

1-1-2019

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### iRepository Citation

Sadaf, Q., Aziz, M., & Anjum, G. (2019). Role of organizational culture in psychological needs satisfaction and work engagement. *Business Review*, 14(1), 81-96. Retrieved from <https://ir.iba.edu.pk/businessreview/vol14/iss1/6>

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## Role of organizational culture in psychological needs satisfaction and work engagement

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**Abstract** This paper explores the role of organizational culture in the satisfaction of basic psychological needs and yielding work engagement among public and private sector managers. Results reveal that organizational culture confers employees with a sense of relatedness which promotes work engagement. Additionally, the study suggests that female managers have a higher need for relatedness, the satisfaction of all basic psychological needs is significantly higher among private sector employees and work satisfaction increases with increasing job level. This study can be used for the development of organizational culture to improve relatedness among employees with respect to gender and the type of the organization.

**Keywords** Organizational culture · Psychological needs · Work engagement.

### 1 Introduction

This study aims at exploring the role of organizational culture in the satisfaction of basic psychological needs and work engagement among employees. For optimal operation of the business, it is imperative for employees to work in coordination, deliver their best, and achieve targets within the stipulated time frame (Benabou 1999).

Self-determination theory posits that fulfilment of the basic three psychological needs of autonomy, competence and relatedness, is an essential predictor of a person's natural development and provides an important buffer from psychological pathology. Psychological needs are essential nutrients for human growth

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and fundamental drivers of human behavior (Latham and Pinder 2005).

In general, SDT maintains that the satisfaction of the three basic psychological needs of autonomy, competence and relatedness contributes to an individual's wellness. Consistent with this claim, several studies have shown positive relations between need satisfaction and optimal functioning. In this context, initial evidence was found for positive relations between need satisfaction and employees' work-related wellbeing as indicated by job satisfaction, work engagement and lower burnout (Ilardi et al 1993; Van den Broeck et al 2008). Through cross-cultural investigations it has been revealed that need fulfilment is essential for all wellbeing indicators, including optimal development, motivation and engagement (Gagné et al 2015). These needs have evolutionary significance and are relevant across cultures and contexts (Gagné et al 2015).

Psychological well-being increases resiliency, positive self-perception, and positive organizational behavior. Individuals with higher psychological well-being have the willingness and ability to learn from experience and can relate to others more positively (Robertson and Cooper 2011; Saks and Gruman 2014). Nonetheless, as noted by Avey et al (2010), psychological well-being is subjective. These variations in individual perceptions about whether leaders and/or organizations provide the conditions for developing psychological well-being may be a constraining factor in individual motivation to develop attitudes and behaviors characteristic of work engagement (Avey et al 2010).

## 2 Literature review

### 2.1 Organizational culture

A fundamental definition of organizational culture is necessary to understand this phenomenon. According to Arnold et al (2005); Schein (1985) organizational culture is "a system of shared meaning held by members, distinguishing the organization from other organizations". Denison (1990) identified four basic views of organizational culture that can be translated into four distinct aspects of culture but more importantly, they focus/emphasize on different functions of culture. With a legacy of fifteen years of research, Denison has established that there are four most profound traits of organizational culture that have consequences on organizational outcomes.

Based on this model, Denison developed a scale known as Denison Organizational Culture Survey to link organizational culture to tangible bottom-line performance measures such as profitability, quality, innovation, market share, growth and employee satisfaction (Denison 1990). This model is based on actual behaviors in the business context and professional jargon is used to address issues. It is a pioneering model that is easy to apply at all levels of business operation. According to the Denison Organizational Culture Survey, the key components of organizational culture are adaptability, mission, consistency and involvement (Denison et al 2006).

Adaptable organizations are those that convert the demands of the environment into concrete and doable actions. These organizations are not intimidated

by risk taking as they learn from their mistakes, which enhance their capability and experience at creating change (Denison et al 2006). These organizations create a system of norms that are conducive to the organization's ability to grow by interpreting and translating environmental signals positively. Adaptable organizations experience growth that can be seen through their sales growth and large market share (Denison et al 2006).

Thriving organizations are guided by clear long-term goals and a sense of meaning and purpose (Denison et al 2006). Organizations with strong cultures have consistent values and systems. Research literature also suggests that effective organizations are extremely consistent and behavior is a result of central norms, leader-follower agreement process and acknowledgement and incorporation of diverse ideas (Denison et al 2006).

Involvement can be defined as building human capability, ownership and responsibility. Organizational cultures characterized as "highly involved" strongly encourage employee involvement and create a sense of ownership and responsibility. Research literature highlights that effective organizations empower their people, build their organization and teams and develop human capability at all three levels (Denison et al 2006).

## 2.2 Basic psychological needs

In accordance with the Self Determination Theory (SDT), every individual has three basic psychological needs; autonomy, competence and relatedness. These needs are to be fulfilled at all levels, i.e., at the specific task level, at the field level of work and family and at the global level of personality (Deci and Ryan 2014). The fulfilment of these needs is associated with positive work outcomes including less work stress and turnover intentions (Chemolli and Gagné 2014).

### 2.2.1 *Autonomy*

Autonomy refers to being in the perceived origin or source of one's own behavior. Autonomy concerns acting from interest and integrated values. "The need for autonomy represents individuals' inherent desire to feel volitional and to experience a sense of choice and psychological freedom when carrying out an activity" (Deci and Ryan 2014).

Although related, understanding of autonomy in organizational psychology is somewhat different from the self-determination perspective (Morgeson and Humphrey 2006). Employees might, for instance, follow-up a request from their supervisor but nonetheless act willingly because their supervisor provided them a meaningful rationale for doing so (Soenens et al 2007).

### 2.2.2 *Competence*

Competence refers to feeling effective in a person's interactions with the social environment and experiencing one's capacities. The need for competence refers to 'individuals' inherent desire to feel effective in interacting with the environment (Ryan and Deci 2000a). It is noticeable in the tendency to discover and

effectively change the environment and engage in challenging tasks to understand, examine and enhance one's current level of skills. This need fulfillment lets individuals adapt to the changing environment and thwarting of this need results in helplessness and demotivation (Ryan and Deci 2000a).

### 2.2.3 Relatedness

Relatedness refers to “feeling connected to others, to caring for and being cared for by those others, to having a sense of belongingness both with other individuals and with one's community.” The scope of relatedness fulfillment ranges from intimate relationships to connecting with a larger community or even connecting with other beings at a global level (Ryan and Deci 2000a). It is in agreement with the idea of social support at the work place in organizational psychology (Viswesvaran et al 1999).

Fulfillment of basic psychological needs termed “psychosocial flourishing” by Diener et al (2010) has appeared to be a solid indicator of mental wellbeing. While early conceptualizations of mental needs were liable to criticism on both theoretical and observational grounds, lately there has been a rebirth of examination on mental needs and their fulfillment (Wei et al 2005).

## 2.3 Work engagement

Kahn (1990) described engaged employees as being physically, subjectively and emotionally involved in their tasks. There are a few meanings of engagement, but Schaufeli and Bakker (2004) proposed what is arguably the regularly used meaning of work engagement “a dynamic, positive business related state that is portrayed by vigor, dedication, and absorption”.

In this literature, vigor is related to more energy and dedication at the work place and to the feeling of importance and significance among other co-workers. Absorption is described by being wholly involved and happily engaged in work. Vigor and absorption are qualities of work engagement, and fundamentally work engagement is characterized as a positive work perspective (Schaufeli et al 2002).

Anjum et al (2019) have shown in their research related to antecedents of gender gap in engagement in the workplace that the patriarchal culture of Pakistani organizations keeps women from joining the workforce. In a qualitative study with medical doctors and psychologists they showed that females were expected to fulfill relationship related gender roles prescribed by society and live and work within the bounds of patriarchal norms. These barriers lead to objectification and explicit discrimination against women at the workplace. Hence females experience lack of engagement and substantial gender gap in professional participation and success in the workforce. However, as psychology and medical jobs are more normalized with respect to gender in Pakistani society, there is lack of literature on the engagement related experiences of Pakistani female managers.

## 2.4 Organizational culture, basic psychological needs and work engagement

Very little work has been done on the direct role of organizational culture in satisfying basic psychological needs of employees, yet some researches indirectly show the relationship among some facets of organizational culture for satisfying three basic psychological needs. To investigate the role of a solid and reliable organizational culture and its effect on work engagement, experts investigated about 9,464 people in 90 organizations. Employees' perception of organizational aspects of Mission, Adaptability, Involvement and Consistency are vital indicators of employee engagement. It was revealed that involvement is essential to an employee's level of engagement (Anjum et al 2019).

Among many determinants of work engagement, organizational culture stands out as the most important. Along with organizational culture, vitality and dedication were the strongest predictors of work engagement (Pawar 2009). In another research, the employee engagement was predicted by vigor and immersion in the task (Xanthopoulou et al 2009).

Literature suggests that satisfaction of basic psychological needs and work engagement are necessary for wellbeing and optimal mental health of the employees (Narváez et al 2014). A recent qualitative research has revealed that the perception of a strong organizational culture leads to employees and managers' well-being but the direct relationship of organizational culture in satisfying basic psychological needs (Autonomy, Relatedness, Competence) and producing work engagement among employees is unclear. Through cross-cultural investigations it has been revealed that need-satisfaction is essential for an individual's wellbeing motivation and engagement (Gagné et al 2015). This study aims to identify the traits of organizational culture that are specifically important antecedents for work engagement.

## 2.5 Current study

This study aims at exploring the role of organizational culture in the fulfillment of basic psychological needs and work engagement. More specifically, we are interested in exploring the mediating role of three distinct basic psychological needs (Autonomy, Competence and Relatedness) of an employee on their work engagement. Private and public organizations have very different cultures and this together with a patriarchal and hierarchical societal structure, work place dynamics have a differential impact on gender (Anjum et al 2019).

In other developing countries, such as Ghana, researchers have shown that there is a strong and a positive relationship between employee engagement and the type of organization where people work. Individuals working in private organizations are more engaged than their counterparts in public organizations. In the context of Pakistan, comparative research on the level of management and public and private nexus is unavailable.

In Pakistan, some researchers Danish et al (2014); Khalid et al (2015) have explored the impact of the organization on the employees' engagement in the private sector but such work has not compared employees from the private and

public sector. Therefore, it is important to explore these dynamics among Pakistani employees working in the public and private sector and in relation to the gender of the employees.

A sample of higher, middle, and lower managerial level employees was taken for the present study. Managers at all three levels differ in responsibilities, type of interaction with the environment (either inside the organization or outside it) and working methods. Higher level managers are assumed to have more autonomy oriented tasks, while middle level managers are more involved in interaction with employees as well as higher level managers. Lower level managers have direct interaction with team members and customers so the satisfaction of basic psychological needs and the level of work engagement is considered to vary. Therefore, there is a need to study how the traits of organizational culture differ in satisfying their basic psychological needs and producing work engagement.

Based on existing literature, the following hypotheses were formulated for this study:

- Basic psychological needs (autonomy, competence and relatedness) mediate the relationship between organizational culture and work engagement.
- Females have a higher need for relatedness compared to males.
- Satisfaction of basic psychological needs is significantly different among the employees of private and public organizations.
- Satisfaction of basic psychological needs is significantly different among employees at different job levels.

### 3 Method

#### 3.1 Sample

The participants included 195 male and female managerial level employees from both public and private sector organizations selected using a convenient sampling technique from the areas of Islamabad and Rawalpindi. 135 belonged to the private sector and 60 were from the public sector. Higher, middle and lower managerial staff was a part of the sample including 27 lower executive managers, 77 middle executive managers and 91 higher executive managers.

#### 3.2 Instruments

Three instruments were used in order to collect data for the constructs under study. The demographic sheet was used to gather information of the participants for the analysis. The details of the instruments used are as under:

##### *3.2.1 Denison Organizational Culture survey (DOCS)*

It was used to measure the four aspects of organizational culture namely Involvement, Consistency, Adaptability, and Mission (Denial & Neale, 2000). It

has sixty items measuring different aspects of organizational culture. It is a 5-point rating Likert type scale.

### *3.2.2 Basic psychological needs at work scale*

Basic psychological needs at work scale had 21 items (Ryan and Deci 2000b). A 7 point likert scale was used to obtain data, ranging from 1 (strongly disagree) to 7 (strongly agree).

### *3.2.3 UTRECHT Work engagement scale (UWES)*

Engagement was assessed with the UWES (Schaufeli et al 2002). Nine items of the UWES were scored on a 7-point frequency rating scale ranging from 0 (never) to 6 (always).

## 3.3 Procedure

Public and private organizations, mainly banks, were visited. Managerial level employees who volunteered to participate were handed over the questionnaires along with the consent form which clearly stated the purpose of the study as well as the surety that they could withdraw from the process whenever they wanted. Confidentiality was also assured.

All necessary directions were provided and optimal time was given to fill the questionnaires. 400 questionnaires were distributed, 280 were returned from which only 195 were utilized for analysis because the rest of them had more than 20% missing data. This missing data can be attributed to the length of our scales.

## 4 Results

All the collected data was entered into IBM SPSS 23 and Process Macro V3. For analysis, initially reliabilities of each sub-scale were checked and then each variable was correlated with each other. A method of stepwise regression was used which is an automated method of model making through the selection of predictors having the most significant relationship with the outcome variable. Then ANOVA and tests were carried out on the demographics.

Table 1 shows descriptive statistics of the data and also Chronbach's alpha of each scale. For the scale of Denison Organizational Culture Survey the alpha ranges from 0.72 to 0.82, for the scale of Basic Psychological Needs at Work it ranges from 0.60 to 0.78 and for the scale of Work Engagement alpha ranges from 0.65 to 0.84.

Correlation results show that involvement highly correlates with basic autonomy (0.47) and competence (0.47) and also significantly with relatedness (0.17) but less than autonomy and competence. Consistency only correlates with relatedness (0.30). Adaptability correlates highly with relatedness (0.40)

and significantly with autonomy (0.27) and competence (0.27) and mission, on the other hand, significantly correlates with all the three constructs autonomy (0.35), relatedness (0.30) and competence (0.29) of basic psychological needs.

With the constructs of work engagement, correlation of organizational culture (involvement) is significantly high with vigor (0.31), dedication (0.38), and absorption (0.38). Consistency has correlation with vigor (0.34), with dedication (0.40), and absorption (0.35). Adaptability, on the other hand, is correlated with vigor (0.43), dedication (0.47) and shows high correlation with absorption (0.57). Mission shows correlation of (0.41) with vigor, (0.54) with dedication and (0.51) with absorption.

After factor analyses, it was found that the four subscales of OC loaded on

**Table 1:** Correlation between organizational culture, psychological needs and work engagement; Cronbach's alpha and descriptive statistics (N=195).

Var	1	2	3	4	5	6	7	8	9	10	M	SD
OC-I	(0.8)										3.8	0.5
OC-C	0.3**										3.8	0.4
OC-A	0.5**	(0.7)									3.9	0.4
OC-M	0.7**	0.4**	(0.8)								4.0	0.4
BPN-A	0.5**	0.1	0.3**	0.4**	(0.8)						4.8	1.0
BPN-R	0.2*	0.3*	0.4**	0.3**	-0.1	(0.8)					5.2	0.6
BPN-C	0.5**	0.1	0.3**	0.3**	0.9**	-0.2	(0.6)				4.8	0.9
WE-V	0.3**	0.3**	0.4**	0.4**	0.2*	0.4**	0.1	(0.7)			4.4	1.0
WE-D	0.4**	0.4**	0.5**	0.5**	0.2**	0.4**	0.2*	0.9**	(0.8)		4.4	1.2
WE-A	0.4**	0.4**	0.6**	0.5**	0.4**	0.3**	0.3**	0.7**	0.7**	(0.8)	4.2	1.2

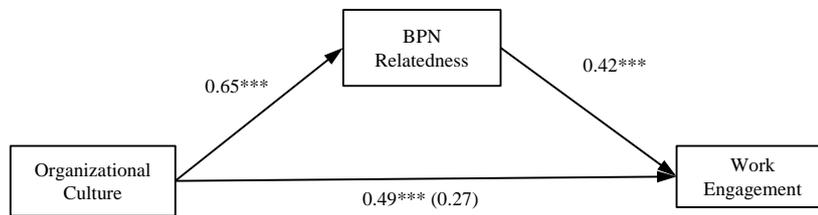
Note: Organizational Culture (Involvement), (Consistency), (Adaptability), (Mission); Basic Psychological Needs (Autonomy), (Relatedness), (Competence); Work Engagement (Vigor), (Dedication), (Absorption)\* p < 0.05, \*\*p < 0.01; Cronbach's alpha ( $\alpha$ ) is in parenthesis

a single factor ( $\alpha = 0.84$ ; M = 3.65; SD= 0.43) and they can be treated as a single observed variable. Similarly, WE subscales loaded on a single observed factor ( $\alpha = .89$ ; M = 4.62; SD = 1.10) and hence for further analyses it was treated as single variable. BPN, on the other hand, loaded on three dimensions so they were treated as three separate observable variables in this data.

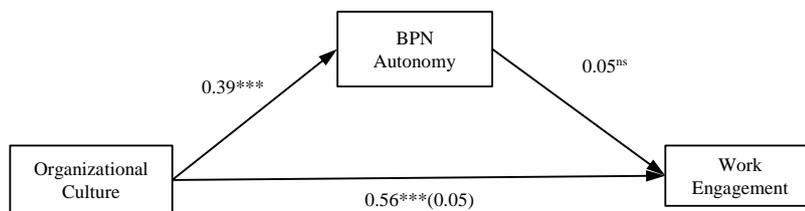
To explore the key relationships of this study (Hypothesis 1), we conducted multiple mediation models to pin point which basic needs have the most substantial role in work engagement of employees. We examined the three components of Basic Psychological Needs (Autonomy = BPN-A, Relatedness BPN-R, and Competence BPN-C) as mediators between Organizational Culture (OC) threat and Work Engagement (WE). Specifically, we conducted analyses with OC as the independent variable, BPN-Autonomy/Relatedness/Competence as the mediator and WE as the dependent variable. We used the latest version of PROCESS to run the mediation analyses (Hayes 2017).

The results showed that the bootstrapped indirect effect of Relatedness was significant (figure 1). It is clear from the figure that the path model with Bootstrapped Unstandardized Indirect Effect (SE = 0.09) [95% CI = 0.11, 0.47] of organizational culture on work engagement is fully mediated with BPN aspect Relatedness as a Mediator = 0.27. \* $p < 0.05$ . \*\*\* $p > 0.001$ . This means that for management level employees, work engagement is driven through the fulfilment of the psychological need of relatedness in their organizational culture.

The other two psychological needs: Autonomy and Competence do not have such mediated relationship. The indirect effect of autonomy (figure 2) and competence (figure 3) were non-significant. It can be said that the relation between organizational culture and employees work engagement is not mediated by the fulfilment of the basic psychological needs of autonomy and competence. We also tested an alternative model to test a reversed mediation: organizational culture mediating the relationship between basic psychological needs and work engagement. However, we did not find any support for such a relation.

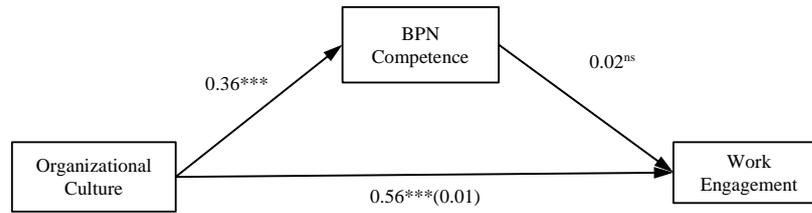


**Fig. 1:** . Bootstrapped unstandardized indirect effect (SE =.09) [95% CI = 0.11, 0.47] of organizational culture on work engagement with BPN-relatedness as a mediator = 0.27. \* $p < 0.05$ . \*\*\* $p > 0.001$ .



**Fig. 2:** Bootstrapped unstandardized indirect effect (SE =.05) [95% CI = -.06, 0.22] of organizational culture on work engagement with BPN-autonomy as a Mediator = 0.05. ns = non-significant; \*\*\* $p > 0.001$ .

Although we had a fewer number of female participants in our sample, another important aspect we explored was the relative assessment of basic psychological needs among male and female employees (Hypothesis 2). The results of this study indicated that there was a non-significant difference among the two



**Fig. 3:** Bootstrapped unstandardized indirect effect (SE =.02) [95% CI = -.03, 0.06] of organizational culture on work engagement with BPN-competence as a Mediator = 0.02. ns = non-significant; \*\*\*p > 0.001.

genders when it comes to autonomy and competence. However, the need for relatedness among males and females varied after controlling for organizational culture and work engagement and exhibited a significant difference for men and women  $t(1) = 4.63, p = 0.03, 95\% \text{ CI} = 5.05- 5.54, \text{Cohen's } d = 0.29$ .

Results from the t-test between public and private sector organizations (Hy-

**Table 2:** t-test for comparison of sectors among managerial level employees on study variables. (N=195).

Variables	Public n = 60		Private n = 135		t(193)	95% CI			Cohen's d
	M	SD	M	SD		P	LL	UL	
OC	3.52	0.36	3.92	0.52	-5.38	0	-0.55	-0.25	0.89
BPN-A	4.46	1.29	4.98	0.73	-3.61	0	-0.81	-0.24	0.5
BPN-R	4.99	0.67	5.31	0.5	-3.75	0	-0.5	-0.15	0.54
BPN-C	4.48	1.23	4.96	0.69	-3.41	0	-0.75	-0.2	0.48
WE	3.69	0.92	4.67	0.92	-6.72	0	-1.25	-0.69	1.06

Note: OC = organizational culture, BPN-A= basic psychological needs (autonomy), BPN-R= basic psychological needs (relatedness), BPN-C= basic psychological needs (competence), WE= work engagement.

pothesis 3) showed that the mean difference is significant for the construct of organizational culture, i.e it is strong in private sector organizations. Likewise, basic psychological needs show significant mean differences, i.e basic psychological needs are more fulfilled among employees of private sector organizations in comparison with the employees of public sector organizations.

Statistics from the t-test also revealed that on the constructs of work engagement, employees of private sector organizations scored relatively higher than the employees of public sector organizations. Cohen's d indicated a large size effect on the traits of organizational culture i.e. > 0.8 whereas, a medium size effect for basic psychological needs i.e. < 0.8 and again a large size effect i.e. > 0.8 for work engagement.

ANOVA analysis revealed significant differences in the levels of designation among managers. It was found that OC differed significantly among three groups,  $F(2,192) = 45.91, p < 0.01$ ; for BPN-A  $F = 53.64$ ; for BPN-R,  $F = 11.7$ ; for BPN-C,  $F = 46.00$  and then for WE,  $F = 6.41$ .

Collectively the analysis on the facets of organizational culture showed that

**Table 3:** One-way ANOVA for comparison of the effect of job designation on study variables. (N=195)

Variables	Lower managers (N=27)		Middle managers (N=77)		Higher managers (N=91)		F	p	Tukey's Post Hoc
	M	SD	M	SD	M	SD			
OC	3.09	0.36	3.82	0.45	3.97	0.41	45.91	0	1 < 2, 3
BPN-A	3.95	0.75	4.43	1.03	5.42	0.48	53.64	0	1,2 > 3
BPN-R	5.52	0.51	5.33	0.5	5.02	0.6	11.71	0	1,2 < 3
BPN-C	3.94	0.72	4.49	1	5.33	0.5	46	0	1,2 > 3
WE	4.79	0.65	3.84	1.38	4.27	1.23	6.41	0	1,3 > 2

Note: OC = organizational culture, BPN-A= basic psychological needs (autonomy), BPN-R= basic psychological needs (relatedness), BPN-C= basic psychological needs (competence), WE= work engagement

organizational culture is strong for higher and middle executive managers. The facets of basic psychological needs were found to be satisfied in middle executive managers and the aspects of work engagement show higher work engagement for lower and higher executive managers as compared to middle executive managers.

The results of ANOVA were not clear regarding which of the three groups differed from one another, so Tukey's post-hoc has been used which shows that OC is strong for middle and higher managerial level with a significance of  $p < 0.05$ . For the constructs of BPN, results show that the need for autonomy was fulfilled among middle and higher executive managers, relatedness showed higher variance in higher executive managers, while competence showed higher variance in lower and middle executive managers with a significance of  $p < 0.05$ . For work engagement, the results indicated that there was higher variance among lower and higher level managers with a significance of  $p < 0.05$ .

## 5 Discussion

This study aimed to explore the role of organizational culture in satisfying basic psychological needs and work engagement. More specifically we explored four hypotheses. The first hypothesis: (H1) basic psychological needs (Autonomy, Competence, and Relatedness) mediate the relationship between organizational culture and work engagement, was partially supported. We found that the need for relatedness was the only basic psychological need that mediated the relationship between organizational culture and work engagement whereas other basic psychological needs did not have a significant mediational role in this regard.

Previous research literature suggests that satisfaction of basic psychological needs and work engagement are necessary for wellbeing and optimal mental health of employees at work (Ilardi et al 1993; Van den Broeck et al 2008). The direct relationship of the traits of organizational culture in satisfying basic psychological needs (Autonomy, Relatedness, Competence) and producing work engagement among employees was unclear in previous literature and hence, the

findings of this study bridge this gap. Furthermore, as Pakistan has a collectivistic culture, our findings on the need for relatedness may have some cultural reasons. For instance, researchers have argued that collectivistic societies like Pakistan emphasize on the need for social approval in personal and professional spaces (Anjum et al 2019). This need for approval may enhance the need for relatedness among employees.

The findings regarding the basic psychological need of relatedness were further endorsed while testing the second hypothesis of this study: (H2) Females have a higher need for relatedness compared to males. These findings are supported by the previous research of (Anjum et al 2019). Although Anjum and colleagues' work was in the context of exploring reasons of gender gap in engagement in the workplace, they found that there are cultural reasons (patriarchy and relationships related gender roles prescribed by society) for lower engagement of females. The findings of this study, therefore, take us one step further towards the understanding of the possibilities of engaging women at the workplace.

This study offers implications for developing an organizational culture that enhances the need for relatedness in order to successfully engage females in the workforce. Furthermore, the findings of this study bridge the gap in research on the engagement related experiences of Pakistani female managers. For instance, organizations aiming to increase the number of female employees in their workforce need to pay more attention to the need for relatedness at their work place and build an organizational culture that is inclusive and relational to help reduce the gender gap. In addition to focusing on the relational aspect, it is also important to emphasize that working in an environment focused solely on the autonomy and competence need would not be sufficient for either males or females. Therefore, creating a culture that capitalizes on relatedness will benefit all employees be they males, females or identifying as any other gender.

The findings regarding the comparison of psychological needs and organizational culture were explored using the next hypothesis: (H3) satisfaction of basic psychological needs is significantly different among the employees of private and public organizations. The findings indicate that employees working in the private sector fare better in terms of the key variables of this study. This indicates that compared to public sector organizations, private organizations provide an organizational culture that has a greater potential to fulfill the basic psychological needs of employees as well as work engagement. These findings are consistent with the research findings in other developing countries, such as Ghana where researchers have shown that individual's working in private organizations are more engaged than their counterparts in the public organizations.

Even in the past, very few studies have catered to differences at sectoral level. One study conducted in Pakistan (Tayyab and Tariq 2001) found significant differences between employees of the public and private sector. They found that public sector organizations show more competitive and spirited culture but the findings of this research suggest that organizational culture is strong in private sector organizations as compared to public sector organizations. Therefore, these findings fill the research gap in the context of Pakistan because comparative research on the level of management and public and private nexus is unavailable.

More recently, in Pakistan some researchers [Khalid et al \(2015\)](#) have explored the impact of organizational culture on the employees' engagement in the private sector but such work has not compared employees from the private and public sector. Therefore, the current exploration of these dynamics holds many social and organizational implications for Pakistani employees working in the public and private sector.

Another key objective of this research was to identify the differences among various levels of job designation. The sample of managers was taken from three levels i.e. lower executive managerial level, middle and higher executive managerial level. The findings on this hypothesis: (H4) satisfaction of basic psychological needs is significantly different among employees having different job levels, were exploratory and yet meaningful. The study showed that the perception of organizational culture is strong for middle and higher executive managers than lower executive managers. Basic psychological needs were also more satisfied among middle and higher executive managerial levels. Furthermore, there was a higher work engagement among higher management level employees compared to the lower level managers.

The findings on the level of employees are rudimentary, however, they have clearly provided evidence that if the organizational culture is strong, employees' need satisfaction will be greater and that will lead to a higher level of work engagement. These findings have implications for human resource departments regarding conduction of trainings about understanding why employees at the lower levels feel lower need satisfaction and how to provide conducive organizational culture for work engagement.

Within the correlational results of our study, our findings indicate a significantly positive relationship between all of the individual traits of organizational culture, basic psychological needs and aspects of work engagement. Correlation results report that involvement is highly correlated with autonomy and competence because when employees will be provided with an organizational culture in which they will be able to get involved in their work, it will consequently fulfill their needs of autonomy and competence. If the need for autonomy will be fulfilled, employees will feel a sense of responsibility to their work. Correlation analysis showed a significant relationship of involvement with competence as well, which suggests that the more the employees get involved in their work, the more competent they will be which is beneficial for the organization as well as for employees ([Denison et al 2006](#)).

The results also show a significant positive correlation between relatedness and involvement in an organization. Johnson (1994) said that the more the employees will get involved in their work and make relations with the senior employees, greater will be the chance to overcome errors by their experience of solving errors through trials. Involvement is building human capability, ownership and capability ([Denison 1990](#)), so if the employees in an organization will make secure relations and connections with each other they will be better informed about their duties and resources in order to work effectively.

On the other hand, consistency of organizational culture only correlated with relatedness of basic psychological needs. This finding shows if the members of an organization are sharing a common set of values and beliefs, there will be no

discrepancy in assigning tasks and goals. The organizational outcomes or ways of working will be predictable and known to all. So in this way, work will be equally distributed and the culture of the organization will be strong enough to produce wellbeing in individuals.

Adaptability and mission on the other hand, significantly correlate with all the three basic psychological needs. This clarifies that an organization is adaptable and is modifying its ways of working according to the growing demands of the workplace, because the work of the employees of that organization is autonomous and they feel responsible for attaining goals. They will show relatedness in sharing a common perspective by continuously interacting with each other and finding new ways, showing their skills and knowledge to work in order to accomplish the set goals. Working in an interactive culture will give them positive feelings and optimal mental health will be assured. In an organization with a clear mission and long-term direction, employees will work to accomplish that set mission. As in literature [Denison \(1990\)](#), it is clearly reflected that organizations having a clear mission work more effectively.

Individuals' increased readiness to devote and dedicate efforts to their work by not becoming easily fatigued and developing the tendency to continuously work on the task despite difficulties or failures ([Chughtai and Buckley 2008](#)) is assured when the organization will provide them with a culture of involvement, adapt with the growing demands, have a clear mission and is predictable and consistent in its ways of working. Dedication is considered to constitute the emotional aspect of work engagement by putting one's heart into the job ([Schaufeli et al 2002](#)). Strong and healthy organizational culture will lead individuals to identify strongly with their work and also work with passion and interest ([Chughtai and Buckley 2008](#); [Schaufeli et al 2002](#); [Geldenhuis et al 2014](#)).

The relationship of traits of organizational culture with absorption is evident when individuals are completely immersed in their work such that they lose track of time and their surroundings. These are tell-tale signs of eudemonic wellbeing derived from work that are depicted in satisfaction and complete engrossment in the job-related task at hand ([Schaufeli et al 2006](#)). In an adaptable organization, employees show absorption in their work which is beneficial for their organization.

### 5.1 Limitations and suggestions

This study has three key limitations. Firstly, the sample is limited in size and is only based on Rawalpindi and Islamabad. This limitation reduces the generalizability of our findings as Rawalpindi and Islamabad represent only the federal and provincial areas of Pakistan. Secondly, our findings are based on self-report data only. Self-report data can be either over-reported or underreported, or the participant could have forgotten the pertinent details from their organizational context. In future studies such limitations can be controlled.

Thirdly, despite our mediational and pathway analyses, the data is primarily based on correlational survey. Such surveys are limited in determining causal re-

relationships among the variables. For example, we can only determine association based relationships through such analyses, and causation or definite directionality cannot be explained through correlational surveys. Therefore, our results cannot be used for causal interpretations.

## 6 Conclusion

This study concludes that organizational culture plays a crucial role in satisfying basic psychological needs and making the employees feel meaningfully engaged at work. Among the satisfaction of psychological needs, the relatedness aspect is the most significant mediator in promoting work engagement in a given organizational culture.

This study has implications for the cultural relevance of relatedness, particularly for the female employees at work. It also concludes that satisfaction of all basic psychological needs is significantly higher among private sector employees as compared to employees of public sector organizations. This raises the need for promoting the development of organizational culture that emphasizes on satisfying psychological needs of the people employed in public sector organizations.

It was also revealed that the satisfaction of basic psychological needs increases significantly with higher job levels. These findings can facilitate industrial and organizational psychologists and human resource experts in the development of organizational culture that facilitates satisfaction of basic psychological needs (especially relatedness) among lower level employees for meaningful work engagement and fully functioning organizations.

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