

To Compete or to Cooperate in the Creative Industry?

A quasi-experimental study with Dutch creatives-entrepreneurs

Ellen Loots¹

(Erasmus University Rotterdam, the Netherlands)

Boukje Cnossen

(Tilburg University, the Netherlands)

Arjen van Witteloostuijn

(Tilburg University, the Netherlands, University of Antwerp / Antwerp Management School,
Belgium & Cardiff University, the United Kingdom)

Abstract

This exploratory study examines the relation between creatives-entrepreneurs' self-perceived creative and entrepreneurial competencies, on the one hand, and their competitive and cooperative behavior, on the other hand. To do so, tailor-made survey scales are developed, and a Prisoner's Dilemma experiment is run, with 45 Dutch creatives-entrepreneurs participating. We find that self-perceived (absolute and relative) creativity are associated with cooperation, yet, in the inverse directions. That is, someone's perception of her or his creative competencies positively relates to cooperation, while her or his perception of creative skills relative to other people's creativity negatively affects cooperative behavior. We suggest that the former may

¹ Corresponding author; Erasmus University, ESHCC, Campus Woudestein, Burgemeester Oudlaan 50, 3062 PA Rotterdam, the Netherlands. Email: loots@eshcc.eur.nl

express someone's feeling of self-confidence that leads to the propensity to seek for collaborations, whereas the latter may indicate a sense of superiority that eradicates any need or inclination to cooperate. Self-perceived entrepreneurial competencies do not matter.

Keywords: cooperation, competition, entrepreneurship, creative industries, PD game

INTRODUCTION

Competition and cooperation are key concepts in economic theory. A large number of microeconomic theories have considered cooperation as a mode of inter-organizational and interpersonal behavior that copes with the complexity of the environment, examples being cooperative game theory, transaction cost economics and principal-agent logic (e.g., Emelianoff, 1995 [1948]; Coase, 1937; Williamson, 1991; Jensen & Meckling, 1976). Competition has been argued to be beneficial to individual utility (Smith, 2004 [1776]), societal progress (Hayek, 1944) and innovation (Schumpeter, 1961; Arrow, 1962). In our context, the link with innovation is particularly interesting. After all, how individuals model their behavior, balancing competition and cooperation, in a turbulent and innovative environment, exemplified by the Cultural and Creative Industries (henceforth, CCI), is yet under-explored. In the current paper, we seek to examine this important question by conducting a quasi-experimental study with 45 Dutch creatives-entrepreneurs.

Creatives-entrepreneurs have been identified as the key agents in a market characterized by the adoption of novel ideas within social networks for production and consumption (Potts, Cunningham, Hartley, & Ormerod, 2008). Understanding the antecedents of the ways in which they organize their work is therefore of interest not only to researchers looking at the creative industries, but also to any scholar interested in where ideas originate and how they are disseminated. Indeed, knowledge of the creativity-entrepreneurship-competition/cooperation

nexus is of great importance, because the creative industries have been recognized to be drivers of the economy in contemporary Western societies (Landry & Bianchini, 1995; Florida, 2002). Yet, the CCI are mainly populated by very small firms and self-employed individuals, which hardly succeed in growing their precarious businesses on their own (Hesmondhalgh, 2002; Haans & van Witteloostuijn, 2016; Rutten, 2012). Coming to a further understanding of how creatives-entrepreneurs' views of themselves might translate into either cooperative or competitive behavior, could therefore foster our understanding of micro-level antecedents of innovative performance.

To the extent that cooperation between individuals in the CCI has been subject to enquiry, this has majorly been limited to individuals in their functional occupations. Other important factors, such as someone's personality traits and creative skills, or one's self-confidence, as reflected in his or her entrepreneurial competencies, have so far been neglected. It is here where we hope to have a contribution to make. In the present paper, we aim to further explore the mesmerizing relationship between creativity and entrepreneurship, on the one hand, and cooperation/competition, on the other hand. Specifically, we study a number of potentially key antecedents of the inclination of individual entrepreneurs or self-employed professionals in the creative industries toward either cooperation or competition.

In our exploratory study, we combine survey data with revealed behavior in a laboratory setting. As our focus is on examining potential antecedents of a preference for competitive or cooperative behavior of individual creatives-entrepreneurs, we decided to develop a tailor-made survey instrument to capture a few potentially powerful individual characteristics, particularly relating to creative and entrepreneurial competencies. Here, our starting point is the observation that a prerequisite to innovation is creativity. Whereas innovation is about the commercialization of new ideas, creativity refers to the traits, skills, or social processes needed to generate these ideas (Amabile, 1996, 1997). Hence, inspired by entrepreneurship and

psychology literatures, we focus on two different types of individual competencies: (self-perceived) creative and entrepreneurial competencies. Specifically, as we will explain in the next section, we turn to self-determination and self-efficacy theories for key insights and measures.

Up to now, little is known about the impact of creativity and entrepreneurship on cooperation/competition in the creative industries (or in other industries, for that matter). Therefore, we decided to opt for a specific methodology and method we see fit with our exploratory journey: abduction and a quasi-experiment, respectively. First, the cultural economics discipline is dominated by the idea that either induction or deduction must be applied, or a combination of both, in the context of a specific study, with induction being associated with qualitative methodologies, and deduction with quantitative methods. We argue in favor of abduction as a “third way” (Misangyi & Acharya, 2014). Abduction is a form of logical inference that begins with an observation and concludes with a hypothesis that accounts for the observation, ideally seeking to find the simplest and most likely explanation, also being referred to as the “Inference to the best explanation” (Douven, 2011).

Second, to generate observations as a critical step in the abductive process, we apply the quasi-experimental method (Esteve, van Witteloostuijn, & Boyne, 2015). The quasi element implies that we collect data regarding individual-level independent variables using a questionnaire (i.e., the creatives-entrepreneurs’ self-perceived competencies); the experimental component means that we run a game to generate our dependent variable (i.e., competitive vis-à-vis cooperative behavior). Specifically, we develop scales to measure self-perceived (absolute and relative) creative and entrepreneurial competencies among, and conduct a Prisoner’s Dilemma game with 45 Dutch creatives-entrepreneurs.

THEORETICAL BACKGROUND

Creative and entrepreneurial competencies

In the present study, we conceive of creativity as a competency. Indeed, creativity has been defined as the ability to generate novel ideas, which is related to both intelligence and personality (Barron & Harrington, 1981). Creativity is not only about the generation of ideas that are original and new, but also feasible and value-adding, and with the potential to change how business is done (Amabile, 1997). Therefore, we distinguish between the creative and entrepreneurial competencies of creatives-entrepreneurs, and seek to find out how both affect cooperative or competitive choices. In the arts, and by extension in the CCI, the distinction and complementarity of artistic or creative talent, on the one hand, and more management-related or entrepreneurial skills, on the other hand, has increasingly been recognized (Voss, Cable, & Voss, 2000; 2006; Reid & Karambayya, 2009; Townley & Beech, 2010; Bhansing, Leenders, & Wijnberg, 2012; 2015). However, the assessment of these two competencies, their interplay and complement or substitute effects on the behavior of creatives-entrepreneurs has, as far as we know, not thoroughly taken place. We take up the challenge to develop appropriate and valid measures, and to survey creatives-entrepreneurs on these two dimensions.

Regarding creativity, self-determination theory provides useful insights.

As far as entrepreneurial competencies is concerned, we take the literature on entrepreneurial self-efficacy as our steppingstone.

Competitive and cooperative behavior

The relation between creativity and competition / cooperation has been, and still is, studied from a variety of angles and within different disciplines. First, management, organization and psychology literatures have tackled several issues related to “creativity at work”, including the influence of competition and cooperation on creativity. They have amply

studied, for example, how work environments that foster either cooperation or competition, or how cooperation within teams, leads to better performance in terms of idea generation (creativity) and implementation (innovation) (e.g., Woodman, Sawyer, & Griffin, 1993; Oldham & Cummings, 1996; Perry-Smith & Shalley, 2003; Shalley, Zhou, & Oldham, 2004). Little of this research has questioned the influence of creativity on competition / cooperation, however. In the current study, we focus on this reversed causality. This feedback loop is also important, because the inclination toward cooperation or competition does not only mark human and organizational behavior, but also shapes industries and determines economic growth (or decline) (Schumpeter, 1942; Hannan & Freeman, 1977).

Second, the “social side of creativity” has received ample scholarly attention. In cultural economics, cultural sociology and management studies, the importance of social relations in the arts field is since long recognized (White & White, 1965). Someone’s social capital – or the network s/he belongs to, including the people with whom s/he collaborates – plays an indisputable role in building reputations and careers in fields of cultural production, thus also in fostering creativity, as divulges the heritage of Pierre Bourdieu (1986) and Howard Becker (1984). Both have inspired many others (e.g., Svejenova, Vives, & Alvarez, 2010; Jones, 2010; Uzzi & Spiro, 2005; Grugulis & Stoyanova, 2012; Braden, 2016). Recently, much of the research into the physical environment best suited for creative production started to take into account social factors as well, such as the proximity of peers for collaboration and exchange (Olma, 2011; Spinuzzi 2012; Solavaara 2015). What these lines of enquiry have in common is that they mainly concentrate on collaborations between actors differently positioned within the chain of production and distribution – so on vertical cooperation.

Horizontal cooperation, yet also competition, have remained largely unstudied in the study of culture and arts, apart from few isolated studies that have focused on the role that cooperation plays as a driver of sales performance (e.g., between ceramists as studied by

Jackson & Tomlinson, 2009). However, in major disciplines such as economics, management and psychology, studies of the antecedents of competitive and cooperative behavior abound.

METHOD

An abductive approach and quasi-experimental design

In our literature review, we identified creative and entrepreneurial competencies as potentially important antecedents of competition/cooperation. Following an abductive approach, the next step is to find out whether – and if so, to what extent – self-perceived creative and entrepreneurial competencies may or may explain collaboration (*vis-à-vis* competition) among creatives-entrepreneurs. We decided in favor of a combination of a survey and an experiment in a controlled lab setting. As explained by Bello, Leung, Radebaugh, Tung, & van Witteloostuijn (2009) and van Witteloostuijn (2015), in the (initial) study of such fundamental human processes as those associated with the cooperation-competition paradox, the experimental design's critical advantage of high internal validity is key asset. This exploratory study adopts a quantitative research strategy, combining a controlled non-field experiment with a survey, giving a sample of 45 Dutch professional creatives-entrepreneurs² in Amsterdam, the Netherlands.

A Prisoner's Dilemma experiment

To capture collaborative versus competitive behavior, we applied the Prisoner's Dilemma game in a non-field lab context. In experimental economics and psychology, the

²The survey was completed by 92 creatives-entrepreneurs, of whom 45 joined the experiment. In this paper, we only work with the data from this sub-sample of 45.

Prisoner's Dilemma game is widely used as an archetypical competition-versus-cooperation setting (Sproull, Subramani, Kiesler, Walker, & Waters, 1996; Boone, de Brabander, & van Witteloostuijn, 1999; Normann & Wallace, 2012). Basically, the Prisoner's Dilemma game reflects a social dilemma regarding individual vis-à-vis collective rationality. By opting to compete, on the one hand, the individual player expresses her or his aim to maximize her or his individual payoff; by deciding to collaborate, the individual participant signals her or his wish to maximize collective payoff. The dilemma resides in the interaction between both players, as the outcome of the Prisoner's Dilemma game depends on both decisions in tandem. We adapted the traditional Prisoner's Dilemma game to the context of the individual creative-entrepreneur.

Specifically, we framed the setting in terms of pitches in the creative industries, where setting a low price implies competitive and opting for a high price collaborative behavior. We ran three versions of the game in four sessions of about an hour each: (a) four choices to compete or collaborate, one for each quarter of a year, without any information about the rival's behavior; (b) four choices to compete or collaborate, one for each quarter of a year, knowing that the rival collaborated throughout in the previous year; and (c) an unknown number of choices for an unknown number of quarters (which turned out to be eight) to compete or collaborate without any information about the rival's behavior. The full experimental protocol, translated from Dutch, is included in Appendix I. In this paper, our dependent variable is based on versions (a) and (c). We decided against using version (b), as the bias introduced by the information regarding the behavior of the opponent in the previous year introduces too much noise (i.e., by substantially reducing the variance) in the context of our exploratory study. So, our dependent variable is the total number of high prices summed over versions (a) and (c) of the Prisoner's Dilemma game, ranging from 0 to 12.

The experiment was part of an event organized in December 2015 in A Lab in Amsterdam (<http://www.a-lab.nl/>), bringing together self-employed professionals and

entrepreneurs in the creative industries. The event offered the opportunity to learn about and discuss recent academic research on entrepreneurship in the creative industries, and to network with other creatives-entrepreneurs. The venue hosting the event is a well-known hub for creatives-entrepreneurs. The experiment was conducted in a classroom-like space that is normally used for brainstorm sessions, and therefore known to quite a few participants. Bringing the experiment to the environment of the creative industries helped increase the internal validity of the experiment, as we expected our sample to be more comfortable in this setting than they would have been in, for example, an on-campus computer lab.

Independent and control variables

To measure our independent variables, we developed an online survey instrument based on several validated scales (which were translated from English to Dutch, backward and forward independently by two of the authors; see Table 1). Particularly, we use the perceived competency scale developed by McAuley, Duncan and Tammen (1989) and the entrepreneurial self-efficacy scale of Weitzel, Urbig, Desai, Sanders and Acs (2010). The survey further contained several items with regard to socio-demographic information, the nature and commercial viability of the respondent's creative and other professional activities.

Our five-item *self-perceived creativity* (SPC) scale is based on the five-item perceived competency sub-scale of the Intrinsic Motivation Inventory (McAuley, Duncan and Tammen, 1989), which has previously been adjusted and employed to assess the competency of a specific group of creatives, namely dancers (Quested and Duda, 2010) (see Table 1). We replaced “dancing” by “my creative profession”, leading to statements such as “I think I am fairly good in my creative profession” and “When I am creative for a while, I have the feeling that I am good at it”, that were gauged on a scale running from 1 (strongly disagree) to 7 (strongly agree).

Factor analysis produced one dimension with an Eigenvalue above 1 (2.30), with all five items loading as expected (all above .58) (see appendix 3a). According to the rule of George and Mallery (2003), reliability analysis demonstrates satisfactory Cronbach alpha coefficients for the self-perceived creativity scale (Cronbach $\alpha = .67$). Scores for self-perceived creativity were computed by averaging the five responses (after inverting the responses to item 5).

[INSERT TABLE 1 ABOUT HERE]

The twelve-item entrepreneurial self-efficacy scale developed by Weitzel et al. (2010) combines validated scales developed by Zhao, Seibert and Hills (2005) and Wilson, Kickul, and Marlino (2007) with two additional items (see Table 1). By self-assessing someone's perceived competencies vis-à-vis those of other members from a reference group – i.e., the professional group s/he belongs to – this scale results in relative measures that reflect someone's self-confidence in certain abilities with reference to a benchmark group. The answers to a series of the questions regarding “How do you compare yourself with others in your professional group in your ability to...” were captured by Likert scales ranging from 1 (much worse) to 7 (much better).

In the original scale of Weitzel et al. (2010), after factorizing and in accordance with the literature, two dimensions were retained: a dimension involving business talent (consisting out of 10 items) and a creativity dimension (consisting out of two items). As we already have a five-item creativity scale, and as our sample consists out of creatives-entrepreneurs (which may lead to different outcomes compared with business students as in Weitzel et al. (2010)), we ran an exploratory factor analysis to validate the internal structure of the scale. The factor analysis yields four factors with eigenvalues above 1, with the fourth factor just marginally exceeding 1

and a total variance explained of 74.76. A first factor consisting out of four items (someone's ability to successfully identify new business opportunities, to raise funds for a new business, to commercialize an idea or new development, and to sell a new product or service) clearly reflects the entrepreneurial dimensions of creativity (Amabile, 1996) that we are looking for. With a Cronbach alpha value of 0.83, the internal consistency of the items in this measure for *self-perceived entrepreneurship* (SPE) is demonstrated. A second factor contains three items that also relate to skills typically associated with business and entrepreneurship: i.e., to persuasiveness, leadership and decision-making. As these skills may affect cooperative and competitive behavior as well, we decided to include this *self-perceived leadership* (SPL) factor (Cronbach $\alpha = .76$) in our model, too, thus proceeding with two variables that reflect (different) entrepreneurial competencies.

Similar to Weitzel et al. (2010), the factor analysis yields a creativity factor as well. However, our creativity factor loaded on three face-valid items instead of two, as in their study. The explanation may be found in the specificities of the respective samples: for professional creatives-entrepreneurs, this particular item (the ability to create new products) may be bounded to creation, thus creativity, whereas business students may more conceive of this as a form of product development or innovation, thus business. Merging these three items with the five items of our other creativity scale fails to generate one, internally consistent creativity dimension. Factor analysis isolated the three new items from the other five ones. Therefore, we decided to proceed with two creativity dimensions as well: next to self-perceived creativity (SPE), a second *relative self-perceived creativity* (*rSPC*) factor with good internal consistency (Cronbach $\alpha = .81$) (George and Mallery, 2003) is utilized. Scores for all four variables were computed by averaging the responses over the items. Table 1 summarizes our scales and items,

and Appendix 3b depicts the structure of our two pairs of creativity and entrepreneurship competency variables.³

Additionally, we include five control variables. Next to the usual suspects age (in years), gender (female = 0; male = 1) and education (an ordinal 7-categories scale), we controlled for income (continuous variable) and one being a maker or not (dummy variable). Someone's income might affect her or his proclivity to cooperate in the sense that the need to cooperate could decline with the earnings one is capable of yielding. Further, when someone is a maker, in terms of a producer of creative products or services, her or his behaviors and intentions could differ from those of people who are active more at the organizational or supportive level. Given the relatively small sample size of 45, we decided to keep the number of explanatory variables to a minimum. We stepwise regressed the cooperation variable against only the controls in a first Model 1, then against the pair of creative competencies in Model 2 and the pair of entrepreneurial competencies in Model 3, and finally against the full bundle of nine potentially explanatory variables in Model 4.⁴ Table 2 provides the descriptive statistics and the correlation matrix.

[INSERT TABLE 2 ABOUT HERE]

RESULTS

Table 3 reports the estimation results for the control variables (Model 1), plus the two creativity variables (Model 2), plus the two entrepreneurial competencies (Model 3), and a comprehensive

³The two items that add up to a fourth factor (solving problems and managing money) were eventually excluded from our analysis, as this dimension not only lacks face validity, but also internal consistency with an unacceptable Cronbach α of .48 (George and Mallery, 2003).

⁴According to Hair (2009), the maximum number of explanatory variables in a regression analysis should not exceed the proportion of one to five observations. As such, given our sample of 45 observations, the number of nine variables is just acceptable.

model including both pairs of creative and entrepreneurial measures (Model 4). In the baseline model, none of the control variables appears to affect the outcome variable, and its explanatory power is negligible ($R^2 = .02$). So, a creative-entrepreneur's inclination toward cooperation or competition does not depend on her or his age, gender, education, income or the fact whether or not s/he is a maker. The results from a second regression, with a not too bad an R^2 of .32 (adjusted $R^2 = .18$), reveal that both self-perceived absolute and relative creativity affect cooperation. Surprisingly, the sign of the effect differs: whereas the absolute self-perceived creativity variable has a positive effect on cooperation ($p = .001$), the relative self-perceived creativity variable negatively affects the number of collaborative choices ($p = .04$). In a third model, the self-perceived entrepreneurship and self-perceived leadership composite variables have no significant effect on cooperation. The final model including all four factors confirms the effect of only creativity and not entrepreneurship on cooperation ($R^2 = .35$; adjusted $R^2 = .16$). Keeping in mind that the adjusted R^2 increases only if newly added terms improve a model more than would be expected by chance, our Model 2 clearly stands out, and provides interesting food for discussion.⁵

[INSERT TABLE 3 ABOUT HERE]

DISCUSSION

This study takes an abductive approach to explore a new research question that has, to the best of our knowledge, not yet been explored before: What are individual-level antecedents of competition/cooperation among creatives-entrepreneurs, and what is the role of creativity? On the basis of a literature review, we selected a few key independent variables we believe might

⁵ Several robustness checks including other controls (such as artistic performance, commercial performance, other income-related variables, and control for sectors) were performed, with no significant impact on the reported findings.

affect our central dependent variable. This is the first step in our abductive approach: identifying independents that may impact our dependent, but without specifying a priori hypotheses (as the theory to do so is not available). Specifically, we decided to explore the effect of self-perceived creative and entrepreneurship competencies on competitive vis-à-vis cooperative behavior of creatives-entrepreneurs. To avoid common-method variance (Chang, Van Witteloostuijn, Eden, & Eden, 2010), we measured our dependent and independent variables using different methods/sources: i.e., an online survey and a lab experiment, respectively. This is the second step in our abductive approach: in so doing, we collected observations for 45 Dutch creatives-entrepreneurs.

In this discussion, we are ready for the third step: formulating hypotheses in an attempt to find the simplest explanation for our findings, in line with abductive reasoning. Given the results reported in Table 3, we would like to suggest four hypotheses:

Hypothesis 1: Among creatives-entrepreneurs, self-perceived absolute creativity positively affects cooperation.

Hypothesis 2: Among creatives-entrepreneurs, self-perceived relative creativity negatively affects cooperation.

*Hypothesis 3: Among creatives-entrepreneurs, self-perceived entrepreneurship is **not** related to cooperation.*

*Hypothesis 4: Among creatives-entrepreneurs, self-perceived leadership is **not** related to cooperation.*

Future work should test our four hypotheses in different contexts and for different samples, probably enriching the theory and the explanations along the way. In so doing, we are back in the world of deduction and Popperian falsification (van Witteloostuijn, 2015). Given our small

sample size and the tentative nature of our theoretical prior, such replication is highly needed anyway.

The underlying theoretical mechanisms, we would argue, are very likely to be related to the idiosyncracies characterizing creatives-entrepreneurs. This implies that the “Among creatives-entrepreneurs” ceteris paribus clause in the above hypotheses is very important, and that future research should compare creatives-entrepreneurs with other samples. This is our key logic: Creatives-entrepreneurs primary, if not dominant, motive is to excel artistically – i.e., to create cultural value (Throsby, 1999; 2000). Actually, expressing a commercial attitude is a disqualifier in circles of creatives-entrepreneurs (Eikhof & Haunschild, 2006; 2007; Abbing, 2008; Ebbers, Wijnberg, & Bhansing, 2014). This explains why self-perceived entrepreneurial competencies fail to have any effect on (cooperative) behavior: they are simply considered to be irrelevant. Rather, self-perceived creative competencies are key. The positive effect of self-perceived absolute creativity suggests that creative self-confidence enhances the preference to cooperate: Only with such self-confidence, creatives-entrepreneurs believe they can produce extra cultural value by collaborating with (a) partner(s). The negative impact of self-perceived absolute creativity implies that those creatives-entrepreneurs believing they are superior to others, prefer to not cooperate, probably because their assessment is that this will not produce anything that is better than what they can produce solo.

REFERENCES

- Abbing, H. (2008). *Why are artists poor?: the exceptional economy of the arts*(p. 368). Amsterdam University Press.
- Amabile, T. M. (1996). *Creativity in Context: Update to the Social Psychology*. Boulder CO: Westview Press.
- Amabile, T. M. (1997). Motivating Creativity in Organizations. *California Management Review*, 40(I), 39–59. <http://doi.org/10.2307/41165921>

- Arrow, K. J. (1962). "The economic implications of learning by doing". *The Review of Economic Studies* (Oxford Journals) **29** (3): 155–173.
- Becker, H. (1984). *Art Worlds*. Berkeley and Los Angeles: University of California Press.
- Bello, D., Leung, K., Radebaugh, L., Tung, R. L., & van Witteloostuijn, A. (2009). From the Editors: Student samples in international business research. *Journal of International Business Studies*, *40*(3), 361–364. <http://doi.org/10.1057/jibs.2008.101>
- Bhansing, P. V., Leenders, M. A., & Wijnberg, N. M. (2012). Performance effects of cognitive heterogeneity in dual leadership structures in the arts: The role of selection system orientations. *European Management Journal*, *30*(6), 523-534.
- Bhansing, P. V., Leenders, M. A., & Wijnberg, N. M. (2015). Selection system orientations as an explanation for the differences between dual leaders of the same organization in their perception of organizational performance. *Journal of Management & Governance*, 1-27.
- Boone, C., De Brabander, B., & Van Witteloostuijn, A. (1999). The impact of personality on behavior in five Prisoner's Dilemma games. *Journal of Economic Psychology*, *20*(3), 343-377.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.) *Handbook of Theory and Research for the Sociology of Education* (New York, Greenwood), 241-258.
- Braden, LEA. Forthcoming in 2016. "Curatorial Connection: Symbolic networks created for artists through museum exhibition." *American Behavioral Scientist*.
- Chang, S.-J., Van Witteloostuijn, A., Eden, L., & Eden, L. (2010). From the Editors: Common method variance in international business research. *Journal of International Business Studies*, *41*(2), 178–184. <http://doi.org/10.1057/jibs.2009.88>
- Coase, R. (1937). The nature of the firm. "The Nature of the Firm". *Economica* (Blackwell Publishing) *4* (16): 386–405. doi:10.1111/j.1468-0335.1937.tb00002.x
- Douven, I. (2011). Abduction. In: *The Stanford encyclopedia of philosophy*, ed. E. Zalta. Accessed May 24 2016.
- Ebbers, J. J., N.M. Wijnberg, and P.V. Bhansing. (2014). Managing the Commercial and Artistic Divide between Directors and Producers. In J. C. Kaufman and D. K. Simonton (eds.) *The Social Science of Cinema 157-186*. New York: Oxford University Press.
- Eikhof, D. R., & Haunschild, A. (2007). For art's sake! Artistic and economic logics in creative production. *Journal of organizational behavior*, *28*(5), 523-538.
- Eikhof, D. R., & Haunschild, A. (2006). Lifestyle meets market: Bohemian entrepreneurs in creative industries. *Creativity and innovation management*, *15*(3), 234-241.
- Emelianoff, I. V. (1995 [1948]). *Economic Theory of Cooperation: Economic Structure of Cooperative Organizations*. Davis: Center for Cooperatives, University of California.
- Esteve, M., van Witteloostuijn, A., & Boyne, G. (2015). The Effects of Public Service Motivation on Collaborative Behavior: Evidence from Three Experimental Games. *International Public Management Journal*, *18*(2), 171–189. <http://doi.org/10.1080/10967494.2015.1012573>
- Florida, R. (2002). *The Rise of the Creative Class. And How It's Transforming Work, Leisure and Everyday Life*, Basic Books
- George, D., & Mallery, P. (2003). *SPSS for Windows step by step: A simple guide and reference*. 11.0 update (4th ed.). Boston: Allyn & Bacon.
- Grugulis, I., & Stoyanova, D. (2012). Social Capital and Networks in Film and TV: Jobs for the Boys? *Organization Studies*, *33*(10), 1311–1331. <http://doi.org/10.1177/0170840612453525>

- Haans, R. F. J., & van Witteloostuijn, A. (2016). Expected job creation across the cultural industries: a sectoral division and its implications for cultural policy. *International Journal of Cultural Policy*, 6632(May), 1–23. <http://doi.org/10.1080/10286632.2015.1128420>
- Hannan, M. T., & Freeman, J. (1977). HannanFreeman_AJS_1977.pdf. *American Journal of Sociology*. <http://doi.org/10.1086/226424>
- Hayek, F. (1944). *The road to serfdom*. London: Routledge.
- Hesmondhalgh, D. (2002). *The cultural industries*. London: Sage Publications.
- Jackson, Ian and Philip R. Tomlinson (2009). ‘The role of cooperation in a creative industry: the case of UK studio pottery’. *International Review of Applied Economics*, 23, 6: 691-708.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial. *Journal of Financial Economics*, 3, 305–360. [http://doi.org/http://dx.doi.org/10.1016/0304-405X\(76\)90026-X](http://doi.org/http://dx.doi.org/10.1016/0304-405X(76)90026-X)
- Jones, C. (2010). Finding a place in history: Symbolic and social networks in creative careers and collective memory. *Journal of Organizational Behavior*, 31, 726–748. <http://doi.org/10.1002/job>
- Landry, C., & Bianchini, F. (1995). *The creative city*, Demos.
- McAuley, Edward, Terry Duncan, and Vance V. Tammen. "Psychometric properties of the Intrinsic Motivation Inventory in a competitive sport setting: A confirmatory factor analysis." *Research quarterly for exercise and sport* 60.1 (1989): 48-58.
- Misangyi, V. F., & Acharya, A. G. (2014). Substitutes or complements? A configurational examination of corporate governance mechanisms. *Academy of Management Journal*, 57(6), 1681–1705. <http://doi.org/10.5465/amj.2012.0728>
- Normann, H. T., & Wallace, B. (2012). The impact of the termination rule on cooperation in a prisoner’s dilemma experiment. *International Journal of Game Theory*, 41(3), 707–718. <http://doi.org/10.1007/s00182-012-0341-y>
- Oldham, G. R., & Cummings, A. (1996). Employee creativity: Personal and contextual factors at work. *Academy of management journal*, 39(3), 607-634.
- Olma, S. (2011). Widerstände und der empirische Fall betahaus. In M. Bergmann & B. Lange (Eds.), *Eigensinnige Geographien: Städtische Raumaneignungen als Ausdruck gesellschaftlicher Teilhabe* (pp. 247 – 254). <http://doi.org/10.1007/978-3-531-93176-0>
- Perry-Smith, J. E., & Shalley, C. E. (2003). The social side of creativity: A static and dynamic social network perspective. *Academy of management review*, 28(1), 89-106.
- Potts, J., Cunningham, S., Hartley, J., & Ormerod, P. (2008). Social network markets: A new definition of the creative industries. *Journal of Cultural Economics*, 32(3), 167–185. <http://doi.org/10.1007/s10824-008-9066-y>
- Quested, E., & Duda, J.L. (2010). Exploring the social-environmental determinants of well- and ill-being in dancers: A test of basic needs theory. *Journal of Sport and Exercise Psychology*, 32 (1), 39-60
- Reid, W., & Karambayya, R. (2009). Impact of dual executive leadership dynamics in creative organizations. *Human relations*, 62(7), 1073-1112.
- Rutten, Paul. (2012). De belofte van het creatieve dividend. *Boekman*, 24 (93), 48-56.
- Salovaara, Perttu. (2015). “What can the coworking movement tell us about the future of workplaces?” In: Ropo, Arja, Salovaara, Perttu, Sauer, Erika, De Paoli, Donatella (eds.), *Leadership in Spaces and Places*. Northampton: Edward Elgar.
- Schumpeter, J.A. (1942). *Capitalism, Socialism and Democracy*. New York: Harper and Brothers.

- Schumpeter, J.A. (1961). *The Theory of Economic Development: An Inquiry Into Profits, Capital, Credit, Interest, and the Business Cycle*. Oxford: Oxford University Press.
- Smith, A. (2004 [1776]). *The Wealth of Nations*. New York: Barnes and Noble.
- Shalley, C. E., Zhou, J., & Oldham, G. R. (2004). The effects of personal and contextual characteristics on creativity: where should we go from here?. *Journal of management*, 30(6), 933-958.
- Spinuzzi, C. (2012). "Working Alone Together: Co-working as Emergent Collaborative Activity". *Journal of Business and Technological Communication*, 25:4, 399-441.
- Sproull, L., Subramani, M., Kiesler, S., Walker, J., & Waters, K. (1996). When the Interface Is a Face. *Human-Computer Interaction*, 11(2), 97-124. http://doi.org/10.1207/s15327051hci1102_1
- Standage, M., Duda, J. L., & Ntoumanis, N. (2005). A test of self-determination theory in school physical education. *The British Journal of Educational Psychology*, 75(Pt 3), 411-433. <http://doi.org/10.1348/000709904X22359>
- Svejenova, S., Vives, L., & Alvarez, J. A. (2010). At the crossroads of agency and communion: Defining the shared career. *Journal of Organizational Behavior*, 31, 707-725. <http://doi.org/10.1002/job>
- Throsby, D. (1999). Cultural capital. *Journal of cultural economics*, 23(1-2), 3-12.
- Throsby, D. (2000). Economic and cultural value in the work of creative artists. *Values and heritage conservation*, 26
- Townley, B. and N. Beech (2010). *Managing Creativity: Exploring the Paradox*. Cambridge: Cambridge University Press.
- Uzzi, B., & Spiro, J. (2005). Collaboration and Creativity: The Small World Problem. *American Journal of Sociology*, 111(2), 447-504. <http://doi.org/10.1086/432782>
- Voss, G. B., Cable, D. M., & Voss, Z. G. (2000). Linking organizational values to relationships with external constituents: A study of nonprofit professional theatres. *Organization Science*, 11(3), 330-347.
- Voss, Z. G., Cable, D. M., & Voss, G. B. (2006). Organizational identity and firm performance: What happens when leaders disagree about "who we are?". *Organization Science*, 17(6), 741-755.
- Weitzel, U., Urbig, D., Desai, S., Sanders, M., & Acs, Z. (2010). The good, the bad, and the talented: Entrepreneurial talent and selfish behavior. *Journal of Economic Behavior and Organization*, 76(1), 64-81. <http://doi.org/10.1016/j.jebo.2010.02.013>
- White, H. C., & White, C. A. (1965). *Canvases and careers: Institutional change in the French painting world*. University of Chicago Press.
- Williamson, O. E. (1991). "Comparative Economic Organization: The Analysis of Discrete Structural Alternatives," *Administrative Science Quarterly*, 36 (June): 269-296.
- Wilson, F., Kickul, J., & Marlino, D. (2007). Gender, Entrepreneurial Self-Efficacy, and Entrepreneurial Career Intentions: Implications for Entrepreneurship Education. *Entrepreneurship: Theory and Practice*, 31, 387-406.
- Wittelooostuijn, A. van (2015). "Toward Experimental International Business: Unraveling fundamental causal linkages", Vol. 22 Iss: 4, pp.530 – 544.
- Wittelooostuijn, A. van (2016), What Happened to Popperian Falsification? Publishing Neutral and Negative Findings: Moving away from biased publication practices, *Cross-Cultural and Strategic Management* (forthcoming).

Woodman, R. W., Sawyer, J. E., & Griffin, R. W. (1993). Toward a theory of organizational creativity. *Academy of management review*, 18(2), 293-321.

Zhao, H., Seibert, S. E., & Hills, G. E. (2005). The mediating role of self-efficacy in the development of entrepreneurial intentions. *The Journal of Applied Psychology*, 90(6), 1265–1272.
<http://doi.org/10.1037/0021-9010.90.6.1265>

Tables

Table 1: survey items

Dimensions	Items	Source
Creativity		
Self-perceived creativity (SPC)	Indicate to what extent you agree with the following statements (7-point Likert from “totally disagree” to “totally agree”) <ul style="list-style-type: none"> – I think I am fairly good in my creative profession – I am satisfied with my creative performance – When I am creative for a while, I have the feeling that I am good at it – I am fairly talented in my creative activity – I am not good at my creative activity (inversed) 	McAuley, Duncan and Tammen (1989) Quested and Duda (2010)
Relative self-perceived creativity (rSPC)	How do you compare yourself with others in your professional group in your ability to... (7-point Likert from “much worse” to “much better”) <ul style="list-style-type: none"> – Be creative – Create new products – Think creatively 	Weitzel et al. (2010) Wilson et al. (2007) Zhao et al. (2005)
Entrepreneurship		
Self-perceived entrepreneurship (SPE)	How do you compare yourself with others in your professional group in your ability to... (7-point Likert from “much worse” to “much better”) <ul style="list-style-type: none"> – Successfully identify new business opportunities – Commercialize an idea or new development – Raise funds for a new business – Sell a new product or service 	Weitzel et al. (2010) Wilson et al. (2007) Zhao et al. (2005)
Self-perceived leadership (SPL)	How do you compare yourself with others in your professional group in your ability to... (7-point Likert from “much worse” to “much better”) <ul style="list-style-type: none"> – Get people to agree with you – Be a leader – Make decisions 	Weitzel et al. (2010) Wilson et al. (2007) Zhao et al. (2005)

Table 2: summary statistics and correlation table

	Summary statistics		Correlations									
	Mean	S.D.	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
Control variables												
1. gender (female)	0,40	0,50	1									
2. age	42,50	12,83	,369*	1								
3. education (ordinal 1-7)	5,69	1,14	-,297*	-,086	1							
4. total income	1761,82	1293,42	,372*	,163	,070	1						
5. maker (yes)	0,64	0,48	,038	,100	-,204	-,097	1					
Independent variables (ordinal 1-7)												
6. self-perceived creativity (SPC)	5,55	0,59	-,250	,049	,089	,050	,106	1				
7. relative self-perceived creativity (rSPC)	4,73	0,94	,023	,176	-,023	-,294	,087	,210	1			
8. self-perceived entrepreneurship (SPE)	3,86	1,06	,336*	-,021	-,233	,091	,001	-,119	,187	1		
9. self-perceived leadership (SPL)	4,82	0,97	,182	-,038	-,256	-,155	,119	,184	,342*	,411**	1	
Dependent variable (continuous 0-12)												
10. collaborations	8,07	2,90	-,019	,058	-,042	,083	,098	,459**	-,166	-,036	,118	1

Notes: N = 45. Pearson correlations are reported. *. Correlation is significant at the 0.05 level (2-tailed). **. Correlation is significant at the 0.01 level (2-tailed).

Table 3: regression analyses

DV: cooperation	Model 1	Model 2	Model 3	Model 4
Control variables				
Constant	7.744 *	-3.005	5.501	-3.686
Gender	-.701	.970	-.920	.564
Age	.016	.009	.026	.025
Education	-.153	-.033	-.067	.066
Total income	.000	.000	.000	.000
Maker	.539	.205	.222	-.037
Dependent variables: creative competencies				
SPC		2.841 ***		2.667 ***
rSPC		-1.072 *		-1.262 *
Dependent variables: entrepreneurial competencies				
SPE			-.343	.396
SPL			.600	-.063
Observations	45	45	45	45
R-squared	.025	.316	.058	.347
Adjusted R-squared	-.111	.175	-.141	.157

Notes: Significance levels prob. < .10 (+), prob. < .05 (*), prob. < .01 (**), prob. < .005 (***)

Appendix 1:

Instructions Creative Entrepreneur game Parts I, II and III

The following experiment in three parts is played between two random players. This means that for each part, you will be assigned to another player who has been randomly selected. The three parts are referred to as I, II and III. For each part the same context applies, although the rules may change slightly. We first introduce the general context, which applies to all parts. Then we will continue with the first part of the experiment, followed by the second, and then the third part.

For this experiment the rules of the game are the following:

- **Aim for the highest payoff.**
- Do not communicate with each other.
- **Wait for instructions** from the game leader.
- Switch off your mobile phone, or put in on silent, and do not look at it for the duration of the experiment.
- During the explanation about the context of the game you may ask questions, **but not after this moment.**
- Wait with turning over this page, and every following page, until the game leader says you may do so.

Those who achieve the highest payoff in this game, win a prize. The first prize is a sum of € 100, the second prize a sum € 75, and the third prize a sum of € 50. The organizers of the game will get in touch with the winners after the analysis of the game results. **Please note: you can only win a prize if you have also filled out the online questionnaire!** Do you want to be eligible for winning a prize? Fill out your e-mail address on the last page.

Even if you are not a winner, by leaving us your e-mail address you can receive a personal report about your performance in comparison to other players. This will teach you how cooperative and/or competitive you are compared to others. If you have already filled out the questionnaire, we will link this information to your behavior in the game, which will give you insight into the factors driving your behavior, and to what extent these matter for others too.

If you have not yet filled out the questionnaire you can do before December 6th 2015 via the following link:
https://tilburgss.co1.qualtrics.com/jfe/form/SV_8JkAPJbxK2kWzvD

You can tear off this page so you can take this link with you. Do so carefully in order for the rest of the package to stay together!

Thank you very much for your cooperation!

Identification Questions

The following questions are used to match the game results with your answers to the questionnaire you filled out before, in order to protect your identity. Make sure you answer these questions in the same ways you have answered them while filling out the online questionnaire.

What are the first two letters of your mother's first name (e.g. "Vi")?

What are the first two letters of your father's first name (e.g. "Pe")?

What are the first two letters of your place of birth (e.g. "Am")?

What are the first two numbers of your date of birth (e.g. "09") (use two signs)?

What are the last two letters of your mother's first name (e.g. "ne")?

What are the last two letters of your fathers's first name (e.g. "er")?

Please wait!

(Now the game leader explains the context of the game.)

Instructions for part I of the experiment

During one specific year, entrepreneur A and B run into each other four times while pitching projects to important clients. It is during these pitches that they decide on the rate they ask from those clients. As a results, these rates cannot be changed anymore. Neither Entrepreneur A nor entrepreneur B is aware of the rates the other entrepreneur asks from her/his clients. Indicate in the table below which level of rate you choose for which client (capital letter L stands for a low rate and capital letter H stands for a low rate).

Note that all combinations of high and low rates are possible. You are entrepreneur A.

If I am entrepreneur A and have to decide on a rate at the same moment entrepreneur B has to, and if <u>neither</u> of us knows what the other will do, I decide the following ...				
	Pitch			
	I	II	III	IV
Rate (L or H)	<input type="checkbox"/> L <input type="checkbox"/> H			

Instructions for part II of the experiment

The following year, entrepreneur A and B run into each other *again*. The market has not changed: your freelance business is running as well as before, the clients are as important as they were before, and you still see each other four times a year while pitching to them. The only difference is that you (entrepreneur A) found out that entrepreneur B asked for a high rate four times last year. In the table below you will indicate again which rate you ask from which client (capital letter L stands for a low rate and capital letter H stands for a low rate).

You are entrepreneur A. All combinations of high and low rates are still possible.

If I am entrepreneur A and if I have to decide on my rate at the same moment entrepreneur B does, and if <u>neither</u> of us knows what the other does, I decide the following ...	
	Pitch

	I	II	III	IV
Rate (L or H)	<input type="checkbox"/> L <input type="checkbox"/> H			

Instructions for part III of the experiment

Entrepreneur B has quit her/his work, rendering all your knowledge about her/his way of pitching to clients irrelevant. You (entrepreneur A) are now dealing with entrepreneur C, whom you do not know yet. You are now regularly running into each other during pitches, just like you did with entrepreneur B. But whereas you knew you would only deal with about entrepreneur B during four pitching moments a year, now these pitching moments have become much more frequent. Neither of you knows how often you will run into each other. Hence, you assume it will be often.

For every pitch you pick whether you ask for a high or a low rate. Do so for one pitch at a time and wait for the instructions from the game leader before you fill out anything.

<p>If I am entrepreneur A and if I have to decide on my rate at the same moment entrepreneur C does, and if <u>neither</u> of us knows what the other does and how often we will run into each other, I decide the following ...</p>	
Pitch	Rate (L or H)
1	<input type="checkbox"/> L <input type="checkbox"/> H
2	<input type="checkbox"/> L <input type="checkbox"/> H
3	<input type="checkbox"/> L <input type="checkbox"/> H
4	<input type="checkbox"/> L <input type="checkbox"/> H
5	<input type="checkbox"/> L <input type="checkbox"/> H
6	<input type="checkbox"/> L <input type="checkbox"/> H
7	<input type="checkbox"/> L <input type="checkbox"/> H
8	<input type="checkbox"/> L <input type="checkbox"/> H

Appendix 2a: Items for measuring self-perceived creativity

(based on McAuley, Duncan and Tammen (1989) and Quested and Duda (2010))

Items	
I think I am fairly good in my creative profession	
I am satisfied with my creative performance	
When I am creative for a while, I have the feeling that I am good at it	
I am fairly talented in my creative activity	
I am not good at my creative activity (inversed)	

Appendix 2b: Items for measuring self-perceived competencies

(based on Weitzel et al. (2010), Wilson et al. (2007), Zhao et al. (2005))

Items	Weitzel et al. (2010)	Current paper
How do you compare yourself with others in your professional group in your ability to... (Likert scale (1-7))		
Solve problems	Business talent	-
Manage money	Business talent	-
Be creative	Creativity	Creativity
Get people to agree with you	Business talent	Leadership
Be a leader	Business talent	Leadership
Make decisions	Business talent	Leadership
Successfully identify new business opportunities	Business talent	Entrepreneurship
Create new products	Business talent	Creativity
Think creatively	Creativity	Creativity
Commercialize an idea or new development	Business talent	Entrepreneurship
Raise funds for a new business	Business talent	Entrepreneurship
Sell a new product or service	Business talent	Entrepreneurship

Appendix 3a: Factor analysis for the self-perceived creativity variable

Factor loadings and communalities based on a principal components analysis with Varimax rotation for 5 items from five-item perceived competency sub-scale of the Intrinsic Motivation Inventory (McAuley, Duncan and Tammen, 1989) (N = 45)

	SPC
I think I am fairly good in my creative profession	0,71
I am satisfied with my creative performance	0,58
When I am creative for a while, I have the feeling that I am good at it	0,67
I am fairly talented in my creative activity	0,75
I am not good at my creative activity (inversed)	0,68

Appendix 3b: Factor analysis for the self-perceived competencies variable (self-perceived entrepreneurship, self-perceived leadership, relative self-perceived creativity)

Factor loadings and communalities based on a principal components analysis with Varimax rotation for 12 items from the 12-item entrepreneurial self-efficacy scale (Weitzel et al., 2010) (N = 45)

	1	2	3	4
	SPE	rSPC	SPL	excluded
Solve problems	0,22	0,19	0,30	0,73
Manage money	0,10	-0,18	-0,09	0,80
Be creative	-0,19	0,89	0,05	-0,02
Get people to agree with you	-0,20	0,45	0,68	0,06
Be a leader	0,20	0,16	0,85	-0,07
Make decisions	0,25	-0,05	0,81	0,21
Successfully identify new business opportunities	0,59	0,13	0,49	0,39
Create new products	0,35	0,79	0,00	-0,15
Think creatively	0,06	0,80	0,28	0,10
Commercialize an idea or new development	0,66	-0,02	0,29	0,40
Raise funds for a new business	0,87	-0,16	-0,03	0,02
Sell a new product or service	0,80	0,29	0,17	0,15
Cronbach alpha	0,83	0,76	,81	,48