

Searching for creativity in innovative working contexts. The role of embeddedness in collaborative spaces

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Abstract

Collaborative spaces (coworking spaces, fab-lab, incubators) may represent a resource for those creative workers who strive to find a meaningful work environment to sustain their professional identity. This paper aims to investigate the role of creative workers' embeddedness in collaborative spaces, exploring whether the perception of being embedded in the space community positively impacts their creativity. The study is based on a quantitative research carried out among 117 coworkers from collaborative spaces in Emilia Romagna. Findings suggest that, while collaborative spaces are designed as the epitome of new creative work settings, creative workers perceive higher levels of creativity only when they perceive fit with the space community, develop links with coworkers, and perceive sacrifice in leaving the collaborative space. Results contribute to the existing literature on the determinants of creativity and the search for meaningfulness in creative and innovative work contexts.

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1. Introduction

In the last years, creativity, “the production of novel and useful ideas by an individual or a group of people working together” (Amabile, 1988: 12), has generated increasing attention among academics, practitioners, and policymakers. It is widely recognized that creativity is a crucial resource to achieve competitive advantage and long-term survival of organizations in the contemporary dynamically changing environment (Unsworth, 2001; George, 2007). At the same time, creativity represents a critical asset for the social and economic development of geographical areas and territories, and creative industries are considered as a significant contributor to national economies (Florida & Goodnight 2005; UNCTAD 2010).

Following this trend, we witnessed a surge of interest for creative workers, both in the creative and cultural industries and in large corporations that have increasingly sought out creative workers to gain competitive advantage (Hesmondhalgh & Baker, 2008; Elsbach, 2009). Creative workers are typically driven by the passionate attachment to their work and the distinctive, professional identity of creative workers (Gill & Pratt, 2008). Thus, they tend to conceive their career as a meaningful path to personal self-actualization (Eikhof & Haunschild, 2007; Montanari et al., 2020) and a way to affirm their professional identity (Elsbach, 2009). As creative professionals might strive to see their professional identity affirmed while working in large corporations, many decide to work independently, facing chronic uncertainty and precarious work conditions (Alacovska et al., 2018; Gill & Pratt, 2008).

Recently, literature has underlined how collaborative spaces could offer important opportunities to creative workers, especially when they work as freelancers, supporting them in navigating their career (Markusen & Johnson, 2006; Merkel, 2019). Collaborative spaces (hereafter CSs) are workspaces such as incubators, fab-labs, or coworking that offer, at a flexible and reasonable price, access to shared spaces, tools, and services, as well as to a stimulating, inspiring physical environment and internal climate characterized by a culture of openness, innovation, and collaboration (Capdevila, 2019; Garrett, Spreitzer & Bacevice, 2017).

Whereas in CSs creative workers might perform their work autonomously “working alone together” (Spinuzzi, 2012), many usually decide to work in such contexts because of their expectations of experiencing a sociable, vibrant, and dynamic working environment, where they can exploit potential synergies with other users of the space (Capdevila, 2019; Montanari, Mattarelli & Scapolan, 2020). CSs are in fact explicitly built and designed to promote such a creative and convivial endeavor that favors creative inspiration, face-to-face contact and individuals’ propensity to exchange ideas (Boschma, 2005; Oksanen & Ståhle, 2013). Through spontaneous interactions, coworkers can develop social ties, share ideas, learn from

others, and jointly improve idea generation and implementation (Bouncken & Reuschl, 2018).

However, literature suggests that the presence of a “creative” workspace layout and the mere physical proximity might not be enough to positively influence creativity and collaboration (Brown, 2017; Capdevila, 2019; De Paoli, Sauer & Ropo, 2017). For example, the open-plan layout and the shared desks that often characterize the design of CSs can also produce negative outcomes such as noise, complex interactions, and increased coordination costs (Irving et al., 2019), as well as numerous interruptions that can prevent persistence in individuals’ work (Leroy, Schmidt & Madjar, 2020). Similarly, exemplar CSs, such as science parks, face difficulties bringing together different actors with diverse backgrounds to create breakthrough innovations (Skelcher et al., 2005). Thus, how collaborative spaces can sustain creativity for creative workers is still unclear.

Some scholars suggest that members of CSs need to find a common breeding ground (Schmidt & Brinks, 2017), to interact effectively and develop a strong sense of community (Blagoev, Costas, Kärreman, 2019; Garrett et al. 2017; Spinuzzi et al., 2019). Such sense of community might help creative workers to avoid the sense of isolation, contribute to their professional legitimacy (Merkel 2019; Waters-Lynch & Potts 2021), and eventually trigger creativity and innovation.

This perspective is consistent with those organizational studies suggesting how social embeddedness can foster information, knowledge sharing, and collaboration, facilitating creativity (Tortoriello & Krackhardt, 2010; Chua, Morris & Ingram, 2011; Perry-Smith & Mannucci, 2015). The concept of social embeddedness relates to how institutions and behaviors are influenced and constrained by ongoing social relations (Granovetter, 1985; Uzzi, 1996), inspiring organizational scholars to develop the concept of organizational embeddedness, i.e., the extent of an employee’s “stuckness” in the organization (Mitchell et al., 2001; Lee, Burch, & Mitchell, 2014). While organizational behavior scholars initially developed this concept to explain employees’ retention in organizations, recent studies enlightened the role of embeddedness in explaining higher levels of innovation-related behaviors and creative performance (Ng & Feldman, 2009, 2010).

Moving from this standpoint, we propose to go beyond the idea that creativity in CSs is influenced only by contextual factors (e.g., physical environment, climate for innovation) and we explore the role that the individuals’ embeddedness in the community of the CSs has in supporting creative workers’ creativity. To this aim, we analyzed the responses provided by 117 creative workers from different types of CSs located in Emilia-Romagna. Our findings indicate that while CSs are designed as a creative work environment, creative workers perceive higher levels of creativity only when they feel embedded in the space community.

The next section summarizes the literature on the determinants of creativity and organizational embeddedness we draw on and propose our research hypotheses. Section 3 illustrates the research design and the operationalization of the variables we adopted in the empirical analysis. In the following sections, we present our findings, then we discuss the theoretical and practical implications of the study, the limitations, and suggest avenues for future research.

2. Theoretical background

In the last years, there has been a burgeoning interest in management literature in understanding the elements that positively influence individual creativity, moving from the individual traits, such as cognitive style, personality traits, intrinsic motivation, domain knowledge, to investigate the contextual characteristics that can affect individuals' creativity (George, 2007; Perry Smith & Shalley, 2003; Shalley et al. 2004). These frameworks emphasize the importance of the interaction between the person and a combination of elements derived from the physical environment, the organizational context and the social context (like, for instance, coworkers helping and support, the organizational support or climate for innovation) (Oldham & Cummings, 1996; Woodman, Sawyer & Griffin, 1993; Shalley et al. 2004), thus suggesting that having a supportive work environment can enhance individuals creativity (Dul & Ceylan, 2010).

Among these contributions, an increasing number of "organizational scholars have recently started to investigate the network side of individual creativity" (Cattani & Ferriani, 2008: 824). This idea, in contrast with the lone genius view, suggests that interactions with others influence various aspects of the creative process (Perry-Smith & Mannucci, 2017) since the group represents the social context where creative behavior occurs (Woodman et al. 1993). Being exposed to diverse social ties provides opportunities to tap into alternative sources of knowledge, available for producing something new, and generating creative ideas (Gong et al. 2020). On the other hand, social networks may provide the support and encouragement that individuals need to sustain the development and realization of creative ideas (Chua et al. 2010). This approach considers the critical role of the social environment in which individuals are embedded during the creative process, providing a new understanding of the network mechanisms that underpin and extend beyond the generation of new ideas (Perry-Smith & Mannucci, 2017). Moving from the idea of creativity as a social process, individuals can be subject to the social dynamics related for example to membership and identification or embeddedness (Perry-Smith & Shalley, 2003). In the realm of organizational studies, embeddedness has been defined as a web of connections "in which an individual can become stuck" (Mitchell et al. 2001: 1104). The three dimensions of embeddedness are *fit*, the extent to which an individual perceives his or her abilities and values to match organizational requirements and the organizations, or community, culture; *links*, the number of connections an individual has developed with coworkers and organizational activities; and *sacrifice*, the perceived economic and psychological costs associated with leaving the current organization (Lee et al., 2004).

Indeed, organizational scholars suggest that being embedded in a social network positively influences creativity (Chua et al. 2010; Tortoriello & Krackhardt, 2010) as embeddedness increases trust, promoting the transfer of knowledge (Burt, 2005). Consistently, Ng & Feldman (2009, 2010) suggest that individuals that feel more embedded in their organization or in their professional/occupational community produce more innovative behaviors and register higher creative performances. More specifically, they provided evidence of the positive relationship between

organizational embeddedness and behaviors aimed at generating, spreading, and implementing new ideas in the workplace. On the same line, also Kiazad and colleagues (2019) found that perceptions of embeddedness with the organization moderates the relationship between psychological contract breach and employees' innovation.

As we mentioned in the introduction, CSs have a strong potential associated with the exchange of knowledge and the "cross pollination" of ideas (Brown, 2017). This potential exchange can indeed be supported when their users feel embedded in the professional and affective community (Garrett et al. 2017). Community building is in fact one of the predominant objectives of co-working, since community often takes the form of social support that positively impacts the work performance of individuals (Brown, 2017). In this context, we propose to look at the role of embeddedness in the CSin supporting individuals' creativity, exploring separately the two components of creativity: novelty and usefulness.

Indeed, while literature usually conceives creativity as a unitary, homogeneous construct, some scholars suggest that the two dimensions of creativity, novelty and usefulness, are two potentially distinct and independent components (Sue-Chan & Hempel, 2015) that can be reached through different paths (Ford & Gioia, 2000; Rietzschel, Nijstad & Stroebe, 2007) and have different goals, enlightening the benefits of studying separately these two components of creativity (Litchfield et al., 2015; Yong et al. 2016). Therefore, we test the underinvestigated relationship between embeddedness and creativity, considering the two separate dimensions, in order to explore if higher embeddedness in the CSleads to higher levels of novelty or usefulness. This approach allows us to shed more light on whether and how CSs might sustain coworkers' creativity, supporting the generation of divergent ideas or the production of feasible ideas.

The novelty component refers to the generation of something never seen before, requiring a certain degree of deviation of the new ideas generated from the habitual ones currently available in the organization (Shalley et al., 2004, De Dreu, Baas, & Nijstad, 2008; Yuan & Zhou, 2008). As creative workers are embedded in the community of a collaborative space, where they are more likely to be exposed to different sources of knowledge and divergent perspectives (Burt, 2005; Chua et al. 2010). Therefore, we propose to test the following hypothesis:

Hypothesis 1a: Creative workers' embeddedness in the collaborative space is positively related to the novelty component of individual creativity

On the other hand, the usefulness component relates to the feasibility of an idea and involves the constraints to its implementation, which is a critical element for the new ideas to be effective and achievable (Yong et al., 2016). As scholars suggested organizational embeddedness positively influences innovation-oriented behaviors such as the dissemination and implementation of new ideas (Ng & Feldman, 2010), we hypothesize that:

Hypothesis 1b: Creative workers' embeddedness in the collaborative space is positively related to the usefulness component of individual creativity

3. Research methods

We collected our data through a survey sent to the creative workers of the CSs located in Emilia Romagna. We distributed the survey to 106 collaboratives spaces. We collected 134 answers and only 117 were complete, coming from 26 collaboratives spaces. Table 1 reports the type and number of CSs that we considered in the region, the number of spaces involved in the study and the response rate.

Table n. 1 - The number of involved CSs by category

Collaborative spaces	Number of spaces	Number of CSs with at least one respondent	Response rate
Coworking	53	12	23%
Hybrid	23	8	35%
Fab-Lab	14	1	7%
Incubators/accelerator	10	4	40%
Creative and cultural Hub	6	1	17%
Total	106	26	25%

Source: Our elaboration

Furthermore, 44% of the respondents to the survey work in coworking spaces, 41% in multifunctional (hybrid) spaces, 9% in incubators and the remaining 6% in creative hubs and fab labs. In general, CSs can vary in terms of the size of the facilities, target audience, and provided services and activities (Montanari et al., 2020). For example, coworking are physical spaces shared by different workers (knowledge workers, freelancers, remote workers mainly working in creative and cultural industries) that provide the access to shared workspaces and resources (e.g., meeting rooms, kitchen, relax rooms, but also training programs, consultancy activities, and events). They can be generalist, which means hosting workers from any industry or professional background, or vertical, hosting workers from a specific profession, industry, or project. Creative and cultural hubs provide studios, shared workspaces, and resources (e.g., meeting rooms, café, wi-fi) for artists and professionals from creative industries, as well as exhibition spaces and cultural venues. Fab-labs can be defined as small-scale laboratory offering flexible computer-controlled tools and services mainly for digital fabrication, dedicated to makers who share values and logics related to collaboration and knowledge sharing. Incubators are spaces aimed at supporting entrepreneurship, offering services to support the development of a new business idea (incubators) or to accelerate the growth of an existing start-up (accelerators), offering physical resources, strategic and managerial consultancy and administrative support. Finally, hybrid spaces include

more than one characteristic from the other types of CSs. Despite these differences, the majority of these spaces are characterized by open space plans, rather than closed offices, since this layout has been traditionally linked with increased communication, interaction, knowledge sharing, idea generation and creativity (Ayoko & Ashkanasy, 2021).

3.1 Dependent variable

We measured individual creativity following Sue-Chan and Hempels' (2016) guidelines. We considered novelty and usefulness as two distinct components of creativity. Novelty was evaluated on six items asking the degree of agreement on a 7-point Likert scale with the following statements: 'I have original ideas', 'I often have a fresh approach to problems', 'I have a unique perspective', 'I generate unprecedented solutions to a problem', 'My solution is often different from traditional ways of doing a task', 'My solution is out-of-the box' (Sue-Chan and Hempel 2016). Usefulness was evaluated using six items: 'I develop solutions focused on the needs of the user, not on the functions of a product', 'I produce simple solutions to problems', 'I identify opportunities for implementing new products/processes', 'I develop adequate plans for the implementation of new ideas', 'I integrate multiple perspectives in a constructive manner', 'I combine ideas in a constructive manner' (Sue-Chan and Hempel 2016), measuring the degree of agreement on a 7-point Likert. The Cronbach Alpha is 0.92 for usefulness and 0.87 for novelty.

3.2 Independent variable

Embeddedness in the collaborative space is a composite variable that measures the degree in which coworkers are embedded in the CS where they work. Drawing on the concepts of job embeddedness (Mitchell et al., 2001), organizational embeddedness and occupational embeddedness (Ng and Feldman, 2009) this variable was constructed through three different dimensions: fit, links and sacrifice, each of them is a collection of observable items. To measure the fit dimension, we used four of five items identified by Ng and Feldman (2009), e.g., 'I feel like I am a good match for this space', 'I utilize my skills and talent well in this space'. Respondents were asked to express their degree, using a Likert scale, from 1 - very disagree to 7 - very agree. The links dimension was measured as a discrete variable, in which respondents can answer a free number $[0; +\infty]$ to the following items: How long have you joined the CS (in months)? How many coworkers of the CS do you interact with regularly? How many coworkers of the CS are highly dependent on you? How many work teams/projects within the CS are you on? To collected data about sacrifice we used three items adapted from Mitchell et al. (2001) and Ng and

Feldman (2009), e.g., 'Working in this space gives me a lot of benefits', 'Coworkers respect me a lot'. We used a Likert scale from 1 – very disagree to 7 – very agree.

The confirmatory factor analysis on one-factor Embeddedness latent variable model showed good fit results ($\chi^2 = 57.50$ $p > 0.03$; RMSEA = 0.06; TIL= 0.96; CFI = 0.97 SRMR = 0.06; Coefficient of determination = 0.96). Construct reliability is 0.86, the degree of variance extracted (AVE) and the Cronbach Alpha were not performed because the latent variable is composed of Likert-scale-based observable variables and discrete-based observable variables.

3.3 Control variables

We used two groups of control variables. The first relates to age, gender, and state of work (a dummy measure with 0= Employed and 1= Self-Employed). The second group relates to those variables related to the work environment that extant literature has identified, on the one hand, as contextual determinant of individual creativity (climate for innovation, coworkers' helping and support) and, on the other, as distinctive characteristics of CSs (creative physical environment).

To measure climate for innovation we adapted a scale designed by Scott and Bruce (1994) for traditional organizational contexts to the particular case of a collaborative space, selecting the four 4 statements which are more suitable to the setting of CSs: 'Creativity is encouraged in this CS', 'This CS can be described as flexible and continually adapting to change', 'This CS is open and responsive to change', 'Assistance in developing new ideas is readily available in this CS', 'There are adequate resources devoted to innovation in this CS'. The survey asked to report the level of agreement with these statements on a 7-point Likert scale. The Cronbach Alpha is 0.92.

To measure coworkers helping and support we adapted the scale of four items developed by Zhou and George (2001), asking to report the level of agreement on a 7-point Likert scale. The items were 'Coworkers willingly share their expertise with each other', 'Coworkers help each other out if someone has problems in his/her work', 'Coworkers encourage each other when someone is down', 'Coworkers try to act like peacemakers when there are conflicts'. The Cronbach Alpha is 0.88.

To measure Creative Physical Environment we adapted the measure developed by Dul et al. (2011). We asked respondents to rate to what extent were present, using a 7-point Likert scale (very little to very much), 12 creative elements of physical environment: furniture, indoor plants/flowers, calming colors, inspiring colors, privacy, window view to nature, any window view, quantity of light, daylight, indoor (physical) climate, sound (positive sound), smell (positive smell). Then, we computed the mean of responses of all items, following Dul and colleagues (2011) procedure "As the proposed overall measure of the work environment is composed of several different elements, we totaled and averaged the element scores [...] for the support from the physical work environment. The scores of the elements do not need to correlate; hence, common test methods for assessing construct reliability do not apply. The scores of the elements do not need to correlate; hence, common test

methods for assessing construct reliability do not apply” (Dul, Ceylan & Jaspers 2011, 723). Indeed, it was not needed to perform Cronbach’s Alpha and CFA.

We conducted an additional test including the type of collaborative space (coworking spaces, fab-labs, etc.) that did not lead to any significant result.

3.4 Common method bias

We decided to keep our dependent variable (the two dimensions of creativity usefulness and novelty) self-reported, drawing on the peculiar context of our study. In fact, CSs are mostly attended by freelancers and remote workers operating in diverse professional fields, such as IT, design, journalism, etc.

Extant research on individual creativity tested models whose dependent and independent variables come from the same source, for example, the employees (e.g., DiLiello & Houghton, 2008; Dul et al., 2011), suggesting that “employees are best suited to self-report creativity because they are the ones who are aware of the subtle things they do in their jobs that make them creative” (Shalley, Gilson, & Blum, 2009, p. 495). Moreover, in the specific research context of CSs, it would have been unfeasible identifying common criteria and external sources (for example the number of awards or an evaluation provided by an external raters) to measure individual creativity. For instance, it was impossible to ask to collaborative spaces’ managers to evaluate the coworkers’ creativity, as they are not their supervisors and do not have specific knowledge of all the professional fields of coworkers that would be necessary to evaluate the creativity of the coworkers. Thus, creative workers of CSs should have the competences to evaluate their creativity appropriately.

In this sense, we followed Ng and Feldman (2012), who argue that the use of creativity self-assessment is acceptable when the individual’s creative changes or performance may not be visible to a third person. Similarly, according to Kaufman (2019), although self-assessment is not the best method for collecting measures of individual creativity, it is acceptable when the research conditions make it necessary, as in our research context.

Nevertheless, we took a set of actions to make sure that common method bias did not represent an issue for this study. First, when preparing the survey, we followed the recommendations suggested by extant literature, such as guaranteeing anonymity, emphasizing that the questions did not imply right or wrong answers, and separating the questionnaire sections related to dependent variables from those sections concerning independent variables (Podsakoff et al., 2003). In addition, we performed the Harman’ single factor test to examine whether common method variance was pervasive in our dataset (Harman, 1967). This technique involves inserting all elements of the survey into a principal components’ analysis. Thus, if a single factor emerges, or if a factor represents more than 50% of the variance in the variables, common method bias is likely to be present. The total variance for a single factor was less than 50% (total variance = 0.39), suggesting that the common method bias did not affect the data, hence our results.

4. Findings

Table 2 presents the correlations between variables and Table 3 shows the results of the regression analyses.

Table n.2 – Means standard deviation and correlation matrix

Variable	Obs	Mean	Std. Dev.	1	2	3	4	5	6	7	8	9
1.Novelty	117	4,90	1,15	1,00								
2.Usefulness	117	5,35	1,04	0,66***	1,00							
3.Embeddedness in the CS	117	4,95	1,48	0,33**	0,29*	1,00						
4.Climate for innovation	117	5,41	1,33	0,36**	0,25	0,36**	1,00					
5.Coworkers helping and support	117	5,38	1,16	0,23	0,31*	0,36**	0,63***	1,00				
6.Creative Physical Environment	117	4,88	1,00	0,33**	0,33**	0,27	0,60***	0,47***	1,00			
7.Age	117	36,15	7,65	0,02	0,05	-0,18	0,00	-0,06	-0,09	1,00		
8.Gender	117	0,62	0,49	0,16	0,14	0,06	-0,04	-0,08	-0,01	0,06	1,00	
9.State of work	117	0,67	0,47	0,12	0,18	0,03	0,18	0,17	0,25	0,15	0,08	1,00

* = p<.05, ** = p<.01, *** = p<.001

Table n. 3 – Hypotheses testing: results from hierarchical regression for the Novelty and Usefulness components of creativity

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6
Novelty				Usefulness		
Age	-0,02	0,32	0,75	0,03	0,56	0,92
Gender	1,70	1,99*	1,75	1,33	1,67	1,46
State of work	1,19	0,17	0,28	1,78	0,71	0,81
Climate for innovation		2,03*	1,63		-0,28	-0,62
Coworkers helping and support		0,04	-0,41		2,01*	1,64
Physical work environment		1,53	1,50		2,07*	2,05*
Embeddedness			2,45*			2,01*
R ²	0,01	0,13	0,17	0,02	0,13	0,15
ΔR ²		0,12	0,04*		0,11	0,02*

Models from 1 to 3 are related to the novelty component of creativity. Model 1 presents the basic regression model, which includes only the control variables related to age, gender and state of work. Model 2 includes other control variables, showing a positive and significant relationship with climate for innovation. In Model 3 we test the effect of embeddedness on novelty. Results show that embeddedness in the collaborative space has a positive and significant effect on the dependent variable novelty ($\beta=2,45$, $p\leq,01$). Moreover, the introduction of the embeddedness independent variable in Model 3 significantly increases fit of the model ($\Delta R^2=,04$, $p\leq,01$). Thus, hypothesis 1 could be supported.

Models from 4 to 6 are related to the usefulness component of creativity. Model 4 presents the basic regression model, which includes only the control variables related to age, gender and state of work. Model 5 includes other control variables, showing a positive and significant relationship with coworkers helping and support and creative physical environment. In Model 6 we test the effect of embeddedness on usefulness. Results show that embeddedness in the collaborative space has a

positive and significant effect on the dependent variable usefulness ($\beta=2,01$, $p\leq,01$). Moreover, the creative physical environment maintains a significant relationship with the dependent variable. The introduction of the embeddedness independent variable in Model 6 significantly increases fit of the model ($\Delta R^2=,02$, $p\leq .01$). Thus, hypothesis 2 could be supported too.

5. Discussion

Our paper provides theoretical implications and empirical contributions. In absence of previous research studying the impact of embeddedness in CSs on creativity, our findings suggest that the level of embeddedness of creative workers in the community of the CS is a relevant predictor of both novelty and usefulness. Our findings indicate that while CSs are designed to be the epitome of creative work environments, creative workers perceive higher levels of creativity only when they feel embedded in the space community. In so doing, we contribute to those studies focused on the role of embeddedness in sustaining innovative and creative performances in organizations (Ng & Feldman, 2010, Kiazad et al., 2019), highlighting the key role that embeddedness plays also in less formal working contexts as CSs. In addition, our results confirm the beneficial role of the sense community developed in CSs (Garrett et al., 2017).

Moreover, our study contributes to the literature on creative workers, specifically on those studies addressing the issue of meaningfulness for this kind of professionals (Alacovska et al., 2018; Gill & Pratt, 2008). As in fact creative workers often strive to find a meaningful endeavor that allows them to express their professional identity (Eikhof & Haunschild, 2007), findings indicate that CSs offer a work environment from which creative workers can derive positive effects. In so doing we contribute to extant literature suggesting that CSs represent for creative workers a source of work meaningfulness and support for their professional identity, sustaining their individual creativity. More specifically, our findings confirm the positive influence of a stimulating, inspiring physical work environment, especially for the generation of useful ideas. Furthermore, we find out that creative workers generate more novel and more useful ideas the more they feel embedded in the space community. This feeling of embeddedness is higher the more creative workers perceive fit with the values, culture and activities of space, develop links with coworkers, and perceive sacrifice in leaving the collaborative space. This result enlightens the key role of embeddedness in CSs in contributing to transform these workspaces in meaningful work endeavors where creative individuals can find the right context to perform their creative work.

We can speculate that our findings might also offer practical implications for the management of CSs, suggesting that these spaces can attract and retain creative workers only when they go beyond the mere coworkers' affiliation, becoming a community where individuals share values, feel connected with other coworkers, and, as a result, do not want to leave the space. Therefore, we suggest to CSs

founders and managers not only to pay attention to the physical layout and interior design of the space, but also to invest in community building activities.

Of course, our study presents some limitations. First of all, it is an exploratory study involving a limited number of respondents from a specific territorial context. In addition, the study does not consider the impact of the single components of embeddedness (fit, links, and sacrifice) on creativity, and specifically on the two dimensions of novelty and usefulness.

These limitations open for future research involving a broader sample of creative workers, responding from CSs located in different geographical areas. Furthermore, it might be promising to disentangle the embeddedness construct in its three components, to see how fit, links and sacrifice impact on the novelty and usefulness dimensions of creativity and eventually analyzing the interaction with other contextual elements such as the physical environment.

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