

## EDITORS

---

Martin Benkenstein

Manfred Bruhn

Marion Büttgen

Christiane Hipp

Martin Matzner

Friedemann W.  
Nerdinger

## Topics for Service Management Research – A European Perspective

*Martin Benkenstein, Manfred Bruhn, Marion  
Büttgen, Christiane Hipp, Martin Matzner and  
Friedemann W. Nerdinger*

---

## Capturing Value in the Service Economy

*Jochen Wirtz and Michael Ehret*

---

## Customization of B2B Services

*Michael Kleinaltenkamp, Ioana Minculescu and  
Sascha Raithel*

---

## Demographic Change and Job Satisfaction in Service Industries

*Christian Dormann, Sarah Brod and Sarah Engler*

Volume 1

1/2017

C.H.BECK · Vahlen · Munich

[www.journal-smr.de](http://www.journal-smr.de)



Q650201701

# Demographic Change and Job Satisfaction in Service Industries – The Role of Age and Gender on the Effects of Customer-Related Social Stressors on Affective Well-Being

By Christian Dormann, Sarah Brod and Sarah Engler

Major changes in the working environment during the last decades have been the increased economic importance of the service sector, the aging workforce, and the growing proportion of women in the workforce. The aim of our study is to investigate how customer-related social stressors (CSS) interact with employees' age and gender regarding employees' affective stress reactions. We used a middle-term panel study across one week and a sample of police officers ( $N = 108$ ) having everyday encounters with citizens. Results showed that CSS elicited changes in police officers' negative affect, and this effect was moderated by gender and age. In particular, older police officers tend to react with weaker increases in negative affect than younger officers do. Similarly, female officers reacted less intensively to negative encounters with citizens than male officers. Results are discussed in terms of their implications for personnel selection and placement, for training, and for team composition.

## 1. Introduction

Next to the shift from production to service industries, the demographic change in Western societies is one of the most influential forces that shape work and organizations. Among different demographic variables, age and gender are probably the most important ones. Compared to other trends, predicting the age distribution in the workforce in our societies in 20 years can be made with extreme high confidence; this workforce is already there and just has to age for 20 years. Fewer and fewer young ones will follow, and coupled with increasing retirement ages the average employee will be a quite old one. This development continues the current trend (e.g., Kinsella and Phillips 2005; Taylor 2006): Whereas young employees between the age of 20 and 24 were the largest group of the workforce in 1980, today employees aged between 40 and 44 are the main group (International Labor Organization 2005). The ratio of elderly people to the working age population is even expected to double by 2060 (Eurostat Database 2012). Maintaining the employability of the aging workforce in particular for service-related jobs thus creates one of the most important challenges for our societies.

A second important development is the increased proportion of women in the workforce (e.g., Major and Germano



Christian Dormann is Professor of Business Education and Management, at Johannes Gutenberg-University Mainz, Jakob-Welder-Weg 9, 55128 Mainz, Germany, Phone: +49 (0)6131 39 29900, Fax: +49 (0)6131 39 29910, E-Mail: cdormann@uni-mainz.de. \*Corresponding Author.



Sarah Brod is Research Assistant at Johannes Gutenberg-University Mainz, Jakob-Welder-Weg 9, 55128 Mainz, Germany, Phone: +49 (0)6131 39 29998, Fax: +49 (0)6131 39 29910, E-Mail: sabrod@uni-mainz.de.



Sarah Engler was Research Assistant at Johannes Gutenberg-University Mainz, now employed at Infraser-Hoechst, Frankfurt, Germany.

**Please note:** We thank Sebastian Giralto for helping with the data collection. We further want to gratefully acknowledge the management of all police headquarters that cooperated for conducting our studies. We also thank all participants for taking part in our study. Finally, we appreciate all of the reviewers' and editors' insightful comments. In particular, we are grateful to an anonymous reviewer's suggestion to include female employees and to investigate the role of gender in our analyses.

2005), especially in male dominated jobs. The increasing proportion of well-educated women, who are keen in making an occupational carrier, and who are facing employers that have to cope with a narrowing market of highly qualified personnel, makes it highly likely that traditional male jobs will be more and more occupied by women in the future.

Through the shift from production to service industries a variety of new service jobs has been created. Many service jobs are characterized by interactions with customers, of which some could be stressful. In particular, our focus is the stress elicited by employees' everyday encounters with customers.

## **2. Customer-related Social Stressors and Their Consequences**

Dealing with difficult customers or clients has been identified as an important source of stress in service jobs (e.g., Ben-Zur and Yagil 2005; Dormann and Zapf 2004; Grandey et al. 2002, 2004; Harris and Reynolds 2004; Johnson et al. 2013). Dormann and Zapf (2004) introduced the term customer-related social stressors (CSS) to describe customer behaviors or customer expectations that might be stressful for service providers. The validity of the concept of customer-related stressors was established across a wide range of jobs. Dudenhöffer and Dormann (2015) showed that the factor loadings of the CSS items (cf. Dormann and Zapf 2004) vary only very slightly among the majority of service jobs. In a similar vein, the effects of the four CSS scales on burnout and job satisfaction varied little, too.

So far, most studies investigated long-term consequences of CSS or negative customer behavior on service providers' affective well-being such as burnout (e.g., Ben-Zur and Yagil 2005; Dormann and Zapf 2004; Grandey et al. 2004). Only sporadic evidence exists concerning mid-term affective stress reactions to negative customer behaviors. Dudenhöffer and Dormann (2013), for instance, showed that CSS impact on service providers' negative affect two weeks later. Knowing that stressors cause mid-term reactions like increased negative affect and decreased positive affect is important for understanding of how stress unfolds. This unfolding of stress via affective reactions plays a theoretical key role in prominent stress theories (e.g., Lazarus 1990). Since there is little research on mid-term affective reactions resulting from social stressors at work, one of our aims is to fill this void.

Negative affect is theoretically well established as a stress outcome variable. The transactional stress model by Lazarus (Lazarus and Folkman 1984) proposes impairments of affect as a mid-term reaction to stressors. According to the

affective event theory by Weiss and Cropanzano (AET; 1996), negative work events that employees regard as important lead to negative affective reactions. Customer-related social stressors are likely to be negative and important work events, thus increasing the likelihood of negative affect as reaction to CSS. Negative affective experiences, in turn, are supposed to serve as mediators within the process of developing long-term stress consequences (e.g., Lazarus 1990; Sonnentag and Frese 2003).

Whereas Lazarus (1990; Lazarus and Folkman 1984) as well as Weiss and Cropanzano (1996) focused on negative affect, Fredrickson (2001; Frederickson and Joiner 2002) elaborated on the negative consequences of decreased positive affect. Frederickson (2001) stated that positive affect "broaden people's momentary thought-action repertoires and build their enduring personal resources, ranging from physical and intellectual resources to social and psychological resources" (p. 219). In addition, positive affect compensates the detrimental effects of negative affect and moreover triggers so-called upward spirals toward increased well-being (Fredrickson and Joiner 2002). Thus, if CSS decrease positive affective states, this might prevent employees to benefit from the favourable consequences emerging from positive affective states. Thus, we have the following hypotheses:

*H1: CSS increase employees' negative affect (one week later).*

*H2: CSS decrease employees' positive affect (one week later).*

### **2.1 Impact of Age on the Relation between CSS and Affective Stress Reactions**

Age is theoretically relevant for affective stress reactions. One of the most important theories concerning age and lifespan development is the Socioemotional Selectivity Theory (SST) by Carstensen (2006; Ready and Robinson 2008). According to SST, individual's perception of remaining lifetime influences motivation, cognition, and emotions. When the time left decreases, people tend to become increasingly motivated to maximize positive and to minimize negative affective experiences (Charles and Carstensen 2007; Ready and Robinson 2008). Older people, thus, are more motivated to regulate their emotions. In addition, older people are not only more motivated to focus on positive states; they also have better emotion regulation skills (e.g., Gross et al. 1997; Röcke et al. 2009).

Emotion-regulation occurs when a conflict situation with customers arises. Younger employees might be more promotion-oriented whereas older employees probably have a prevention focus (cf. Higgins 2000). In a study by Freund (2006), younger adults appeared to be more concerned with optimizing their performance, while older adults

were more concerned with minimizing losses. Employees aiming at optimizing their performance in a social conflict situation probably try to gain control over the customer with whom there is a struggle, whereas employees trying to minimize losses are more interested in conflict resolution. This does not imply that older employees are less proactive or less efficient (cf. Bertolino et al. 2011). Both strategies, that is, trying to gain control or to solve the conflict, may in principal lead to success. Rather, older employees are more strongly motivated to prevent emotional stress than to gain status.

The theoretical propositions of an age-related shift in motivation and skills to regulate emotions provide a good explanation why aging is related to a decrease in negative affect (e.g., Charles et al. 2003; Charles et al. 2001; Kobau et al. 2004). Moreover, this age-related shift in motivation and emotion regulation skills could explain why older people show weaker affective reactions to stressful social situations. Birditt et al. (2005) found that older participants experience interpersonal problems as less stressful than younger and middle-aged participants. In addition, older participants feel anger and psychological distress less frequently when being confronted with interpersonal problems or stressors (Birditt and Fingerman 2003; Neupert et al. 2007). Moreover, Birditt et al. (2005) found that older people react to interpersonal problems less frequently with arguing than younger participants do; instead, older individuals primarily react with 'doing nothing'. This might prevent small interpersonal conflicts from escalating.

The effects of age discussed earlier built on SST (Carstensen 2006). Although the core variable according to SST is individual's perception of remaining lifetime, research on SST frequently used age as a proxy for the remaining lifetime (e.g. Breslin and Safer 2012; Carstensen et al. 2011). We believe this is reasonable and we therefore propose:

- H3: Employees' age will moderate the relation between CSS and negative affect, such that the older the employee, the lower the effect of CSS on the increase in negative affect.
- H4: Employees' age will moderate the relation between CSS and positive affect, such that the older the employee, the lower the effect of CSS on the decrease of positive affect.

## 2.2 Impact of Gender on the Relation between CSS and Affective Stress Reactions

Gender is an important personal variable when interpersonal processes are investigated. Even though there are different theoretical perspectives explaining gender differences in behavior, they frequently make similar predictions. On the one hand, according to the *socialization per-*

*spective*, different expectations regarding appropriate female and male behaviors exist in society. In childhood, individuals begin to learn "sex-appropriate" behaviors through the process of reinforcement and role modeling. On the other hand, *Social role theory* (SRT) proposes that behavior is influenced by individuals' social roles (e.g., Eagly et al. 2000). Men and women assume different roles, role expectations, and norms and standards. These expectations and norms are transmitted to future generations and become sexual stereotypes (e.g., males are assertive, women take care), which explain gender differences in behavior.

Empirical evidence of gender differences in attitudes and behavior suggests differential effects of CSS on affective stress reactions for male and female employees: First, men are more task- or goal-oriented (agentic); women are more relationship-oriented (communal; e.g. Karatepe et al. 2006). Studies investigating gender differences in selling behaviors confirm females' greater relationship-orientation and customer-orientation (e.g., Singuaw and Honeycutt 1995). CSS make successful interactions difficult and impede employees' achievement of objectives. Thus, CSS can be expected to be more frustrating for male than for female employees. Since women are more relationship-oriented, female employees are likely to be more motivated and skilled in handling difficult interactions with customers than male employees. Furthermore, customer-orientation is an important resource, particularly in interactions with difficult customers, because customer-oriented service providers might interpret ambiguous or disproportionate customer expectations as part of their job. For female employees, a customer-oriented attitude might be also an important resource in interactions with difficult citizens. Consequently, female employees should experience less negative stress reactions.

Second, according to SRT (Eagly 1987) men are more aggressive than women, which is also evidenced in empirical research. For instance, men tend to show more physical aggression (e.g., Archer 2004). Kukiainen et al. (2001) found higher rates of aggression in predominantly male workplaces than in predominantly female workplaces. Male employees reported more frequently to engage in workplace aggression than female employees (Baron et al. 1999; Rutter and Hine 2005). A meta-analytic approach showed that male employees apply more aggression to other members of the organization than female employees (Hershcovis et al. 2007) do. Higher prevalence of aggressive behavior among men probably indicates that men are experiencing more stress in certain social situations. Knight et al. (2002) found in their meta-analysis that gender differences in aggressive responses were smaller in no or highly stressful interpersonal situations and larger in slightly or moderate stressful interpersonal situations. This has implications for our study because we focus on

CSS, which are comprised of disproportionate expectations, ambiguous expectations and personal aversions that can be considered to be moderately stressful social situations. Accordingly, gender differences in employees' affective stress reactions to CSS might be particularly likely.

Finally, women outperform men in decoding or reading nonverbal behavior and in perceiving an interaction partners' emotions (e.g., Hall 1978; Hall et al. 2000; Hall and Matsumoto 2004). Accordingly, female employees probably detect CSS much earlier than male co-workers do. Therefore, they may apply emotional coping strategies (e.g., emotion regulation of their own negative affective states, i.e., antecedent-focused emotion regulation, Gross 1998) as well as instrumental coping strategies (e.g., trying to calm citizens down) earlier.

In sum, we propose a weaker relation between CSS and affective stress reactions for female employees than for male employees and have the following hypotheses:

*H5:* Employees' gender will moderate the relation between CSS and negative affect, such that female employees will react with a smaller increase in negative affect to CSS than male employees will.

*H6:* Employees' gender will moderate the relation between CSS and positive affect, such that female employees will react with a smaller decrease in positive affect to CSS than male employees will.

### 2.3 Stress among Police Officers and Customer-related Stressors

In the present study, we investigate police officers. Police officers provide several services to the community and their residents. Thus, their job can be considered as a service job. It is widely recognized that working as a police officer is stressful (e.g. Brown and Campbell 1994; Van Hasselt et al. 2003). For instance, retirement ages of police officers in many European countries are quite low – not seldom by law – because it is supposed to be a highly demanding occupation (The Social Protection Committee 2004). However, dealing with difficult citizens – compared to dealing with offenders or victims of criminal acts – has not yet received much attention. Previous research has mainly focused on the large-scale critical incidents or major criminal acts, whereas police officers' smaller scale events such as stressfully behaving citizens is what so many officers encounter on the job (Sheehan and van Hasselt 2003). The potential interactions of age and gender with police officers' CSS are thus both theoretically important in order to better understand occupational stress and practically important for job design and HR-related activities.

### 2.4 Contributions to the Literature

By investigating the impact of CSS on affective stress reactions, and investigating if age and gender moderate this relationship among police officers, we add to the literature in several ways. First, Johnson et al. (2013) showed that age relates to higher stress reactions, and the relation between customer-related stressors and stress reactions is moderated by age. However, their study was only cross-sectional, leaving some ambiguity if these relations can be causally interpreted. In particular, the most strongly affected dependent variable was a cynical attitude towards customers, which shares some conceptual overlap with CSS. We add to the study by Johnson et al. (2013) by analyzing possible cross-lagged effects in a short panel study using positive and negative affect and CSS. Further, we also used gender as a moderator in addition to age.

Second, little is known about the mitigating and enhancing factors, which moderate the impact of demands on strain among police officers (Chrisopoulos et al. 2010; Kaufman and Beehr 1989). Neither study analyzed age nor gender as potential moderators. In general, demographic variables, including age and gender were frequently considered as control variables (main effects) in studies investigating stressful social interactions. To our knowledge, however, there is no study, which investigated the moderating effect of age and gender on the relation between citizen-related stressors and employees' well-being. Thus, investigating how effects of CSS on well-being vary with age and gender among police officers could provide a more profound insight into how negative social encounters can be handled.

Third, the present study adds to the literature by refining and extending a study by Dudenhöffer and Dormann (2013), which demonstrated the effect of CSS on service providers' negative affect using a mid-term panel design and a sample of employees of public service organizations. We extend the work by Dudenhöffer and Dormann in two directions: We investigate the effects of CSS not only on increased negative affect but also on reduced positive affect. Furthermore, we examine age and gender as potential moderators in the relation between CSS and service providers' negative and positive affect.

Fourth, our study adds to the literature by analyzing the mid-term consequences of CSS; previous studies mainly focused on short-term or on long-term consequences of stress at work. Investigating mid-term stress reactions is theoretically quite important, which we explained earlier, however, few studies have considered mid-term stress reactions yet. Furthermore, there is no generally accepted taxonomy classifying stressors or strains with reference to their time frame. Payne (2001), for instance, used the term "short" if referring to a duration of minutes up to hours,

“medium” if lasting days up to weeks, and “long” for covering month and years. More recently, Dudenhöffer and Dormann (2013) added a fourth category and they defined “immediate” reactions (lasting for seconds to minutes), “short-term” reactions (hours up to a day), “mid-term” (several days or weeks), and “long-term” (across one month to several years). Based on this classification scheme, our study uses a one-week interval and focuses on mid-term strain reactions. Thus, analyzing age and gender as possible moderators of the relation between demands and mid-term stress reactions among police officers make substantial contributions to the literature.

### 3. Method

We collected data by two intranet-based online surveys. The interval between the surveys was one week. We asked participants concerning the level of CSS experienced during the present working day and examined the effect on police officers’ mid-term affective reactions one week later. As we aimed at examining mid-term changes in affective reactions, based on suggestions by Payne (2001) and by Dudenhöffer and Dormann (2013) a one-week lag is appropriate.

#### 3.1 Sample and Procedure

Our participants were police officers from police headquarters of a larger German city that overall employs 1,350 police officers. In order to participate, police officers must have had personal contact with citizens on a regular basis. We have no definite numbers how many of these police officers did not have regular contact with citizens, but presumably these were just a few. After the chief of police had given his agreement to perform the study, we informed police officers about it via intranet.

During the time of the study, approximately 1,200 police officers used the intranet and, thus, could potentially participate. Participating police officers responded to the online questionnaire via intranet, too. They responded to the surveys at the end of their work shift. Overall,  $n = 332$  officers participated in either of the two waves of data collected ( $n = 153$  at Wave 1 only,  $n = 71$  at Wave 2 only), which were separated by one week. Those police officers who filled out both questionnaires were included in our analyses ( $n = 108$ ).

Participants were on average 42.97 years old (Range = 26–59,  $SD = 8.64$ ). Job tenure was measured in terms of categories. Tenure in the current position ranged from 3–6 months (2.30%), 6–12 months (11.40%), 1–2 years (10.20%), 2–5 years (17.00%), 5–10 years (30.70%), 10–15 years (15.90%), 15–20 years (6.8%), 20–30 years (4.50%), and 30–40 years (1.10%).

### 3.2 Measures

#### 3.2.1 Citizen-related social stressors

We measured CSS with the CSS-items of Dormann and Zapf (2004). For all items, we replaced the word “customer” with “citizen.” In a group discussion with representatives of the police, we agreed on adding two further items, which were supposed to reflect characteristic requirements of police service. One item was “I had to deal with citizens that felt unfairly treated by me,” and the other item was “I had to deal with citizens that felt personally attacked by me.” Participants responded to items concerning the *present working day* on a five-point agreement scale ranging from 1 (*not at all true*) to 5 (*totally true*). When measuring CSS of the present working day (daily CSS), Dudenhöffer and Dormann (2013) recommended integrating all items into a single scale rather than using four scales, because the likelihood of any of the single events captured by each item during a single day is rather low. Cronbach’s alpha was .96.

#### 3.2.2 Positive and negative affect.

We measured negative affect and positive affect with all ten items of the German version of the Positive and Negative Affect Schedule (PANAS; Watson et al. 1988) by Krohne et al. (1996). We asked for negative and positive affect ‘right now’ using a five-point agreement scale from 1 (*not at all*) to 5 (*totally*). Cronbach’s alpha for negative affect was .86 (t1) and .88 (t2), for positive affect Cronbach’s alpha was .92 (t1) and .94 (t2).

### 4. Results

All hypotheses were tested using  $p < .05$  as significance level. Descriptive statistics are shown in *Tab. 1*. Citizen-related social stressors correlated significantly with positive and negative affective reactions, as expected. Correlations show that main effects of age and gender were generally weak and not significant. Correlations between positive and negative affective stress reactions were negative; however, in absolute size they were all smaller than .40, which is certainly sufficient to treat them as distinct outcomes. Test-retest correlations of positive affect (.77) and negative affect (.82) were not too high suggesting a one-week interval between measurement occasions to be long enough to expect some change.

Next, we tested our main effect and moderating effect hypotheses using negative affect as an outcome. The results are shown in *Tab. 2*. As could have been expected from inspecting the correlations, the main effects of age and gender (Step 2) on the change in negative affect were only small; still the effect of age was marginally significant with older police officers experiencing slightly less nega-

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1 Age	40.88	9.21							
2 Gender <sup>1)</sup>			.46**						
3 CSS T1	2.03	.67	-.40**	-.08	.96				
4 Positive Affect T1	3.24	.66	.05	.02	-.29**	.90			
5 Positive Affect T2	3.23	.72	-.00	.09	-.26**	.77**	.93		
6 Negative Affect T1	1.63	.49	-.04	.06	.37**	-.29**	-.31**	.82	
7 Negative Affect T2	1.58	.50	-.11	.07	.43**	-.40**	-.36**	.82**	.85

Note. <sup>1)</sup> Male = 2, Female = 1. CSS= Citizen-related social stressors. Cronbach's alpha in the diagonal. \*\*  $p < .01$  (two-tailed).

Tab. 1: Descriptive statistics of study variables (N = 108)

Model		<i>B</i>	<i>SE</i>	$\beta$	<i>t</i>	<i>p</i>
1	constant	0.24	0.10		2.56	0.01
	Negative Affect T1	0.81	0.05	0.82	14.96	0.00
$\Delta R^2 = .679, \Delta F = 223.84, p < .001$						
2	Constant	0.34	0.18		1.90	0.06
	Negative Affect T1	0.80	0.05	0.82	14.84	0.00
	Age	-0.01	0.00	-0.12	-1.86	0.07
	Gender <sup>1)</sup>	0.10	0.08	0.08	1.22	0.22
$\Delta R^2 = .011, \Delta F = 1.818, p < .067$						
3	Constant	0.11	0.21		0.50	0.62
	Negative Affect T1	0.76	0.06	0.77	13.16	0.00
	Age	0.00	0.00	-0.06	-0.90	0.37
	Gender <sup>1)</sup>	0.08	0.08	0.06	1.03	0.31
	CSS	0.10	0.05	0.13	1.94	0.06
$\Delta R^2 = .011, \Delta F = 3.758, p < .055$						
4	Constant	0.19	0.21		0.90	0.37
	Negative Affect T1	0.76	0.06	0.78	13.65	0.00
	Age	0.00	0.00	-0.05	-0.69	0.49
	Gender <sup>1)</sup>	0.04	0.08	0.03	0.43	0.67
	CSS	0.07	0.05	0.09	1.33	0.19
	CSS x Age	-0.08	0.04	-0.12	-2.08	0.04
$\Delta R^2 = .024, \Delta F = 4.311, p < .017$						

Note. <sup>1)</sup> Male = 2, Female = 1. CSS= Citizen-related social stressors.

Tab. 2: Hierarchical regression of negative affect time 2 (N = 108)

tive affective reactions. When CSS were added, the effect was positive as expected and marginally significant; the more CSS were reported, the more increased the negative affect across the subsequent week. Since the effect was only marginally significant, however, the support for H1 was not fully convincing. In the fourth step, the moderator effects of age and gender were tested. Both interaction effects became significant, and both interactions exhibited the shape that was expected in our hypotheses. Thus, H3 and H5 were supported.

Figure 1 shows the graphical representation of the interactions of CSS with age and of CSS with gender. To draw this figure, we used CSS and age scores one standard deviation below and above the mean. Since the standard deviation of gender is difficult to interpret, we used the unstandardized regression weights, which are easier to inter-

pret because they directly re-present differences between men and women. All coefficients were taken from Step 4 of the regression equation shown in Tab. 2. The slopes show that for both, men and women, younger police officers showed a clear increase in negative affect when exposed to CSS. This increase was not as strong for older male officers. For older female officers, the regression slope showed even a slight decrease of negative affect. Taken together, the two regression slopes for men and the two regression slopes for women show that men showed a steeper overall increase in negative affect when exposed to CSS than women did, which reflects the moderating effect of gender on the CSS-negative affect relations.

Next, we tested our main effect and moderating effect hypotheses using positive affect as an outcome. The results are shown in Tab. 3. As it turned out, none of our hypotheses with regard to reduced positive affect as a reaction to CSS (H2, H4, and H6) was supported.

Compared to negative affect, regressing positive affect on age and gender yielded different results. Whereas gender had no significant effect on negative affective well-being, a – sometimes only marginally – significant and positive effect of gender on positive affective well-being was found; male officers tend to experience more positive affect. Similarly, age was marginally significant throughout the different steps of the hierarchical regression analysis showing that older officers experience less positive affect.

## 5. Discussion

In the last decades, working environment has changed in various ways. Major changes are the aging workforce, the increasing proportion of women in previously male-dominated jobs, and an ongoing shift of jobs from the primary and the secondary sector into the service sector. Thus, it is important to understand how older workers employed in a service job that does not stereotypically match their gender cope with extant job demands. In many jobs, demands

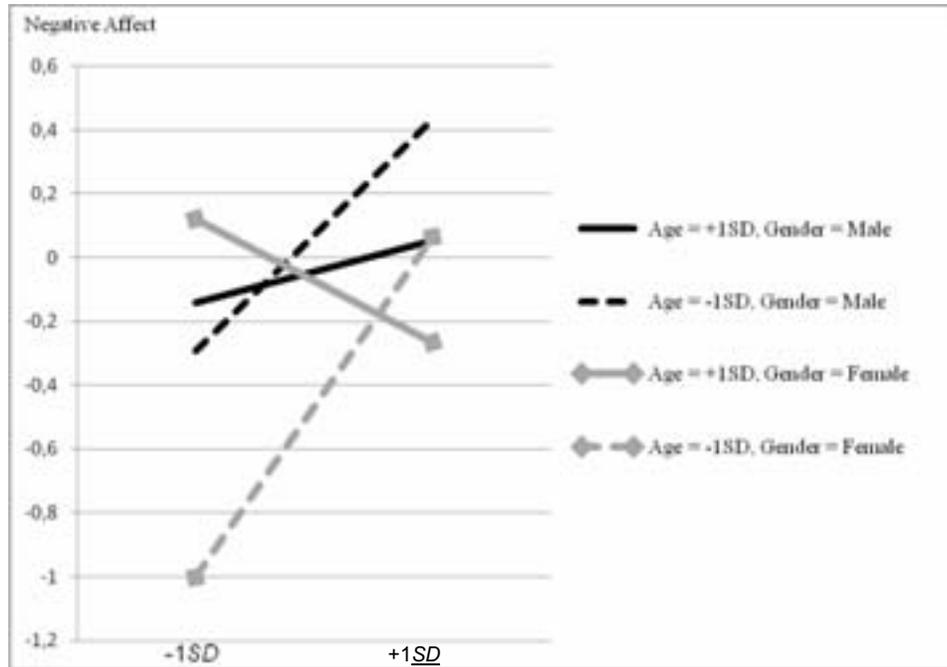


Fig. 1: The moderating effect of age and of gender on the effect of citizen-related social stressors on the change in negative affect.

Model		B	SE	$\beta$	t	p
1	constant	.49	.224		2.199	.030
	Positive Affect T1	.84	.067	.769	12.404	.000
$\Delta R^2 = .592. \Delta F = 153.848. p < .001$						
2	constant	.36	.33		1.09	.280
	Positive Affect T1	.84	.07	.77	12.55	.000
	Age	-.01	.01	-.10	-1.47	.145
	Gender <sup>1)</sup>	.26	.14	.13	1.85	.067
$\Delta R^2 = .015. \Delta F = 1.946. p > .144$						
3	constant	.75	.46		1.61	.111
	Positive Affect T1	.82	.07	.75	11.67	.000
	Age	-.01	.01	-.14	-1.83	.070
	Gender <sup>1)</sup>	.28	.14	.14	2.00	.048
	CSS	-.10	.09	-.08	-1.19	.239
$\Delta R^2 = .005. \Delta F = 1.404. p > .238$						
4	constant	.75	.47		1.604	.112
	Positive Affect T1	.81	.07	.75	11.54	.000
	Age	-.01	.01	-.14	-1.82	.072
	Gender <sup>1)</sup>	.28	.15	.14	1.95	.054
	CSS	-.10	.09	-.08	-1.11	.269
	CSS x Age	.04	.07	.04	.53	.597
	CSS x Gender <sup>1)</sup>	.01	.07	.01	.07	.941
$\Delta R^2 = .001. \Delta F = 0.186. p > .830$						

Note. <sup>1)</sup> Male = 2, Female = 1. CSS= Citizen-related social stressors.

Tab. 3: Hierarchical regression of positive affect time 2 (N = 108)

have changed from physical demands to emotional and social demands (e.g., Hochschild 1983). Interacting with customers or clients has now become a serious source of stress in various jobs (e.g., Grandey et al. 2004) and research has been accumulating on effects of customer-related social stressors (CSS; e.g., Ben-Zur and Yagil 2005; Dormann and Zapf 2004; Volmer et al. 2012). In the current study, we investigated the main and moderating effects of citizen-related stressors and age on police officers' affective well-being. The major finding is that the effect of CSS

on negative affective reactions is stronger for younger than for older police officers.

Age-related differences are in accordance with the proposition of the Socioemotional Selectivity Theory (SST; Carstensen 2006), which proposes ageing to be related to an increased motivation to minimize negative affective experiences by applying emotion regulation strategies (Charles and Carstensen 2007; Ready and Robinson 2008). However, whether or not age-related changes in motivation are the key explanation of our results is not entirely clear. Weaker negative affective reactions of older employees, for example, might also be due to age differences in emotion regulation skills, which are increasing with age, too (e.g., Gross et al. 1997; Röcke et al. 2009). Chronological age, as we measured it in our study, *per se* does not identify the psychological mechanisms through which these differences emerge. Future studies could address this issue in more depth.

Female employees' show weaker negative affective reactions to CSS than men. Sexual stereotypes, which are formed over generations through socialization processes, social role expectations and norms, explain gender differences in behavior and attitudes. We believe females' lower aggressive tendencies, females' greater relationship-orientation (e.g. Karatepe et al. 2006), greater customer-orientation (e.g., Singuaw and Honeycutt 1995), and greater skills in perceiving nonverbal behavior and interaction partners' emotions (e.g., Hall and Matsumoto 2004), make female officers less likely to interpret a social conflict with a citizen as a personal issue. They are better able to mentally separate their self from their role as police officer in such situations. Dollard et al. (2003) proposed that the ability for role separation is a crucial coping resource in stressful

service interactions. Male police officers probably feel more personally involved in conflicts with citizens and feel rejected. Gardner, Pickett and Brewer (2000) demonstrated that rejection experiences resulted in selective memory for the explicitly social events. This could result in a prolonged mental struggle with experienced social conflicts. Every time a police officer thinks about the job, negative citizen-related memories and feelings of rejection are retrieved, which cause higher levels of negative affect. In the long run, this might lead to more severe affective disorders.

Our results suggest that it could be worthwhile to investigate in more detail how older and female employees cope with social stressors in terms of emotion regulation strategies. For example, it has been suggested that a particular emotional demand in security-related jobs is to appear neutral. Martin (1999) reported that for police officers involved in conflict resolutions, a neutral emotional display is required. This fits to the wide-held belief that behaving neutral is possibly the best way to prevent social conflicts from escalating. When involved in a conflict or in minor social issues like being confronted with CSS, however, maintaining a neutral display might be much more difficult for young officers who have more aggressive tendencies, including, for example, behaviors such as yelling, swearing at others, and fighting (Ng and Feldman 2008). Hence, we believe that the dissonance emerging by establishing a neutral display could be an important mediator in the link between CSS and negative reactions. More specifically, we believe that age moderates the effect of CSS on emotional dissonance rather than moderating the effect of emotional dissonance on negative outcomes. Unfortunately, we did not have data collected on emotional dissonance to test this possibility.

Differences in emotion regulation strategies or regulation skills may not be the only reason why CSS vary in their impact on stress reactions among police officers. It could also be possible that – depending on age and gender stereotypes of the citizens involved – particular emotional reactions of the officers are expected and, thus, more successful in reducing CSS. For example, it might be a successful strategy for a young male officer to react with a strong negative emotional reaction in the early beginning of a social discourse with a citizen. This might tempt the citizen to show more compliance and thus, might prevent the situation from escalating further. For instance, police interrogators deliberately exhibit negative emotions to suspects to gain confessions (Arther and Caputo 1959; cited in Sutton and Rafaeli 1988). However, negative emotions displayed by older or by female officers could be less successful. They could even turn the situation into the worse, if these emotions contradict the expectations of the citizen. Such a mismatch between stereotypically expected and actual officers' behavior could potentially cause

stress for the citizen, which could further heat up the atmosphere. How age and gender as important demographic variables impact on the escalation of social conflicts at work is certainly worth future investigation.

### **5.1 Limitations**

Our study has some limitations. First, results might be confounded by common method variance, since the data are based on self-reported measures. However, since we analyzed repeated measures, response tendencies and other confounding third variables are less likely to have led to spurious relations (e.g., Zapf et al. 1996). Furthermore, we are not aware of any methodological literature claiming that third variables can account for spurious moderated effects; third variables may only account for main effects. Even if third variables could account for moderated relations, one has to take into account that age and gender could be only related (but not caused) by such third variables. Hence, we are convinced that a causal interpretation of the effects discovered can be made, even though with caution. Age and gender might not be the real causal agents, but whatever variable it is, it must be closely related to age, like job status or some sort of experience being unrelated to the current position.

Second, we investigated police officers' mid-term affective reactions to CSS. Mid-term reactions are important for our understanding how effects of stressors unfold and long-term stress consequences develop. We did not investigate long-term stress consequences and the mediating effect of mid-term reactions. However, since research on mid-term reactions is rather limited, our results provide an important step to better understanding the time-related dynamics of the whole stress process.

Finally, we investigated affective stress reactions only. Stress reactions might occur on the psycho-physiological, on the affective, on the cognitive, and on the behavioral level, too (Lazarus 1990; Sonnentag and Frese 2003). Whereas a few mainly laboratory studies investigated short-term psycho-physiological (Wegge et al. 2007), cognitive (e.g., Goldberg and Grandey 2007; Wegge et al. 2007), and behavioral (Wang et al. 2011; Yang and Diefendorff 2009) stress reactions, findings concerning affective and mid-term reactions are lacking. Further research should fill in this gap leading to a better understanding for the development of long-term stress reactions like psychosomatic complaints or depressive symptoms.

### **5.2 Practical Implications**

Our findings offer a number of practical implications. We would like to discuss briefly possible implications for selection and placement, for training, and for team composition.

First, personnel selection and placement will benefit from our results. We could show that older police officers cope particularly well when confronted with stressfully behaving citizens. Thus, police headquarters should be open to hiring, employing, and retaining more older officers, in particular if they are supposed to serve in areas with (minor) stressful encounters with citizens. Moreover, police headquarters should try to retain older police officers by creating working conditions that consider the needs of this group. Police headquarters should also create working conditions for younger officers in order to reduce their level of stress. For instance, younger police officers – in particular officers with children at home – should get support in combining family- and work-related duties and goals (e.g., family-friendly schedules). As younger officers show stronger affective reactions to CSS, rotating schemes, which could prevent younger officers from prolonged exposure to CSS, seem to be another promising strategy.

Furthermore, officers' age should be considered if teams are composed. Police officers usually work in teams or dyads. When dyads and teams are composed of older and younger police officers, younger officers might benefit from the support and the role modeling they receive from older officers. Received social support from older officers may moderate (i.e., reduce) the negative effects of CSS. Social support can be provided in various ways. Emotional support can be provided by expressing appreciation, respect, comprehension, or acceptance toward a co-worker. Instrumental social support, i.e. helping a co-worker in a difficult interaction with a citizen might be useful as well. If teams consist of younger as well as of older officers, older officers of the team can handle potential difficult interactions with citizens while younger team members stay in the background. This could prevent stress reactions and could foster learning through role modeling of older officers.

Finally, there are several implications for occupational training. First, there is a need to prepare particularly young officers to deal with citizens. Training could try to enhance emotion regulation strategies to cope better with negative affective reactions caused by citizens' behaviors. Moreover, police officers should learn how to deal with frustration and aggressive tendencies elicited by negatively behaving citizens. To do so, HR-departments should use the competence of their employees, for instance, by establishing mentoring programs in which younger officers can profit from the experiences and competences of older officers.

### 5.3 Conclusion

Regarding employee health and well-being, our results show that the demographic change in terms of more older employees being active in the labor market could offer opportunities for a healthy workforce. Older versus younger employees do not cope with job demands equally well. In particular, given the growing proportion of jobs with contacts to citizens, customers, and clients, our results show that older workers seem to be better prepared to cope with exciting social demands than younger employees, who made up the lion's share of the workforce in the previous decades. Thus, the demographic change is not just a "great challenge" as it has been frequently labeled; it is also a great opportunity for the older members of our societies, which have been disregarded by many employers for a long time.

### References

- Archer, J. (2004). Sex differences in aggression in real-world settings: a meta-analytic review, *Review of General Psychology*, 8, 291–322.
- Arther, R.O. & Caputo, R.R. (1959). *Interrogation for Investigators*. New York, William C. Cope and Associates.
- Baron, R.A., Neuman, J.H., & Geddes, D. (1999). Social and personal determinants of workplace aggression: evidence for the impact of perceived injustice and the type A behavior pattern, *Aggressive Behavior*, 25, 281–296.
- Ben-Zur, H., & Yagil, D. (2005). The relationship between empowerment, aggressive behaviours of customers, coping, and burnout, *European Journal of Work and Organizational Psychology*, 14, 81–99.
- Bertolino, M., Truxillo, D.M., & Fraccaroli, F. (2011). Age as moderator of the relationship of proactive personality with training motivation, perceived career development from training, and training behavioral intentions, *Journal of Organizational Behavior*, 32, 248–263.
- Birditt, K.S, Almeida, D.M., & Fingerman, K L. (2005). Age differences in exposure and reactions to interpersonal tensions: a daily diary study, *Psychology and Aging*, 20, 330–340.
- Birditt, K.S., & Fingerman, K.L. (2003). Age and gender differences in adults' descriptions of emotional reactions to interpersonal problems, *Journals of Gerontology*, 58, 237–245.
- Breslin, C.W. & Safer, M.A. (2012). Aging and long-term memory for emotionally valenced events, *Psychology and Aging*, Online First Publication, August 13, 2012. doi: 10.1037/a0029554
- Brown, J.M. & Campbell, E.A. (1994). *Stress and policing: Sources and strategies*, New York, Wiley.
- Carstensen, L.L. (2006). The influence of a sense of time on human development, *Science*, 312, 1913–1915.
- Carstensen, L.L., Turan, B., Scheibe, S., Ram, N., Ersner-Hersfield, H., Samanez-Larkin, G.R., Brooks, K.P., & Nesselroade, J.R. (2011). Emotional experience improves with age: evidence based on over 10 years of experience sampling, *Psychology and Aging*, 26, 21–33. doi: 10.1037/a0021285
- Charles, S.T., & Carstensen, L.L. (2007). Emotion regulation and aging, in Gross, J.J. (Ed.), *Handbook of emotion regulation*, New York, NY, Guilford Press, 307–330.

- Charles, S.T., Mather, M.M., & Carstensen, L.L. (2003). Aging and emotional memory: the forgettable nature of negative images for older adults, *Journal of Experimental Psychology, General*, 132, 310–324.
- Charles, S.T., Reynolds, C.A., & Gatz, M. (2001). Age-related differences and change in positive and negative affect over 23 years, *Journal of Personality and Social Psychology*, 80, 136–151.
- Chrisopoulos, S. Dollard, M.F., Winefield, A.H., de Jonge, J., & Dormann, C. (2010). The relation between job-specific demands and resources, and burnout in a cross-sectional sample of Australian police officers, *Journal of Occupational & Organizational Psychology*, 83, 17–37.
- Dollard, M.F. & Dormann, C., Boyd, C.M., Winefield, A.H. & Winefield, H.R. (2003). Unique aspects of stress in human service work, *Australian Psychologist*, 38, 84–91.
- Dormann, C., & Zapf, D. (2004). Customer-related social stressors and burnout, *Journal of Occupational Health Psychology*, 9, 61–82.
- Dudenhöffer, S., & Dormann, C. (2013). Customer-related social stressors and service providers' affective reactions, *Journal of Organizational Behavior*, 34 (4), 520–539.
- Dudenhöffer, S., & Dormann, C. (2015). Customer-related social stressors: meaning and consequences across service jobs, *Journal of Personnel Psychology*, 14 (4), 165.
- Eagly, A. (1987). *Sex differences in social behavior: A social role interpretation*, Hillsdale, NJ, Erlbaum.
- Eagly, A.H., Wood, W., & Diekmann, A.B. (2000). Social role theory of sex differences and similarities: a current appraisal, in Eckes, T., & Trautner, H.M. (Eds.), *The developmental social psychology of gender*, Mahwah, NJ, Erlbaum, 123–173.
- Eurostat Database (2012). "Sustainable development – Demographic changes" – Statistics Explained (2012/8/5). Retrieved August 23<sup>rd</sup>, 2012, from [http://epp.eurostat.ec.europa.eu/statistics\\_explained/index.php/Sustainable\\_development\\_-\\_Demographic\\_changes#](http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Sustainable_development_-_Demographic_changes#).
- Fredrickson, B.L. (2001). The role of positive emotions in positive psychology, *American Psychologist*, 56, 218–226.
- Fredrickson, B.L., & Joiner, T. (2002). Positive emotions trigger upward spirals toward emotional well-being, *Psychological Science*, 13, 172–175.
- Freund, A.M. (2006). Age-differential motivational consequences of optimization versus compensation focus in younger and older adults, *Psychology and Aging*, 21, 240–252.
- Gardner, W.L., Pickett, C.L., & Brewer, M.B. (2000). Social exclusion and selective memory: how the need to belong influences memory for social events, *Personality and Social Psychology Bulletin*, 26, 486–496.
- Goldberg, L.S., & Grandey, A.A. (2007). Display rules versus display autonomy: emotion regulation, emotional exhaustion, and task performance in a call center simulation, *Journal of occupational health psychology*, 12 (3), 301.
- Grandey, A.A., Dickter, D.N., & Sin, H.-P. (2004). The customer is not always right: customer aggression and emotion regulation of service employees, *Journal of Organizational Behavior*, 25, 397–418.
- Grandey, A.A., Tam, A.P., & Brauburger, A.L. (2002). Affective states and traits in the workplace: diary and survey data from young workers, *Motivation and Emotion*, 26, 31–55.
- Gross, J.J. (1998). Antecedent- and emotion-focused emotion regulation: divergent consequences for experience, expression, and physiology, *Journal of Personality and Social Psychology*, 74, 224–237.
- Gross, J.J., Carstensen, L.L., Pasupathi, M., Tsai, J., Skorpén, C.G., & Hsu, A.Y.C. (1997). Emotion and aging: experience, expression, and control, *Psychology and Aging*, 12, 590–599.
- Hall, J.A. (1978). Gender effects in decoding nonverbal cues, *Psychological Bulletin*, 85, 845–857.
- Hall, J.A., Carter, J.D., & Horgan, T.G. (2000). Gender differences in the nonverbal communication of emotion, in Fischer, A.H. (Ed.), *Gender and Emotion: Social Psychological Perspectives*, Paris, Cambridge University Press, 97–117.
- Hall, J.A., & Matsumoto, D. (2004). Gender differences in judgments of multiple emotions from facial expressions, *Emotion*, 4, 201–206.
- Harris, L.C., & Reynolds, K.L. (2004). Jaycustomer behavior: an exploration of types and motives in the hospitality industry, *Journal of Services Marketing*, 18, 339–357.
- Hershcovis, M.S., Turner, N., Barling, J., Arnold, K.A., Dupré, K.E., Inness, M., LeBlanc, M.M., & Sivanathan, N. (2007). Predicting workplace aggression: a meta-analysis, *Journal of Applied Psychology*, 92, 228–238.
- Higgins, E.T. (2000). Promotion and prevention experiences: Relating emotions to non-emotional motivational states, in Forgas, J.P. (Ed.), *Handbook of Affect and Social Cognition*, Mahwah, NJ, Lawrence Erlbaum Associates, 186–211.
- Hochschild, A.R. (1983). *The managed heart*, Berkeley, CA, University of California Press.
- International Labor Organization. (2005). *Yearly Statistic*, Retrieved February 15, 2012, from [www.ilo.org](http://www.ilo.org).
- Johnson, S.J., Holdsworth, L., Hoel, H., & Zapf, D. (2013). Customer stressors in service organizations: the impact of age on stress management and burnout, *European Journal of Work and Organizational Psychology*, 22 (3), 318–330.
- Karatepe, O.M., Yavas, U., Babakus, E., & Avci, T. (2006). Does gender moderate the effects of role stress in frontline service jobs? *Journal of Business Research*, 59, 1087–1093.
- Kaufmann, G.M. & Beehr, T.A. (1989). Occupational stressors, individual strains, and social supports among police officers, *Human Relations*, 42, 185–197.
- Kinsella, K., & Phillips D. (2005). Global aging: the challenge of success, *Population Bulletin* 60, 30–40.
- Knight, G.P., Guthrie, I.K., Page, M.C., & Fabes, R.A. (2002). Emotional arousal and gender differences in aggression: a metaanalysis, *Aggressive Behavior*, 28, 366–393.
- Kobau, R., Safran, M.A., Zack, M.M., Moriarty, D.G., & Chapman, D. (2004). Sad, blue, or depressed days, health behaviors and health-related quality of life, behavioral risk factor surveillance system, 1995–2000, *Health and Quality of Life Outcomes*, 2, 40–48.
- Krohne, H.W., Egloff, B., Kohlmann, C.-W., & Tausch, A. (1996). Untersuchungen mit einer deutschen Version der "Positive and Negative Affect Schedule" (PANAS) [Investigations with a German version of the Positive and Negative Affect Schedule (PANAS)], *Diagnostica*, 42, 139–156.
- Lazarus, R.S. (1990). Theory-based stress measurement, *Psychological Inquiry*, 1, 3–13.
- Lazarus, R.S., & Folkman, S. (1984). *Stress appraisal, and coping*, New York, Springer.
- Major, D.A., & Germano, L.M. (2005). The changing nature of work and its impact on the work-home interface, in Jones,

- E., Burke, R.J., & Westman, M. (Eds.), *Work-life Balance: a Psychological Perspective*, Hove, Psychology Press, 13–38.
- Martin, S.E. (1999). Police force or police service? Gender and emotional labor, *Annals of the American Academy of Political and Social Science*, 561, 111–126.
- Neupert, S.D., Almeida, D.M., & Charles, S.T. (2007). Age differences in reactivity to daily stressors: the role of personal control, *The Journals of Gerontology*, 62, 216–225.
- Ng, T.W.H. & Feldman, D. C. (2008). The relationship of age to ten dimensions of job performance, *Journal of Applied Psychology*, 93, 392–423. doi: 10.1037/0021-9010.93.2.392
- Payne (2001). Measuring emotions at work, in Payne, R.L. & Cooper, C.L. (Eds.), *Emotions at Work: Theory, Research and Applications for Management*, Chichester, Wiley, 107–133.
- Ready, R.E., & Robinson, M.D. (2008). Do older individuals adapt to their traits? Personality-emotion relations among younger and older adults, *Journal of Research in Personality*, 42, 1020–1030.
- Röcke, C., Li, S.-C., & Smith, J. (2009). Intraindividual variability in positive and negative affect over 45 days: do older adults fluctuate less than young adults? *Psychology and Aging*, 24, 863–878.
- Rutter, A., & Hinen, D.W. (2005). Sex differences in workplace aggression: an investigation of moderation and mediation effects, *Aggressive Behavior*, 31, 254–270.
- Sheehan, D.D. & van Hasselt, V.B. (2003). Identifying law enforcement stress reactions early, *FBI Law Enforcement Bulletin*, 72 (9), 12–17.
- Siguaw, J.A., & Honeycutt, Jr. E.D. (1995). An examination of gender differences in selling behaviors and job attitudes, *Industrial Marketing Management*, 24, 45–52.
- Sonnentag, S., & Frese, M. (2003). Stress in organizations, in Borman, W.C., Ilgen, D.R., & Klimoski, R.J. (Eds.), *Comprehensive Handbook of Psychology. Vol. 12: Industrial and Organizational Psychology*, New York, Wiley, 453–491.
- Sutton, R.I. & Rafaeli, A. (1988). Untangling the relationship between displayed emotions and organizational sales: the case of convenience stores, *Academy of Management Journal*, 31, 461–487.
- Taylor, P. (2006). *Employment Initiatives for an Ageing Workforce in the EU15*, Dublin, Ireland, European Foundation for the Improvement of Living and Working Conditions.
- The Social Protection Committee (2004). Promoting longer working lives through better social protection systems. Retrieved August 27<sup>th</sup>, 2012, from <http://ec.europa.eu/social/BlobServlet?docId=5380&langId=en>
- Volmer, J., Binnewies, C., Sonnentag, S., & Niessen, C. (2012). Do social conflicts with customers at work encroach upon our private lives? A diary study, *Journal of Occupational Health Psychology*, 17, 304–315.
- Van Hasselt, V.B., Sheehan, D.C., Sellers, A.H., Baker, M.T., & Feiner, C.-A. (2003). A behavioral-analytic model for assessing stress in police officers: Phase I. Development of the Law Enforcement Officer Stress Survey (LEOSS), *International Journal of Emergency Mental Health*, 5 (2), 77–84.
- Wang, M., Liao, H., Zhan, Y., & Shi, J. (2011). Daily customer mistreatment and employee sabotage against customers: examining emotion and resource perspectives, *Academy of Management Journal*, 54, 312–334.
- Watson, D., Clark, L.A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales, *Journal of Personality and Social Psychology*, 54, 1063–1070.
- Wegge, J., Vogt, J., & Wecking, C. (2007). Customer-induced stress in all centre work: a comparison of audio-and video-conference, *Journal of Occupational and Organizational Psychology*, 80, 693–712.
- Weiss, H.M., & Cropanzano, R. (1996). Affective events theory: a theoretical discussion of the structure, causes, and consequences of affective experiences at work, *Research in Organizational Behavior*, 18, 1–74.
- Yang, J., & Diefendorff, J.M. (2009). The relations of daily counterproductive workplace behavior with emotions, situational antecedents, and personality moderators: a diary study in Hong Kong, *Personnel Psychology*, 62, 259–295.
- Zapf, D., Dormann, C., & Frese, M. (1996). Longitudinal studies in organizational stress research: a review of the literature with reference to methodological issues, *Journal of Occupational Health Psychology*, 1, 145–169.

#### Keywords

Age, gender, customer-related social stressors, affective reactions, police officers.