

1 **Value congruence, control, sense of community and demands as determinants of**  
2 **burnout syndrome among hospitality workers**

3

4 **Ángela Asensio-Martínez<sup>1,2,3</sup>, Michael P. Leiter<sup>4</sup>, Santiago Gascón<sup>1,2,3</sup>, Stephanie**  
5 **Gumuchian<sup>4</sup>, Bárbara Masluk<sup>1,2</sup>, Paola Herrera-Mercadal<sup>1,3</sup>, Agustín Albesa<sup>1</sup>, Javier**  
6 **García-Campayo<sup>1,2,3</sup>.**

7

8 1 Department of Psychology and sociology, University of Zaragoza, Zaragoza, Aragón, Spain.

9 2 REDIAPP “Network on Preventive Activities and Health Promotion” (RD 12/005/006),

10 Barcelona, Cataluña, Spain.

11 3 Aragon Institute for Health Research (IIS Aragon), Zaragoza, Aragón, Spain.

12 4 Canada Research Chair in Occupational Health, Department of Psychology, Acadia

13 University, Wolfville, Nova Scotia, Canada.

14

15 - Corresponding autor: Ángela Asensio Martínez, Department of Psychology and Sociology,  
16 University of Zaragoza, Spain. Phone: +34635274038. Email: [angelacasensio@gmail.com](mailto:angelacasensio@gmail.com).

17 Address: San Antonio Abad 20, 2ºG. Zip Code: 50010. Zaragoza. Country: Spain.

18 - Michael P Leiter, PhD. Psychology Department Acadia University. Phone: 1 902 585 1758.

19 Email: [michael.leiter@acadiau.ca](mailto:michael.leiter@acadiau.ca). Address: 24 Highland Ave, Acadia University,

20 Wolfville, NS B4P 2R6. Country: Canada.

21 - Santiago Gascón-Santos, Department of Psychology and Sociology, University of

22 Zaragoza, Spain. Phone: +34665863771. Email: [sgascon@unizar.es](mailto:sgascon@unizar.es). Address: San Julián

23 Road, 2 – 3º Left. Zip Code: 44002. City: Teruel. Country: Spain.

24 - Stephanie Gumuchian, PhD. Canada Research Chair in Occupational Health, Psychology

25 Department, Acadia University, Wolfville, NS Canada. Phone: 1 902 585 1758. Email:

- 26 [103307g@acadiau.ca](mailto:103307g@acadiau.ca). Address: 24 Highland Ave, Acadia University, Wolfville, NS B4P  
27 2R6. Country: Canada.
- 28 - Bárbara Masluk, Psychology and sociology Department, University of Zaragoza, Spain.  
29 Phone: +34644502421. Email: [bmasluk@unizar.es](mailto:bmasluk@unizar.es). Address: Cdad. Escolar, 0. Zip Code:  
30 44003. Teruel. Country: Spain.
- 31 - Paola Herrera-Mercadal, Aragon Institute for Health Research (IIS Aragon), Zaragoza,  
32 Spain. Phone: +34654894565. Email: [herrerampaola@gmail.com](mailto:herrerampaola@gmail.com). Address: Doctor Suarez  
33 Perdiguero 4. Zip Code: 50002. Zaragoza. Country: Spain.
- 34 - Agustín Albesa, Psychology and sociology Department, University of Zaragoza, Spain.  
35 Phone: +34876162958. Email [agustinalbesa@gmail.com](mailto:agustinalbesa@gmail.com). Address: Corona de Aragón, 2,  
36 Pral. Izda. 1. Zip Code: 50009. Zaragoza. Country: Spain.
- 37 - Javier García Campayo, Aragon Institute for Health Research (IIS Aragon), Zaragoza,  
38 Spain. Phone: +34976253621. Email: [jgarcamp@gmail.com](mailto:jgarcamp@gmail.com). Address: Avda. Isabel La  
39 Católica 1. Zip Code: 50009. Zaragoza. Country: Spain.

40

#### 41 **ACKNOWLEDGEMENTS**

42 This study was carried out with the support of University of Zaragoza (Spain), REDIAPP  
43 Network on Preventive Activities and Health Promotion (RD 12/0005/0006), and Centre of  
44 Organizational Research & Development of Acadia University (Canada), also this study was  
45 funded by the European Union through the General Directorate of Labor of the Government of  
46 Aragon.

47

48

49

50

51

52 **Abstract**

53 Employees working in the hospitality industry are constantly exposed to occupational  
54 stressors that may lead employees into experiencing the burnout syndrome. Research  
55 addressing the interactive effects of control, community and value congruence, to alleviate the  
56 impact of workplace demands on experiencing burnout is relatively limited. The present study  
57 examined relationships among control, community and value congruence, and workplace  
58 demands and the three components of burnout. A sample of 418 employees working in a  
59 variety of hospitality associations including restaurants and hotels in Spain were recruited.  
60 Moderation analyses and linear regressions analyzed the predictive power of control,  
61 community, and value congruence as moderating variables. Results indicate that control,  
62 community and value congruence were successful buffers in the relationships between  
63 workplace demands and the burnout dimensions. The present findings offer suggestions for  
64 future research on potential moderating variables, as well as implications for reducing burnout  
65 among hospitality employees.

66

67 **Key words:** burnout; stress; engagement; hospitality industry; value congruence; community;  
68 workplace

69

70

71

72

73

74 **1. INTRODUCTION**

75 Worker interaction with certain working risk conditions as chronic job stress and

76 overload could cause syndrome of burnout, being this syndrome a consequence of work [1].  
77 Herbert Freudenberger [2], in 1974, defined this syndrome as the feeling of defeat that  
78 derives from demands that require a high level of energy and employees' personal  
79 involvement. Maslach and Jackson [3], in 1981, provided an operational definition of  
80 burnout: the Maslach burnout inventory. This definition focalized on the emotional responses  
81 of the affected workers, highlighting the presence of symptoms of emotional exhaustion,  
82 depersonalization and the lack of personal accomplishment [4]. This definition had been  
83 reconceptualized to improve its factorial validity and also, to get its applicability in all kinds  
84 of occupations, defining burnout as "*a prolonged response to chronic emotional and*  
85 *interpersonal stressors on the job, and is defined by the three dimensions of exhaustion,*  
86 *cynicism, and inefficacy, which constitute the 'Maslach burnout inventory-general survey'*  
87 *(MBI-GS)*" [4, p.397]. Exhaustion is defined as the feeling of not being able to continue  
88 working, due to the depletion of emotional resources, usually arises as a result of prolonged  
89 exposure to high work demands. Cynicism refers to the lack of interest and loss of meaning,  
90 as well as indifference and detachment toward one's job. Inefficacy is defined by the feeling  
91 of being unable to complete tasks due to feelings of extreme incompetence. Burnout includes  
92 a stress component in the exhaustion aspect of the syndrome, but includes as well reflections  
93 on respondents' relationships with service recipients and on their own performance as  
94 employees.

95       Regarding the consequences on the health of workers, burnout can disturb individuals'  
96 sleep patterns, cause eating disorders, and cardiovascular issues, as well as promote the  
97 development of drug abuse problems and feelings of depression and anxiety [5–12]. Burnout  
98 has been associated with various forms of job absenteeism, intention to leave the job, leads to  
99 lower productivity and effectiveness at work, it is associated with decreased job satisfaction  
100 and a reduced commitment to the job or the organization, has a negative impact on working

101 environment, causing greater personal conflict and disrupting job tasks [4] .

102         Burnout most commonly arises when an organization exercises excessive demands and  
103 does not supply employees with the resources needed to meet these demands [13]. Past  
104 literature has shown the relationship between burnout and helping professions, specifically  
105 health, social services, and teaching [14–16]. The potential for emotional strain is greatest for  
106 workers in the helping professions because they are constantly dealing with other people and  
107 their problems [17], like hospitality worker whose work involves extensive and direct face-to-  
108 face contact with other people.

109         Hospitality professionals is a group that is constantly exposed to high amounts of stress due  
110 to the types of tasks that they are required to perform and also because of their constant interaction  
111 and reliance on other people [18]. Employees are faced with a variety of sources of stress overload  
112 such as the inability to monitor their jobs, the arising of interpersonal tension between coworkers and  
113 their managers, dealing with difficult customers, and having a constant fear of making a mistake  
114 [19]. Dealing with people can be a rewarding aspect of working in hospitality industry (good  
115 customer relations, awards and praise from customers, etc.), but it also has the potential to add stress  
116 to one's work duties. This emotional work refers to the regulation of emotions to create and express a  
117 specific facial and bodily display aiming at achieving organizational goals [20], emotional work can  
118 be detrimental to service providers both psychologically and physically [19]. These aversive and  
119 complex social interactions, and the requirement to satisfy the needs and expectations of guests,  
120 implies that hospitality employees may experience an excessive demands, frequent complaints, and  
121 even threats of termination, being the emotional work one of the major causes of occupational stress  
122 and burnout [21–25]. In certain situations, professionals working in the hospitality industry may  
123 become "blinded emotionally", and as a result of work in a mechanical manner, avoid being involved  
124 in their jobs, and become increasingly detached from their coworkers. This strategy to combat stress  
125 forces employees to become apathetic and indifferent towards their jobs, which ultimately allows

126 them to continue working in high stress environments laden with negative conditions, highlighting  
127 the importance of inter- and intra-individual emotional competencies in enhancing the resilience and  
128 psychological wellbeing [26].

129         Among theoretical models developed with the purpose of explaining the burnout  
130 syndrome should be outlined the demands – control model [27]. The demand-control model of  
131 Karasek [27], argues that job demands are stressors whose intensity increases as the subject  
132 perceives that those demands exceed his or her own resources. When this occurs, the amount  
133 of control an employee has over his or her job becomes especially important as autonomy helps  
134 buffer the development of work-related stressors, such as the three components of burnout. Job  
135 demands refer to the workloads of the employees, and they have been operationalized in terms  
136 of the amount of work that needs to be done, existing time pressures, and conflicting demands  
137 [28]. A definitive aspect of the Karasek model is that control plays a moderating role on the  
138 relationship of demands and stress. The workplace resource of control gives employees the  
139 means of reducing the potentially stressful impact of demands. In later studies [29] social  
140 support was included in the model and could be observed its' buffering role by looking at how  
141 social support within the workplace could prevent burnout and high levels of job strain. Several  
142 studies have shown that social support can prevent, reduce or even combat the negative effects  
143 of stress responses in individuals [30,31].

144         Other more current theoretical model in the study of burnout syndrome is the value  
145 congruence model, which discusses the incongruence between individual values and the  
146 values held by the organization [32]. The model proposes that value conflicts will have  
147 negative implications on employees, which may develop into the three components of  
148 burnout, and it also proposes that the impact of value conflicts has only minor implications on  
149 the exhaustion aspect of burnout but becomes more relevant when discussing the cynicism  
150 and inefficacy components of the burnout syndrome [32]. Individuals go through various

151 processes, including personal experiences, cultural backgrounds, or professional training,  
152 which helps them develop a set of values pertaining to their work. Corporate values are  
153 expressed through organizational missions, visions, and values. Employees who hold values  
154 that are congruent with the organization will be motivated to pursue shared objectives and  
155 will be supported in their endeavours by the organization. In contrast, when an employee  
156 holds values that conflict with the values of the organization they work for, a career crisis  
157 may ensue. When in conflict, pursuing personal values at work may enhance the employee's  
158 risk of developing symptoms of burnout, and prior studies have found strong correlations  
159 between value incongruence and burnout symptoms [32–36].

160         The majority of the recent literature done on stress in the work environment is limited  
161 to healthcare and educational settings [35,37,38]. Few recent studies have focused on burnout  
162 levels within hospitality environments such as the hotel and catering industries. Past literature  
163 on the hospitality industry focuses extensively on other issues such as emotional dissonance,  
164 emotional exhaustion, personality traits and conflicts in the work–family environment [39–  
165 42].

166         An objective of this analysis is to determine the extent to which the key constructs in  
167 the value congruence model moderate the relationship of demands and aspect of burnout. To  
168 pursue this question we will first attempt to replicate the Karasek model's moderating effect  
169 for control. We will then extend the analysis to consider potential moderating effects of  
170 community and value congruence on the relationships of workload with the three aspects of  
171 burnout. We base our expectation of moderating effects on the specific qualities of the  
172 measure used in our survey [43]. This measure refers to workplace dimensions that have been  
173 established as directly pertinent to burnout and that have direct relevance to the workload area  
174 that assesses demands. We expect the value congruence model to provide a more accurate  
175 consideration of the moderation hypotheses because it goes beyond the straightforward

176 relationship between demands and exhaustion to consider the implications of community and  
177 value congruence for cynicism and inefficacy as well. In this study, rather than focus on the  
178 job stressors that are distinct for hospitality workers, we used an approach that assesses  
179 general areas of worklife relevant to a wide range of occupations. This approach permits  
180 direct comparisons with other occupational groups, such as healthcare and teaching

181 The aim of this study is to examine the interactions among job demands, job control,  
182 social support (community) and values, with the three components of burnout (exhaustion,  
183 cynicism, and efficacy).

184 And following the theoretical models [27,32], we hypothesized that:

- 185 - Control will moderate the relationship between workplace demands and the  
186 presence of: emotional exhaustion ( $H_1$ ), cynicism ( $H_2$ ), and self-efficacy,  
187 components of burnout. ( $H_3$ )
- 188 - Community will moderate the relationship between workplace demands and the  
189 presence of: emotional exhaustion ( $H_4$ ), cynicism ( $H_5$ ), and self-efficacy,  
190 components of burnout. ( $H_6$ )
- 191 - Value congruence will moderate the relationship between workplace demands and  
192 the presence of: emotional exhaustion ( $H_7$ ), cynicism ( $H_8$ ), and self-efficacy,  
193 components of burnout. ( $H_9$ ).

194

## 195 **2. MATERIALS AND METHODS**

196 The sample was recruited from a variety of hospitality associations and centres in  
197 Spain. The hotels, restaurants, and catering companies that were chosen to participate in this  
198 study were selected based on the size of the businesses. A total number of 12 hotels and 11  
199 restaurants from Aragón (Spain) participated in this study. The study received approval from  
200 the European Union and the Aragon Government, and was supervised by the Aragon institute



201 of occupational health (ISSLA). The current study was in line with the Helsinki convention.

202         The final sample consisted of seven hotels, nine restaurants and one catering service,  
203 with a total of 418 active employees. The sample was made up of 51,0% males and 45,5%  
204 females, and there were eleven respondents with missing data (2,6%), with an average age of  
205 37.08 years. Majority of participants admitted being in a stable relationship (70,1%), and having  
206 0-2 dependent children. There were 324 (77,5%) hotel workers, 61 (14,6%) restaurant workers,  
207 and 22 (5,3%) catering workers. More than half of respondents were full-time employees  
208 (67,0%). Majority of participants were employees (67,7%). There were 30 (7,2%)  
209 manager/administration workers, 68 (16,3%) receptionist/customer care workers, 6 (1,4%)  
210 caretaker, 83 (19,9%) waiters/waitresses, 66 (15,8%) kitchen workers, 60 (14,4%) room  
211 service workers, 21 (5,0%) laundry/cleaning workers, 33 (7,9%) maintenance workers, and 31  
212 (7,4%) other workers, there were twenty respondents with missing data (4,8%).

213         Prior to conducting the survey, senior managers in each company were required to  
214 solicit participation amongst their employees and gain approval for the research. Managers  
215 and employees of each of the selected centres were informed of the study. The questionnaires  
216 were distributed by the intermediate supervisors of each company. These supervisors asked  
217 their employees to fill out the questionnaires which contained questions about various  
218 sociodemographic and occupational variables, burnout, and their areas of worklife. Once the  
219 questionnaire was completed, it was put in an envelope, and handed back to the intermediate  
220 supervisor, who gave it to the main researcher. A consent form was included at the beginning  
221 of the survey which ensured the participants confidentiality and anonymity.

222

223 2.1 Measures:

224 - Sociodemographic and occupational factors: Subjects were asked to complete a series of  
225 questions that were related to general sociodemographic and occupational characteristics.

226 - Areas of worklife: To assess the level of engagement of employees the present study used  
227 the Areas of worklife survey (AWS) in its validated Spanish version [44]. This scale  
228 measures the following work areas, which contribute positively or negatively to burnout.  
229 The scale is made up of 29 items and consists of six subscales or areas: manageable  
230 workload (e.g. “I do not have enough time to do what is important in my work”), control  
231 (e.g. “I have control over how I do my work”), community (e.g. “People trust one another  
232 to fulfil their roles”), values (e.g. “Working here forces me to compromise my values”),  
233 reward (e.g. “I receive recognition from others for my work”) and fairness (e.g. “Resources  
234 are allocated fairly here”). In the present study we focused on the first four areas. Every  
235 area assesses respondents’ perceived incongruences between employees and their  
236 workplaces. The answers are presented in a 5-point Likert scale, ranging from 1 = *strongly*  
237 *disagree* to 5 = *strongly agree*. The Cronbach’s  $\alpha$  scores for internal consistency for all  
238 subscales are  $\geq 0,72$  [45,p.200].

239 - Burnout: The Spanish version of the Maslach burnout inventory - general survey (MBI-GS)  
240 was used in the present study [46]. This adaptation consists of 16 items grouped into three  
241 dimensions: exhaustion (e.g. “I feel emotionally drained from my work”), cynicism (e.g. “I’ve  
242 become more callous towards people since I took this job”) and efficacy (e.g. “I deal very  
243 effectively with the problems of my work”). Responses are presented in a 7-point Likert scale  
244 with scores ranging from 0 = *never* to 6 = *always*. The Cronbach’s  $\alpha$  scores for internal  
245 consistency for each of the three subscales within the MBI-GS were  $\geq 0.78$  [47].

246

### 247 **3. RESULTS**

248 The results of the present study were analyzed with SPSS version 16. To test the demand  
249 – control (– support) model and the value congruence model the statistical analysis was focused  
250 on the areas of workload, control, community and values, and components of burnout

251 (exhaustion, cynicism and efficacy). The measure of community captures social support  
 252 specifically and includes as well the overall social climate of workgroups [45]. Correlations  
 253 were run between all of the variables to ensure that significant relationships existed between them.  
 254 Afterwards, a series of moderation analyses were run to test whether the moderating variables  
 255 (control, community and value congruence) could account for a significant amount of variance. A  
 256 series of linear regressions were used to analyze the predictive ability of control, community and  
 257 value congruence as moderating variables in the relationships between workload and three  
 258 components of burnout (exhaustion, cynicism and efficacy)

259 **Table 1** presents the means, standard deviations, correlations and reliabilities of the  
 260 variables and scales used in this study. Control, community and values were all significantly  
 261 correlated with the three components of burnout ( $p < .05$ ). Manageable workload was correlated  
 262 with exhaustion and cynicism; but not significantly correlated with efficacy. Control, community,  
 263 values and manageable workload were negatively correlated with both the exhaustion and  
 264 cynicism components of burnout. These correlations indicate that when individuals have a  
 265 manageable workload, high control over their work, a strong community and congruence values  
 266 that they may score lower on the exhaustion and cynicism components of burnout. Additionally,  
 267 control, community and values were positively correlated with the efficacy component of burnout.  
 268 These correlations indicate that when individuals have a manageable workload, high control over  
 269 their work, a strong community and consistent values that they may score higher on the efficacy  
 270 components of burnout.

271 **Table 1** Descriptive statistics and correlations of study variables.

	<i>M</i>	<i>SD</i>	Efficacy	Cynicism	Exhaustion	Workload	Control	Community	Values
Efficacy	4,20	1,14							
Cynicism	1,34	1,16	-,26*						

Exhaustion	1,64	1,35	-,14*	,64*				
Manageable Workload	3,10	,77	-,01	-,34*	-,57*			
Control	3,15	,94	,26*	-,29*	-,37*	,27*		
Community	3,53	,81	,32*	-,39*	-,39*	,23*	,42*	
Values	3,49	,78	,29*	-,40*	-,45*	,40*	,47*	,48*

272 Note.  $N=390$ . \* $p<.05$ .

273

274 **Table 2** presents the results of multiple regression analyses on the effects of control,  
 275 community, and value congruence as moderating variables within the relationships  
 276 between workload and the three components of burnout: emotional exhaustion,  
 277 cynicism and efficacy.

278 **Table 2** Results of regression analysis on the moderating effects of control, community and values

Predictor	$\beta$	$R^2$	$\Delta R$
<i>Dependent variable: Exhaustion</i>			
Manageable workload	-.50*		
Control	-.18*	.37	
Manageable workload $\times$ control	.14*	.39	.02*
Manageable workload	-.47*		
Values	-.23*	.38	
Manageable workload $\times$ values	.07	.38	.00
Manageable workload	-.53*		
Community	-.25*	.40	
Manageable workload $\times$ community	.11*	.42	.01*
<i>Dependent variable: Cynicism</i>			
Manageable workload	-.24*		

Control	-.17*	.13	
Manageable workload × control	.09*	.14	.01*
Manageable workload	-.23*		
Values	-.29*	.19	
Manageable workload × values	.01	.19	.00
Manageable workload	-.24*		
Community	-.31*	.19	
Manageable workload × community	.07	.20	.00
<b><i>Dependent variable: Efficacy</i></b>			
Manageable workload	-.15*		
Control	.29*	.08	
Manageable workload × control	.04	.08	.00
Manageable workload	-.16*		
Values	.39*	.11	
Manageable workload × values	.14*	.13	.02*
Manageable workload	-.16*		
Community	.29*	.08	
Manageable workload × community	-.00	.08	.00

279 \* $p < .05$

280

281 The analyses for emotional exhaustion confirmed significant moderating effects for  
282 control and community, but not for value congruence. At step one control and a manageable  
283 workload were strong predictors of emotional exhaustion ( $R^2=.39$ ,  $p<.05$ ; manageable  
284 workload  $\beta=-.50$ ,  $p<.05$ ; control  $\beta=-.18$ ,  $p<.05$ ). In the second step of the regression analysis,  
285 the interaction term between manageable workload and control explained a significant  
286 increase in variance in the emotional exhaustion component of burnout ( $\beta=.14$ ,  $\Delta R^2=.02$ ,  
287  $p<.05$ ; manageable workload  $\beta=-.50$ ,  $p<.05$ ; control  $\beta=-.18$ ,  $p<.05$ ). When analyzing the effects

288 of community as a moderator between manageable workload and emotional exhaustion it was  
289 found at step one that community and a manageable workload were strong predictors of  
290 emotional exhaustion ( $R^2=.40$ ,  $p<.05$ , manageable workload  $\beta=-.53$ ,  $p<.05$ ; community  $\beta=-$   
291  $.25$ ,  $p<.05$ ). In the second step of the regression analysis, the interaction term between  
292 manageable workload and community explained a significant increase in variance in the  
293 emotional exhaustion component of burnout ( $\beta=.11$ ,  $\Delta R^2=.01$ ,  $p<.05$ ; manageable workload  
294  $\beta=-.53$ ,  $p<.05$ ; community  $\beta=-.25$ ,  $p<.05$ ). These results indicate that control and sense of  
295 community moderate the relationship between workload and emotional exhaustion (control  
296  $\Delta R^2 =.02$ ,  $p <.05$ ; community  $\Delta R^2 = .01$ ,  $p<.05$ ), therefore providing support for  $H_1$  and  $H_2$   
297 Additionally, no significant moderating effects for value congruence (value congruence  $\Delta R^2$   
298  $=.00$ ,  $p>.05$ ) were found, therefore providing insufficient evidence to support hypothesis 7.

299 With regards to cynicism, significant results were found for the effects of control as a  
300 moderating variable within the relationship between manageable workload and cynicism, but  
301 not for community or for value congruence. At step one manageable workload and control  
302 were discovered to be strong predictors of cynicism ( $R^2=.13$ ,  $p<.05$ ; control  $\beta=-.18$ ,  $p<.05$ ;  
303 manageable workload  $\beta=-.24$ ,  $p<.05$ ). In the second step, the interaction between manageable  
304 workload and control explained a significant increase in variance in the cynicism variable  
305 ( $\beta=.09$ ,  $\Delta R^2=.14$ ,  $p<.05$  control  $\beta=-.18$ ,  $p<.05$ ; manageable workload  $\beta=-.24$ ,  $p<.05$ ). The  
306 control variable was a significant moderator within the relationship between manageable  
307 workload and cynicism ( $\Delta R^2 = .01$ ,  $p<.05$ ). This moderated regression analysis confirms  $H_2$ ,  
308 however, the  $H_8$  and  $H_5$  cannot be confirmed as there were no significant results able to  
309 support the moderating effects of community and value congruence (community  $\Delta R^2 =.00$ ,  
310  $p>.05$ ; value congruence  $\Delta R^2 =.00$ ,  $p>.05$ ).

311 As shown in Table 2, significant results for value congruence as a moderating variable  
312 in the relationship between manageable workload with professional efficacy were found, but

313 not for community and control. At step one value congruence and manageable workload were  
314 strong predictors of cynicism ( $R^2=.12$ ,  $p<.05$ ; value congruence  $\beta=.39$ ,  $p<.05$ ; workload  $\beta=-$   
315  $.17$ ,  $p<.05$ ). In the second step of the regression analysis, the interaction term between  
316 manageable workload and value congruence explained a significant increase in variance in the  
317 efficacy component of burnout ( $\beta=.14$ ,  $\Delta R^2=.02$ ,  $p<.05$  value congruence  $\beta=.39$ ,  $p<.05$ ;  
318 manageable workload  $\beta=-.17$ ,  $p<.05$ ). It was found that value congruence significantly  
319 moderated the relationship between manageable workload and efficacy ( $\Delta R^2 = .02$ ,  $p<.05$ ),  
320 therefore providing support for  $H_9$ .  $H_3$  and  $H_6$  were not supported as no significant  
321 moderating effects of control and community were found (control  $\Delta R^2 = .00$ ,  $p>.05$ ;  
322 community  $\Delta R^2 = .00$ ,  $p>.05$ ).

323         Graph 1 indicates that individuals who report having more control over their work are  
324 more likely to be protected against the emotional exhaustion component of burnout ( $H_1$ ). The  
325 lower line of the graph plots the exhaustion scores for participants scoring one standard  
326 deviation above the mean on control variable. The upper line in contrast reflects the  
327 corresponding scores for those scoring one standard deviation below the mean on control. The  
328 slope difference on the low control line is greater than that for the high control line, reflecting  
329 a buffering effect. Thus, individuals with high control over their work were better able to  
330 buffer the effects of the relationship between workload and exhaustion than individuals with  
331 low control.

332         Graph 2 shows that individuals who report having an increased sense of community  
333 were able to buffer the relationship between manageable workload with emotional exhaustion  
334 ( $H_4$ ). The lower line of the graph plots the exhaustion scores for participants scoring one  
335 standard deviation above the mean on community and the upper line in contrast reflects the  
336 corresponding scores for those scoring one standard deviation below the mean on community.  
337 The slope difference on the low community line is steeper than that for the high community

338 line, reflecting a buffering effect. Individuals with a high sense of community were better able  
339 to buffer the effects within the relationship between having an unmanageable workload and  
340 developing exhaustion than individuals with a low result of the community variable.

341 Graph 3 illustrates that individuals who had more control over their work were better  
342 able to buffer the relationship between manageable workload and cynicism ( $H_2$ ). The lower  
343 line of the graph plots the cynicism scores for participants scoring one standard deviation  
344 above the mean on control. The upper line in contrast reflects the corresponding scores for  
345 those scoring one standard deviation below the mean on control. The slope difference on the  
346 low control line is greater than that for the high control line, showing a buffering effect. Thus,  
347 individuals with high control over their work were better able to buffer the effects of the  
348 relationship between manageable workload and cynicism than individuals with a low result o  
349 the control variable.

350 Graph 4 shows that individuals with stronger value congruence were better able to  
351 buffer the relationship between manageable workload and efficacy ( $H_9$ ). The lower line of the  
352 graph plots the efficacy scores for participants scoring one standard deviation above the mean  
353 on value congruence and the upper line in contrast reflects the corresponding scores for those  
354 scoring one standard deviation below the mean on value congruence. The slope difference on  
355 the high value congruence line is greater than that for the low value congruence line,  
356 reflecting a buffering effect. Thus, individuals exercising low value congruence perceived more  
357 efficacy when they had a manageable workload than people with high value congruence, but in  
358 situations where an unmanageable workload is present the buffering effect of high value  
359 congruence, greatly increases the amount of efficacy experienced by these individuals.

360

#### 361 **4. DISCUSSION**

362 The present study tested the effectiveness of the demand – control (– support) model and



363 the value congruence model in explaining the development of the three components of burnout  
364 among individuals employed in the hospitality industry in Spain.

365 It was hypothesized that having control over one's work would act as a buffer within the  
366 relationships between workplace demands and the presence of the emotional exhaustion, cynicism  
367 and self-efficacy components of burnout ( $H_1$ ,  $H_2$ ,  $H_3$ ). These hypotheses were partially supported,  
368 as control was found to act as a buffer within the relationships between workplace demands and  
369 the presence of the emotional exhaustion and cynicism components of burnout, but not within the  
370 relationship between workplace demands and the self-efficacy component of burnout. This  
371 finding supports the idea that individuals who have more control over their work will score lower  
372 on emotional exhaustion when experiencing an unmanageable workload, than individuals who  
373 have less control over their work. Additionally, when individuals have more control over their  
374 work and are experiencing an unmanageable workload, they will score lower on cynicism than  
375 someone who exert less control. These findings are in line with previous research [37,48–50].

376 The present findings regarding control as a successful buffer between the relationship of  
377 having high demands and developing burnout are pertinent towards hospitality industry workers.  
378 The discovery that having control over one's work can act as a potential buffer within these  
379 relationships, is an important finding for those involved in the working world. Allowing  
380 employees to feel as though they exert control over every aspect of their work tasks and roles may  
381 be the primary factor responsible for the employee to feel motivated and to desire to learn more  
382 about their roles and responsibilities within the organization [51].

383 However, a buffering effect of control within the relationship between job demands and  
384 self-efficacy was not found, therefore providing insufficient support to confirm hypothesis 3.  
385 Similar results were found in a previous study conducted on a sample of teachers where control  
386 was found to be a moderator in the relationship between job demands and emotional exhaustion  
387 and between job demands and cynicism, but not within the relationship between job demands and

388 self-efficacy [37]. This finding could be because hospitality workers may only have control over  
389 some characteristics of their work that do not directly affect their perceived levels of self-efficacy  
390 (e.g., choosing their holiday times, or their lunch breaks).

391  $H_4$ ,  $H_5$  and  $H_6$  stated that community would moderate the relationship between  
392 workplace demands and the presence of the emotional exhaustion, cynicism and self-efficacy  
393 components of burnout. Only one of the three hypotheses, the  $H_4$  was supported. The  
394 interaction term within the analysis suggests that perceived sense of community is able to act  
395 as a buffer within the relationship between workplace demands and the presence of the  
396 emotional exhaustion component of burnout. This means that individuals experiencing an  
397 unmanageable workload and a high sense of community are more likely to score lower on  
398 levels of emotional exhaustion than someone who has a lower sense of community. These  
399 findings coincide with previous research [31,49,52,53]. Moreover, limited support was found  
400 for  $H_5$  and  $H_6$  as community was found to be an unsuccessful moderator within the  
401 relationships between workplace demands and the cynicism and self-efficacy components of  
402 burnout. According to previous research, this finding could be related to the different sources  
403 of social support and sense of community one experiences while working within the  
404 hospitality industry [52,54]. Hospitality employees may focus on building social support and  
405 relationships within their families and friends, but not on building a strong social support and  
406 sense of community among their supervisors and colleagues.

407 It was also hypothesized that value congruence would buffer the relationship between  
408 workplace demands and the presence of the emotional exhaustion, cynicism and self-efficacy  
409 components of burnout ( $H_7$ ,  $H_8$ ,  $H_9$ ). These hypotheses have been partially supported, as only  
410 value congruence was found to buffer the relationship between workplace demands and the  
411 presence of the self-efficacy component of burnout ( $H_9$ ). This means that individuals experiencing  
412 high levels of value congruence will score higher on self-reported levels of self-efficacy than

413 someone with low levels of value congruence, when experiencing unmanageable workloads.

414         These findings are consistent with previous research showing that having congruent  
415 values can significantly predict levels of professional efficacy [35]. Furthermore, the value  
416 congruence model proposes that the impact of value conflicts has only minor implications on the  
417 exhaustion component of burnout but becomes more relevant when discussing the cynicism and  
418 inefficacy components of the burnout syndrome. Our results are partially consistent with the value  
419 congruence model [32], as significant relationships between value congruence and exhaustion and  
420 between value congruence and self-efficacy were found, but no significant relationship was found  
421 between cynicism and self-efficacy. This suggests that within the sample of hospitality industry  
422 employees value congruence is not a significant buffer with relation to the cynicism component of  
423 burnout.

424         The buffering effect of having congruent values on the relationship between emotional  
425 exhaustion and cynicism was not a significant one. Having values congruent with the organization  
426 can improve the perceived self-efficacy of hospitality workers, which could then lead to increased  
427 motivation to achieve shared aims within the company. In contrast, having values that are  
428 congruent with organizations values did not provide a protective effect against the emotional  
429 exhaustion and cynicism components of burnout within this sample of hospitality workers. This  
430 finding may be a result of the nature of the human service industry, as it is common in this  
431 industry to feel unrecognized and underappreciated by customers or by the organization you work  
432 for. These incongruent values held by employees within organizations may result in experiencing  
433 emotional exhaustion and cynicism, which ultimately may result in implications to their  
434 productivity levels and health.

435         There are several limitations to this study. First of all, the self-report nature of the current  
436 study limits the researcher's ability to make causal conclusions about the present findings. Other  
437 areas of bias arise when using subjective self-reports to obtain data, such as participants altering

438 their responses based on their knowledge of being evaluated. This self-report bias can occur in  
439 two directions: maximization or minimization, i.e., the tendency of choosing answers to create a  
440 favorable impression or, in other cases, of trying to give a worse impression than it actually is.  
441 With regards to the surveys administered, additional confusion for participants may have arisen  
442 due to the researchers not differentiating between the types of social support they were required to  
443 answer questions about. Furthermore, the sample was too diverse, so that workers could present  
444 different patterns of burnout, depending on their interaction with the users of the service and the  
445 type of work developed, and it could provide an interesting research line in the future. Lastly, the  
446 subject study is limited to Aragón (Spain), though it includes all regions of Aragón. Although it is  
447 beyond the scope of this study, future research should examine stress in other cities and  
448 communities of Spain and then make cross-cultural comparisons. As a result, generalization and  
449 replication of the current findings awaits further empirical examination.

450

## 451 **5. CONCLUSION**

452 The findings of the present study are crucial step towards improving the quality of the work  
453 environment and health of hospitality workers. Organizations should highlight the importance of  
454 increasing the amount of autonomy given to their employees, and fostering a supportive social  
455 environment in which their employees can prosper. These changes have the potential to act as  
456 protective factors against the development of burnout syndrome among employees, against the  
457 serious consequences that this syndrome presents for both workers and the organization.  
458 Additionally, organizations should work towards hiring employees who hold similar values to the  
459 ones upheld by the organizations they are attempting to work for, because it will increase the  
460 effort and commitment of employees. Further research directions may bring new insights into the  
461 importance of various types of social support (family, friends) on alleviating burnout symptoms as  
462 well as further exploring the importance of having incongruent values on the development of

463 burnout within the hospitality industry.

464

## 465 6. REFERENCES

- 466 [1] Fidalgo Vega M. INSHT. NTP 704: Síndrome de estar quemado por el trabajo o  
467 “burnout” (I): definición y proceso de generación [NTP 704: burnout syndrome (I):  
468 definition and process]. 2005 [cited 2016 Apr 1]. Spanish. Author’s manuscript  
469 available at  
470 [http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?](http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD&do=Search&idPalabra=ctjbbba)  
471 [vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD&do=Search&idPalabr](http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD&do=Search&idPalabra=ctjbbba)  
472 [a=ctjbbba](http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD&do=Search&idPalabra=ctjbbba)
- 473 [2] Freudenberger HJ. Staff Burn-Out. *J. Soc. Issues.* 1974;30:159–165.
- 474 [3] Maslach C, Jackson SE. The measurement of experienced burnout. *J. Organ. Behav.*  
475 1981;2:99–113.
- 476 [4] Maslach C, Schaufeli WB, Leiter MP. Job burnout. *Annu. Rev. Psychol.* 2001;52:397–  
477 422.
- 478 [5] Melamed S, Kushnir T, Shirom A. Burnout and risk factors for cardiovascular diseases.  
479 *Behav Med.* 1992;18:53–60.
- 480 [6] Nowack KM, Pentkowski AM. Lifestyle habits, substance use and predictors of job  
481 burnout in professional working women. *Work Stress.* 1994;8:19–35.
- 482 [7] Monte PRG, Nuñez-Román EM, Selva-Santoyo Y. Relación entre el síndrome de  
483 quemarse por el trabajo (burnout) y síntomas cardiovasculares: un estudio en técnicos  
484 de prevención de riesgos laborales [Relationship between burnout syndrome and  
485 cardiovascular symptoms: a study in occupational risk prevention technicians]. *Interam.*  
486 *J. Psychol.* 2006;40:227–232. Spanish.
- 487 [8] Torres SJ, Nowson CA. Relationship between stress, eating behavior, and obesity.  
488 *Nutrition.* 2007;23:887–894.
- 489 [9] Ekstedt M. Burnout and sleep [dissertation]. Sweden: Karolinska Institutet; 2005.
- 490 [10] Cunradi CB, Chen MJ, Lipton R. Association of Occupational and Substance Use  
491 Factors with Burnout among Urban Transit Operators. *J. Urban Health.* 2009;86:562–  
492 570.
- 493 [11] Ahola K, Honkonen T, Kivimäki M, et al. Contribution of burnout to the association  
494 between job strain and depression: the health 2000 study. *J. Occup. Environ. Med.*  
495 2006;48:1023–1030.
- 496 [12] Potocka A, Mościcka A. Stres oraz sposoby radzenia sobie z nim a nawyki żywieniowe  
497 wśród osób pracujących [Occupational stress, coping styles and eating habits among  
498 Polish employees]. *Med. Pr.* 2011;62:377–388. Polish.

- 499 [13] Álvarez Gallego E, Fernández Ríos L. El síndrome de burnout o el desgaste profesional  
500 (I): Revisión de estudios [Burnout syndrome or professional burnout (I): Review of  
501 studies]. *Rev. Asoc. Esp. Neuropsiq.* 1991;11:257–265. Spanish.
- 502 [14] Cordes CL, Dougherty TW. A Review and an Integration of Research on Job Burnout.  
503 *Acad. Manage. Rev.* 1993;18:621–656.
- 504 [15] Wu S, Zhu W, Wang Z, et al. Relationship between burnout and occupational stress  
505 among nurses in China. *J. Adv. Nurs.* 2007;59:233–239.
- 506 [16] Laugaa D, Rasclé N, Bruchon-Schweitzer M. Stress and burnout among French  
507 elementary school teachers: A transactional approach. *Eur. Rev. Appl. Psychol.*  
508 2008;58:241–251.
- 509 [17] Maslach C. The Client Role in Staff Burn-Out. *J. Soc. Issues.* 1978;34:111–124.
- 510 [18] O’Neill JW, Davis K. Work Stress and Well-being in the Hotel Industry. *Int. J. Hosp.*  
511 *Manag.* 2011;30:385–390.
- 512 [19] Kim HJ. Hotel service providers’ emotional labor: The antecedents and effects on  
513 burnout. *Int. J. Hosp. Manag.* 2008;27:151–161.
- 514 [20] Hochschild AR. *Managed Heart: Commercialization of Human Feeling.* 3rd ed.  
515 Berkeley (LA); 2012.
- 516 [21] Kruml SM, Geddes D. Exploring the Dimensions of Emotional Labor The Heart of  
517 Hochschild’s Work. *Manag. Commun. Q.* 2000;14:8–49.
- 518 [22] Zapf D, Seifert C, Schmutte B, et al. Emotion work and job stressors and their effects  
519 on burnout. *Psychol. Health.* 2001;16:527–545.
- 520 [23] Brotheridge CM, Grandey AA. Emotional Labor and Burnout: Comparing Two  
521 Perspectives of “People Work.” *J. Vocat. Behav.* 2002;60:17–39.
- 522 [24] Cheung FYL, Tang CSK. The influence of emotional dissonance and resources at work  
523 on job burnout among Chinese human service employees. *Int. J. Stress Manag.*  
524 2007;14:72–87.
- 525 [25] Kogovsek, M, Kogovsek M. Emotional Labour in Hospitality Industry: Literature  
526 Review. *Quaestus.* 2014;115–130.
- 527 [26] Kinman G, Grant L. Exploring Stress Resilience in Trainee Social Workers: The Role  
528 of Emotional and Social Competencies. *Br. J. Soc. Work.* 2010;bcq088.
- 529 [27] Karasek RA. Job Demands, Job Decision Latitude, and Mental Strain: Implications for  
530 Job Redesign. *Adm. Sci. Q.* 1979;24:285–308.
- 531 [28] Karasek R. Lower health risk with increased job control among white collar workers. *J.*  
532 *Organ. Behav.* 1990;11:171–185.
- 533 [29] Johnson JV. Collective control: strategies for survival in the workplace. *Int. J. Health*  
534 *Serv.* 1989;19:469–480.

- 535 [30] Greenglass ER, Burke RJ, Konarski R. The impact of social support on the  
536 development of burnout in teachers: Examination of a model. *Work Stress*.  
537 1997;11:267–278.
- 538 [31] Halbesleben JRB. Sources of social support and burnout: a meta-analytic test of the  
539 conservation of resources model. *J. Appl. Psychol.* 2006;91:1134–1145.
- 540 [32] Leiter MP. A two process model of burnout and work engagement: distinct  
541 implications of demands and values. *G. Ital. Med. Lav. Ergon.* 2008;30:A52-58.
- 542 [33] Siegall M, McDonald T. Person-organization value congruence, burnout and diversion  
543 of resources. *Pers. Rev.* 2004;33:291–301.
- 544 [34] Verplanken B. Value congruence and job satisfaction among nurses: a human relations  
545 perspective. *Int. J. Nurs. Stud.* 2004;41:599–605.
- 546 [35] Leiter MP, Frank E, Matheson TJ. Demands, values, and burnout: relevance for  
547 physicians. *Can. Fam. Physician.* 2009;55:1224–1225, 1225.e1-6.
- 548 [36] Dylağ A, Jaworek M, Karwowski W, et al. Discrepancy between individual and  
549 organizational values: Occupational burnout and work engagement among white-collar  
550 workers. *Int. J. Ind. Ergon.* 2013;43:225–231.
- 551 [37] Brouwers A, Tomic W, Boluijt H. Job demands, job control, social support and self-  
552 efficacy beliefs as determinants of burnout among physical education teachers. *Eur. J.*  
553 *Psychol.* 2011; 7(1): 17-39. [cited 2016 Apr 1]. Author’s manuscript available at  
554 <http://ejop.psychopen.eu/article/view/103>.
- 555 [38] Santavirta N, Solovieva S, Theorell T. The association between job strain and  
556 emotional exhaustion in a cohort of 1,028 Finnish teachers. *Br. J. Educ. Psychol.*  
557 2007;77:213–228.
- 558 [39] Karatepe OM, Aleshinloye KD. Emotional dissonance and emotional exhaustion  
559 among hotel employees in Nigeria. *Int. J. Hosp. Manag.* 2009;28:349–358.
- 560 [40] O’Neill JW, Xiao Q. Effects of organizational/occupational characteristics and  
561 personality traits on hotel manager emotional exhaustion. *Int. J. Hosp. Manag.*  
562 2010;29:652–658.
- 563 [41] Karatepe OM, Magaji AB. Work-Family Conflict and Facilitation in the Hotel Industry  
564 A Study in Nigeria. *Cornell Hosp. Q.* 2008;49:395–412.
- 565 [42] Karatepe OM, Uludag O. Affectivity, conflicts in the work–family interface, and hotel  
566 employee outcomes. *Int. J. Hosp. Manag.* 2008;27:30–41.
- 567 [43] Leiter MP, Maslach C. Areas of worklife: a structured approach to organizational  
568 predictors of job burnout. In: Perrewé P, Ganster DC, editors. *Research in occupational*  
569 *stress and wellbeing*. Oxford: Elsevier; 2003. p. 91–134.
- 570 [44] Gascón S, Leiter MP, Stright N, et al. A factor confirmation and convergent validity of  
571 the “areas of worklife scale” (AWS) to Spanish translation. *Health Qual. Life*  
572 *Outcomes.* 2013;11:63.

- 573 [45] Leiter, M.P. *Areas of Worklife Survey Manual*. 4th ed. Wolfville, NS, Canada: Centre  
574 for Organizational Research & Development; 2006.
- 575 [46] Schutte N, Toppinen S, Kalimo R, et al. The factorial validity of the Maslach Burnout  
576 Inventory-General Survey (MBI-GS) across occupational groups and nations. *J. Occup.*  
577 *Organ. Psychol.* 2000;73:53–66.
- 578 [47] Bresço-Esteve E, Salanova M, Schaufeli W. Síndrome de estar quemado por el trabajo  
579 “Burnout” (III): Instrumento de medición. Nota Técnica de Prevención (NTP 732)  
580 [Burnout Syndrome (III): Instrument of measurement. Technical Note of Prevention  
581 (NTP 732)]. [cited 2016 Apr 1]. Spanish. Author’s manuscript available at  
582 [http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?](http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD&do=Search&idPalabra=ctjbba)  
583 [vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD&do=Search&idPalabr](http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD&do=Search&idPalabra=ctjbba)  
584 [a=ctjbba](http://www.insht.es/portal/site/Insht/menuitem.a82abc159115c8090128ca10060961ca/?vgnextoid=db2c46a815c83110VgnVCM100000dc0ca8c0RCRD&do=Search&idPalabra=ctjbba)
- 585 [48] Baron RM, Kenny DA. The moderator-mediator variable distinction in social  
586 psychological research: conceptual, strategic, and statistical considerations. *J. Pers.*  
587 *Soc. Psychol.* 1986;51:1173–1182.
- 588 [49] Jonge J de, Dollard MF, Dormann C, et al. The Demand – Control Model: Specific  
589 Demands, Specific Control, and Well-Defined Groups. *Int. J. Stress Manag.*  
590 2000;7:269–287.
- 591 [50] Chiang FFT, Birtch TA, Kwan HK. The moderating roles of job control and work-life  
592 balance practices on employee stress in the hotel and catering industry. *Int. J. Hosp.*  
593 *Manag.* 2010;29:25–32.
- 594 [51] Demerouti E, Bakker AB, de Jonge J, et al. Burnout and engagement at work as a  
595 function of demands and control. *Scand. J. Work. Environ. Health.* 2001;27:279–286.
- 596 [52] Snyder J. The Role of Coworker and Supervisor Social Support in Alleviating the  
597 Experience of Burnout for Caregivers in the Human-Services Industry. *South.*  
598 *Commun. J.* 2009;74:373–389.
- 599 [53] Nieuwenhuijsen K, Bruinvels D, Frings-Dresen M. Psychosocial work environment  
600 and stress-related disorders, a systematic review. *Occup Med (Lond)* 2010;60:277–286.
- 601 [54] Baruch-Feldman C, Brondolo E, Ben-Dayana D, et al. Sources of social support and  
602 burnout, job satisfaction, and productivity. *J. Occup. Health Psychol.* 2002;7:84–93.

603  
604  
605  
606

### 607 **List of figures**

608  
609  
610  
611  
612  
613  
614

- 609 Graph 1: Moderating effects of control of the relationship between workload and exhaustion  
610 Graph 2: Moderating effects of sense of community of the relationship between workload and  
611 exhaustion  
612 Graph 3: Moderating effects of control of the relationship between workload and cynicism  
613 Graph 4: Moderating effects of value congruence of the relationship between workload and  
614 efficacy