reliable and construct valid. Permission to use the ALQ free of charge and for a limited period is provided for research purposes only. This document contains:

**Conditions of Use for the Authentic Leadership Questionnaire** - Use of the Authentic Leadership Questionnaire is subject to the conditions outlined in this section.

**Abstract of Research Project** - A brief description of your research project.

**Authentic Leadership Questionnaire** - The form itself (rater and self) and instructions for calculating scale scores.

**Permission to Reproduce Sample Items** - You cannot include an entire instrument in your thesis or dissertation, however you can use up to three sample items. Academic committees understand the requirements of copyright and are satisfied with sample items for appendices and tables. For customers needing permission to reproduce three sample items in a proposal, thesis, or dissertation this section includes the permission form and reference information needed to satisfy the requirements of an academic committee.

**All Other Special Reproduction:** For any other special purposes requiring permissions for reproduction of this instrument, please review the information at <http://www.mindgarden.com/copyright.htm> or contact us at [info@mindgarden.com](mailto:info@mindgarden.com).

---

## Conditions of Use for the ALQ

### *Before conducting your research:*

- 1) You will submit the Research Permission for the Authentic Leadership Questionnaire form.
- 2) While filling out the Research Permission for the Authentic Leadership Questionnaire form you will need to provide additional information and agree to additional conditions if...
  - ... you are planning to administer the ALQ online using a survey company other than Mind Garden.
  - ... you are planning to translate the ALQ.
  - ... you are planning to alter the ALQ.
- 3) You will electronically sign an agreement that you understand and agree to comply with the conditions of use. This agreement is at the end of the Research Permission for the Authentic Leadership Questionnaire form.

*Note: This pdf is documentation that you have successfully fulfilled these three conditions.*

### *While conducting your research:*

- 1) You will only use the ALQ for non-commercial, unsupported research purposes. Non-commercial research purposes means that you will not now or in the future directly or indirectly use the content for profit-seeking or other financial or commercial motivations but rather will use the content solely to further research that is purely academic or public-good driven. Your license to the content is personal to you and is solely for such non-commercial research purposes.
- 2) You will use the ALQ in its exact form without any changes to the instructions, rating scales/anchors, or order of items. All of the items listed in the survey must be used. (If you have indicated on your Research Permission for the Authentic Leadership Questionnaire form that you plan to alter the ALQ and provided details on the proposed alterations and the rationale behind those alterations, then you may ignore this condition).
- 3) You will use the ALQ for only the specific study that has been requested. There will be no further use of the ALQ without resubmitting the Research Permission for the Authentic Leadership Questionnaire for additional permission to use the ALQ with additional studies.
- 4) You will not provide the ALQ to any other researchers. They must submit their own Research Permission for the Authentic Leadership Questionnaire form for permission.

## Abstract of Research Project

Permission to use the ALQ is for the following research project:

**Project title:**

Authentic Leadership and Employee Creativity: Mediating Role of Work Related Flow and Psychological Capital

**Research focus:**

the broader focus of present study is to integrate the role of authentic leadership and (Gardner et al., 2005; Yammarino et al., 2008) and positive psychological antecedents (work related flow & psychological capital) in augmenting employee creativity (Rodin & Galunic, 2004) impact of autotelic experience and psychological flow specifically at workplace (Bakker, 2000; Kawabata, Mallet, & Jackson, 2011) as well as in context of indigenous organizational settings practices of authentic leadership in culturally diverse samples especially Asian cultures (Gelland, Erez, & Aycan, 2007; House & Aditya, 1997; Walumbwa et al., 2008) sampling strategy: Inclusion of varied occupations (employees of banks and software houses) offer comparative derivations (e.g., Coelho et al., 2011; Jung & Yoon, 2012) focusing on a multiple job positions enhance the variance of the variables (e.g., Hartina, Maxham, & McKee, 2000; de Jong, de Ruyter, & Lemrink, 2004)

**Key hypotheses:**

The broader hypotheses are: To explore relationship between authentic leadership and employee creativity. To investigate the relationship between work related flow and psychological capital. To determine the mediating role of work related flow and psychological capital in the relationship between authentic leadership and employee creativity. To determine psychometric properties (indices of internal consistency, validity estimates in terms of interscale correlations) To validate the factor structure through confirmatory factor analysis of the measures To explore the role of varying demographics like gender, socioeconomic status, education, job designation, job experience, job tenure in the same organization, duration, and type of organization in relation to study variables.

**Sample characteristics:**

N = 600 Organization Types: software houses and banks (public & private) Gender: men & women Age: minimum 25 years Education: graduation, post graduate, Above post graduation Control Variables: Job Experience: minimum 2 years Job Tenure: minimum 1 year in the same organization Job Designations: For banks: Manager Operations, Manager Teller, Manager Customer Relations (Leader: Branch manager) Software Houses: Computer Programmers, System Analyst, System Integrator, Software Engineers, Sr. Software Engineers (Leader: Senior Project/Executive Manager)

**Research method:**

Correlational Research Design, Quantitative Measures will be used Authentic Leadership Questionnaire (Avolio, Gardner, & Walumbwa, 2007) Work Related Flow Inventory (Bakker, 2008) Psychological Capital Questionnaire (Luthans, Youssef, & Avolio, 2007) Creativity Scale (Zhou & George, 2001) Social Desirability Scale-17 (Stober, 2001)

**Organizational characteristics:**

Banks (both public and private sector); Software Houses

**Organization domain:**

Other (write below)

**Other domain:**

services oriented

**Country/Countries:**

Pakistan

**I will be conducting this study in English:**

Yes

You requested permission to reproduce the number of copies of the ALQ stated below. The copyright holder has agreed to grant a license to reproduce this number of copies of the ALQ within one year of the date listed on the cover page of this document.

Aisha Zubair

Exact number of reproductions being requested for this research project: 600

---

You agreed to all the conditions of use outlined in this document by electronically signing the Research Permission for the Authentic Leadership Questionnaire form.

Electronic signature: Aisha Zubair  
Date of signature: 22nd October, 2013

Aisha Zubair

## Authentic Leadership Questionnaire (ALQ Version 1.0 Self)

Bruce J. Avolio, Ph.D.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Organization ID #: \_\_\_\_\_ Person ID #: \_\_\_\_\_

Instructions: The following survey items refer to your leadership style, as you perceive it. Please judge how frequently each statement fits your leadership style using the following scale:

Not at all    Once in a while    Sometimes    Fairly often    Frequently, if not always  
 0            1            2            3            4

## As a leader I...

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. say exactly what I mean  | 0 | 1 | 2 | 3 | 4 |
| 2. admit mistakes when they are made  | 0 | 1 | 2 | 3 | 4 |
| 3. encourage everyone to speak their mind                                     | 0 | 1 | 2 | 3 | 4 |
| 4. tell you the hard truth  | 0 | 1 | 2 | 3 | 4 |
| 5. display emotions exactly in line with feelings                             | 0 | 1 | 2 | 3 | 4 |
| 6. demonstrate beliefs that are consistent with actions                       | 0 | 1 | 2 | 3 | 4 |
| 7. make decisions based on my core values                                     | 0 | 1 | 2 | 3 | 4 |
| 8. ask you to take positions that support your core values                    | 0 | 1 | 2 | 3 | 4 |
| 9. make difficult decisions based on high standards of ethical conduct        | 0 | 1 | 2 | 3 | 4 |
| 10. solicit views that challenge my deeply held positions                     | 0 | 1 | 2 | 3 | 4 |
| 11. analyze relevant data before coming to a decision                         | 0 | 1 | 2 | 3 | 4 |
| 12. listen carefully to different points of view before coming to conclusions | 0 | 1 | 2 | 3 | 4 |
| 13. seek feedback to improve interactions with others                         | 0 | 1 | 2 | 3 | 4 |
| 14. accurately describe how others view my capabilities                       | 0 | 1 | 2 | 3 | 4 |
| 15. know when it is time to reevaluate my position on important issues        | 0 | 1 | 2 | 3 | 4 |
| 16. show I understand how specific actions impact others                      | 0 | 1 | 2 | 3 | 4 |



## Authentic Leadership Questionnaire (ALQ Version 1.0 Rater)

Bruce J. Avolio, Ph.D.

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Organization ID #: \_\_\_\_\_ Person ID #: \_\_\_\_\_

Instructions: The following survey items refer to your leader's style, as you perceive it. Judge how frequently each statement fits his or her leadership style using the following scale:

Not at all    Once in a while    Sometimes    Fairly often    Frequently, if not always

0            1            2            3            4

## My Leader:

- |   |           |
|---|-----------|
| 1. says exactly what he or she means  | 0 1 2 3 4 |
| 2. admits mistakes when they are made   | 0 1 2 3 4 |
| 3. encourages everyone to speak their mind                                      | 0 1 2 3 4 |
| 4. tells you the hard truth   | 0 1 2 3 4 |
| 5. displays emotions exactly in line with feelings                              | 0 1 2 3 4 |
| 6. demonstrates beliefs that are consistent with actions                        | 0 1 2 3 4 |
| 7. makes decisions based on his or her core values                              | 0 1 2 3 4 |
| 8. asks you to take positions that support your core values                     | 0 1 2 3 4 |
| 9. makes difficult decisions based on high standards of ethical conduct         | 0 1 2 3 4 |
| 10. solicits views that challenge his or her deeply held positions              | 0 1 2 3 4 |
| 11. analyzes relevant data before coming to a decision                          | 0 1 2 3 4 |
| 12. listens carefully to different points of view before coming to conclusions  | 0 1 2 3 4 |
| 13. seeks feedback to improve interactions with others                          | 0 1 2 3 4 |
| 14. accurately describes how others view his or her capabilities                | 0 1 2 3 4 |
| 15. knows when it is time to reevaluate his or her position on important issues | 0 1 2 3 4 |
| 16. shows he or she understands how specific actions impact others              | 0 1 2 3 4 |

Aisha Zubair

**Authentic Leadership Questionnaire Scales:**

Each scale consists of these item numbers. Average the item value to get the raw score for the scale.

Transparency: 1, 2, 3, 4 & 5

Moral/Ethical: 6, 7, 8 & 9

Balanced Processing: 10, 11 & 12

Self Awareness: 13, 14, 15 & 16

Aisha Zubair



To whom it may concern,

This letter is to grant permission for Aisha Zubair to use the following copyright material for his/her research:

Instrument: *Authentic Leadership Questionnaire (ALQ)*

Authors: *Bruce J. Avolio, William L. Gardner, and Fred O. Walumbwa*

Copyright: 2007 by *Bruce J. Avolio, William L. Gardner, and Fred O. Walumbwa*

Three sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any published material.

Sincerely,

A handwritten signature in black ink, appearing to read "K. Walumbwa".

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## Appendix

----- Forwarded message -----

From: **Jing Zhou** <[jzhou@rice.edu](mailto:jzhou@rice.edu)>  
Date: Wed, May 15, 2013 at 2:41 PM  
Subject: RE: permission to use Creativity Scale  
To: Aisha Zubair <[aishazubair@nip.edu.pk](mailto:aishazubair@nip.edu.pk)>

Thanks for your interest. That scale was published in full in the following article. You have my permission to use it in research. Please cite the following article appropriately.

Zhou, J., & George, J. M. (2001). When job dissatisfaction leads to creativity: Encouraging the expression of voice. *Academy of Management Journal*, 44, 682-696.

Jing Zhou  
Associate Editor, *Journal of Applied Psychology*  
Past President, International Association for Chinese Management Research (IACMR)  
Houston Endowment Professor of Management  
Director for Asian Management Research and Education  
Jesse H. Jones Graduate School of Business  
Rice University  
6100 Main Street  
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Phone: [713-348-5330](tel:713-348-5330)  
FAX: [713-348-6296](tel:713-348-6296)  
Email: [jzhou@rice.edu](mailto:jzhou@rice.edu)  
<http://www.business.rice.edu/OnlineDirectory/PersonnelDetail.aspx?id=3412>

**From:** Aisha Zubair [<mailto:aishazubair@nip.edu.pk>]  
**Sent:** Monday, May 13, 2013 12:49 AM  
**To:** [jzhou@rice.edu](mailto:jzhou@rice.edu)  
**Subject:** permission to use Creativity Scale

Dear Prof. Dr. Zhou,

Hope you are fine. I am doing doctoral dissertation to explore the mediating relationship between leadership, psychological flow and employee creativity among software developers.

For this I need to use the Creativity Scale (Zhou & George, 2001). I need your kind permission to use the scale for the said purpose.

Best regards

**Aisha Zubair**

-----  
**Lecturer**  
**National Institute of Psychology (NIP)**  
Quaid-i-Azam University, Islamabad  
Direct - +92 51 9064-4049  
Fax - +92 51 2896012  
Email – [aishazubair@nip.edu.pk](mailto:aishazubair@nip.edu.pk) Web- [www.nip.edu.pk](http://www.nip.edu.pk)

----- Forwarded message -----

From: **Joachim Stoeber** <[J.Stoeber@kent.ac.uk](mailto:J.Stoeber@kent.ac.uk)>  
Date: Wed, Nov 14, 2012 at 6:14 PM  
Subject: Re: permission to use Social Desirability Scale-17 (SDS-17)  
To: Aisha Zubair <[aishazubair@nip.edu.pk](mailto:aishazubair@nip.edu.pk)>

Dear Aisha: Permission granted. Good luck with your research. Best, Joachim

Sent from my mobile

On 14 Nov 2012, at 13:12, "Aisha Zubair" <[aishazubair@nip.edu.pk](mailto:aishazubair@nip.edu.pk)> wrote:

> Dear Prof. Dr. Joachim Stöber  
>  
> Hello,  
>  
> I, Aisha Zubair (PhD scholar) have read your article titled "The  
> Social Desirability Scale-17 (SDS-17): Convergent validity,  
> discriminant validity, and relationship with age" published in  
> European Journal of Psychological Assessment, 17, 222-232.  
>  
> Presently i am doing doctoral study on the topic "Authentic Leadership  
> and Employee Creativity: Mediating role of flow and psychological  
> capital among software developers".  
>  
> I need your permission to use the said scale in my study based on  
> Pakistani population. I intend to use the scale in its original  
> language (English) as minimum educational level of the respondents  
> will be MCS or BS (Hons) in mathematics, computer science, and IT. Any  
> concerns related to cultural appropriateness will be probed at the  
> initial levels of the study.  
>  
> If there are any requisites involved in the procurement of permission,  
> kindly let us know.  
>  
> My supervisor is Prof. Dr. Anila Kamal (Director, National Institute  
> of Psychology, Quaid-i-Azam University, Islamabad, Pakistan).  
>  
> Best Regards  
>  
> \*Aisha Zubair\*  
> \*-----  
> Lecturer\*  
> \*National Institute of Psychology (NIP) \*  
> Quaid-i-Azam University, Islamabad  
> Direct - +92 51 9064-4049  
> Fax - +92 51 2896012  
> Email – [aishazubair@nip.edu.pk](mailto:aishazubair@nip.edu.pk) Web- [www.nip.edu.pk](http://www.nip.edu.pk)

Sun, Nov 11, 2012, 9:21 PM

Reply

**Aisha Zubair** <[aishazubair@nip.edu.pk](mailto:aishazubair@nip.edu.pk)>  
to bakker

Dear Prof. Dr. Arnold B. Bakker,

I, Aisha Zubair (PhD scholar) have read your article titled "The work-related flow inventory: Construction and initial validation of the WOLF" published in Journal of Vocational Behavior 72 (2008) 400–414.

I need your permission to use the said scale in my study based on Pakistani population. I intend to use the scale in its original language (English) as minimum educational level of the respondents will be MCS or BS (Hons) in mathematics, computer science, and IT. Any concerns related to cultural appropriateness will be probed at the initial levels of the study.

If there are any requisites involved in the procurement of permission, kindly let us know. My supervisor is Prof. Dr. Anila Kamal (Director, National Institute

of Psychology, Quaid-i-Azam University, Islamabad, Pakistan).

Best Regards

\*Aisha Zubair\*

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Lecturer\*

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**A.B. Bakker** <[bakker@fsw.eur.nl](mailto:bakker@fsw.eur.nl)>

Reply to me

You have my permission.

Mon, Nov 12, 2012, 1:08 AM

Good luck, kind regards,

Arnold Bakker

Verstuurd vanaf mijn iPad

[www.arnoldbakker.com](http://www.arnoldbakker.com)

-----Disclaimer-----

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Dear Dr. Bakker,

Thank you very much for the generous facilitation.

best Regards

Aisha

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**Aisha Zubair**

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