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# **Unfriendly customer behaviors and employees' psychological capital: the role of health symptoms and positive humor events at work: A moderated mediation approach**

## **Abstract**

This study examined mediators and moderators that may explain the link between unfriendly customer behaviors and workers' psychological capital with a sample of 380 employees. We hypothesized that perceived health symptoms would mediate the link between unfriendly customer behaviors and psychological capital. We also hypothesized a moderated mediation model, in which positive humor events would moderate the mediation model. Results show that the negative association between unfriendly customer behaviors with psychological capital was due to an increased level of perceived health symptoms. Moreover, positive humor events moderated the link between unfriendly customer behaviors and perceived health symptoms, such that the link was stronger when the frequency of positive humor events was low to moderate. This study addresses a major gap in the positive psychology literature by attempting to examine why unfriendly customer behaviors relate to decreased psychological capital and what factors influence in this relation. Practical implications are further discussed.

**Keywords:** unfriendly customer behaviors; psychological capital; health symptoms; humor events; moderated mediation.

## **Introduction**

The relationship between affective events experienced at work and well-being indicators such as optimism, happiness, or hope, have attracted considerable attention in positive psychology research (e.g., De Jonge, Bosma, Peter & Siegrist, 2000). In particular, a number of empirical studies have linked various types of negative events

with workers' well-being and health in the long run (e.g., Junça-Silva, Caetano, & Rueff-Lopes, 2017; Nielsen, Matthiesen, & Einarsen, 2008). Research has shown that negative events are more likely to occur in certain work contexts. For example, if workers have to deal with customers on a regular basis, negative affective events are more likely to occur, since customers do not always act in a positive or neutral way towards employees (e.g., Rueff-Lopes, Navarro, Caetano & Silva, 2017; Weiss & Cropanzano, 1996). While there is robust evidence about the impact of customers' negative behavior on different employees' wellbeing indicators (Hoobler & Swanberg, 2006), the underlying mechanisms linking both are still unclear. In the present study we aim to investigate how customers' unfriendly behavior impacts on workers' psychological capital. Given the amounting evidence supporting that the exposure to customers' negativity also impacts on workers' health (Rueff-Lopes, Navarro, Caetano & Junça-Silva, 2017), we aim to explore the possible mediating role of health symptoms in the relation between customers' unfriendly behaviors and psychological capital. Nevertheless, we do not expect this relation to be impermeable to other events that occur at work, particularly positive ones such as humor events. Since research has consistently shown that humor promotes both physical and psychological health (see the humor-health hypothesis, Martin, 2002) and that it has a positive impact in diverse components of health and well-being (Fritz, Russek, & Dillon, 2017), we propose that it will buffer the negative impact of customers' unfriendly behaviors on employees' health symptoms. We also aim to explore whether the strength of this indirect effect depends on the level of positive humor events, that is, if the mediation relation is contingent on humor events.

To better understand this relation is important because the costs associated with decreases in workers' well-being are very high when the resultant medical actions, sick

leave compensation and loss of productivity are taken into account (Brosschot & Van Der Doef, 2006).

### *Customer behaviors in a call-center context*

Weiss and Cropanzano (1996) presented the affective events theory (AET) as a framework for studying affect and well-being at work. The AET suggests that events are proximal causes of emotional reactions. Affective events cause (pleasant or unpleasant) emotions that will influence individuals' behaviors and attitudes (Weiss and Cropanzano, 1996). This theory defines an affective event as a situation that stimulates the appraisal of, and an emotional reaction to a transitory or ongoing job related agent, object or occurrence (Roseman, Spindel, & Jose, 1990), i.e., "*things happen to people in work settings and people often react emotionally to these events*" (Weiss & Cropanzano, 1996, p. 10).

Certain work contexts are richer in terms of event generation than others, particularly those that encompass social interactions. For example, service workers have to deal with customers on a daily basis, being consequently exposed and vulnerable to customers' (mis)behavior very frequently. Indeed, some investigations based on theoretical frameworks like the emotional contagion theory (Hatfield, Cacioppo & Rapson, 1994) and the AET provided support for the influence that customers' behavioral and emotional displays have on employees (e.g., Dallimore, Sparks & Butcher, 2007; Kiffin-Petersen, Murphy, & Soutar, 2012). Consequently, interaction with customers are also considered as events (e.g. Kiffin-Petersen et al., 2012).

Service interactions can be compared to social relations, where two or more individuals exchange not only products or services, but also emotions (e.g., Hochschild,

1983). However, such exchange is not always functional, as customers do not always behave in neutral or functional ways. Some authors suggest that, despite this fact, companies do not want to draw attention to customer misbehavior and often attribute it to poor service quality (e.g., Yagil, 2008). Consequently, employees have to deal with customer dysfunctional behavior as though they caused it, which potentially threatens their personal safety and psychological well-being (Hoobler & Swanberg, 2006). A study by Grandey, Kern & Frone (2007) compared the frequency of abuse from outside actors (e.g., customers) and inside ones (e.g., managers, colleagues) and found that not only abuse from outsiders happened more regularly, as it more strongly predicted emotional reactions, such as emotional exhaustion.

It is utterly important for service work researchers and professional to understand in depth the dynamics of the impact of customers behavior on workers because, in line with the AET theory's suggestions, they are prone to influence workers' emotions, attitudes and behaviors. In this particular research we focus on customer behavior occurring in call centers since they are known as highly stressful work environments and, according to the AET, the occurrence and consequences of daily events are stronger in strained contexts (Weiss & Cropanzano, 1996). Call-centers are breeding grounds for customers' unfriendliness - not only in terms of its intensity, but also in terms of its frequency since, according to Grandey, Dickter and Sin (2004), call-center employees witness or fall victim to customer misbehavior on average ten times a day.

These affective events will influence diverse emotional reactions and consequent work-related attitudes and behaviors at work. For instance, some studies have shown that positive affective events are positively related with work engagement (Junça-Silva, Caetano, & Rueff-Lopes, 2017), job satisfaction (e.g., Ohly, & Smith, 2015), optimism

(e.g., Lench, & Bench, 2014), among others. On the other hand, negative affective events have also been linked to decreased levels of work engagement (e.g., Junça-Silva, et al., 2017), physiological health (Rueff-Lopes et al., 2017), optimism and resilience (e.g., Li, et al., 2014).

### *Unfriendly customer behaviors and psychological capital*

Optimism and resilience, together with self-efficacy and hope, comprise the psychological capital construct, or *PsyCap* (Luthans, Youssef, 2004; Luthans et al., 2007). *PsyCap* has been defined as “an individual’s positive psychological state of development, and is characterized by: (1) having confidence (self-efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) in order to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success” (Luthans et al., 2007, p. 3).

Psychological capital is developed through a pattern of investment of psychological resources that results in obtaining experiential rewards from the present moment, and at the same time increasing the likelihood of future benefits. It is all about the state of the four components of your inner life. When you add up each component, experiences and capital, it makes up the value (Csikszentmihalyi, 2011). It has been demonstrated that psychological capital is strongly and positively related to individuals’ well-being, and happiness (Avey, Luthans, Smith, & Palmer, 2010). For example, a study conducted by Luthans, Youssef, Sweetman and Harms (2013) specifically examined, and provided evidence, that the construct of psychological capital could be extended into the well-being domain by positively relating with different satisfaction-related well-being indicators.

On the other hand, we predict that psychological capital is negatively related to customer misbehavior. As many studies have demonstrated, unfriendly customer behaviors are harmful and represent a threat to employees' well-being. Wegge, Vogt, and Wecking (2007), for example, found that these kinds of behaviors were associated with negative experiences at work and that individuals who were exposed to them had lower levels of well-being. Other studies have found negative affective events, including exposure to customer misbehaviors, to be potent predictors of negative outcomes at work (Nafei, 2015). In sum, these findings imply that for individuals who deal with customers at work, in a daily basis, experiencing unfriendly customer behaviors relates to diminished levels of well-being. Given the amounts of evidence relating well-being and psychological capital, we propose that the second will also be negatively affected by unfriendly customer behavior.

#### *Perceived health symptoms as a mediator*

There is increasing evidence that occupational stress increases perceived health complaints, such as headaches, gastrointestinal problems, and neck pain, among others (e.g., Pereira, & Elfering, 2014). In recent years, there has been an increased interest in this topic and two theoretical models emerged to explain how occupational stressors influence workers' health: the demand control model and the effort–reward imbalance model (Siegrist & Rödel, 2006). Despite their relevance, none of the models take into account social interactions at work however, as we previously mentioned, social interactions are one of the most frequent work-related affective events (Junça-Silva, & Caetano, 2013). Moreover, service jobs have become one of the major employment sector. Therefore, social interactions with co-workers, supervisors and costumers are part of the everyday life for a large proportion of employees (e.g. Dormann & Zapf, 2004).

As affective events, social interactions at work may be positive or negative, arousing positive or negative affective reactions, respectively. Moreover, compared to other work-related affective events, such as workload, social interactions at work represent not only a very common but also the most troublesome and upsetting stressor (Dormann & Zapf, 2002; Smith & Sulsky, 1995). Negative social interactions, which obviously include unfriendly customer behaviors, have been shown to trigger negative affective reactions, such as irritation, anxiety, stress, or depression (Kiffin-Petersen, Murphy, & Soutar, 2012), and even physical reactions, such as distorted heart rhythm (Rueff-Lopes et al., 2017). DeLongis, Coyne, Dakof, Folkman and Lazarus (1982) compared the impact of daily hassles vs major life events on health status and found that the impact of daily negative events was significantly higher.

The need-belong theory (Baumeister, & Leary, 1995) suggests that individuals have a naturally pervasive drive to establish and maintain a minimum number of positive and significant interpersonal relationships. If the need to belong is not satisfied, it may trigger signs of maladjustment, behavioral, or psychological pathologies, and health problems (Baumeister, & Leary, 1995). Following the theory, Semmer, and colleagues (2007) proposed that negative social interactions at work are a direct way of threatening the need to belong, mainly because stress is an offense to the self. Therefore, we propose a relationship between unfriendly customer behaviors at work and impaired health.

Different studies have focused on the relationship between unfriendly customer behaviors and workers' health (e.g., Dormann, & Zapf, 2004). For instance, regarding psychological health, different studies showed a positive relationship between exposure to customers' misbehavior and emotional exhaustion, dissonance and burnout (e.g., Choi and Lee; 2010; Dormann & Zapf, 2004; Karatepe, 2011; Karatepe and



Aleshinloye, 2009; Van Dierendonck and Mevissen, 2002) .). There is also considerable evidence on the relation between customer misbehavior and workers health (Miner & Glomb, 2010). For example, Dudenhöffer and Dormann (2013) showed that customer mistreatment within a working day can accumulate and persist, and in turn influence employees' health symptoms, such as headaches, or stomachaches. Brosschot and colleagues (2006) also demonstrated that worries resulting from aggressive and unfriendly customer behaviors were related to somatic health complaints. It is utterly important to advance knowledge in this area, because the impact of exposure to customers misbehavior also affects organizations. For instance, Grandey et al. (2004) found that customer verbal aggression leads to increased absences of call center employees, due to sick leaves. Sliter, Sliter, and Jex (2012), in a study conducted with bank tellers, found that customer incivility provoked more absences, due to sickness. Further, there is evidence of the so called "carry-over effects" of negative events (e.g., Demerouti & Cropanzano, 2017), this is, the impact of negative events may appear immediately but it also may manifest itself in the following days (e.g., Eckenrode & Bolger, 1997; Weiss & Beal, 2005; Weiss & Kurek, 2003), being this possibility particularly strong in the case of health symptoms caused by, or related to, work events (e.g., Fox, Dwyer, & Ganster, 2017). Therefore we opted to assess the occurrence of health symptoms in the day that followed the occurrence of the events.

Based on the above-mentioned evidence on the relation between unfriendly customer behaviors and workers' health, and on the impact that diminished health has in well-being (e.g., Walsh, 2011) we hypothesize that:

*Hypothesis 1:* Health symptoms will mediate the relationship between negative customers' behaviors and psychological capital.

### *Positive humor events as a moderator*

The notion that humor has salutary properties is very ancient, dating at least to the biblical proverb that “a merry heart doeth good like medicine” (Proverbs 17:22; King James Bible). Accordingly, humor and laughter provide beneficial effects through diverse mechanisms, such as physical exercise to the muscles, lungs, and inner organs of the body, enriching the blood, increasing respiration, and blood circulation, improving digestion and, at the same time, providing emotional catharsis.

More recently, this idea that humor is beneficial for health has received considerable attention by researchers, and media. According to Martin and Lefcourt (2004) the humour–health hypothesis asserts that there is a link between humour and health and currently that link is perceived to be a positive one. There are four processes that may explain the humor-health hypothesis. These processes give rise to both direct and indirect links. First, humor creates accompanying physiological changes in the body, which, in turn, are positive and lead to better health. Moreover, humor may create a resultant positive emotional state or mirth (Schermer, et al., 2017), which is beneficial for health. For instance, there has been evidence of the beneficial effects of humor and laughter on immunity, pain tolerance, blood pressure, and so forth (e.g., Martin, & Lefcourt, 2004). Diverse researchers proposed that vigorous laughter exercises and relaxes muscles, improves respiration, stimulates circulation, increases the production of pain-killing endorphins, decreases the production of stress-related hormones, and enhances the immune system (e.g., Fry, 1994; McCreaddie, & Wiggins, 2008).

Second, humor may have, at least, indirect effects on physical, and psychological health because it may assist in moderating adverse effects of stress through the individual’s cognitive perception, thereby enhancing the ability to cope with the known negative physical effects of stress. It is also proposed that humor has diverse

benefits on individual's interpersonal skills, or social support. Therefore, it provides extra-resources to manage the experience of negative events. Plus, it may have indirect effects on health by influencing health-related lifestyle activities. For instance, individuals experiencing more frequently humor events, perhaps due to a more cheerful and optimistic outlook, may engage in more healthy lifestyle activities, such as abstaining regular exercise, and refraining from smoking or excessive alcohol consumption.

This dynamic of humor enhancing health can be described by the *wheel model of humor*, by Robert and Wilbanks (2012). This model (Robert, & Wilbanks, 2012) suggests that humor-induced positive affect results in the transmission of emotion to individuals, and social groups, which in turn creates a climate that supports humor use and subsequent humor events. This model is depicted in a circular pattern to highlight the cumulative and escalatory process through which individual humor events can have beneficial effects for individuals and groups over repeated cycles of the wheel.

If humor and laughter have positive effects on health variables, then one would expect that individuals who experience humor events more frequently in their daily lives, would show evidence of better general health. This pattern would suggest that the greater the experience of humor events the less concern about engaging in behaviors and habits that increase health risk. Thus, we presume.

*Hypothesis 2:* Positive humor events will moderate the strength of the mediated relationship between negative customers' behaviors with psychological capital via health symptoms, such that the relationship will be weaker under a high frequency of positive humor events than under a low frequency.

## **Method**

We drew our sample from one division of a large national organization responsible for the management of highways. The department where this study was conducted is a support service providing solutions and answers for customers' problems. Employees were informed about the purpose of the study. Anonymity and confidentiality were assured. Participants were asked to voluntarily answer a questionnaire at work.

### *Participants*

Three hundred and eighty employees took part in this study. Of the total participants, 72% ( $N=272$ ) were female. Participants mean age was 34.17 years ( $SD=7.45$ ) and ranged from 22 to 54 years. Their mean organizational tenure was 4.72 years ( $SD=4.24$ ), ranging from 1 to 13 years. Regarding education, 48% of the participants were university graduates and the remaining 52% had a high school certificate.

### *Procedure and measures*

Participants were asked to fill in a structured questionnaire in two-time points. They first answered to a questionnaire comprising measures of negative customers' behavior, psychological capital and positive humor events. In this questionnaire, they also provided socio-demographic information, such as gender, age, organizational tenure, and marital status. In the next day, at the end of the working shift, participants were asked to fill in a new survey about the health symptoms experienced in the last 24 hours.

*Customers' unfriendly behaviors* were assessed through four items of the customer unfriendliness scale (Reisman, 1983). This measure includes four items, and responses were rated on a five-point scale with categories ranging from 1 - never to 5 - always. One example was: "how frequently did customers yield at you?" This measure presented a strong reliability ( $\alpha=.89$ ).

*Positive humor events* were assessed through the scale for daily hassles and uplifts at work (Junça Silva, Caetano, & Rueff-Lopes, 2018). We included the five items of positive humor events of the scale. Participants identified the frequency of each experienced event on a five-point Likert scale (1 – did not happen; 5 – it happened four or more times today).

*Health symptoms* were measured through a list of 17 items of health complaints (Fahrenberg, 1975). Participants identified whether they have experienced each symptom on that day (“yes/no”), such as, a headache, stomachache, or fatigue.

To measure *psychological capital*, we used the psychological capital questionnaire (PCQ: Luthans, Avolio, & Avey, 2007). This scale includes 24 items, six for each of the four dimensions (hope, optimism, self-efficacy, and resilience), to which respondents should indicate their level of agreement using a five-point Likert scale, from 1 (“strongly disagree”) to 5 (“strongly agree”). The questionnaire has 3 inverted items: 3 – “When I’ve a setback at work, I’ve difficulty in recovering and moving on”; 20 – “If something bad can happen to me at work, it will happen”; and 23 – “At work, things never run as I would like”. The scale evidenced a strong reliability ( $\alpha > .85$ ).

#### *Data analyses*

To control for the influence of common method bias in this study, we followed established recommendations (Podsakoff, MacKenzie, Jeong-Yeon & Podsakoff, 2003). Thus, we carried out a series of confirmatory factor analyses (CFA) on the data set. We calculated four fit indices to determine how the model fitted our data (Hair, Black, Babin, Anderson & Tatham 2005). The  $\chi^2/df$  values less than 2.5 indicate a good fit (Arbuckle 2006). For the Tucker–Lewis index (TLI), incremental fit index (IFI) and comparative fit index (CFI), values greater than 0.9 represent a good model fit (Bentler 1990), and for the root mean square error of approximation (RMSEA) and standardized

root mean square residual (SRMR), values less than 0.08 indicate a good model fit (Browne & Cudeck 1993; Hu & Bentler 1998). We initially carried out a CFA on the full measurement model, in which all items loaded onto their latent factors as intended (Anderson & Gerbing 1988; Hair et al. 2005). Overall, the measurement model exhibited good psychometric properties. Moreover, all path estimates were significant ( $p < .05$ ). To further test for common method variance, we conducted Harman's single-factor test, which involves a CFA in which all variables were allowed to load onto one general factor. The model exhibited a very poor fit, which provided a good indication that a single factor did not account for most of the variance in our data.

To analyze whether all variables in our study were distinct, we carried out nested model comparisons. Specifically, we compared the full measurement model comprising all latent variables with the one factor model. Results of sequential  $\chi^2$  difference tests revealed that the model fit of the intended model with four distinct variables was significantly better ( $\chi^2 = 3.22$ ,  $df = 1$ ,  $p = .00$ ; CFI = .99; AIC = 41.22; RMSEA = .07) than the one-factor model ( $\chi^2 = 16.60$ ,  $df = 5$ ,  $p = .00$ ; CFI = .87; AIC = 113; RMSEA = .20 (all at  $p < .001$ ). This suggests that all variables were distinct in this study and, therefore, appropriate for inclusion in the analyses.

## Results

Descriptive statistics, bivariate correlations, and Cronbach's alphas for all the variables are presented in Table 1. We used hierarchical multiple regressions to test Hypothesis 1 and hierarchical moderated regressions to test Hypothesis 2. We centered the variables to avoid multicollinearity with their product terms (Aiken & West, 1991).

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INSERT TABLE 1  
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*Test of hypotheses*

Hypothesis 1 proposed that perceived health symptoms mediate the relationship between customers' unfriendly behaviors and workers' psychological capital. To test this hypothesis, we analyzed a simple mediation model with the bootstrapping approach, as described by Preacher and Hayes (2008) using 5,000 bootstrapping samples. The results in Table 2 show that there was a significant total indirect effect of customers' behaviors on psychological capital, mediated by health symptoms. The direction of the effects supports that customers' behaviors relate to higher perceived health symptoms, which, in turn, are related to lower psychological capital. Moreover, the perceived health symptoms exhibited a significant indirect effect, supporting hypothesis 1, as indicated by significant point estimates and the 95% bootstrapping confidence intervals (CI) not including zero.

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INSERT TABLE 2  
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*Conditional Indirect Effects*

Hypothesis 2 predicted that the indirect effect of the perceived health symptoms for the relationship between customers' behaviors and psychological capital would be weakened by a high frequency of positive humor events. We tested the conditional indirect effects, (i.e., moderated mediation) with Model 7 in the PROCESS bootstrapping approach provided by Hayes (2007). To assess moderated mediation (Muller, Judd & Yzerbyt, 2005; Preacher et al. 2007), we examined four conditions: (a) significant effects of customers' behaviors on workers' psychological capital; (b) significant interactions between customers' behaviors and positive humor events; (c) significant effect of perceived health symptoms on psychological capital; and (d) different conditional indirect effect of customers' behaviors on psychological capital, via perceived health symptoms, across low and high levels of positive humor events.

The last condition, which is the essence of moderated mediation, establishes whether the strength of the mediation via perceived health symptoms differs across the two levels of the moderator (Preacher et al., 2007). Moderated mediation is demonstrated when the conditional indirect effect of customers' behaviors on workers' psychological capital, via perceived health symptoms, differs in strength across low and high levels of positive humor events.

Our results for Hypothesis 1, which demonstrated that customers' behaviors were significantly related to psychological capital, supported Condition 1 for moderated mediation. To test for Condition 2, we first examined whether the interactions of customers' behaviors with positive humor events were significant in predicting the perceived health symptoms. Results of the moderated regressions of positive humor events on perceived health symptoms, organized by customers' behaviors, are presented in Table 3. Table 3 shows that the interaction term for customers' behaviors with positive humor events ( $\beta = -.62, p < .01$ ) was significant in predicting perceived health symptoms. Thus, Condition 2 was satisfied. Condition 3 was supported by our results for Hypothesis 1, in which perceived health symptoms were positively related to psychological capital. Hence, results based on the first three conditions indicate that positive humor events could moderate the mediation.

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INSERT TABLE 3  
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To further validate findings of moderated mediation relationships, we examined Condition 4, which requires the magnitude of the conditional indirect effect of customers' behaviors via perceived health symptoms to be different for workers' psychological capital across high and low levels of positive humor events. We used Preacher et al.'s (2007) statistical significance test, which applied Aroian's (1947) exact



standard error for indirect effects, to compute a  $z$  statistic for the conditional indirect effect. Following Preacher et al.'s (2007) recommendation, we operationalized high and low levels of positive humor events as one standard deviation above and below the mean score of the respective variable.

Table 4 presents the estimates, standard errors,  $z$  statistics, and significance value of the conditional indirect effects for customers' behaviors across low and high levels of positive humor events. Results show that the conditional indirect effect of customers' behaviors was stronger and significant in the low positive humor events condition (1.25,  $p < .01$ ). However, its impact decreased as the frequency of positive humor events increased and revealed to be weaker and not significant in the high positive humor events condition (.15,  $ns$ ). Thus, Hypothesis 2 was supported.

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INSERT TABLE 4 AND FIGURE 1  
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### **Discussion**

This study's goals were twofold. First, we aimed to analyze the mediating role of health symptoms on the relationship between unfriendly customer behaviors and psychological capital. Second, we intended to explore whether positive humor events would buffer our mediated model, that is, if humor events would attenuate the positive impact of unfriendly customer behaviors on employees' health symptoms. Both hypotheses were supported, thus providing evidence for this model of moderated mediation.

Results emphasise the importance of both unfriendly customer behaviors and health symptoms for psychological capital, as both had main effects on it. However, they work best together: customers' unfriendliness are translated into lower levels of

psychological capital by the enhance of health symptoms (mediation), and the effects of unfriendly customer behaviors on health symptoms are moderated by positive humor events, indicating that people that experience less positive humor events are more likely to be vulnerable to more health symptoms after unfriendly customer behaviors (moderation). This is in line with assumptions of the humor-health hypothesis (e.g., Martin, 2004).

Assuming that humor events have beneficial effects for individuals' health, we explored whether this moderation effect influences the link between negative customers' behaviors on workers' health complaints. The presente findings indicated that the strength of the mediation effect decreased when levels of positive humor events increased (figure 1): that is, unfriendly customer behaviors enhance employees' health complaints, particularly when they experience low to moderated levels of positive humor events. Workers appear to be more vulnerable to this detrimental effect when they experience less episodes of humor. Hence, this result is in line with studies that emphasize the importance of humor for diverse outcomes, such as health (e.g., Fritz, Russek, & Dillon, 2017).

The indirect effect represents an inhibitor mechanism, that is, employees exposed to unfriendly customers become more vulnerable to feel health complaints and, consequently, are more likely to experience decreases in their psychological capital (Miner & Glomb, 2010). However, by taking moderated mediation into account, we acknowledge that this process works differently, according to the numer of positive humor events, that those individuals experience. Therefore, moderated mediation allows a better description of the causal mechanisms by which unfriendly customers' behaviors influence psyhcological capital: unfriendly customer behaviors affect psychological capital through three pathways, (a) directly, as indicated by a main effect on psychological

capital, indirectly via (b) the mediation path (through the increased levels of health symptoms), and (c) via the moderator effect which mitigates the mediation effect, when the level of positive humor events increases.

### *Limitations*

There are some limitations to consider when interpreting the results of the present study. First, gathered data with only one professional category. Moreover, data were restricted to full-time young professionals. Thus, it is important for future studies to investigate the proposed model within different professions and populations, such as part-time, temporal and / or older workers. Second, the two-point self report research design does not allow investigating the developmental effects and patterns that link unfriendly customer behaviors with psychological capital and mediators and induces shared method variance, which may have affected the observed relationship among the measures. Future studies should test this model with daily longitudinal designs with several time-points, for example using the experience sampling method.

### *Implications*

The present findings indicate that exposure to unfriendly customers may lead to an increased number of health symptoms, and therefore, to decreased psychological capital. Because the present study uncovered more closely why unfriendly customer behaviors have detrimental effects on workers' health and well-being, the results have also implications on how to minimize those negative effects typically associated with unfriendly behaviors for the large number of workers who experience a lower number of humor events. While some authors emphasize the importance of helping workers to cope with unfriendly customers (e.g., Bem-Zur, & Yagil, 2005), a different approach suggested by this study might focus the importance on how to increase positive humor

events at work, in order to increase workers' health and well-being, regardless of whether they have experienced a negative episode with a customer or not. For this purpose, organizational interventions that focus on positive humor events seem particularly useful. Also providing more time for social breaks (with workers and / or supervisors) could increase the occurrence of humor events.

Overall, this study addresses a crucial need for research in the positive psychology literature by attempting to examine why unfriendly customer behaviors relates to decreased psychological capital.

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## Tables

Table 1  
*Descriptive statistics*

	Descriptive Statistics				
	$\alpha$	Minimum	Maximum	Mean	SD
PsyCap	.86	2.71	4.82	3.97	0.43
Humor events	.86	0	4	1.82	0.91

Customers' behaviors	.89	1	4	1.68	0.67
Symptoms	.88	0	12	1.96	2.15

**Table 2**  
*Standardized indirect effects of customers' behaviors on psychological capital through the health symptoms*

Mediator	Point estimate	SE	Bootstrapping BC 95% CI	
			Lower	Higher
Psyc. Symptoms	.04	.02	.01	.07

Note: \*\* $p < .001$

† 95% CI that does not include zero.

**Table 3**  
*Regression results for testing moderation of positive humor events on the relationship between customers' behaviors and health symptoms*

Variables	Health symptoms	
	$\beta$	$t$
Customers' behaviors	.63	2.86
Perceived health symptoms	.03	.19
Behaviors X Symptoms	-.62	-2.71
$F$	3.97**	
$R^2$ (Adj. $R^2$ )	.26 (.06)	

Note: \*\* $p < .001$ .

**Table 4**  
*Moderated Mediated Results for customers' behaviors across levels of positive humor events*

Moderator	Level	Customers' behaviors				
		Conditional indirect effect	SE	Z	p	LLCI – ULCI
Positive humor events	-1 SD	1.25	.30	4.19	.00	.66 – 1.84
	Mean	.70	.18	3.81	.00	.34 – 1.06
	+1 SD	.15	.19	.77	.43	-.23 – .53

## Figures

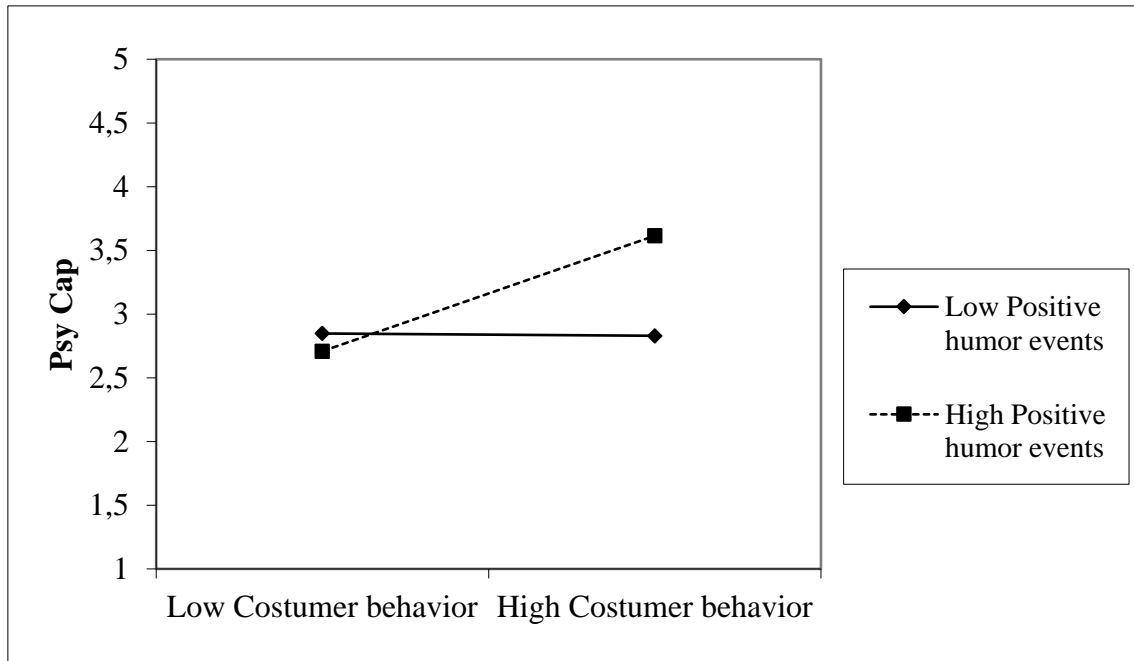


Figure 1. Plot of moderated mediation.