HOW JOB CRAFTING INFLUENCES WORK MEANINGFULNESS IN COWORKING SPACES

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Article info

Abstract

Purpose. *Coworking spaces are emerging as a new organizational archetype involving freelancers, independent professionals, entrepreneurs, and corporate employees. Specialized providers design these innovative environments to encourage continuous collaboration and knowledge sharing among peers. However, to maximize their systematic encounters with like-minded individuals and achieve valuable outcomes, users are required to self-regulate their behavior daily. This investigation examines the role that proactive behaviors and the sense of job control have in increasing the meaning coworking users associate with their jobs as a key value indicator.*

Design/methodology/approach. *The present research is based on a quantitative study that involved 167 coworking users in 42 different coworking spaces in Italy.*

Findings. *The results show that approach job crafting behaviors positively influence work meaningfulness and that said relationship is strengthened by the job control individuals have.*

Practical and social implications. *Our research offers important managerial implications, giving coworking providers the tools to make their space more engaging by promoting proactive behaviors and improving the knowledge of users about how to make the best of their working experience.*

Originality of the study. *Such findings broaden the literature on coworking spaces, currently underexplored, and underline the importance of investigating, at the same time, individual factors and contextual elements to better understand the nature of work and its outcomes in these spaces.*

1. Introduction

Over the past few years, there have been significant changes in work organization. Consequently, the needs of workers in terms of autonomy, flexibility, and connections have varied, too (Bouncken et al., 2020). At the same time, the knowledge economy started to become more and more important, with professional figures such as freelancers and independent workers at the center of the spotlight (Bouncken and Reuschl, 2018), trying to find ways to face the challenges their daily routine poses (e.g., isolation, the need to separate life spaces from workspaces, the lack of encounters with different kinds of professional figures).

For these reasons, collaborative workplaces (Avdikos and Pettas, 2021) became relevant, in particular, coworking spaces that manage to combine autonomy and cooperation in a unique way, attracting freelancers and in-dependent workers all around the world.

Shared workspaces started gaining popularity in 2005 in San Francisco and London and gradually extended worldwide, with a significant increase in the last few years. According to pre-COVID-19 pandemic figures, up until 2022, shared workspaces counted around five million users (Avdikos and Pettas, 2021) working across 50.000 spaces, most of which are classified as coworking spaces. Their success may be due to the key concepts that characterize these spaces (Bouncken and Reuschl, 2018; Bouncken et al., 2021; Bueno et al., 2018): openness, inherent relationality, and challenging nature. The first element underlines that this kind of space welcomes all sorts of users, the second highlights the possibility of interacting with other professional figures, and the third emphasizes workers' need to manage their professional activity in an autonomous, independent way.

The users of coworking spaces have access to a wide range of possibilities, such as getting to know other like-minded individuals, exchanging information, improving idea generation and implementation, and creating new business opportunities. Moreover, coworking spaces offer an unconventional system of organization, with their geographically diffused, time-variating, and differently configured modalities (Bouncken and Aslam, 2019). Based on a periodic fee, users are provided with office facilities (e.g., desks, printers, internet connection), spaces for recreational activities (e.g., kitchens, game rooms, gyms), and social experiences (e.g., training classes, parties, dinners). In some cases, users can access such spaces 24/7 and have the opportunity to adapt their working hours to their lifestyles. The providers of coworking spaces design the environment by clarifying rules and restrictions and, at the same time, encourage users to join ad hoc events to contribute to making a rich and pleasant coworking experience (Bouncken et al., 2020). The presence of a coordinating figure allows this kind of working environment to be organized and loose, formal and informal at the same time.

Although many scholars focused their attention on coworking spaces (e.g., Avdikos and Pettas, 2021; Bouncken et al., 2021; Bueno et al., 2018; Spreitzer et al., 2015), few studies have emphasized the importance of the behaviors of workers in this setting. This is an important gap to fill since, on the one hand, coworking spaces may offer many opportunities for users to be proactive because of a context permeated by autonomy and versatility, and, on the other hand, workers must have the right attitude and perform the right behaviors to make the most of their working life, to avoid a "working alone, together" experience (Spinuzzi, 2012) and exploit every opportunity offered by such an unconventional working environment. In these contexts, job crafting emerges as a crucial element specifically because of the nature of coworking spaces that offer more opportunities for proactivity that, we expect, may promote the sense of meaningfulness workers associate with their jobs.

At the same time, it is important to notice that the coworking experience "is not for everybody" (Howell, 2022). To take advantage of these unusual working environments, users need to better understand the behaviors they can perform to improve the quality of their professional lives. Specifically, a proactive attitude represented by job crafting behaviors may help users of coworking spaces to better fit in this setting by taking advantage of the flexible context these spaces offer and, at the same time, interacting with the vital and dynamic community usually found in these environments.

A fundamental characteristic of coworking spaces seems to be the amount of autonomy users have to manage their professional lives, considering that workers who choose this work setting generally have more control over their decisions regarding their jobs than other, more traditional working environments. Job control may be a valuable element to consider in the analysis connected to the proactive behaviors of workers because it is strictly linked to the choices workers make regarding the allocation of resources (Bond and Flaxman, 2006) and the modification of demands (Du et al., 2019).

Based on these premises, the study's goal is to achieve an improved comprehension of the relationship between the proactive behaviors of workers in coworking spaces and work meaningfulness by helping answer the following questions: can job crafting behaviors influence the meaning workers attribute to their jobs in coworking spaces? Does job control modify the relationship between job crafting and work meaningfulness? To answer the previously mentioned questions and contribute to filling a gap in the literature regarding the behaviors of the users of coworking spaces and job crafting, in this study, we have explored how proactive behaviors may play a fundamental role in the construction of the perception of a more meaningful job for coworking users and, at the same time, the importance of job control in this process.

Overall, we believe that our study contributes to the existing literature on coworking spaces by shedding light on how coworking users may take maximum advantage of their working experience by behaving proactively and, consequently, according to our hypotheses, increasing the meaning they associate with their jobs. Moreover, this research sheds light on the dynamics of the relationship between the four separate dimensions of job crafting behaviors and work meaningfulness and assesses whether job control has a role in modifying said relationship.

2. Literature review and research hypotheses development

2.1 The relationship between job crafting and work meaningfulness

The initial conceptualization of job crafting was presented by Wrzesniewski and Dutton in 2001. The authors defined it as a modification of the task and relational boundaries of work outside the formal job requirements with a consequent change in employees' work identities and meaning (Wrzesniewski and Dutton, 2001). Tims and Bakker (2010) integrated this definition by theorizing the Job Demands-Resources (JD-R) model that envisions job crafting as a set of proactive behaviors aimed at increasing the available job resources and modifying job demands to improve the person-job fit without considering formal job descriptions. The scholars defined four types of job crafting behaviors aimed at increasing structural resources, increasing social resources, increasing challenging job demands, and decreasing hindering job demands.

Job resources are physical, psychological, social, or organizational job elements that enable workers to achieve their objectives, carry out their tasks by dealing with job demands, and promote personal growth and development (Demerouti et al., 2001). Tims et al. (2012) differentiate structural and social resources. Structural resources refer to elements such as autonomy, responsibility, control, and knowledge of the job, while social resources refer to elements such as support, guidance, feedback, and advice from peers and leaders. When workers perceive that the available resources are not enough, they show increased levels of stress and disengagement and decreased levels of motivation (Bakker and Demerouti, 2007). On the contrary, when workers perceive that more resources are available, they show decreased levels of depersonalization and emotional exhaustion, increased levels of satisfaction and engagement, and increased ability to develop further resources (Bakker and Demerouti, 2008). Said resources are important job elements that can be expanded by performing job crafting behaviors aimed at increasing structural and social resources.

Job demands are work features that can be differentiated between "challenging" and "hindering". Challenging job demands are perceived by workers as complex but provide increased mastery experiences, satisfaction, self-efficacy, work engagement, and personal development. An example is participating in new projects with opportunities to learn and grow professionally. Hindering job demands are perceived as an obstacle between workers and the achievement of their goals and may increase the levels of stress and anxiety (Bakker and Demerouti, 2007). An example is a task that is perceived as mentally or emotionally too intense.

The concept of "work meaningfulness" can be defined as the perception of the significance workers attribute to their job, experiencing it as meaningful, valuable, and worthwhile (Hackman and Oldham, 1976). Meaningful work is associated with a series of benefits both for workers and organizations. For example, individuals who experience their job as meaningful report better psychological adjustment, intrinsic motivation, greater well-being, and greater job satisfaction (Steger et al., 2012). In the first contribution regarding job crafting, Wrzesniewski and Dutton (2001) highlighted a connection between proactive behaviors and the meaning associated with one's job by stating that the "altered task and relational configurations change the design and social environment of the job, which, in turn, alters work meanings […]" (Wrzesniewski and Dutton, 2001, p. 179). By changing a job's cognitive task boundaries (one of the job crafting behaviors theorized by the authors), job crafters also modify the meaning they associate with the work they perform. An example provided by the scholars is an internet service provider that does not simply "make sales" but connects people to the contemporary world, giving them a powerful tool to constantly keep up with the current times (Wrzesniewski and Dutton, 2001). The employee in the example is attributing a different meaning to their job, reinterpreting it using the lens of their personal values so that they can increase their job satisfaction, well-being, and intrinsic motivation.

In line with the previously mentioned theories and models, in this study, we hypothesize that job crafting behaviors have a positive effect on work meaningfulness. More specifically, we assume that increasing the available structural resources may increase the meaning associated with one's job because having more autonomy, responsibility, control, and knowledge of the job may make workers feel more confident about their ability to achieve their goals and perform their daily tasks in a more meaningful way. When workers proactively acquire and use the available resources consistent with their goals and aspirations, some positive consequences, such as increased levels of well-being and happiness, can be achieved (Berdicchia et al., 2022). It seems plausible to assume that when workers perform behaviors aimed at increasing structural resources, work meaningfulness also increases. The possibility workers, and especially coworking users, have to decide and act

in a discretional way leaves room for the customization, even if partial, of job elements according to individual preferences, values, motivation, and personal expectations (Tims and Bakker, 2010). In this stimulating context, coworking users may be willing to acquire and keep structural resources that are useful to maximize their working experience to avoid the feeling of detachment from their job due to the physical distance from their organization, colleagues, and supervisors.

Recent literature highlights that the key elements of coworking spaces may be social interactions, social support, and knowledge sharing (Gardentitsch et al., 2016). Previous studies show that one of the most common reasons why workers decide to join coworking spaces is the opportunities derived from interactions with people, random discoveries, and knowledge sharing (Spreitzer et al., 2015; Hysa et al., 2024). Coworking users may autonomously decide to receive and provide feedback (Bouncken and Reuschl, 2018), and this means that they may craft their jobs by increasing the social resources available. This proactive behavior seems to be fundamental for coworking users since connecting with peers through support, guidance, feedback, and advice may bring more work meaningfulness to their jobs. Coworking spaces are seen as highly collaborative communities of freelancers, entrepreneurs, and professionals with a typical visionary and innovative lifestyle (Ciasullo et al., 2019). Workers are involved in an environment that prioritizes social exchanges through constant cooperation with other users with different professional and personal backgrounds (Bueno et al., 2018). In this context, workers increase social resources and, consequently, associate more meaning with their job since one of the reasons that brought them to coworking spaces may be the enhanced possibilities of professional support, advice, and feedback from workers with completely different backgrounds (Spreitzer et al., 2015).

As regards the first two job crafting behaviors mentioned above, the Conservation of Resources (COR) theory (Hobfoll, 1989) seems in line with our hypotheses since individuals tend to protect the resources they already have and, at the same time, try to constantly increase them. This consequently creates what Hobfoll (1989) calls a "gain spiral" that allows workers to keep maintaining and increasing their resources. It is then plausible to assume that workers who increase their structural and social resources will keep increasing them and, consequently, increase also the meaning associated with their job.

Increasing challenging demands may help workers focus on what is particularly meaningful to them by engaging in activities they believe are difficult but rewarding. Coworking users who are engaged in a different work environment compared to their peers working in more traditional ones may feel the urge to increase the challenging demands associated with their job to make it more interesting, consequently increasing the lev-

els of work meaningfulness. When workers experience a more open in-
novation climate, flexible workplaces, and social interaction, all character-
istics found in coworking spaces (Hysa et al., 2024), they may choose to
engage in more meaningful activities according to their interests. Selecting
these kinds of challenging activities consequently increases the levels of
work meaningfulness because it is reasonable to assume that coworking
users (as workers in general), when given more flexibility and autonomy to
choose the demands associated with their job, would choose activities that
they believe are meaningful to them.

Consistent with this, when dealing with hindering demands, workers
may avoid those tasks that are perceived as an obstacle between them and
the achievement of their goal and do not provide meaning to their work. It
would be unreasonable to assume otherwise, since when individuals can
choose between shaping a job more suitably according to their preference,
nobody would choose to modify it by adding obstacles between them and
the achievement of their goal and avoiding more stimulating activities.

In the context of coworking spaces, this may be particularly relevant.
Coworking users who experience a different work environment compared
to their peers working in more traditional contexts may feel a stronger
need to act proactively because of the autonomous nature of the environ-
ment they work in every day. More importantly, to them, it is even more
fundamental to perceive work meaningfulness since being on their own
may make them feel detached from their actual goal and distant from cus-
tomers, peers, and supervisors. Consequently, we argue that job crafting
behaviors may have a positive effect on work meaningfulness in cowork-
ing spaces.

H1: The effect of H1a) increasing structural resources, H1b) increasing
social resources, H1c) increasing challenging demands, and H1d) decreas-
ing hindering demands on work meaningfulness is positive.

2.2 The moderating role of job control

Job control is defined as a perceived ability to exert some influence over
one's work environment to make it more rewarding and less threatening
(Ganster, 1989). Previous literature underlines that job control is associ-
ated with some positive outcomes such as improved performance, men-
tal health, and job satisfaction (Hackman and Lawler, 1971). Workers with
higher levels of job control are more likely to influence the outcomes of
their jobs, have more decision rights over their tasks, and are more flexible
in efficiently allocating resources (Bond and Flaxman, 2006). For this rea-
son, the concept of job control seems to be strictly connected to job crafting
since workers who choose to proactively increase their resources or modify
their demands are "controlling" some aspects of their jobs. Therefore, we

believe that the presence of job control may create more favorable conditions for job crafting to have a positive effect on work meaningfulness. This may be particularly true for coworking users who strongly rely on their autonomy and the control they have of their job to carry out daily tasks and achieve their goals.

Many different job design theories, such as the Job Characteristics Model (Hackman and Oldham, 1976), the Job Demand-Control Model (Karasek and Theorell, 1990), and the Job Demands-Resources model (Tims and Bakker, 2010), propose that job control is one of the most important job resources. Said resource is intrinsically motivating because it fulfils basic human needs and fosters individuals' growth and development (Deci and Ryan, 2000). The two best-rated attributes of coworking spaces, according to workers, are flexibility and autonomy (Bueno et al., 2018), so we may assume that these are structural resources that they try to increase. As previously mentioned, increasing the structural resources associated with one's job may increase the levels of work meaningfulness. When workers show high levels of job control, they may decide to increase their resources in a way that is in line with their values. For example, they may look for more knowledge about their job because they are intrinsically motivated to do so, to improve their daily working routine, and to find new interesting unexplored aspects of their professional activity. On the contrary, when the users of coworking spaces face situations where their job control is limited (e.g., strict schedules, urgent deadlines), they may (in line with the previous example) try to increase the knowledge regarding their jobs just because they need to, because they have to solve a pressing problem, to carry out an activity that they do not know how to perform and, consequently, they try to increase their comprehension of it. Thus, we argue that, in presence of job control, the relationship between increasing structural resources and job meaningfulness may be modified.

In coworking spaces, social resources are more important than in other settings. Previous literature shows that when workers lack coordination or when many different choices can be made to carry out a specific activity, less structured than usual, in the absence of strict rules or procedures to follow, they may look for certainty by connecting with other people, looking for support, and learning and preserving information (Ashford, 1986). We argue that increasing the social resources connected to the job consequently increases work meaningfulness. This relationship may thrive in the presence of job control because of the different kinds of interaction that this variable promotes. For example, when the social resources workers seek are associated merely with solving their high-priority problems because of the limited possibilities they have (e.g., little time to complete a task, many activities to perform at the same time, lack of a skill connected to a demand), individuals may feel that the quality of their social interac-

tions is compromised. In this case, workers increase their social resources with the main goal to achieve a result, solve a problem, accomplish a task, and this may reduce the quality of the relationship between this proactive behavior and work meaningfulness. On the contrary, when workers are free to interact with other professional figures in a more relaxed, autonomous way (e.g., during the breaks in the recreational spaces offered by coworking spaces), the relationship between the proactive behavior of increasing their social resources and work meaningfulness may be considerably strengthened. We believe this may happen because the quality and content of social interactions are different in presence of job control, that allows individuals to look for social resources that may not only directed to the solution of a problem but to the implementation of new skills learnt from other professional figures, a different mindset to deal with one's job, an out-of-the-box thinking inherent to the mutual exchange of information coming from individuals with heterogeneous backgrounds. This kind of interaction is possible only when workers show high levels of job control that, consequently, may modify the relationship between increasing social resources and work meaningfulness.

The Job Demand-Control model (JD-C), theorized by Karasek and Theorell (1990), points out that workers with higher levels of control can choose how to best cope with new demands or challenges. This may help them discover new ways to perform their job more effectively, thus gaining competence, confidence, productivity, and accomplishment (Bond and Flaxman, 2006). In the JD-C model, this sense of accomplishment is also referred to as "active learning". Feeling confident, competent, productive, and accomplished may enhance the meaning that workers associate with their jobs. In the context of coworking spaces, the dynamic, flexible climate and the constant social connections may encourage workers to increase the levels of challenging job demands. Workers may be inspired by others and develop new business ideas that may stimulate them to engage in challenging activities. We argue that increasing the challenging demands of one's job is associated with increased levels of work meaningfulness. Having more job control allows workers to choose which activities and tasks are more suitable to their needs and increase person-job fit, meaningfulness, well-being and has positive consequences on performance. When coworking users have little or no job control, they are limited in their decisions to choose the demands and, consequently, embark on activities strictly connected to the achievement of professional goals that may be fundamental in the short term but do not bring the advantages mentioned above. When workers are free to choose the tasks and activities connected to their jobs, it is reasonable to assume that they choose tasks that are challenging and rewarding, in line with their aspirations, inclinations, and desires. For all the above-mentioned reasons, we argue that job control modifies the rela-

tionship between increasing challenging job demands and work meaningfulness.

Hindering job demands are perceived as an excessive workload that impedes the achievement of goals and may increase the levels of stress and anxiety. The JD-C model underlines that job control enables workers to deal with excessive job demands effectively, thus avoiding strain (Karasek and Theorell, 1990). As a consequence, job control enables employees to effectively deal with such demands by implementing strategies such as delegating work tasks, prioritizing goals and tasks, or taking breaks that allow workers to recover. All these behaviors may be considered a form of decreasing hindering job demands, which we believe may bring more work meaningfulness. When workers find themselves in highly controlled working settings, the above-mentioned relationship may be weakened due to the limits workers may face. For example, workers who have no time to manage the overwhelming number of requests and tasks may decrease hindering demands and consequently increase the meaningfulness associated with their job in a completely different way compared to workers who can autonomously choose the best activities to perform because they have higher levels of job control and do not have to worry too much about the consequences of their freely chosen actions. For all the above-mentioned reasons, we believe that, in the presence of job control, the relationship between behaviors aimed at decreasing hindering demands and the meaning workers attribute to their jobs may be strengthened.

H2: Job control strengthens the positive relationship between H2a) increasing structural resources, H2b) increasing social resources, H2c) increasing challenging demands, and H2d) decreasing hindering demands and work meaningfulness.

Overall, our hypotheses are represented in the following conceptual model.

Fig. 1. Tested model
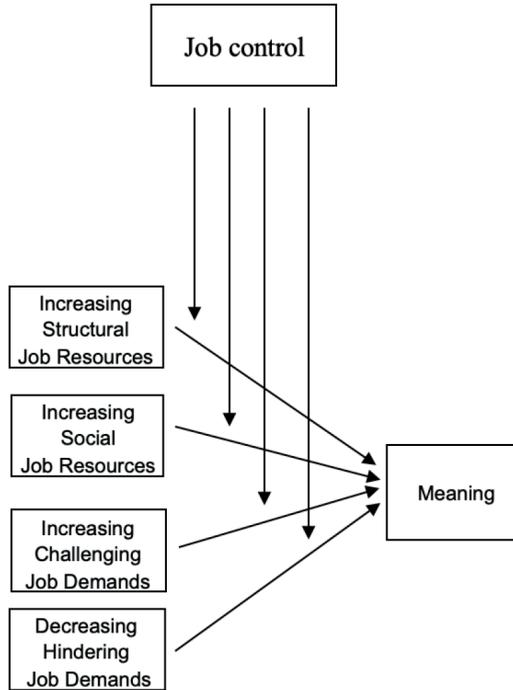
3. Methodology

3.1 Participants and Procedures

The Italian Conference of Coworking Spaces is an official event where most Italian coworking space providers and users can share ideas and discuss trends to promote the coworking movement in general. The initial stage of our investigation involved contacting the promoters of the Conference, with whom we already had a research partnership. As a result of said partnership, we could i) verify our key methodological choices starting from a sample selection, ii) test and refine the questions of our survey through an online focus session with a purposeful sample (Creswell and Plano Clark, 2011) of coworking users participating to the 2021 virtual edition of the Conference, iii) get the list of Italian coworking spaces joining the Conference. To provide homogeneity in the sample, we decided not to include global entrepreneurial-driven coworking spaces such as "WeWork".

The second stage of our study concerned contacting the community managers/owners of every chosen coworking space. We clarified the goals

of our research, the type of coworking spaces we were looking for, and the content of the survey. Of the 239 coworking spaces we contacted, 42 decided to join the study (about 18%). Afterwards, the community managers/owners sent the survey to all the coworker members of the community, asking them to respond and ensuring anonymity.

Of the 190 surveys we received, 23 were incomplete, so we could not include them in the analysis. The final sample we used was composed of 167 coworking users (mainly start-uppers, consultants, and professionals coming from a wide variety of areas), with an average age of 40.6 years (SD 7.9), with slightly more females (56.3%). As regards qualifications, 10.8% had a high school diploma, 62.3% had a bachelor's degree, and 26.9% had a master's degree or a PhD. Most participants are web designers (30%) and entrepreneurs (24%), but there are also writers (7%), management consultants (17%), project managers (9%), and marketing/sales technicians (13%).

3.2 Measures

A professional translator translated each measuring scale, as the respondents' native language was Italian. To validate the translation, we used the back translation method (Brislin et al., 1973).

Job crafting. We used the sub-dimensions of the job crafting scale developed by Tims et al. (2012) to measure job crafting. The first three dimensions ("increasing structural resources", "increasing social resources", and "increasing challenging demands") include 5 items each, while the dimension "decreasing hindering demands" includes 6 items. Since, in coworking spaces, there are no supervisory roles, we decided to eliminate from the "increasing social resources" dimension the behavior related to seeking the support of the supervisor.

Some examples for each variable are "I try to develop my capabilities" for "increasing structural resources"; "I ask colleagues for advice" for "increasing social resources"; "when an interesting project comes along in my coworking space, I offer myself proactively as project coworker" for "increasing challenging demands"; and "I make sure that my work is mentally less intense" for "decreasing hindering demands". The Cronbach's alpha estimates for these scales are, respectively, 0.84, 0.90, 0.89, and 0.84.

Job control. Job control was measured by adapting the Karasek et al. (1998) Job Content Questionnaire. The instrument comprises 3 items. A sample item is "I have a lot of say about what happens on my job". The alpha was 0.71.

Work meaningfulness. Work meaningfulness was measured by the Work and Meaning Inventory (WAMI) developed by Steger et al. (2012). The instrument comprises 10 items. A sample item is "I have a good sense of what makes my job meaningful". The alpha was 0.92.

Control variables. To rule out the potential confounding effects of socio-demographic variables, several variables (age, gender, education level, and job tenure) were controlled for.

4. Findings

Before testing our hypotheses, we performed numerous preliminary analyses. Our data were all collected at one point in time, and all self-reported, so we tried to avoid the risk of common method variance (CMV) by taking some precautions. We used reliable psychometric scales validated in the relevant literature and ensured anonymity for all respondents (Podsakoff et al., 2012).

We also analyzed the structural validity of the scales. We performed a confirmatory factor analysis in AMOS. The proposed model, a six-factor model in which increasing structural job resources, increasing social job resources, increasing challenging job demands, decreasing hindering demands, job control, and work meaningfulness loaded on their respective factor exhibits an acceptable fit [$\chi2 = 937.23$ (df = 419), CFI = 0.92, IFI = 0.92, TLI = 0.90, RMSEA = 0.06].

Other competitive models, i.e., a five-factor model where we constrained increasing structural resources and increasing social resources to load on one factor [$\chi2 = 1187.17$, (df = 424), CFI = 0.80, IFI = 0.80, TLI = 0.77, RMSEA = 0.10]) and a three-factor model, where we constrained all items related to job crafting to load on one factor [$\chi2 = 1799.07$ (df = 431), CFI = 0.55, IFI = 0.56, TLI = 0.50, RMSEA = 0.14], show a poorer fit of the data.

Lastly, we calculated the means, standard deviations, and intercorrelations of all variables in the analysis, as reported in Tab.1.

Tab. 1. Descriptive statistics and intercorrelations of the variables.

	Variables	Mean	SD	1	2	3
1.	Age	40.63	7.90			
2.	Gender	0.44	0.50	0.06		
3.	Job tenure	9.37	6.93	0.65***	0.06	
4.	Education	3.16	0.59	-0.13	-0.02	-0.32**
5.	Increasing structural resources	4.25	0.50	0.51	-0.22*	0.02
6.	Increasing social resources	3.32	0.92	-0.24**	0.13	-0.17*
7.	Increasing challenging demands	3.35	0.88	0.01	-0.03	0.14
8.	Decreasing hindering demands	2.46	0.61	-0.11	-0.01	-0.04
9.	Work meaningfulness	3.95	0.67	0.14	-0.14	-0.01
10.	Job control	4.05	0.68	0.03	0.07	0.1

Notes: N = 167. Cronbach's alpha are listed in parentheses on the diagonal. Gender: male = 1; female = 0. Education: 1 = middle school diploma or less; 2 = high school diploma; 3 = bachelor degree 4 = master degree or more.
* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

Tab.1 Continued

4	5	6	7	8	9	10
-0.10	(0.84)					
0.12	0.22**	(0.90)				
-0.14	0.29***	0.53***	(0.89)			
-0.08	0.12	0.10	0.01	(0.84)		
0.02	0.48***	0.28***	0.25**	0.08	(0.92)	
0.11	0.25**	0.17*	.017*	0.13	0.24**	(0.71)

4.1 Hypothesis testing

Since the danger of including multiple Xs in a regression model "is the possibility that highly correlated Xs will cancel out each other's effects" and since "the stronger the associations between the variables in the model, the greater the potential of such a problem" (Hayes, 2013, p. 195), we built four separate models, one for each sub-dimension of job crafting, instead of just one comprehensive model. It is important to notice that, according to Hayes (2013), both approaches are legitimate. In the first step (which was the same for all the models), age, gender, job tenure, and education were entered as control variables. In the second step, we added the independent variable (the job crafting dimension under study) and job control.

Results (see Tab. 2) show that work meaningfulness is influenced positively by increasing job resources (structural: $\beta = 0.56$, $p < 0.001$, social: $\beta = 0.20$, $p < 0.001$) and increasing challenging demands (see Tab. 3) ($\beta = 0.18$, $p < 0.001$). Thus, hypotheses H1a, H1b, and H1c are supported. Contrary to what we expected, decreasing hindering demands does not affect work meaningfulness (see Tab. 3). Thus, hypothesis H1d is not supported. Finally, in step 3 of the regression, we added the interaction terms. The interaction term is significantly positive for increasing structural resources ($\beta = 0.29$, $p < 0.05$), increasing social resources ($\beta = 0.17$, $p < 0.05$), and increasing challenging demand ($\beta = 0.27$, $p < 0.001$). Thus, hypotheses H2a, H2b, and H2c are supported. Hypothesis H2d is not supported, as the interaction term for decreasing hindering demands is not significant.

Tab. 2. Results of regression analysis (job crafting resources as independent variables).

Variable	Step 1	Model 1 IDV = Increasing structural resources DV = work meaningfulness		Model 2 IDV = Increasing social resources DV = work meaningfulness	
	Step 1	Step 2	Step 3	Step 2	Step 3
Age	0.02**	0.02**	0.03**	0.03***	0.03**
Gender	-0.19	-0.08	-0.09	-0.17	-0.17
Education	0.01	0.03	0.03	-0.07	-0.02
Tenure	-0.02	-0.02*	-0.02*	-0.02*	-0.02*
Job crafting		0.57***	0.60***	0.20***	0.18**
Job control		0.15*	0.11	0.22**	0.25***
Job crafting x Job control			0.29*		0.17*
R2	0.06	0.28	0.30	0.20	0.23
ΔR2		0.22	0.02	0.14	0.03
F	2.57*	10.64***	0.97***	6.67***	6.69***

Note. N = 167. Entries are unstandardized coefficient estimates.
* p < 0.05; ** p < 0.01; *** p < 0.001.

*Tab. 3. Results of regression analysis (job crafting demands as independent variables).*

Variable	Step 1	Model 3 IDV = Increasing challenging demands DV = Work meaningfulness		Model 4 IDV = Decreasing hindering demands DV = work meaningfulness	
	Step 1	Step 2	Step 3	Step 2	Step 3
Age	0.02**	0.02**	0.03**	0.02**	0.02**
Gender	-0.19	-0.20*	-0.20**	-0.22*	-0.21**
Education	0.01	-0.01	0.01	-0.04	-0.04
Tenure	-0.02	-0.03**	-0.02**	-0.02*	-0.02*
Job crafting		0.18***	0.16**	0.08	0.05
Job control		0.23***	0.26***	0.26***	0.26***
Job crafting x Job control			0.27***		0.13
R2	0.06	0.19	0.24	0.14	0.14
ΔR2		0.13	0.18	0.08	0.08
F	2.57*	6.15***	7.32***	4.23***	3.76***

Note. N = 167. Entries are unstandardized coefficient estimates.
* p < 0.05; ** p < 0.01; *** p < 0.001.

To provide a clearer representation of the significant interaction effects, we plotted simple slopes, one standard deviation below and one above the mean of the job control measure (Fig. 2).

Fig. 2. The moderating effect of Job control on the relationship between Job crafting and Work meaningfulness
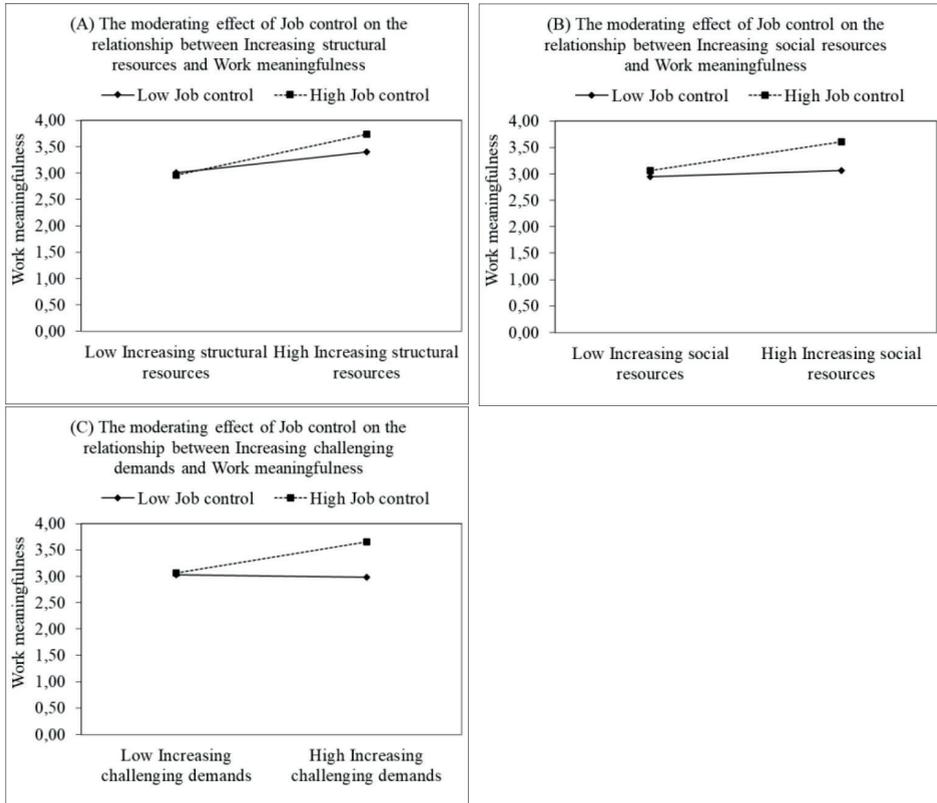
4. Discussion

The results show that hypothesis H1d is not supported. The relationship between the proactive behavior of decreasing hindering demands and work meaningfulness is not positive as we expected, it is non-significant. According to previous literature, this result could be interpreted in line with the distinction Bruning and Campion (2018) make between "approach job crafting" and "avoidance job crafting" supported by the Transactive Theory (Lazarus and Folkman, 1984) that states that individuals deal with potential threats in both approach and avoidant manners. Approach job crafting activities are characterized by the attempt to increase resources and to

accept challenges (Bruning and Campion, 2018), referring to the behaviors represented by H1a, H1b, and H1c that our results support. Avoidance job crafting, on the other hand, is aimed at reducing or eliminating part of an individual's work and reflects the behavior of decreasing hindering job demands included in H1d, not supported by our results. Our contrasting results may emerge due to this distinction that underlines how avoidance job crafting behaviors may be negatively related to engagement (Petrou et al., 2012) and motivation (Petrou et al., 2012). Therefore, it is reasonable to assume that the relationship between job crafting behaviors aimed at decreasing hindering demands and work meaningfulness is influenced by all the above-mentioned effects.

In the context of coworking spaces, this acquires more importance since many aspects of these "collaborative workplaces" (Avdikos and Pettas, 2021) are connected with approach job crafting activities that may be the ones associated with the meaning workers attribute to their job. Some of these aspects include the attainment of new capabilities and abilities through learning opportunities provided through workshops and seminars (Bouncken and Aslam, 2019) that are expected to be connected with more autonomy, responsibility, and knowledge of the job (increasing structural resources), supporting cooperation (Peleteiro et al., 2015) and knowledge-sharing (Spreitzer et al., 2015) (increasing social resources), and the "challenging nature" of coworking spaces (Berdicchia et al., 2022) that involves the willingness of coworking users to shape their daily activities to make them more interesting and rewarding (increasing challenging demands). This may be the reason why H1a, H1b, and H1c are supported while H1d is not.

5. Implications

5.1 Theoretical implications

To the best of our knowledge, this study is the first to analyze the relationship between job crafting behaviors and work meaningfulness in coworking spaces. Acquiring a better understanding regarding the connections between the proactive behaviors of users and the psychological dynamics involved in the association of meaning to one's job is of paramount importance in the context of coworking spaces since the novelty and peculiarity of these specific settings, compared to other more traditional ones, has not yet been deeply explored from the point of view of the positive outcomes of proactive behaviors, work meaningfulness, and the influence of job control on such relationships. Traditional work settings do not offer the wide range of possibilities of coworking spaces and, therefore, in such a context,

individuals may have more opportunities to craft their jobs, acquire more job control, and associate meaning to their work in an original, unconventional way. This is one of the reasons why this study provides an important contribution to expanding the literature in this sense, analyzing the actual behaviors of workers to understand how and under which circumstances coworking users can make the most of their professional lives.

Moreover, our investigation considers the four separate dimensions of job crafting and analyzes their relationship with the meaning workers associate with their job, and this may be relevant independently from the context of coworking spaces, although further research is necessary to confirm our assumption. The mixed results obtained are in line with previous studies (Zhang and Parker, 2019) and the necessity to provide insight into the actual impact of such proactive behaviors on intrinsic motivation, well-being, and psychological adjustment, all aspects connected to meaningfulness. Our study provides an interesting contribution to literature in this sense, broadening and deepening these topics that are both relevant per se and in the context of coworking spaces.

The role of job control analyzed in this research offers another important contribution to existing literature. Our results underline the importance of job control in the modification of the relationship between approach job crafting behaviors and work meaningfulness. Strengthening said relationship, job control seems to be a key ingredient for workers to redirect their actions toward proactive behaviors that increase the meaning associated with their jobs. Being able to choose one's activities, methods, and schedule creates a more thriving environment that, when characterized by largely diffused proactive behaviors, increases meaningfulness.

All of this may be particularly relevant in coworking spaces since workers may have more possibilities to determine specific aspects of their jobs due to their flexible environment and, consequently, perceive more job control compared to other, more traditional work settings. To the best of the authors' knowledge, this aspect of coworking has not been analyzed in the literature, and this study provides a contribution in this regard, considering the existing research on the topic of job control in coworking spaces and expanding it by examining its role connected with proactive behaviors and work meaningfulness.

Overall, this study contributes to the literature in many different ways; it focuses on the behaviors of workers in coworking spaces, an aspect that has been largely overlooked by existing research, and, at the same time, it provides useful insight from the job crafting point of view, analyzing its connections with work meaningfulness and the role that job control has in modifying said relationship.

5.2 Practical implications

Various practical implications derive from this research. Since one of the most important aspects of coworking spaces is the opportunity to personalize some relevant characteristics of jobs, coworking providers and owners, given the outcomes of our study, may want to underline these customization possibilities to promote proactivity in workers. For example, providers may adopt some policies aimed at communicating and encouraging such opportunities, as well as training and educational initiatives aimed at increasing awareness regarding the importance of proactive behaviors and their consequences in such flexible environments as coworking spaces. Providers may also want to focus on the findings of our research regarding job control, increasing it with policies that encourage it, and making their spaces more attractive for users.

Another practical implication of this research could be related to the coworking users themselves, as well as other workers in traditional settings that adopt a more flexible context. The present research underlines how approach job crafting behaviors increases work meaningfulness, and this may be an interesting result for coworking users to orient their actions to proactivity to shape their jobs into more meaningful, valuable, and worthwhile ones. In addition, it is also interesting to notice that, according to our results, avoidance job crafting behaviors do not modify the significance they associate with their job, and this concept may help them understand that avoiding or delegating hindering tasks may have consequences that do not affect meaningfulness in any way. Taking advantage of the wide variety of possibilities that coworking spaces offer may improve the experience of users in such settings, reshaping their working life based on their understanding of the positive consequences of proactive behaviors on work meaningfulness and the effect job control has on this relationship. This may be relevant when coworking users deal with their daily tasks (adopting proactive behavior may help them be conscious of how and when to acquire resources and how and when to increase or decrease demands), but also in taking advantage of the flexible environment (being aware of how job control moderates the relationship between job crafting behaviors and work meaningfulness).

6. Limits and future research directions

The present study presents some limitations that offer research opportunities for future investigations.

Firstly, all the data we gathered comes from a unique source, that is, respondents. However, the self-reported nature of data appears consistent with the research design, considering the impossibility of collecting objective data from company documents or provided by supervisors and taking into account the nature of the investigated organizational context.

Secondly, data was collected at a single time. Again, the nature of the contexts we explored played a fundamental role in the choice of research design since coworking spaces are very dynamic in terms of the participation and involvement of users in these environments. This makes longitudinal data collection very difficult. Moreover, the precautions we adopted during the research and the nature of the investigated model make the risk of common method bias less relevant. To achieve this, we ensured anonymity to participants while also relying on a very robust theoretical framework. Simultaneously, we considered the unlikelihood that the interaction effects are caused by the CMV (Siemsen et al., 2010). However, our model should be adopted into a longitudinal research design in the future.

Thirdly, we aligned with existing research on coworking spaces that focuses on the interactions among peers (Garrett et al., 2017; Appel-Meulenbroek, 2020; Orel et al., 2022). However, it would be interesting for future research to consider the social resources coworking users exchange also in terms of the informal leaders that may emerge. More specifically, even if in coworking spaces there is no supervisor, users may view some peers as role models and seek their feedback. Future research could explore social resources in this regard.

Lastly, the intrinsic nature of coworking spaces makes the generalizability of results more complicated. Although there are excellent reasons to imagine that what we found can be applied to other organizational contexts, the specific features that characterize these work settings (absence of supervisors, wide possibility to have self-regulated goals and choices, particularly dynamic social interactions, etc.) make it difficult to generalize our results to organizations of a different kind. Future studies could consider investigating the role of job control and proactivity in connection with work meaningfulness, also in other different contexts. At the same time, we have conducted this study in Italy. It would be interesting to confront our results with future research conducted in other countries to observe if specific cultural elements may have influenced the observed relationships.

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