Anticipated Tuberculosis Stigmatized Identities and Deviant Workplace Behavior: A Moderated Mediated Model in Pakistan

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Abstract   *In a competitive world there is a need of countries to maintain the productivity of firms. In the last few decades organizations highlighted the issue that most of the employees engage in negative workplace behavior. The current study highlights the serious causes of deviance behavior of employees. Employees diagnosed with Tuberculosis become stigmatized; they exhibit negative behaviors instead of citizenship behavior. In this study consider centrality of tuberculosis stigma as a moderating and self-esteem as a mediating variable. Data has been collected from tuberculosis stigmatized employees working in public and private tuberculosis hospitals across Pakistan.*

Key Words: Anticipated TB stigma, Centrality TB Stigmatized Identities, Self-Esteem, Deviant Workplace Behavior

Background of the Study

The term stigma arises in the time of ancient Greek when people get marked or tattooed, cut or burned in the skin to be considered as illegal, slaves or the enemies. It is a term that makes an individual lesser than the rest of people because of some features that are not worthy compared to the rest of the people within social relations (Goffman, 1963). These negative attributes create devalued identities of stigmatized people (Beyan, Erdal, Alici, Cimrin & Demiral, 2018). These beliefs might be positive or negative known as valence content of stigmatized identities including anticipated stigmatized identities and secondly, the frequency of emotions and thoughts of these devalued identities is known as the magnitude of stigmatized identities i.e. stigma of centrality of identity (Quinn et al., 2014).

The two important barriers to affect tuberculosis management negatively are that tuberculosis is often perceived as a contagious and "touchy" disease, hard to diagnose and upfront interrupted. Anti-tuberculosis treatment is needed to reduce the stigma due to this infectious disease (Craig, Daftary, Engel, Driscoll &Loannaki, 2017; Rood, Mergenthaler, Bakker, Redwood & Mitchell, 2017). Survivors of tuberculosis have been characterized as a burden on the fitness system (because of remedy expenses), at workplace (due to insurance expenses) and among their colleagues (because of the danger of propagation) in international settings (Seo, Kim, Hwang, Hoong & Lee, 2016). The number of tuberculosis infected individuals survives in densely populated countries. In Asian context, approximately 85.9% patients had experienced stigma and the levels of stigma were higher in women as compared to other relative groups (Chowdhury, Rahman, Mondal, Sayem & Billah, 2015).

Employees with poor self-esteem mostly show negative behaviors at job. Their poor confidence and lack of self-esteem engage them in destructive activities at workplace (Chirasha & Mahapa, 2012; Whelpley & McDainel, 2016). The lack of control over their esteem increases their association with negative behaviors (Mitchell, Vogel & Folger 2015). People with low self-esteem often show social problems and their identity becomes inconsistent (Palermiti, Servidio, Bartolo & Costbaile, 2017). Workplace deviance is an individual voluntary behavior that reduces the organizational norms. Individuals with low self-esteem might show these behaviors (Mackey, Frider,

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Perrewe, Gallagher & Brymer, 2015). Therefore, the body of existing literature has examined that infected stigmatized people have poor psychological (self-esteem) outcomes. These infected individuals get less support and attention at workplace that decrease their self-esteem and exhibit negative workplace outcomes. The management science literature has paid less attention on negative identities to overcome this gap. The current study considers self-esteem as a mediating mechanism between anticipated tuberculosis stigma and deviant workplace behavior.

They found that high centrality of these negative attributes boosts individuals to internalize these identities as their actual identity and they experience bad response from others due to the centrality of these negative beliefs (Meyer, 2013; Thoits, 2013). It means that the centrality of these negative attributes and the anticipation of the stigma are positively associated with each other (Smith & Baker, 2012). Very little work has been done on the magnitude of stigmatized identities. The previous qualitative researches have explored the magnitude of stigmatized identities (centrality). They depicted that future studies consider these identities as the potential moderators in the literature of stigma.

Literature Review

Anticipated (Tuberculosis) Stigma and Self-esteem

People with devalued identities anticipate that group of non-stigmatized people socially alienate and devalue them in future because of their devalued identities. These people develop negative beliefs and identities known as anticipated stigmatized identities (Ikizer, Ramírez-Esparza & Quinn, 2017). They anticipate that if they disclose who they are; they will face deleterious outcomes either at workplace or with their family and friends (Newheiser, Barreto & Tiemersma, 2017). Anticipated stigmatization process, due to serious chronic illness, diminishes ones self-esteem. Anticipated stigma found that higher level of anticipation has negative impact on their abilities, worth, education and so on (Peltzer & Pengpid, 2016). Researchers showed that most of the people have less trust because of the highest level of anticipated stigma and remain unable to manage both at one platform (Isaksson, Corker, Cotney & Hamillton, 2017; Jackson, Beeken & Wardle, 2014). It means that negative perception about poor health or anticipated stigmatization is associated with individual's poor confidence (Jackson, Beeken & Wardle, 2014). Therefore, the existing literature on anticipated stigmatized identities victimized through chronic and even infectious diseases found low self-esteem. Hence, the current study hypothesized as,

H1: An Anticipated Stigmatized Identity due to (tuberculosis/TB) is negatively related to self-esteem.

Centrality Tuberculosis Stigma as a Moderator

Centrality of stigmatized people is the magnitude of stigma which means that how much individuals centralized these negative attributes towards themselves (Quinn, Williams, & Quintana et al., 2014). Centrality of invisible stigmatized identities increase the positive and negative valence content of stigmatized identities like anticipated stigma and investigated that the higher the centrality of invisible stigmatization, the higher will be valence content of stigmatized people (Quinn & Earnshaw, 2013).

People with high centrality of stigmatized identities mostly internalized their devalued identities and negative beliefs; they consider these negative beliefs as an important part of their identity (Overstreet, Gaskins, Quinn & Williams, 2017). Researchers examined that anticipation of stigmatized identities and its risk should be associated with the characteristics of social network mechanism; these mechanisms include their identity centrality thus, the higher the centrality of stigma the greater will be the anticipation of risk (Smith & Baker, 2012).

Similarly, the meta-analysis conducted on stigmatized people found that centrality of devalued identity may moderate the association between positive and negative beliefs of stigma and health outcomes (Pascoe & Richman, 2009). On the contrary, few authors described that the greater stigmatized centrality reinforces the relationship between internal negative beliefs and the anticipation of past negative experiences along with poor self-esteem (Major & O'Brien, 2005). Hence,

H2: Centrality of TB stigma moderates the relationship between anticipated tuberculosis stigma and self-esteem. Due to this the negative relationship will be stronger between anticipated TB stigma and self-esteem.

Self-esteem as a mediating variable between anticipated TB stigmatized identities and deviant workplace behavior

Management scholars investigated different facts that those individuals trust their abilities and values; they become more confident and develop their own self-concepts (Baumeister, 2013; Rosenberg, Rosenberg, & McCord, 1978). These devalued individuals have low level of self-esteem. They develop negative beliefs about their identities victimized by disease or any bad social reaction (Hogg, 2016). People anticipate from their past experience to become less worthy. Negative anticipation and beliefs might decrease their level of esteem (Kleim et al., 2008). Most of the negative behaviors at workplace occur due to lack of maintenance of employee's self-esteem (Whelpley & McDaniel, 2016). Moreover, people anticipate that they will be discriminated against others because of their devalued identities; thus, reducing their self-esteem. It means the expectation of negative feedback related to such "obscure" work behaviors. In like manner, most of the stigmatized people experience frustrations and professional incompetence and are considered undervalued at workplace due to infectious diseases or chronic illness. Authors depicted that these employees mostly engage in deviant behavior (Iliescu, Ispas, Sulea, & Ilie, 2015). Thus, on the basis of existing literature the current study hypothesized as;

H3: Self-esteem is a mediating variable in the relationship between anticipated tuberculosis stigmatized people and deviant workplace behavior.

Theoretical Framework
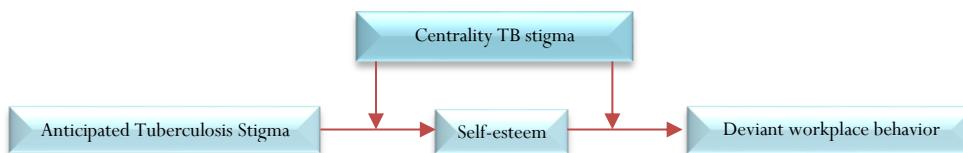
Figure 1: Anticipated Tuberculosis stigmatized employees and their deviance behavior

Methodology

This specific section identifies the method and technology used to discover the relationships of anticipated tuberculosis stigmatized employees at workplace, with mediating mechanism of self-esteem and centrality as a moderating variable between anticipated tuberculosis stigma and self-esteem. The current research focuses on time-lagged survey design to collect the data of desired population of the study.

Time Lag Research Design

This study spotlights time-lag survey design. Data was collected in two time lags. In first time lag the data was gathered for anticipated tuberculosis stigma and centrality of TB stigmatized people. Indeed, deviant workplace behavior and self-esteem the data was gathered in second time lag. In first time lag, 470 questionnaires were distributed and 400 responses were received. The remaining responses were removed due to their answers missing in data. Similarly, in time lag 2, the author distributed 400 questionnaires and received 350. The final sample was 321 because 29 responses were discarded due to their answers missing in the data.

Population and Sample

From October 2018 to March 2019, a center for contacting people diagnosed with tuberculosis was established in several public and private hospitals of tuberculosis across Pakistan The reason for selecting this population of interest is that, like HIV, tuberculosis is an epidemic that places a double burden on human resources and for this reason, it is one of the reasons to handle this disease in the workplace. The researcher has applied purposive sampling technique to achieve better results. The appropriate sample size of current population was 321. The author contacted the medical superintendent (MS) of the public and private hospitals across Pakistan and notified

them about the purpose of the survey. They were also informed that data will only be obtained by employees, especially in direct contact with TB patients each day and who have more than 8 hours of work in this infectious environment for six days a week.

Instruments of the study

Anticipated TB Stigma

Anticipated TB stigma scale was developed by Earnshaw, Quinn, Kalichman, & Park, (2013). The alpha reliability of scale including three divisions are as follows, friends and family score (Alpha reliability, 0.91), for colleagues (Alpha reliability, 0.91) and for healthcare workers (Alpha reliability, 0.92).

Centrality of TB Stigmatized Identity

To measure the scale of centrality of TB stigmatized identities, an 8-items scale has been used which was developed by Luhtanen & Crocker, (1992) with alpha reliability 0.76.

Self-Esteem

Employees' self-esteem scale was measured using 10-items scale developed by Rosenberg, (1965), also known as "Rosenberg Self-Esteem Scale. Alpha reliability of the scale was 0.72.

Deviant Work Place Behavior

The scale of deviant workplace behavior has been developed by Bennett and Robinson, (2000) including 19 items. Sample items include: "Said something hurtful to someone at work" and "Made fun of someone at work" and alpha reliability for the scale was 0.78.

Results and Discussion

Confirmatory Factor Analysis (CFA)

In current research study, after exploratory factor analysis and before testing hypotheses, CFA was carried out to test the factor structure and the validity of construct.

Table. Confirmatory factor analysis of the measurement model.

	Chi-Square	df	CMIN/DF	IFI	TLI	CFI	RMSEA
Modified Model	3674.265	2472	1.486	.899	.892	.898	.039

The present theoretical model consists of four variables including one IV, DV, one moderator and one mediating variable. There are different thresholds for all above measurements in table 4.5 to check the fitness of model. The threshold value for RMSEA is 0.050, IFI = 0.902, TLI = 0.89 and for CFI = 0.90. In order to achieve the excellent model fitness, researchers can modify the results through co-variances of error terms (Hair et al., 2011). After CFA, the measurements of current model become as follows. The value of RMSEA is 0.039 which is less than 0.05 pointing out a good fit of model, IFI value of current model is equal to 0.899 which illustrates a good fit, TLI = 0.892 which also proves excellent fit and CFI = 0.898 which again represents good fit of current theoretical model.

Correlation Analyses

In quantitative research, correlation analysis is used to quantify the association among variables.

		ATS	CTS	SE	DWB
1	ATS	1			
2	CTS	-.094	1		
3	SE	.173**	.034	1	
4	DWB	.011	.019	.224**	1

**p <.05, *p <.01, ATS=Anticipated TB stigma, CTS= Centrality TB stigma, SE= Self-esteem, DWB= Deviant workplace behavior.

In addition, centrality of tuberculosis stigma is insignificantly and negatively associated with anticipated TB stigma (r=-.094, p > .01). In the current research, the above table depicts that self-esteem is significantly and positively correlated with anticipated TB stigma(r=.173, p <. 05). In addition, self-esteem is positively but insignificantly correlated with centrality of TB stigma (r=.034, p > .01). Furthermore, deviant workplace behavior is insignificantly correlated with anticipated tuberculosis stigma (r=.011, p >. 01). Additionally, deviant workplace behavior is insignificantly centrality of TB stigma(r=.019, p > .01).

Hypotheses Testing

Standardize co-efficient for structural path (H1)

Structural Path	B	B	S.E	P-value
Anticipated TB stigma ⟶ Self-esteem	.15	.20	.078	.009

***=P <.001, β represent standardized regression coefficients, B= un-standardized regression coefficients, S.E= Standard Error

H1. Anticipated tuberculosis stigma is negatively related with self-esteem.

The results illustrate that anticipated tuberculosis stigma has positive impact on self-esteem of infected employees with statistical value of (B = .20, p <0.01).Thus, according to above mentioned results, it is confirmed that H1 is rejected because positive value of estimates show that increase in estimate increases employees' self-esteem instead of decreasing it.

H2. Centrality of tuberculosis stigma moderates between anticipated TB stigma and self-esteem such that it strengthens the negative relationship between anticipated stigma of tuberculosis infected employees and self-esteem.

Table. Moderation Analysis

Structural Path	Coefficients	P-value
Anticipated TB stigma ⟶ Self-esteem	.15	.009
Centrality TB stigma ⟶ Self-esteem	.02	p>.05
INTER_TERM3(ATS×CTS)	.004	p>.05

Hypothesis 2 proposed that centrality of tuberculosis stigma will increase the negative relationship between anticipated TB stigma and poor self-esteem. The above mentioned results in table showing the insignificant value of interaction term (B = .004, p >.05) illustrated that centrality of tuberculosis stigma does moderate between anticipated TB stigmatized identities and self-esteem. Hence, hypothesis H2 is accepted.

H3: Self-esteem Mediates the Relationship between Anticipated Tuberculosis Stigmatized Identities and Deviant Workplace Behavior.
T: Mediation Analysis (H3)

Hypothesis	Direct Effect	Indirect Effect	LL 95% CI	UL 95% CI	Result
ATS ⟶ SE ⟶ DWB	-.041	.030	.006	.073	Mediation
	P>.05	P<.01			

Note: Bootstrap sample size 5000. LL= lower limit; CI = confidence interval;
UL = upper limit; ATS=Anticipated TB stigma; SE=Self-esteem; DWB=Deviant workplace behavior; SI=social isolation

The result of proposed hypothesis revealed that direct effect of ATS on self-esteem is insignificant (B =-.041, p>.05) but indirect effect is significant with value (B =.030, p< .01). Moreover, the value of confidence interval lies between zero and revealed that there is full mediation. Hence, H3 is accepted.

Discussion, Conclusion, Limitations and Recommendations

Results indicated that anticipated TB stigma was positively related to the self-esteem of stigmatized people, which is consistent with previous research showing that educating the infected individuals about their disease to seek help from their friends, co-workers and family; reduces the negative relationship between anticipated stigmatization and self-esteem(Latalova, Kamaradova & Prasko, 2014).These statistical findings are not consistent with the problem statement that anticipated tuberculosis stigmatized identities are negatively related with self-esteem. Social Identity Theory posits that people try to maintain positive identities within groups (Tajfel & Turner, 1979). However, not every stigmatized individual will anticipate negative outcomes. Some individuals become energized and empowered by prejudice that will create positive relationship between anticipation about stigmatized identities and self-esteem (Ow & Lee, 2015).

These current results align with existing research studies that the greater centrality of invisible stigmatized identity will increase the negative psychological consequences like poor self-esteem (Quinn & Chaudoir, 2009).

Most of the negative behaviors at workplace emerge when they lose their worth and identity with their fellow workers, e.g. the descriptive statistics showed the negative correlation between self-esteem and negative workplace behaviors (Avey, Palanski & Walumbwa, 2011).The existing findings are similar with current statistical results. People anticipating threats to self-identity show aggressive behavior in retaliation (Ferris, Spence, Brown & Heller, 2012).

Conclusion and Recommendations

The statistical results of theoretical model support the current study and most of the proposed hypotheses are accepted. This study contributes to the existing literature of not only social science but also in psychology. Current study also investigates the interlinking role of self-esteem between anticipated tuberculosis stigma and deviant workplace behavior.

There are few recommendations which are needed to be considered by future research scholars. There was no accurate information regarding tuberculosis patients in Pakistan so the data is collected only from the public and private hospitals for tuberculosis in Pakistan. For an inclusive study, a comparison is needed to conduct a study across hospital and other sectors like banking, education or telecom to present a clearer picture of the stigmatized identities and their workplace outcomes.

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