Empirical investigation of mobbing, stress and employees' behavior at work place: quantitatively refining a qualitative model

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Abstract Organizations are consistently looking ways to reduce occupational stress to improve the productivity of their employees. It is matter of great interest for them to find out potential causes of occupational stress. Mobbing is relatively new concept for behavioral scientists, which illustrates in the form of unfriendly behavior of employee at workplace. The current study finds out different causes of Mobbing and their relationship with mobbing behavior, stress and employee behavior at workplace. The study uses exploratory factor analysis to identify causes of the mobbing and structural equation modeling to test relationship between constructs. A convenient sample of 450 employees from Higher Education Institutions of Pakistan (Sindh, Punjab, Baluchistan and Khyber Pakhtoonkhawa province) was taken for empirical investigation. The empirical findings reveal that mobbing has a positive relationship with stress and leads to negative employee behavior at workplace.

Keywords Mobbing · Occupational stress · Employee behavior · Higher education · Pakistan

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1 Introduction

Mobbing was relatively an unknown phenomenon, <20 years ago. Leymann (1996) opines that mobbing is a sort of long-term hostile behavior that is detected in employees at their places of work. Mobbing is psychological aggression that often involves a group of 'mobbers' instead of a single person. In theory, mobbing is considered to be an extreme type of social stressor at workplace. Leymann (1993a, b) gives the concept of mobbing as a rigorous form of harassments in organizations. Contrasting to 'normal' social stressors, yet, mobbing is a long-lasting, escalated conflict with repeated harassing actions systematically aimed at a target person (Leymann 1996; Zapf et al. 1996; Einarsen and Skogstad 1996; Zapf 1999). While bullying, describes physical aggression by a single person, most often by a supervisor. On the other hand empirical studies have shown that this is clearly not the case (Zapf 1999). In Germany and some other countries, the term 'mobbing' is preferably used, while in this article the terms bullying and mobbing are used interchangeably. As it is viewed in the literature that workplace bullying, moral harassment, psychological terror, workplace violence and are some other terms used to describe hostile activities at place of work such as rumors, verbal aggressions, humiliations etc. The recognition of mobbing is not a trivial task since hostile activities is sometimes of quite normal interactive behaviors. Though, it is when such activities are used repeatedly and over a longer period of time for harassment, so they turn into dangerous communicative weapons.

On the basis of above discussion, it is found that the term "mobbing" is used as a synonym of bullying. Mobbing is an action by the weak coming together in order to commit aggressive acts. History shows that in 1960s the term mobbing was first used for animals and then for children as same acts was identified among them. In the 1980s, Leyman found that the mobbing concept was experienced in adults as well (Davenport et al. 2003). Maguire (1999) describes the concept of mobbing as a 'non-bloody war' in organizations (Westhues 2004). Jennifer et al. (2003, pp. 492–493) defines bullying as a situation that emerges frequently and creates stress among employees at workplace. Thoits (1995) conceptualize mobbing as a process that starts with the employee's being a target of dangerous and disrespectful behavior. There are lots of studies that are quantifying the importance of mobbing for numerous European countries. So, the mobbing definition and the samples that are considered vary across these countries and consequently the incidence of mobbing is not actually comparable, for example, Cowie et al. (2000) focused on workers in international institutions of England and found that 38 % of them suffered from mobbing behaviors. Whereas, Hubert et al. (2001) find an incidence of 1 % among workers in the financial sector of Holland. The 4th European Working Conditions Survey (EWCO 2005) revealed that mobbing affects round about 5 % of workers in Europe with significant differences across countries (from 2 % in Italy and Bulgary to 17 % in Finland), due largely to differences in the sensitivity to the phenomenon and in the level of cultural awareness of it. Table 1 shows some highlights about the mobbing, stress and employees behavior with the recent literature supports.

Ozkan and Ozdevecioglu (2013) determine the impact of occupational stress on burnout and life satisfaction in 217 accountants in the city of Kayseri in Turkey. The results show that occupational stress has a negative impact on life satisfaction, while it has a positive impact on the three dimensions of burnout i.e., motional exhaustion, lack of personal accomplishment and depersonalization. Lee and Yen (2013) explore the relationship between work values and career orientation for employees in high-tech production in Taiwan. The results reveal that human resources management is critical for companies involved in high technology research and development and manufacturing. Based on above cited literature, it may conclude that there is not enough research has done so far to explain the causes of mobbing. Therefore, this

Table 1 Recent literature support

S. no	Author/s of the study	Purpose of the study	Findings
1	Angeles Carnero et al. (2012)	To evaluate the impact of mobbing on employee's health	The probability of suffering bad health is significantly higher among mobbed workers than among those not being mobbed
2	Mona and Niall (2011)	To evaluate clinical and health effects on workers, subjected to persistent harassment in the workplace	Mobbing influence psychological and physical health of workers negatively
3	Brewer and Whiteside (2012)	To investigate the presence of workplace bullying/mobbing at one British prison	Results found that direct experience of bullying/mobbing significantly predicted stress. Subsequent analyses depicted that experiencing one specific bullying behavior (i.e. dismissive of individual and their work) predicted psychological, physical, and behavioral symptoms of stress
4	Bjørkelo (2013)	To evaluate health consequences at work place	Link between whistle blowing, workplace bullying/mobbing and the devastating effects on health has been found
5	Harkbm (2012)	To explore the effect of work related stress on the organization financial performance and workers behavior	Job stress caused by poor work conditions, harassment poor communication between colleagues, unreasonable work expectations, impossible deadlines, and lack of autonomy and mobbing/bullying at workplace
6	Göçen et al. (2013)	To explore the concept of mobbing in SMEs and to find the effects of the various presses, forms of harassment and market entry prevention carried out by the companies	Many of the attitudes which comprise of mobbing acts seen in the mutual behavior of the companies that work in the Turkish labor market

study took an initiative ton investigate three potential causes of mobbing i.e., organizational causes, social system of the work group and the personal causes. In addition, this study explore mobbing consequences in relation with employees behavior i.e., how it effects the psychological and physiological health of employees in the context of higher education's institute of Pakistan. The study divides in the following sub-sections: after introduction which is presented in Sect. 1 above, Sect. 2 shows material, method and discussions. Section 3 concludes the study.

2 Method and Results

2.1 Questionnaire development

Standardized questionnaires were taken from relevant literature that attempted to gather information regarding all the variables i.e., causes of mobbing, mobbing behavior, stress (psychological and physiological) and employee behavior. Five points likert scale is used in this study, as it is the most commonly used measure in scale design. Some open ended items are also included.

2.2 Instruments

In order to measure "potential causes of mobbing" in the organization, some scales of the "Instrument for stress-oriented job analysis" (ISJA version 5.1) (Semmer et al. 1995, 1999; Zapf 1993) were used in this study.

Besides this, several scales measuring "aspects of the social system" were also used given below.

(1) A scale of social stressors (Frese and Zapf 1987).
(2) A German version of the social support scales developed by Caplan (Caplan et al. 1975) was being translated in English.

Mobbing behavior was measured with the help of a English translation of the Leymann Inventory of Psychological Terrorization LIPT (Leymann 1990).

We have used six mobbing scales a sproposed by Zapf et al. (1996) in their study i.e.,

   I *Scale of Mobbing by organizational measures* that includes question regarding to person's decisions, judging a person's job performance in an offending manner, and assigning degrading tasks to the person concerned.
  II *Scale of social isolation* that includes one does not talk to the person concerned, and being treated like air or non-existent.
 III *Scale of attacking the private sphere* it includes questions regarding to making a person look stupid, criticizing a person's private life regularly and suspecting a person to be disturbed psychologically.
  IV *Scale of verbal aggression* this scale includes verbal threats and shouting at or cursing at a person loudly.
   V *Scale of physical aggression* this scale includes threat of physical violence and minor use of violence.
  VI *Scale of rumors* It includes saying nasty things about a person behind his/her back.

"Psychological well-being" measured with the scale of psychological wellbeing scale commonly called PWS. The PWS is a 36 item scale adapted from three instruments given below:

Table 2 Demographic characteristics of the respondents

Gender	Percentage
Male	55.8
Female	44.2
Job Profile	
Teaching	57
Management	36
Others	7
Age	
25–29	54
30–34	34
35–39	7
40–44	4
Above	1
Provinces	
Punjab	32
Sindh	24
Baluchistan	12
Khyber Pakhtoonkhawa (KPK)	17
Federal	15

(1) Clinical anxiety scale (CAS; Thyer 1992) for measuring level of anxiety (for example: I feel calm) consisted of 12 items.

(2) Index of clinical stress (ICS; Hudson and Abell 1992) foe measuring level of stress (for example: I feel over frightened). It also comprises of 12 items.

(3) Generalized contentment scale (GCS; Hudson 1993) for measuring level of depression (like I feel downhearted). It was also a 12 items scale.

"Job behavior" measured with The job behavior scale commonly called JSS that is developed by Warr et al. (1979). The scale was considered to be very suitable for this study as it is precise, simple, and precise and measures both the intrinsic and extrinsic job satisfaction which leads to employee's job behavior.

2.3 Sample

A convenient sample of 450 employees from Higher Education Institutions of Pakistan was taken for the study. Demographic statistics for the sample is shown in Table 2 for ready reference.

2.4 Framework construction

Research is primarily used multidimensional constructs for the measurement of the underlying theory. Explanatory factor analysis (EFA) is used for measurement of the different dimensions of constructs. Factor analysis is a technique/method in order to investigate whether a number of variables of interest are linearly related to a smaller number of unobservable factors. In the particular vocabulary of factor analysis the parameters of these linear functions are known as loadings. In certain conditions, the theoretical variance of each variable and

the covariance of each pair of variables might be expressed in terms of the loadings as well as the variance of the error terms. The variable communality is the part of its variance that is explained with the help of common factors. The specific variance is the part of the variable variance that is not accounted by the common factors.There exist an infinite number of sets of loadings explaining the same theoretical variances and covariance's.

2.4.1 Rotated component analysis

The varimax rotation method encourages the detection of factors each of which is related to few variables and on the other hand it discourages the detection of factors that are influencing all variables. There is substantial subjectivity in the interpretation of factors and determining the number of factors. There are a number of methods in order to obtain first and rotated factor solutions, and each solution might give rise to a different interpretation. Study used EFA to explore different dimensions of the constructs.

2.5 EFA results for measurement dimensions of the constructs

2.5.1 Construct 1: causes

There can be multiple reasons that can cause mobbing in the workplace of organization. Mobbing can be caused by more than one factor at the same time. Literature suggests that personal characteristics of mobbing victims, organizational environment, personal characteristics of perpetrators, and the leadership style of the organizational manager appear frequently as reasons for the presence of mobbing in the place of work (Davenport et al. 2009). EFA results for the construct "causes of mobbing" is shown in Table 3. The questions having less than 0.40 loading are excluded from further analysis. Table 3 shows that three factors i.e., Leadership, Power distance and culture, all combine to form organizational causes of mobbing. All the 18 items (4 of Leadership, 7 of Power distance and 7 questions of culture) regarding to these three factors are contributing more in the component i.e. organizational causes of mobbing and most of the items are having loading above 0.50. Four of the items of an instrument are contributing in the factor i.e. Envy having most of the item loadings above 0.5. Envy belongs to social causes of mobbing. Ten items of Personality and five items of skills are having maximum contribution in the factor personal causes of mobbing with item loadings above 0.5 mostly.

Based on EFA results, causes of mobbing are categorize into following dimensions i.e.,

I Leadership: leadership styles play a complex but significant role in the process of mobbing. Leaders must create a climate of trust and good interpersonal relationships should be promoted in the working groups, so that it will diminish the risk of anxiety, stress, frustration, and mobbing at workplace. Findings of NecatiCemaloğlu (2011) study depicted that leadership styles of employers mostly influence the happening of mobbing towards employees at workplace of educational organizations. It is declared that as a result of positive acts of employer's i.e. problem solving motivation, participating in decision, efficient communication, and direction and rewarding, that are observed in transformational leaders, positive organizational health occurs in educational organizations. Therefore, workplace mobbing doesn't occur there. Employers or leaders who create a negative organizational environment might contribute to mobbing in the workplace of educational organizations.

II Culture: every organization has its own organizational culture that is collectively formed by its members which gives guidelines for the members of the organization with regard

Table 3 Rotated component matrix using varimax rotation

Items	Leadership	Power distance	Culture	Envy	Personality	Skills
I am given supportive feedback by my head of department on the work I do	0.62					
I can talk to my head of department about the something that has upset or annoyed me about work	0.51					
I am supported by my head of department to complete the tasks assigned to me	0.86					
My head of department cares about my opinion	0.51					
The employees with higher position obtain special privileges connected with position in organizational hierarchy		0.57				
All employees have equal rights; there are not privileges for those with higher position in an organization structure		0.72				
The employees have possibility to empower		0.59				
The relations between a superior and subordinates are hierarchical and formalized		0.63				
The relations between a superior and subordinates are open and friendly; there is a mutual exchange of experiences		0.48				
The authority comes with the position in the hierarchy		0.57				
The authority comes with the competencies		0.66				
Individual performance is emphasized as an important goal, achievements in increasing performance are rewarded			0.54			
Responsibilities are clearly defined and individuals understand their role and the extent of their authority			0.86			
Managers and subordinates communicate readily on an informal basis and meetings are held when necessary			0.64			
Subordinates as well as management are encouraged to volunteer their views, and disagreement is seen as a positive attempt to improve things			0.43			

Table 3 continued

Items	Leadership	Power distance	Culture	Envy	Personality	Skills
The right people are selected in the first place and effort is made to help them develop their skills			0.84			
Ideas are welcomed from any level in the company and everyone's views are taken into account before important decisions are made			0.51			
Time and money are committed to exploring new ideas			0.74			
You do not congratulate the person in your organization who is at similar level and with whom you often compare yourself?				0.48		
The news of his/her achievement make you feel disturbed				0.57		
If your competitor suffers embarrassing public failure or professional loss, this makes you feel happy				0.56		
I have never intensely disliked anyone				0.61		
I see myself as someone who Tends to find fault with others					0.57	
I see myself as someone who Is depressed, blue					0.84	
I see myself as someone who Is helpful and unselfish with others					0.55	
I see myself as someone who Is relaxed, handles stress well					0.42	
I see myself as someone who Starts quarrels with others					0.59	
I see myself as someone who Is emotionally stable, not easily upset					0.68	
I see myself as someone who Remains calm in tense situations					0.71	
I see myself as someone who Is outgoing, sociable					0.64	
I see myself as someone who Is sometimes rude to others					0.61	

Table 3 continued

Items	Leadership	Power distance	Culture	Envy	Personality	Skills
I see myself as someone who Likes to cooperate with others					0.43	
I am a strategic thinker						0.51
I consider myself a creative thinker						0.55
I am good in decision making						0.49
I am good enough at problem solving						0.54
I can coordinate effectively						0.61

to how they should behave. This is a mutual or reciprocal relationship because on one side, a certain sort of organizational culture affects the performance of an individual, while on the other side, how organizational members actually perform also influences the culture of the organization. In literature culture has been defined in various ways. A common definition of culture is that it is "a software of the mind" (Hofstede 1980) in that it gives members of a group with shared cognitive structures for example implicit theories and therefore a commonality with respect to interpretations of specific behaviors, attitudes and values. For example, members of societies are obligated to act in ways (like obey superiors) which show to others that they uphold societal values (for example deference to authority) (Maehr and Nicholls 1980). If we admit that an organization is in steady interaction with its environment it pursue that organizations must follow radical changes when the surroundings alter quickly. Organizational culture is subjective to the general cultural environment as the members of an organizational transmit values into the organization from the external environment of culture, but these values could be very different and so the organizational culture appears to meet the terms of societal culture. Organizational culture is a combination of numerous elements that involves unconscious parts of organizational life and it also covers all of the functions of an organization (Shein (1992)). Culture of an organizational depends on the sphere and sector of activity and also on the economic environment in which the organizations mostly operate. Here the question arises as to which aspects factually induce mobbing if we consider the deepest roots of behavior? Here the organization's culture concept probably is appropriate because it determines norms and values of organization and by them strongly affects the employee's behavior.

III Power distribution: power distance represents the extent to which less powerful members believe that power is distributed in relationships unequally and refers to social inequality and the amount of authority that one person has more than another (Hofstede 1980; Hofstede and Bond 1984). As according to workplace relationships, power distance represent the difference between the extent to which the subordinate can influence the leader and the extent to which the leader can influence the subordinate (Hofstede 1980). In addition, power distance represents the value that members of a society put on adhering to authoritarian norms (Doney et al. 1998). Mostly mobbing at workplace arises from an increase of workplace conflicts in organizations, where one person is more powerful as compare to other by value of his/her hierarchical position in the organization, status, knowledge, personality, or other personal attributes. Various researchers have pointed out

that as conflict increases it leads to bullying/mobbing because of the power difference among the parties in dispute (Einarsen and Skogstad 1996; Zapf et al. 2003). One of the causes that mobbed targets are generally found to be workers, and managers the perpetrators, is because of the in-built formal structure of power at the place of work among employees and between those who are in more senior positions. Though, in most places of work informal power structures exist, with some employees who are having more influence or power due to their increased experience, knowledge, job security or employability than others. They might also have more influence as compare to other party in a specific dispute. Some other informal power structures might include gender, race, age, sexuality and ability.

IV Envy: it is mentioned by 278 victims in a Norwegian survey that envy is also an important factor that may contribute in the occurrence of mobbing at workplace (Einarsen et al. 2003) followed by a general negative evaluation of the leadership style of one's immediate superior. Though, these victims also felt that self-efficacy, lack of copying resources, low self-esteem, lack of conflict management skills and shyness, contributed to the problem .Envy and Internal jealousy from other members of group might leads toward problems like aggression, stress and mobbing as well.

V Personal causes: literature shows that Personal characteristics of workers might be the cause of mobbing at workplace. Personal reasons of mobbing may include deficits in social skills, low level of performance, "being difficult" i.e. being finicky about accuracy, or being moaning or aggressive. Some of the aspects because of which the mobbing victims saw themselves as different from the other work group members consist of several items like lack of social skills, low qualification and unassertive behavior (Zapf and Buhler 1998).

2.5.2 Construct 2: Mobbing behavior

Quantifying and understanding the process of mobbing is essential because of its socio economic consequences. In reality not only the victim is involved in this sort of problem, it is seemed that the society and the organization may also be involved. Vega and Comer (2005) depicted that mobbing activities may create an environment of psychological threat that might reduce productivity and inhibits the commitment between individual and a group.

Various factors have been identified, which prompt workers to experience dissatisfaction from work, stress and exhaustion in their workplace of organization, mobbing is one of them. Uppal (2005) revealed that mobbing has a significant impact on a variety of factors therefore decreasing the levels work satisfaction levels among workers. Halbur (2005) found that mobbing may leads to serious problems like lack of morale in workers, increase in employee turnover and a decrease in the performance of employees. Research done by Brodsky (1976), Zapf et al. (1996) and Einarsen et al. (1998) showed that there is a positive relationship between experience of stress at workplace and the existence of mobbing. Moreover, it is known that mobbing victims experience many physical and psychological illnesses.

Table 4 shows that mobbing behavior of respondents is comprises of five sub-factors threat to professional status, threat to personal standing, isolation, overwork and destabilization. Sub factor i.e. threat to professional status is comprises of eight items, threat to personal standing consists of seven items, five items are belonging to the sub factor i.e. isolation, three are belonging to overwork and last sub factor destabilization is comprises of six items. All the 29 items are having maximum contribution in the component Mobbing behavior of respondents with most of the item loadings above 0.5.

Table 4 Rotated component matrix for measuring mobbing behavior

Items	Status	Personal standing	Isolation	Overwork	Destabilization
Persistent criticism of my work and effort	0.51				
I am being given tasks with unreasonable or impossible targets or deadlines	0.52				
Allegations are being made against me	0.57				
I am being the subject of excessive teasing and sarcasm	0.61				
Attempts to belittle and undermine my work	0.81				
Unjustified criticism and monitoring of my work	0.42				
Attempts are to be done to humiliate me in front of my colleagues	0.32				
Intimidating use of discipline or competence procedures	0.55				
Offensive or insulting remarks are made about my personality, attitudes or private life		0.81			
I am being shouted at or being the target of spontaneous anger (or rage)		0.71			
In my organization people are having intimidating behavior such as finger-pointing, invasion of personal space, shoving		0.62			
There is an undermining of my personal integrity		0.74			
Verbal threats or threatening gestures are to be given		0.48			
Physical violence is to be done in the organization		0.51			
There is a damaging personal possession		0.57			
I am being ignored, excluded or being or being 'sent to Coventry'			0.41		
There is withholding of necessary information from me			0.74		
Unreasonable refusal of leave of absence training, or promotion are given			0.51		
I am being ignored, excluded or being or being 'sent to Coventry'			0.55		
There is an undue pressure to work				0.71	
Setting of unrealistic or impossible deadlines				0.82	
I am being exposed to an unmanageable workload				0.51	

Table 4 continued

Items	Status	Personal standing	Isolation	Overwork	Destabilization
I am being ordered to do work below my competence level					0.59
My key areas of responsibility are removed or replaced with more trivial/unpleasant task					0.67
There is Spreading of gossips and rumors about me					0.61
My organization undervalues my efforts					0.68
My organization takes away areas of my responsibility without prior consultation					0.55
My organization change plans without telling me					0.51

Literatures identified some behavioral problems that occur among employees and that act as an inefficiency of employees as well as the organization and they refer them to "Mobbing Behavior". (Wefald 2008) defines mobbing behavior as "psychological violence" or "psycho-terror" that is practiced by one or numerous persons against another person or other persons in a hostile, systematic and unethical manner (Davenport et al. 2003, pp. 4–5). Mikkelsen and Einarsen (2002, p. 397) define mobbingbehavior as "recurring negative acts such as all types of maltreatment, isolation, destabilization and gossip" (Cemaloğlu, and veErtürk 2007, p. 798).

Field (2002) argued that mobbing is generally caused by deterioration in interpersonal relations and by dysfunctioning of an organization. It consists of repeated and continuing negative acts, and constructs an atmosphere where communication becomes unethical, hostile and immoral. Five dimensions of mobbing behavior have been identified by Smith 1997 that we are going to use in this study, are as follow:

  i Threats to professional status
 ii Threats to personal standing
iii Isolation
 iv Overwork
  v Destabilization

According to Pranjić et al. (2006), threat to professional status is exposure to unjustified criticism, mocking opinions, public humiliation, work monitoring and intimating use of disciplinary actions. Threat to personal integrity includes undermining of personal integrity, irritating, teasing, verbal threats and gestures that are threatening, and destructing personal possessions. It also means attacking the private sphere of an employee which includes enduringly criticizing a person's private life, assembling a person look fool/stupid,and suspecting a person to be disturbed psychologically. Isolation includes ignoring, withholding necessary information, exclusion, and irrational refusal of applications for promotion, leave or training. Enforced overwork includes unwarranted work pressure and unreasonable deadlines. Overwork also refers to the huge amount of work that is being allocated to an employee to do. Destabilization includes claiming credit for another person's ideas, spreading of rumors

Table 5 Rotated component matrix measuring stress factors

Items	Physical	Psychological
I feel frequent anxiety		0.57
I had trouble keeping my mind on what I was doing		0.54
I felt depressed		0.56
I felt that everything I did was an effort		0.67
I thought my life had been a failure		0.65
I felt fearful		0.61
I talked less than usual		0.55
I felt lonely		0.51
People were unfriendly		0.54
I felt sad		0.67
I felt that people dislike me		0.33
I could not get "going"		0.54
I feel stress most of the times		0.64
It is impossible for me to get to sleep	0.22	
I feel Migraines and headaches	0.84	
I feel Indigestion or gastrointestinal problems	0.57	
I feel extreme fatigue or exhaustion	0.56	
I feel little tendencies to eat, drink, or smoke more than usual	0.54	
I have reduced sexual interest	0.41	
I have troubled breathing or feeling of suffocation	0.51	
I feel loss of appetite	0.52	
I feel Muscular trembling (i.e., nervous tics, twitching eyelid, etc.)	0.57	
I usually feel sharp pains or painful sensations in various parts of the body	0.49	
I feel a strong temptation to stay in bed in the morning	0.48	
I have a tendency to sweat or palpitations	0.47	

or hateful gossip, making other person's efforts underestimate, removing or reducing other person's areas of responsibility without consulting to him/her.

2.5.3 Construct 3: stress

Psychological stress is comprises of 13 items with most of the item loadings 0.5, while physical stress consists of 12 items. Both are the components of factor i.e. stress. Each item is having enough contribution in this factor as shown in Table 5.

Work related stress is fast becoming the norm in most of the organizations. "Nearly two-thirds of Australian employees say they are under extreme stress at work." Harkbm (2012). The term stress is generally defined as either a stimulus or a response, or a mixture of both. All definitions and opinions about stress leads to the supposition that stress is there when the person experiences psychological or physical imbalance owing to change in the environment or any internal change in the organism. Consequently, stress has also been defined as "any environmental, social or internal demand which requires the individuals to adjust his/her usual behavior patterns" (Thoits 1995, p. 54). Job stress mayalso be defined as an awareness of employees or feeling of personal dysfunction in the result of perceived

conditions or activities in the place of work, and the physiological and physiological reactions of employees that are caused by these undesirable,uncomfortable happenings or threats in the worker's immediate environment of workplace (Montgomery et al. 1996). Stress has been documented as an inevitable life aspect and has long been used as a vital concept under different names in different theoretical formulations in the beginning. Likewise, the term "anxiety" rather than stress was used in the theorizing concept of Freud and in the reinforcement (learning theory) of Hull and Spencer. Anxiety was also viewed by Dollard and Miller as a classical conditioned response that led to unserviceable /pathological habits of anxiety reduction (Lazarus and Folkman 1984). In modern years, it has been recognized that "while stress is an inevitable aspect of the human condition, it is coping that makes the big difference in adaptation outcome" (Lazarus and Folkman 1984, p. 6).

2.5.4 Construct 4: employee behavior

Table 6 shows four components of employee behavior i.e. job satisfaction, absence behavior, intensions to quit and work morale. There are total 25 items that are showing maximum contribution in the factor employee behavior. Out of these 25 items, 15 are regarding to job satisfaction, 2 are of absence behavior, 3 items are about intensions to quit while remaining 5 items belong to work morale of employees.

The consequences (negative) of stress on work behaviors of workers has been a well-documented in the literature like, absenteeism,reduced productivity, frequent tardiness and high turnover as well (Noe 2002). Cartwright and Cooper (2007) has given estimate in their study that, because of stress related turnover and absenteeism, 12 % of the US's GNP and 10 % of the UK's GNP is lost. The current study focused on three specific aspects of work behaviors i.e. absence behaviors, intentions to quit and work morale. These three behaviors are basic indicators of workers' overall job attitude and is related to actual work performance of employees directly (Robbins 2005).

Factors that prompt absence behavior are complex. Its happening may be attributed to mental or emotional problems, factors intrinsic to the job and factors extrinsic to the job. These factors might consist of chronic illness and unstable marital relationships. Work absence is a personnel problem which is costly enough and itsconsequences enormously hinder profits and performance of workers in an organization.

Absenteeism and related withdrawal behaviors like lateness, turnover etc reflect attitudes such as, low levels of organizational commitment, job dissatisfaction and an intention to quit, specially, a worker who remains absent from work is showing negative attachment with the organization consciously or unconsciously (Davenport et al. 2009).

An individual's intention to quit is described as "a psychological response to specific organizational conditions which falls along a continuum of organizational withdrawal behaviors ranging from day-dreaming to the physical act of quitting" (Tett and Meyer 1993). in recent times, organizations are facing considerable difficulties in the retention of staff. Recent literature on quitting intention have recognized several antecedents of actual leaving behavior: job satisfaction,promotion and training opportunities, wages, relationships with colleagues, organizational commitment and stress at work as well.

Work morale is a psycho-social strength in employees activated by their identification with and commitment to organizational objectives and goals. High level of work morale is considered to be one of the vital factors for an organization's success and survival while low morale affect both individuals and organizations negatively (Rivkin 2001). High work morale is considered to be a valuable thing for an organization like other assets as it contributes to organizational competitiveness and profits as well and managers endeavor to build up

Table 6 Rotated component matrix measuring employee behavior's factors

| Items	Morale	Quit	Absence	Satisfaction
The physical conditions in which you work				0.54
Freedom to choose your own working methods				0.56
Your fellow workers				0.55
The recognition you get for good work				0.46
Your immediate manager				0.51
The amount of responsibility you are given				0.74
The rate of pay				0.64
The opportunity to use your abilities				0.54
Relations between management and staff				0.55
Future chance of promotion				0.64
The way the organization is managed				0.74
The attention paid to your suggestions				0.41
The hours of work				0.42
The amount of variety in your job				0.44
Your job security				0.84
How Many times do you absent yourself from work every month (e.g. illness or private business): _____			0.52	
How many times do you take off every month (i.e. without organizational approval): _____			0.58	
I often think of leaving the organization		0.87		
It is very possible that I will look for a new job soon		0.56		
If I may choose again, I will choose to work for the current organization		0.52		
The atmosphere at work is pretty bad	0.51			
Everyone around here don't look forward to come to work	0.55			
The company is not going places	0.57			
There is no future for this company	0.61			
We all pull together this company (We are the ones making this company progress)	0.68			
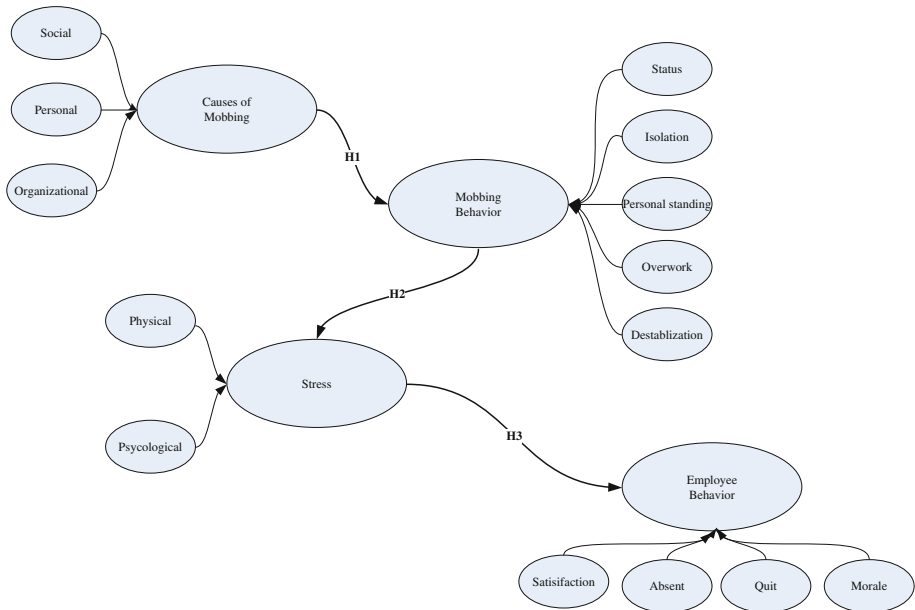
Fig. 1 Factors of causes of behavior, mobbing behavior, stress and employees' behavior *Source* Author's extraction on the basis of Tables 3–6

organizational loyalty in order to boost work morale (Chang and Lu 2009). Though, most of the employees are found to suffer from low work morale, largely attributable to factors that causes stress at workplace.

Findings of the study of Flin (2010), show that the sources of occupational stress have negative and significant correlation with job satisfaction of employees. Consequently the study of MohdDahlan et al. (2010), found that there is significant impact of coping behavior as a moderating variable on job satisfaction. And the result shows the consistent findings as that of Beaton and Murphy (1993), in which the overall source of stress scale was found to have a significant but negative correlation with job satisfaction variable. Uppal (2005) findings show that mobbing has a significant effect on a variety of factors that leads toward job dissatisfaction level of employees at workplace.

Figure 1 shows the different factors of causes of mobbing, mobbing behavior, stress and employee behavior, which extracted from rotated component matrix using varimax rotation.

After finding the factor loading of each and every components of mobbing and employees behavior, this study formulate the following hypothesis i.e.,

H1: There is a significant positive relationship between causes of Mobbing and Mobbing behavior.

H2 There is a significant positive relationship between Mobbing behavior and psychological and physiological stress.

H3 There is a significant negative relationship between Physiological and Psychological Stress and Employee behavior.

H4 There exist an indirect relationship between causes of Mobbing and Stress through Mobbing Behavior.

H5 Mobbing Behavior has indirect relationship with Employee Behavior through Stress.

Table 7 Model fit summary

Fitness indices	Standard values	Achieved values
CFI	Must exceed 0.80	0.89
NFI	Greater or equal to 0.90	1.00
RMSEA	$P < 0.08$	0.075
GFI	Greater or equal to 0.90	0.935
AGFI	Greater or equal to 0.90	0.91
Chi Square, χ^2	Below 3.0	1.978

In order to measure the objectives, the study used weighted average for measurement of constructs by using the formula i.e.,

$$WAC = \frac{F_i}{\sum_{n=1}^{i} F_i} \times R_i \tag{1}$$

where, WAC = weighted average of construct
F_i = Factor loading of item i
R_i = Response of Respondent i

2.6 Model Fitness

Hair et al. (2006) provided few model fit indices that are used to find out whether the model gives complete fitness or not. Achieved values in the table below shows the complete fitness of the model and are providing an acceptable fit to the data. All the values of fitness indices i.e. CFI, NFI, RMSEA, GFI, AGFI and Chi Square are meeting the cut point of standard values. So the Model fitness is achieved as we can examine the modification indices in the following Table 7.

The effects of variables are grouped into three categories: direct, indirect and overall effect, while the last one refers to the direct effects plus the indirect ones. Figure 2 shows the structural equation modeling on the studied variables.

As Fig. 2 depicts i.e., there is a direct relationship between causes of Mobbing and Mobbing behavior, through the path having coefficient value 0.71 which is significant at P value <0.05 %. So **H1** accepted. In addition, there is a positive relationship between mobbing behavior and stress. Mobbing behavior effects Stress directly with the path coefficient value 0.95 and P value <0.05 that demonstrates that the relationship is not only positive but significant as well, which supports **H2**. Analysis further shows that stress and employee behavior has **direct** relationship i.e., stress affects employee behavior directly and negatively which is shown with the value of path coefficient i.e. −0.63. So **H3** is accepted.

There is an **indirect** relationship between causes of mobbing and stress i.e., causes of Mobbing indirectly affect stress through the path having indirect influence of 0.67 (by multiplying the path coefficients 0.71 × 0.95). This shows that causes of mobbing first affect Mobbing behavior positively with path coefficient value 0.71, and then Mobbing behavior affects stress also positively with the path coefficient value 0.95. So the indirect relationship is determined that supports **H4**.

In addition, there found an **indirect** relationship between Mobbing behavior and employee behavior. Mobbing behavior indirectly affects employee behavior through the path having indirect influence of −0.59 (0.95 × −0.63). This demonstrates that Mobbing behavior first affects stress positively (0.95) then stress affects employee behavior negatively (−0.63). On
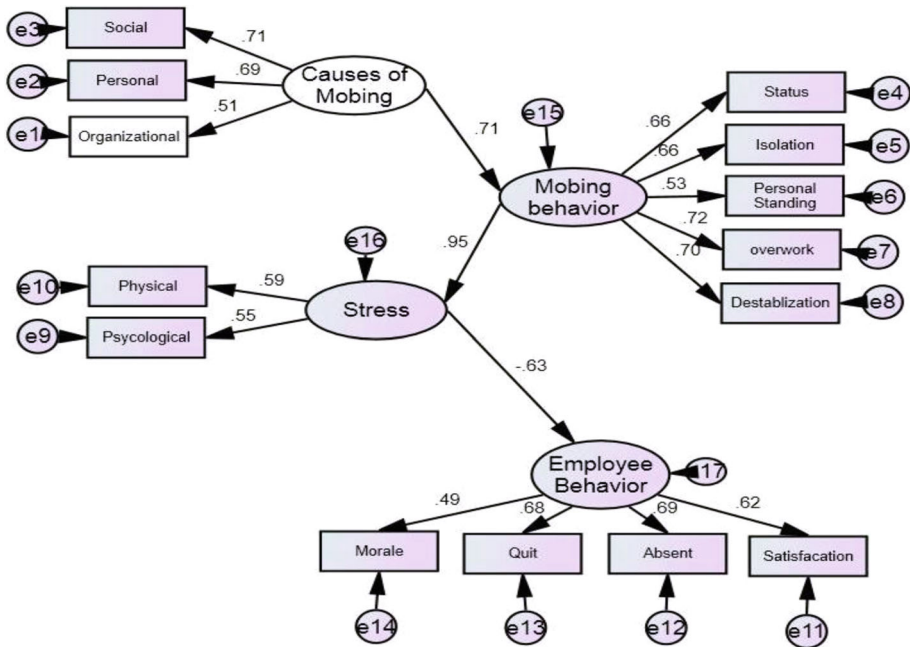
Fig. 2 Structural equation model (SEM) estimates

Table 8 Direct indirect effects of variables

	Causes of Mobbing	Mobbing behavior	Stress	Employee behavior
Causes of Mobbing	1.00	0.71 (Direct)	0.67 (Indirect)	−0.42 (Indirect)
Mobbing behavior	0.71 (Direct)	1.00	0.95 (Direct)	−0.59 (Indirect)
Stress	0.67 (Indirect)	0.95 (Direct)	1.00	−0.63 9 (Direct)
Employee behavior	−0.42 (Indirect)	−0.59 (Indirect)	−0.63 (Direct)	1.00

the basis of it indirect influence has been calculated, that shows **H5** is accepted. Table 8 conclude the direct and indirect effects between the variables.

3 Conclusion

Organizations are looking ways to address disruptive behaviors promptly in order to increase professionalism, and adopt a framework for better understanding of those behaviors and approaches for taking action. These organizations also develop strong strategies and policies that define issues very clearly and offer guidelines for action to address disruptive behaviors among employees and healthcare providers as well. But for these purposes organizations should be aware about what can be the disruptive behaviors that might lead employees toward negative actions/behaviors and creates health problems in them like stress, frustration, aggression etc. This study clearly shows that Mobbing is one of the long term hostile behaviors that is detected among employees at their workplaces. Study also pointed out some of the

common causes of Mobbing at workplace; these include organizational, social and personal causes. Organizational causes involve leadership, culture and power distribution. Envy found to be a social cause of Mobbing whereas personality and skill/qualification is considered as personal cause of Mobbing. It is also concluded that Mobbing can be caused by more than one factor at the same time. Major findings of the study revealed that there is a positive relationship between Causes of Mobbing and Mobbing behavior i.e. threats to professional status, threats to personal standing, isolation, overwork and destabilization. And this mobbing behavior has direct and positive relationship with psychological and physical stress. This finding is also supported by the study of Mona and Niall (2011) that depicts that mobbing influence psychological and physical health of workers negatively. Brewer and Whiteside (2012) research findings also showed the same results. Stress creates negative employee behavior as it lead employees toward low work morale, absenteeism, low job satisfaction and intensions to quit from the job. Study also found an indirect relationship of Mobbing behavior with employee behavior through stress. This determines that, Mobbing behavior increases stress among workers that arouses negative behavior among them.

Study is useful for both service and manufacturing organization which are consistently facing unfriendly employee's behavior and wanted to find out potential causes of increased employees stress and negative behavior. Study provides a framework for the organizations to understand causes of mobbing, mobbing behavior, stress and employee behavior and discussed their relationship. By using this framework organization can help their employee's to reduce occupational stress and stimulate friendly work behavior.

References

Angeles Carnero, M., Martínez, Blanca, Sánchez-Mangas, Rocío: Mobbing and workers' health: empirical analysis for Spain. Int. J. Manpow. **33**(3), 322–339 (2012)

Beaton, R.D., Murphy, S.A.: Sources of occupational stress among fire-fighter/EMT'sand fire-fighter/paramedics and correlations with job-related outcomes. Prehospital Disaster Med. **8**, 50–140 (1993)

Bjørkelo, Brita: Workplace bullying after whistle blowing: future research and implications. J. Manag. Psychol. **28**(3), 306–323 (2013)

Brewer, Gayle, Whiteside, Emma: Workplace bullying and stress within the prison service. J. Aggress. Confl. Peace Res. **4**(2), 76–85 (2012)

Cemaloglu, N.: "The exposure of primary school teachers to bullying: an analysis of various variables". Soc Behav Pers, **35**(6), 789–802 (2007)

Brodsky, C.: The Harassed Worker. Lexington Books, Washington, DC (1976)

Caplan, R.D., Cobb, S., French, J.R.P., van Harrison, R., Pinneau, S.R.: Job Demands and Worker Health. National Institute for Occupational Safety and Health (NIOSH), Washington, DC (1975)

Cartwright, S., Cooper, C.L.: Managing Mergers, Acquisitions and Strategic Alliances. Butterworth Heinemann, Oxford (2007)

Cemaloğlu, N., veErtürk, A.: Öğretmenlerinmaruzkaldığıyıldırmaeylemlerinincinsiyetyönündenincelenmesi. Türkeğitimbilimleridergisi **5**(2), 345–365 (2007)

Chang, K., Lu, L.: The influence of occupation on stressors and work behaviours. Int. J. Hum. Resour. Manag. **20**(3), 591–605 (2009)

Cowie, H., Jennifer, D., Neto, C., Angulo, J.C., Pereira, B., Del Barrio, C. and Ananiadou, K.: Comparing the nature of workplace bullying in two European countries: Portugaland UK. In: Sheehan, M., Ramsay, S., and Patrick, J. (eds.) Transcending boundaries: integrating people, processes and systems, conference proceedings, The School ofManagement, Griffith University, Brisbane, QLD, pp. 128–33

Davenport, N., Schwart, R.D., Eliot, G.P.: Mobbing: Emotional Abuse in the AmericanWork Place, SistemYayıncılık, İstanbul. Ç ev, Osman Cem Ö NERTOY (2003)

Doney, P., Cannon, J., Mullen, M.: Understanding the influence of national culture onthe development of trust. Acad. Manag. Rev. **23**(3), 601–620 (1998)

Einarsen, S., Raknes, B.I., Mattheisen, S.B.: Bullying and harassment at work and their relationships to work environment quality: an exploratory study. Euro. Work. Organ. Psychol. **4**, 381–401 (1994)

Einarsen, S., Skogstad, A.: Prevalence and risk groups of bullying and harassment at work. Euro. J. Work Organ. Psychol. **5**, 185–202 (1996)

Einarsen, S., Matthiesen, S.B., Skogstad, A.: Bullying, burnout and well-being amongassistant nurses. J. Occup. Health Saf. **14**(14), 563–568 (1998)

Einarsen, S., Hoel, H., Zapf, D., Cooper, C. (eds.).: The concept of bullying at work: the European tradition. In: Bullying and emotional abuse in the workplace: international perspectives in research and practice. Taylor & Francis, London (2003)

Field, T.: Bullying in medicine. Those who can, do; those who can't, bully. BMJ **324**, 786 (2002)

Frese, M., Zapf, D.: EineSkalazurErfassung von SozialenStressoren am Arbeitsplatz, (A scale for the assessment of social stressors at work). ZeitschriftfuÈ r Arbeitswissenschaft **41**, 134–141 (1987)

Göçen, S., Yirik, S., Yılmaz, Y., Altınta, V.: Intercompany mobbing: the effects of company growth. Qual. Quant. **47**, 1275–1285 (2013)

Gore, S.: Social support and styles of coping with stress. In: Cohen, S., Syme, L.S. (eds.) Social Support and Health, pp. 263–278. Academic Press, Orlando (2002)

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., Tatham, R. L.: Multivariate data analysis. 6th edn. Prentice Hall, New Jersey (2006)

Halbur, K.V. : "Bullying in the academic workplace". Academic Leader, **2**(11), 3–7 (2005)

Harkbm: The effect of work related stress and its impact on the productivity of both the organization and the employee. StudyMode.com. Accessed 03, 2012, from http://www.studymode.com/essays/The-Effect-Of-Work-Related-Stress-951719.html

Hofstede, G.: Culture's consequences: international differences in work -related values. Sage, Beverly Hills (1980)

Hofstede, G., Bond, M.H.: Hofstede's culture dimensions: an independent validation usingRokeach's value survey. J. Cross-Cult. Psychol. **15**(4), 417–433 (1984)

Hofstede, G.H.: Culture's Consequences: Comparing Values. Behaviors, Institutions and Organizations across Nations. Sage, Thousand Oaks (2001)

Hogh, A., Mikkelsen, E.G., Hansen, A.M.: Individual consequences of workplace bullying/mobbing. In: Einarsen, S., Hoel, H., Zapf, D., Cooper, C. (eds.) Bullying and Harassment in the Workplace: Developments in Theory, Research and Practice, 2nd edn, pp. 107–128. CRC, Boca Raton (2011)

Hubert, A.B., Furda, J., Steensma, H.: Mobbing: systematic harassment in organizations. Gedrage Organisatie **14**(6), 378–396 (2001)

Hudson, W., Abell, N.: Index of Clinical Stress (ICS). WALMYR, Tempe (1992)

Hudson, W.: The Generalized Contentment Scale (GCS). WALMYR, Tempe (1993)

Jennifer, D., Cowie, H., Ananiadou, K.: Perception and experience of workplace bullying in five different working populations. Aggress. Behav. **29**(6), 489–496 (2003)

Kivimäki, M., Elovainio, M., Vahtera, J.: Workplace bullying and sickness absence inhospital staff. Occup. Environ. Med. **57**(10), 656–660 (2000)

Laura, Barker: Chapter 13 a positive 1 bullying: lessons from the Victorian public sector. In: Charmine, EJ Härtel, Neal, M Ashkanasy, Wilfred, J Zerbe (eds.) What Have We Learned? Ten Years On (Research on Emotion in Organizations), pp. 341–362. Emerald Group Publishing Limited, Bingley (2011)

Lazarus, R.S., Folkman, S.: Stress Appraisal, and Coping. Springer, New York (1984)

Lee, H., Yen, K.: A study of the relationship between work values and career orientation of employed in the high technology industry. Qual. Quant. **47**, 803–810 (2013)

Leymann, H.: "AÈ tiologie und HaÈufigkeit von Mobbing am Arbeitsplatz ± eine UÈ bersichtuÈber die bisherigeForschung", ("Etiology and frequency of mobbing at work ± a review of existing research"). ZeitschriftfuÈ r Personalforschung **7**, 83–271 (1993a)

Leymann, H.: Presentation av LIPT-formulaÈ ret: Konstruktion, validering, utfall, (Presentation of the LIPT Questionnaire: Construction, Validation And Outcome). VioleninomPraktikertjaÈnst, Stockholm (1990)

Leymann, H.: Mobbing ± Psychoterror am Arbeitsplatz und wie man sichdagegenwehrenkann, (Mobbing ± Psychological Terror at Work, and How One Can Defend Oneself). Rowohlt, Reinbeck (1993b)

Leymann, H.: The content and development of mobbing at work. Euro. J. Work Organ. Psychol. **5**, 165–184 (1996)

Lou, L.: Work motivation, job stress and employee well-being. J. Appl. Manag. Stud. **8**(1), 61 (1999)

Maehr, M.L., Nicholls, J.G.: Culture and achievement motivation: a second look. In: Warren, N. (ed.) Studies in Cross-cultural Psychology, pp. 221–267. Academic Press, London (1980)

Maguire, D.: Commentary on cover of N. Davenport et al., Mobbing: Emotional Abuse inthe American Workplace, Civil Society, Ames, IA (1999)

Mikkelsen, E.G., Einarsen, S.: Relationships between exposure to bullying at work and psychological and psychosomatic health complaints: The role of state negative affectivity and generalized self-efficacy. Scand. J. Psychol. **43**, 397–405 (2002)

MohdDahlan, A.Malek, Kathryn, Mearns, Flin, Rhona: Stress and psychological well-being in UK and-Malaysian fire fighters. Cross Cult.l Manag. **17**(1), 50–61 (2010)

Mona, O'Moore, Niall, Crowley: The clinical effects of workplace bullying: a critical look at personality using SEM. Int. J. Workplace Health Manag. **4**(1), 67–83 (2011)

Montgomery, D.C., Blodgett, J.G., Barnes, J.H.: A model of financial securities sales persons' job stress. J. Serv. Mark. **10**(3), 21–34 (1996)

Moran, C., Colless, E.: Positive reactions following emergency and disaster responses. Disaster Prev.Manag. **4**(1), 55–60 (1995)

Moran, C.: Personal predictions of stress and stress reactions in fire fighter recruits. Disaster Prev. Manag. **10**(5), 356–365 (2001)

NecatiCemaloğlu, : Primary principals' leadership styles, school organizational health and workplace bullying. J. Educ. Adm. **49**(5), 495–512 (2011)

Noe, R.A.: Employee Training and Development. McGraw-Hill Co. Inc, Boston (2002)

Ozkan, A., Ozdevecioglu, M.: The effects of occupational stress on burnout and life satisfaction: a study in accountants. Qual. Quant. **47**, 2785–2798 (2013)

Pearlin, L.I., Schooler, C.: The structure of coping. J. Health Soc. Behav. **19**, 2–21 (2001)

Pranjić, N., Bilić, L.M., Beganlić, A., Mustajbegović, J.: Mobbing, stress, and work ability index among physicians in Bosnia and Herzegovina: survey study. Croat. Med. J. **47**(5), 750–758 (2006)

Rivkin, J.W. : Reproducing knowledge: replication without imitation at moderate complexity, Org .Sci. **12**(3), 274–293 (2001)

Robbins, S.P.: Organ. Behav. Prentice-Hall, Englewood Cliffs (2005)

Semmer, N.K., Zapf, D., Dunckel, H.: Assessing stress at work: a framework and an instrument. In: Svane, O., Johansen, C. (eds.) Work and Health ± Scientific Basis of Progress in the Working Environment, pp. 105–113. Office for Official Publications of the European Communities, Luxembourg (1995)

Semmer, N.K., Zapf, D., Dunckel, H.: 'Stress-orientierte Arbeitsanalyse ISTA, Stress-oriented job-analysis ISTA'. In: Dunckel, H. (ed.) Handbuch zur Arbeitsanalyse. Verlag der Fachvereine, Zurich (1999)

Shein, E.: Organizational culture and leadership: a dynamic view. Jossey-Bass, San Francisco, CA, p. 9 (1992)

Smith, R.: All doctors are problem doctors. BMJ **314**, 314–322 (1997)

Stone, A.A., Helder, L., Schneider, M.S.: Coping with stressful events: coping dimensions and issues. In: Cohen, L.H. (ed.) Life Events and Psychological Functioning, pp. 182–210. Sage, Newbury Park (2000)

Tett, R.P., Meyer, J.P.: Job satisfaction, organizational commitment, turnover intention and turnover: path analyses based on meta-analytic findings. Pers Psychol. **46**, 259–293 (1993)

Thoits, P.A.: Stress, coping, and social support processes: where are we? What next? J. Health Soc. Behav. **35**, 53–79 (1995)

Thyer, : The Clinical Anxiety Scale (CAS). WALMYR, Tempe (1992)

Uppal, S.: "Disability, workplace characteristics and job satisfaction". Int. J. Manpow. **26**(4), 336–351 (2005)

Vega, G., Comer, D.R.: Sticks and stones may break your bones, but words can break your spirit: bullying in the workplace. J. Bus. Ethics, **58**(1–3), 101–109 (2005)

Warr, P.B., Cook, J.D., Wall, T.D.: Scales for the measurement of some work attitudes and aspects of psychological well-being. J. Occup. Psychol. **52**, 129–148 (1979)

Westhues, K.: Workplace mobbing in academe: reports from twenty universities. Edwin Mellen Press, Lewiston, NY (2004)

Wefald, A.: An examination of job engagement, transformational leadership, and related psychological constructs. Unpublished doctoral dissertation, Kansas State University, Manhattan (2008)

Wefald, A.J., Smith, M.R., Savastano, T.C., and Downey, R.G.: A structural model of workload, job attitudes, stress, and turnover intentions. Kansas State University (2008)

Zapf, D.: Stress-oriented job analysis of computerised office work. Euro. Work Organ. Psychol. **3**, 85–100 (1993)

Zapf, D., Knorz, C., Kulla, M.: On the relationship between mobbing factors, and jobcontent, the social work environment and health outcomes. Euro. J. Work Organ. Psychol. **5**, 215–237 (1996)

Zapf, D., Buhler, K.: Exclusion and stigmatisation at work. Department Of Psychology, J.W. Goethe-University Frankfurt (1998)

Zapf, D.: Mobbing in Organisationen. Ein UÈ berblickzum Stand der Forschung, (Mobbing in organisations. A state of the art research review). ZeitschriftfuÈ r Arbeits- & Organisationspsychologie **43**, 1–25 (1999)

Zapf, D., Einarsen, S., Hoel, H., Vartia, M.: Empirical findings on bullying in the workplace. In: Einarsen, S., Hoel, H., Zapf, D., & Cooper, C.L. (eds.) Bullying and emotional abuse in the workplace: International perspectives in research and practice, pp. 103–126. Taylor Francis, London (2003)