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Chapter 5

Chapter 5. More Than a Course: Participation in MOOCs to Signal Professional Value⁴

ABSTRACT

We explore the role of massive online open courses (MOOCs), one of the learning alternatives that has become available to millions of people, in the job search process, linking the invested effort in obtaining a certification or completing several courses from the same specialization with the job seeking outcomes, such as getting a job. In a study of a marketing MOOC learners ($N = 278$) we explore the antecedents and outcomes of such invested effort through the lens of the signaling theory. The results indicated that school brand importance and self-promotion were important predictors of invested effort in MOOCs, while learning goal orientation towards MOOCs was not. The invested effort in MOOCs positively related to perceived usefulness of MOOCs in getting a job through both signaling of MOOC-related competencies and perceived employability. We complemented the quantitative data with 19 semi-structured interviews to provide nuances to the findings. Theoretical and practical implications of the role of MOOCs in the context of contemporary careers are discussed.

Keywords: MOOC, job search, career, self-presentation, signaling

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5.1 Introduction

When searching for a job, signaling one's professional value is important, as employers have to make hiring decisions based on limited information about the applicants (Bangerter, Roulin, & König, 2012). However, with the growing speed of globalization and digitalization much has been changed in how individuals signal their professional value (Manroop & Richardson, 2016). For example, there is a growing number of novel technology-enabled learning tools to gain the knowledge, skills, and attitudes necessary to be competitive in the labor market (De Vos et al., 2011; Williams, Stafford, Corliss, & Reilly, 2018). Although such technological opportunities are important enablers of career success (Chen et al., 2018; Zhenghao et al., 2015), current job search models omit such new developments for job searchers (Manroop & Richardson, 2016).

In this paper, we propose that technology-enabled learning tools have the capability to change how individuals signal their professional value to prospective employers. Specifically, we focus on one example of such technologies: massive open online learning courses (MOOCs), defined as “open, large-scale web-based courses designed and delivered by accredited higher education institutions and organizations” (Deng, Benckendorff, & Gannaway, 2019, p. 48). Since its emanation about a decade ago, this educational model has gained considerable popularity in higher education because it offers virtual educational opportunities (Pomerol, Epelboin, & Thoury, 2015). The emergence of MOOCs has impacted not only higher education (Rosendale, 2017; Veletsianos & Shepherdson, 2016) and the ways how employers upskill their employees (Hamori, 2019), but also how individuals plan and manage their careers (Callanan, Perri, & Tomkiewicz, 2017). A growing number of MOOC providers offer the learners credentials, most

often with the intent to include those in their resumes to signal their qualification and suitability for a job (Bersin, 2016).

Previous studies have established a positive relationship between taking MOOCs and career outcomes, both subjective (e.g., enhanced skills, perceived employability) and objective (e.g., receiving a pay raise or a promotion) (Watson, Kim, & Watson, 2016; Zhenghao et al., 2015). However, little research examines the role of MOOCs in the job search process. Moreover, given that in the context of contemporary careers people more often need to invest in their personal branding (Gorbatov et al., 2018), it is important to examine the underlying mechanisms through which MOOCs influence job search outcomes. This led us to the question: *Why do people invest effort in doing MOOCs and how does this investment relate to job search outcomes?* To develop our hypotheses, we draw on the typology of motivations to pursue higher education by Côté and Levine (1997) to suggest three predictors of invested effort in MOOCs: learning goal orientation towards MOOCs, school brand importance, and self-promotion. As we do so, we link together three streams of literature: signaling theory (Spence, 1973), the dramaturgical approach (Goffman, 1956), and the research on achievement motivation (Dweck, 1986). Based on Côté and Levine's (1997) motivational typology, we investigate the role of the three predictors in people's investment in MOOCs. Thereby, we expand previous research on this technology-enabled learning tool, as previous studies mainly looked at the relationships between MOOCs and employability through the lens of the human capital theory (Dillahunt, Ng, Fiesta, & Wang, 2016; Perna et al., 2014). We add the economics perspective by examining the signaling potential of MOOCs in relation to job search outcomes. To test the hypotheses, we quantitatively analyzed the data from 278 students who took at least one marketing MOOC from a prestigious European business school. Then, we interviewed 19 students from the same cohort

to add further insights into the reasons for investing extra effort in MOOCs and the potential career outcomes. The findings of this study contribute to our understanding of the antecedents of investing effort in MOOCs and of the signaling function of such novel learning technologies to communicate one's professional value to potential employers.

5.2 Theory and Hypotheses

5.2.1 Investing Effort in MOOCs as Signaling

Educational attainment is a common strategy to achieve career success (Mueller, 1988; Thomas, 2000, 2003). In recent years, the widespread growth and use of technology, such as mobile or wearable devices, and efficient internet connectivity have contributed greatly to democratization of education and engaging with learning materials on the move (Sharples, Kloos, Dimitriadis, Garlatti, & Specht, 2015). MOOCs, for example, are internet based educational courses, often free of registration charge. Basically, they are publicly-shared curricula aimed at large-scale interactive participation (Pomerol et al., 2015).

MOOC providers offer completion certificates (often for pay), bearing the name of the educational institution offering the course (Dellarocas & Van Alstyne, 2013; Deng et al., 2019; McClure, 2014). Sometimes a series of MOOCs are clustered together offering students to pursue a specialization and receive a certificate for the entire subject. Learners can even earn a degree from a prestigious university for one course of a specialization. Those who earn a MOOC certificate can use it to make their professional qualities more visible on the labor market – an activity commonly referred to as signaling.

Signaling theory (Spence, 1973) is concerned with information asymmetry resulting from one party having incomplete information about the other party. Information asymmetry can be reduced, for example, by obtaining higher education, as it signals to the employer that the job

seeker is likely to possess the required competencies to perform well in a role (Connelly, Certo, Ireland, & Reutzel, 2011). By signaling competence, job seekers can reduce uncertainty inherent in the labor market. Indeed, a study among 46,791 freelancers showed that obtaining skill certificates increased a worker's earnings by decreasing employer uncertainty (Kässi & Lehdonvirta, 2019). Hence, we expect that such signaling functions will be among the key reasons for individuals to engage with MOOC learning.

5.2.2 Antecedents of Investing Effort in MOOCs

Research on the motivation to invest effort in MOOCs has been inconclusive: Some researchers found that most people take MOOCs to assist themselves particularly in advancing their career growth (Christensen et al., 2013; Torres-Díaz, Infante Moro, & Valdiviezo Díaz, 2014; Zhenghao et al., 2015), and other studies indicate that, for example, gaining knowledge or personal interest are more important motivations for taking a MOOC (Shapiro et al., 2017; Terras & Ramsay, 2015). Therefore, the first goal of this paper is to examine the motivations to invest effort in MOOCs.

To identify and frame the antecedents of investing effort in MOOCs, we use the typology of motivations for pursuing higher education developed by Côté and Levine (1997). Their five motivations include *careerist-materialist* (to get ahead in life), *personal-intellectual development* (to gain competence), *humanitarian* (to make the world a better place), *expectation-driven* (to meet expectations of others), and *default* (absence of agency). Subsequent applications of this model revealed that different motivational reasons led to different outcomes (e.g., Dennis, Phinney, & Chuateco, 2005; Guiffrida, 2006). For example, one study showed that the need for competence and autonomy were positively related to intention to persist and academic performance (Guiffrida, Lynch, Wall, & Abel, 2013).

We suggest that particularly careerist-materialist and personal-intellectual development motivations will be relevant for applying to MOOC education. Alraimi et al. (2015) explored the antecedents of MOOC continuance intention, focusing on mostly the course characteristics, such as perceived openness, perceived usefulness, and perceived reputation. These authors showed that perceived reputation and perceived openness were the strongest predictors of course adherence. In this paper we turn our attention to the motivational aspects related to the careerist-materialist and personal-intellectual development elements of Côté and Levine's (1997) typology. We posit that other motivations are less applicable to MOOCs, because there is no default expectation to take MOOCs, nor a sentiment that MOOCs help achieve a humanitarian cause.

Further, we suggest that in the context of MOOCs learning goal orientation towards MOOCs represents a motivation of the personal-intellectual development nature, as, by definition, the desire to learn drives individuals to engaging with the subject matter intellectually to grow and develop. The other two antecedents, i.e. school brand importance and self-promotion, belong to the careerist-materialist motivations, because they are concerned with the extrinsic characteristics of the learning process, where education is seen as a means to obtaining career benefits. We will address them in greater detail in the next three sections.

5.2.1.1 Learning goal orientation towards MOOCs

There is substantial literature pointing in the direction that “a desire to learn a new topic, augment formal education, curiosity, and certification” are the most cited reasons for taking MOOCs (Glass, Shiokawa-Baklan, & Saltarelli, 2016, p. 46). This desire can be conceptualized as learning goal orientation, or the intrinsic motivation to learn and develop, and to pursue goals “in which individuals seek to increase their competence, to understand or master something new”

(Dweck, 1986, p. 1040). Indeed, Barak et al. (2016) found that intrinsic motivational elements (e.g., the desire to be part of a community of people with similar interests, to find solutions to challenging problems, or to stay constantly updated and informed) and self-determination were most salient for MOOC course completers, as compared to self-efficacy, career motivation, and grade motivation. Those who are high in learning goal orientation are likely to seek and value activities conducive to personal growth, as they are intrinsically motivated in the task itself (VandeWalle, Cron, & Slocum, 2001; Vandewalle, Nerstad, & Dysvik, 2019). For instance, Klein et al. (2006) found that learning goal orientation was positively related to motivation to learn, i.e. the desire to gain competence, skills, and experience and achieve a sense of mastery. We hypothesize that people with higher learning goal orientation towards MOOCs (i.e., seeking to increase their knowledge or skills through MOOCs) will be more likely to invest extra effort in MOOCs. Doing so will allow them to study the subject matter in greater depth by pursuing a specialization or more comprehensively by completing several different courses.

Hypothesis 1a: Learning goal orientation towards MOOCs is positively related to invested effort in MOOCs.

5.2.1.2 School brand importance

A school brand has been defined as “the totality of perceptions and feelings that stakeholders associate with that particular [school]” (Rauschnabel, Krey, Babin, & Ivens, 2016, p. 3077). Depending on the individual perceptions and feelings about a particular school, as well as the personal career goals and objectives, the school brand importance, or how much value someone assigns to the school brand, will vary among the MOOC learners. More elite academic institutions have brands that are more recognizable and more appealing to students and employers (Palmer, Koenig-Lewis, & Asaad, 2016). In line with signaling theory (Spence, 1973),

MOOC learners attempt to attain an association with the brand of the prestigious educational institution offering the MOOC credentials. People want to bask in the reflected glory of successful organizations they may be actually very faintly related to by taking on their logos, symbols, and colors (Cialdini et al., 1976; Zinko & Rubin, 2015). Several scholars wrote about co-branding as a personal branding strategy of strategically associating one's name with the brand of a successful organization (Evans, 2017; Kucharska, 2017). From this perspective, the brand of the educational institution will play an important role in the decision to invest extra effort in MOOC, and MOOC learners will be motivated to prefer courses from academic institutions with greater brand equity. Historically, prestigious universities have been very selective in choosing students and studying there could be only afforded by the select few. However, with more prestigious universities offering MOOCs (Baggaley, 2013), studying and getting a certificate from, for instance, Harvard or MIT, has become a cheap alternative for anyone irrespective of geography. There is ample evidence that the brand of an educational institution is related to the career outcomes of its alumni. MacLeod et al. (2015), for example, discovered that college reputation was correlated with graduates' earnings growth, while the years of schooling were not. Therefore, as MOOCs offer an opportunity to have a certificate from a well-known university, school brand importance is likely to be a motivator for doing a MOOC.

Hypothesis 1b: School brand importance is positively related to invested effort in MOOCs.

5.2.1.3 Self-promotion

Signaling can also be realized through self-presentation activities. Goffman's (1956) dramaturgical theory posits that individuals engage in a series of social interactions to improve

one's public self-image. This theory shifts the focus from identity to desired image, as a person's identity is viewed as fluid and malleable to the needs of the target audience, which gave root to studying modern self-presentation behaviors, such as impression management (Bolino, Kacmar, Turnley, & Gilstrap, 2008; Bolino, Long, & Turnley, 2016). Self-promotion is a particular expression of impression management behaviors, concerned with being "viewed as competent by touting their abilities and accomplishments" (Bolino & Turnley, 2003, p. 143). This impression management tactic is particularly associated with success in job interviews and performance evaluations. For example, doctors who display their credentials on the walls are perceived as more competent by their patients (Bolino et al., 2016). Closely related to self-promotion, personal branding is particularly concerned with attaining career benefits through effective positioning of professional self in the digital sphere (Gorbatov et al., 2018). Thus, self-promotion is likely to be positively related to the extra effort invested in MOOCs, as it leads to gaining a course certificate.

Hypothesis 1c: Self-promotion is positively related to invested effort in MOOCs.

5.2.3 The Outcomes of Invested Effort in MOOCs

Previous studies have established a positive relationship between taking MOOCs and career outcomes (Watson et al., 2016; Zhenghao et al., 2015). In a qualitative study, Dillahunt et al. (2014) found that, overall, participants believed that MOOCs provided some tangible benefits for their current jobs, with a small fraction of the interviewees reporting that MOOCs had helped them obtain a new job. Zhenghao et al. (2015) reported that out of those learners who stated career benefits as their primary reason to do a MOOC 26 percent found a new job after taking a MOOC. Therefore, we hypothesize that the perceived usefulness of MOOCs in getting a job,

defined as the subjective perception of the role of a MOOC in gaining employment, will be the distal outcome of invested effort in MOOCs.

Hypothesis 2: Invested effort in MOOCs is positively related to the perceived usefulness of MOOCs in getting a job.

This relationship is expected to be parallelly mediated by signaling of MOOC-related competencies and perceived employability, which we address in detail below.

5.2.3.1 MOOCs and Signaling of MOOC-related Competencies

Signaling theory helps explain how exchange of information happens in situations of looking for employment and personnel selection (Bangerter et al., 2012). We view signaling of MOOC-related competencies as proactively making one's professional value visible to the potentially interested parties through, for instance, including the MOOC in the LinkedIn profile or mentioning the MOOC at a job interview. Skill development, in general, is a common tactic to enhance job search opportunities. For example, Zikic and Saks (2009) found that individuals who engage in training and leverage available career resources are likely to demonstrate more effective job search behaviors. Individuals who invest extra effort in MOOCs, such as completing several related courses or attaining a certificate of completion, are likely to do so for a specific career-related purpose, such as to signal their competence to potential employers through the obtained credentials, as opposed to those who simply audit the courses (i.e., study the course material without completing the final test to obtain a certificate). Since a better image of competence is associated with career benefits (De Vos, Forrier, Van der Heijden, & De Cuyper, 2017), signaling one's value through MOOC certifications could be a viable job search strategy in addition to, or instead of, traditional educational credentials. Thus, we hypothesize that invested effort in MOOCs will lead to signaling of MOOC-related competencies.

Hypothesis 3: Invested effort in MOOCs is positively related to signaling of MOOC-related competencies.

5.2.3.2 MOOCs and Perceived Employability

The human capital theory posits that investing in one's education and training leads to greater human capital (Becker, 1993). The individuals' stock of human capital was found to be positively related to their perceived employability (Berntson, Sverke, & Marklund, 2006), defined as "the ability to keep the job one has or to get the job one desires" (Rothwell & Arnold, 2007, p. 25). One of the ways of increasing one's human capital is completing a MOOC in the area of professional interest or in the area linked with the requirements of the desired job. For instance, a longitudinal study by Wittekind et al. (2009) showed that job-related skills are positively related to perceived employability. In a qualitative study, Dillahunt et al. (2016) found that doing MOOCs conferred to the learners such benefits as enhancing their credibility at work, improving their job skills, introducing them to new topics, and improving access to knowledge, which led to an increase in perceived employability. So, in line with the human capital theory, we expect that invested effort in MOOCs will have a positive relationship with perceived employability.

Hypothesis 4: Invested effort in MOOCs is positively related to perceived employability.

5.2.3.3 The Mediating Role of Signaling of MOOC-related Competencies and Perceived Employability in Perceived Usefulness of MOOCs in Getting a Job

Finally, we expect that when individuals feel more employable because the MOOC they took enriches them with the knowledge and skills needed for the future role and in the process of job search they actively signal such knowledge and skills to the potential employers, they attribute their success for getting a job to the MOOCs in which they invested effort. Drawing on

the signaling theory, we suggest that, when individuals make their invested effort in MOOCs visible to others, it is likely to lead to the perceived usefulness of MOOCs in getting a job, otherwise they would not be engaging in such signaling activities. Signaling can be realized either before or during an active job search. Empirical studies conclusively demonstrate how preparatory (e.g., preparing a resume) and active (e.g., applying for a position) job search behaviors lead to desired job outcomes (Blau, 1994; Moynihan, Roehling, Lepine, & Boswell, 2003; Saks & Ashforth, 1999). A meta-analytic review of antecedents of job search demonstrated that job search behaviors, such as signaling one's competence with obtained credentials, were positively and significantly associated with finding employment (Kanfer, Wanberg, & Kantrowitz, 2001), and similar findings were reported in a recent multidisciplinary review (Manroop & Richardson, 2016). Kässä and Lehdonvirta (2019) found that obtaining skill certificates led to higher earnings by decreasing employer uncertainty and not through skill attainment.

As obtaining education leads to accumulation of human capital, which is positively related to getting employment (Becker, 1993), individuals are likely to associate their success in finding a job with the MOOCs they took. So, furthering one's education and learning new skills is likely to be positively related to perceived employability, as demonstrated by several studies (De Vos et al., 2011; Wittekind et al., 2009). There is also evidence that employability is positively related to re-employment (McArdle et al., 2007). It logically follows that individuals, who feel employable thanks to a training course that they took with the purpose to find a job, are likely to attribute success for finding a job to that specific course. Hence, we propose:

Hypothesis 5 Signaling of MOOC-related competencies (H5a) and perceived employability (H5b) are positively related to perceived usefulness of MOOCs in getting a job.

Hypothesis 6: Signaling of MOOC-related competencies (H6a) and perceived employability (H6b) mediate the relationship between invested effort and perceived usefulness of MOOCs in getting a job.

5.3 Methods

5.3.1.1 Quantitative data

5.3.1 Participants and Procedures

The participants for this study were recruited through the Coursera.com platform. The link to the survey was sent to those who took at least one MOOC from the Marketing specialization from a prestigious European business school. As enrollment into those MOOCs is ongoing, we kept the survey open for one year, periodically sending the survey to students at least three months after completion of the MOOCs to ensure that they have been able to use that MOOC in their job search activities. The participants were incentivized to take part in the survey by offering a total of 20 iTunes vouchers of 20 euros each, or equivalent in the local currency, for a complete response. A total of 1358 responses were received, 990 of which were complete. The inclusion criterion was employment status, as our goal was to examine the impact of MOOCs on career outcomes for those who are not in formal employment. Hence, for this study, we only selected the responses from those who were unemployed or self-employed ($N = 336$). We checked for outliers, both visually and through boxplots, for each variable, and deleted 8 cases. Responses with missing values for the relevant variables were deleted case wise, which gave us a total of 278 responses with no missing data for analysis.

At the time of taking the survey, the mean age of the participants was 33 years old ($SD = 9.81$), 48.2% were females, living across 66 countries, with most participants being from India (10.5%), Mexico (9.8%), Colombia (7.6%), Spain (7.6%), and the USA (6.2%). Most of them

were highly educated, consistent with the overall MOOC learner profile (Deng et al., 2019): 49.6% had a university degree, 34.8% had a master's or professional degree, and 2.9% had a PhD. This sample consisted of 34.5% unemployed, 29.5% self-employed, and 36.0% students at the time of starting the MOOC (answers to question "What was your employment status when starting the MOOC?"). Most participants had a business or management educational background (65.0%), while others came from engineering (9.0%), arts and humanities (6.0%), or other areas of studies. For 18.5% of the sample this was the first MOOC they took, while the rest had had previous MOOC experience, with 14.1% having taken more than ten MOOCs before.

5.3.2 Measures

In line with the literature on technology adoption, the name of the technology is important to be included in the items to ensure the specificity of the measurement (see, e.g., Ajjan & Hartshorne, 2008; Brown & Venkatesh, 2005). Therefore, apart from the self-promotion and perceived employability scales, the word "MOOC" is included in the items. All items were answered on a five-point Likert scale ranging from 1 = *strongly disagree* and 5 = *strongly agree*, unless indicated otherwise.

Invested effort in MOOCs was measured with a 3-item scale created for this study as a criterion of completed training. The items were: "I completed not only this MOOC, but the entire specialization that this course was part of", "I took not only this MOOC, but also other MOOCs in Marketing from [name of the school]", and "I earned a course certificate". The first question taps into the motivation to complete the whole specialization and being able to claim finishing a "program". A study of MOOC learners at the Linnaeus University in Sweden showed that mandatory courses enjoyed significantly higher completion rates than the optional ones (Creelman & Reneland-Forsman, 2013). The second question about taking other Marketing

courses goes beyond pursuing a specialization, but rather taking a genuine interest in the subject. People interested in a specific topic take more MOOCs in that topic, irrespective of the program it belongs to. Indeed, Hone and El Said (Hone & El Said, 2016) found that the course content was a major predictor of MOOC completion. Finally, the certificate question was chosen because certification was found to be one of the strongest predictors of effort and course completion rates. For example, Kizilcec et al. (2013) found evidence that learners who took a MOOC to enhance their resume were more likely to complete a course, and Koller et al. (2013) demonstrated that those learners who chose to pay for the Coursera's "Signature Track", which implied getting a certificate upon successful completion of the course requirements, were more likely to complete the course. Since these three items are a combination of indicators that may vary independently of each other (i.e., invested effort in MOOCs could increase if one of the items increases while others remain the same), this is a formative, rather than a reflective, scale (Diamantopoulos & Winklhofer, 2001). The standardized regression weights for the items ranged from .16 to .38. As multicollinearity could pose a problem in formative scales, we computed the variance inflation factors (VIF) for the items. The VIF values were 1.20, 1.40, and 1.50, indicating no concerns regarding multicollinearity.

Learning goal orientation towards MOOCs was measured with a 3-item scale developed by Elliott and Church (1997) modified to fit the learning setting studied here. An example item is "In a MOOC, I prefer course material that really challenges me so I can learn new things". The Cronbach's alpha for this scale was .79.

School brand importance was measured with a modified 4-item scale by Yoo and Donthu (2001). An example item is "It makes sense to do a [name of the school] MOOC instead of any other school, even if those MOOCs are the same". The Cronbach's alpha for this scale was .88.

Self-promotion was measured with the 6-item scale of Bolino and Turnley (1999). We collected responses using a 5-point scale ranging from 1 (*never*) to 5 (*all the time*). An example item is “I make public my talents or qualifications”. The Cronbach’s alpha for this scale was .86.

Signaling of MOOC-related competencies was measured with 6-items adapted from the active job search behavior scale by Blau (1994). A sample item was “I applied for jobs that required knowledge in the topic area of the MOOC”. The confirmatory factor analysis (CFA) on the job search scale returned a poor fit for the scale: $\chi^2 = 92.55$, $df = 9$, $\chi^2/df = 10.29$, CFI = .89, TLI = .82, RMSEA = .18. Two items specifically were loading lower than the others: “I included the MOOC in my resume” ($\lambda = .65$, $p < .001$) and “I included the MOOC on my LinkedIn (Facebook) profile” ($\lambda = .63$, $p < .001$), while all other standardized weights were ranging between .72 and .80 at $p < .001$. Removing those two items significantly improved the model fit ($\chi^2 = 2.41$, $df = 2$, $\chi^2/df = 1.21$, CFI = .99, TLI = .99, RMSEA = .03) without substantially reducing the Cronbach’s alpha ($\alpha = .85$). We, therefore, decided to proceed with the analyses using the four-item scale.

Perceived employability was measured with the 5-item scale by Berntson and Marklund (2007). An example item is “My competence is sought-after in the labor market”. The Cronbach’s alpha for this scale was .82.

Perceived usefulness of MOOC in getting a job was operationalized as one item: “The MOOC helped me get a new job”.

Demographics and controls. We asked the participants to indicate their age in years and gender, as several studies reported differences in online learning behaviors according to age (Watted & Barak, 2018; Williams et al., 2018) and gender (Wallace & Panteli, 2018). Gender was coded as 1 = *male* and 2 = *female*.

5.3.1.2 Qualitative data

To provide additional insights into why people engage in MOOCs and how they use such courses in their job search one of the authors conducted 19 semi-structured interviews with active learners in a marketing specialization MOOC from the same cohort as the quantitative sample. Consistent with the quantitative sample, these 19 individuals were either students, self-employed, or unemployed. The interviewees represented diverse geographies (Brazil, Cameroon, Canada, China, Cyprus, Haiti, the Netherlands, Portugal, Russia, Singapore, the UK, and the US). The questions centered around two broad themes: the reasons to do MOOCs and using MOOCs in job search. Examples of main questions were “Why did you decide to do MOOCs and not other forms of employee development (short face-to-face courses, etc.)?” and “What type of impact will your MOOCs have on employer perceptions?”. The interviews were conducted in English and were transcribed in full before the analyses. The objective of the interviews was not to test the hypotheses but to add some nuance to the analyses and shed some light on the underlying mechanisms of action, which are hard to capture with quantitative analysis (Gibson, 2017; Tunarosa & Glynn, 2017). Thus, our focus was on illuminating nuanced understandings of the reasons for investing effort in MOOCs and of how these courses help signal one’s professional value and add to one’s perceived employability. Therefore, to analyze the qualitative data we have employed the basics of a theoretical thematic analysis (Braun & Clarke, 2006). In line with the guidelines, we started from familiarizing ourselves with the data by reading through the transcripts several times and then proceeded to extracting the themes to organize the data around the research question. In so doing, we were guided by the concepts discussed in our theory section.

5.3.3 Analytical Strategy

To test the hypotheses, we used structural equation modeling (SEM) with the Amos v.25 software (Arbuckle, 2017). We used bootstrapping on 5,000 samples to corroborate the significance of the indirect effects in the model, as this procedure provides more correct estimation of the sampling distribution through a bias-corrected bootstrap approximation (Preacher & Hayes, 2008).

To test the fit of alternative models to the data, we employed several traditionally used indices. The chi-square/*df* ratio, an indication of the closeness of model fit to a perfect, of 3 or less indicates a good model fit (Kline, 2016). Hu and Bentler (1999) suggest cutoff values close to 0.95 for TLI and CFI and a cutoff value close to .06 for RMSEA. P_{close} is a *p*-value test on RMSEA that needs to be greater than .05 to reject the null hypothesis that the computed RMSEA is greater than .06 that would indicate a poor fit. Akaike Information Criterion is a comparative index, a modification of the standard goodness-of-fit index χ^2 , that estimates the quality of each model compared to other models and includes a penalty for complexity, so that smaller values indicate a better fit (Bozdogan, 1987; Schreiber et al., 2006).

The SEM analyses were conducted on a partial disaggregation model (Bagozzi & Edwards, 1998). We created parcels for variable consisting of more than four items (three parcels for each of the following: perceived employability and self-promotion). Parceling facilitates model identification and ensures a more stable solution for smaller samples (Bagozzi & Edwards, 1998; Little et al., 2002). We created the parcels using the shared uniqueness strategy recommended by Hall et al. (1999).

5.4 Results

The means, standard deviations, and correlations among all study variables are presented in Table 5.1. An examination of the zero-order correlations provides initial support for most of our hypotheses. School brand importance and self-promotion were positively related to invested effort in MOOCs ($r = .35$ and $r = .34$, p 's $< .001$, respectively). Conversely to our expectations, the correlation between learning goal orientation towards MOOCs and invested effort in MOOCs was not significant ($r = .09$, $p = .16$). Notably, learning goal orientation towards MOOCs, school brand importance, and self-promotion were also positively related to signaling of MOOC-related competencies ($r = .18$, $r = .37$ and $r = .33$, p 's $< .001$, respectively). Age and gender did not correlate meaningfully with the key study variables, and, therefore, were excluded from the model.

5.4.1 Measurement Model

Following the example of Rich, Lepine, and Crawford (2010), we assessed the fit of our data to a measurement model before estimating the theorized relationships. The measurement model consisting of six latent variables (invested effort in MOOCs, school brand importance, self-promotion, learning goal orientation towards MOOCs, signaling of MOOC-related competencies, and perceived employability) demonstrated good fit to the data: $\chi^2 = 160.97$, $df = 109$, $\chi^2/df = 1.48$, CFI = .98, TLI = .97, RMSEA = .04, $p_{close} = .85$. The items loaded strongly on the intended factors (average loading = .78). In order to establish the discriminant validity of the latent variables, we compared Model 1 to nested alternatives that combined those constructs. Because our focus in this study is signaling, we primarily report results of models in which we combined signaling of MOOC-related competencies with the other variables. Neither of those models demonstrated a better fit than the hypothesized one, according to the statistics and the fit

indices shown in Table 5.2. Chi-square difference tests were significant, favoring Model 1.

Overall, these results demonstrate the adequacy of the measures, allowing us to proceed with testing the structural model.

5.4.2 Structural Model

The results of the SEM analyses revealed that our hypothesized model fit the data well: $\chi^2 = 329.97$, $df = 177$, $\chi^2/df = 1.87$, CFI = .94, TLI = .92, RMSEA = .06, $p_{close} = .15$. Using the chi-square difference tests (Bentler & Bonett, 1980) and the AIC, we compared this hypothesized model to four theoretically plausible nested models (Table 5.3). The results indicate that the original model demonstrated better fit and parsimony as compared to the alternative competing models, and was, therefore, retained as the best-fitting, parsimonious model, which we used to test the hypothesized relationships.

Table 5.1

Means, standard deviations, and correlations of the study variables

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7	8	9
1. Gender	1.48	.50	-								
2. Age	34.04	10.87	-.13*	-							
3. Invested effort in MOOCs	2.90	1.14	-.08	.02	-						
4. Signaling of MOOC-related competencies	3.12	1.10	-.02	-.06	.50**	.85					
5. School brand importance	3.67	0.80	-.10	.02	.35**	.37**	.88				
6. Self-promotion	3.47	0.78	-.07	.02	.34**	.33**	.23**	.86			
7. Learning goal orientation towards MOOCs	4.32	0.63	-.11	-.06	.09	.18**	.35**	.14*	.79		
8. Perceived employability	3.43	0.79	-.08	.07	.21**	.32**	.26**	.28**	.14*	.82	
9. Perceived usefulness of MOOCs in getting a job	.15	.36	.08	-.12*	.20**	.27**	0.11	.05	.12*	.19**	-

Notes: $N = 278$. Coefficient alphas are presented in bold on the diagonal. * $p < .05$, ** $p < .01$.

Table 5.2

Measurement models comparisons

Structure	χ^2	<i>df</i>	CFI	TLI	RMSEA	p_{close}	AIC	$\Delta\chi^2(\mathbf{df})$
Model 1: Five factors	160.97	109	.98	.97	.04	.85	248.97	
Model 2: Four factors, SMC & LGO combined	425.08	113	.85	.82	.10	< .001	505.08	264.11 (4)
Model 3: Four factors, SMC & SBE combined	546.49	113	.80	.75	.12	< .001	626.49	385.52 (4)
Model 4: Four factors, SMC & SP combined	502.31	113	.82	.78	.11	< .001	582.31	341.34 (4)
Model 5: Four factors, SMC & PE combined	334.18	113	.90	.87	.08	< .001	414.18	173.21 (4)
Model 6: Three factors, SMC, PE & LGO combined	592.92	116	.78	.74	.12	< .001	666.92	431.95 (7)
Model 7: Two factors, SMC, PE, LGO & SBI combined	923.74	118	.62	.56	.16	< .001	993.74	762.77 (9)
Model 8: One factor	1268.54	119	.46	.38	.19	< .001	1336.54	1107.57 (10)

Notes. $N = 278$. LGO, learning goal orientation towards MOOCs; SBI, school brand importance; SP, self-promotion; SMC, signaling of MOOC-related competencies; PE, perceived employability; CFI, comparative fit index; TLI, Tucker-Lewis index; RMSEA, root-mean-square error of approximation; p_{close} , p value of close fit; AIC, Akaike information criterion. All χ^2 and $\Delta\chi^2$ values are significant at $p < .001$. $\Delta\chi^2$ tests are relative to Model 1.

Table 5.3

Structural models comparisons

Structure	χ^2	<i>df</i>	CFI	TLI	RMSEA	p_{close}	AIC	$\Delta\chi^2(\text{df})^b$
Model 1: Hypothesized model	340.28	177	.94	.92	.06	.08	448.28	
Model 2: Hypothesized model, with the structural path from invested effort in MOOCs to perceived usefulness of MOOCs in getting a job constrained to zero	340.31	178	.94	.92	.06	.09	446.31	.003 (1), $p = .96$
Model 3: Hypothesized model, reversed direction between invested effort in MOOCs and school brand importance	381.06	179	.92	.91	.06	.006	485.06	40.78 (2)
Model 4: Hypothesized model, reversed direction between invested effort in MOOCs and perceived employability	358.21	177	.93	.91	.06	.03	466.21	17.93 (0)
Model 5: Hypothesized model with age and gender as controls	409.19	218	.93	.91	.06	.11	525.19	68.91 (41), $p = .004$

Notes. CFI, comparative fit index; TLI, Tucker-Lewis index; RMSEA, root-mean-square error of approximation; p_{close} , p value of close fit; AIC, Akaike information criterion. All χ^2 and $\Delta\chi^2$ values are significant at $p < .001$, unless a specific p value is indicated. All $\Delta\chi^2$ tests are relative to Model 1.

5.4.3 Tests of Hypotheses

First, we examined the standardized regression coefficients for the direct effects (see Figure 5.1). Specifically, Hypotheses 1 a-c argue for positive relationships between learning goal orientation towards MOOCs, school brand importance, and self-promotion and invested effort in MOOCs. The regression coefficient for the path between learning orientation and invested effort was not significant ($\gamma = .12, p = .32$). Thus, Hypothesis 1a was not supported. However, the statistically significant parameter estimates for the effects of school brand importance and self-promotion on invested effort in MOOCs ($\gamma = .41, p = .01$ and $\gamma = .41, p = .008$, respectively) provided support for Hypotheses 1b and 1c.

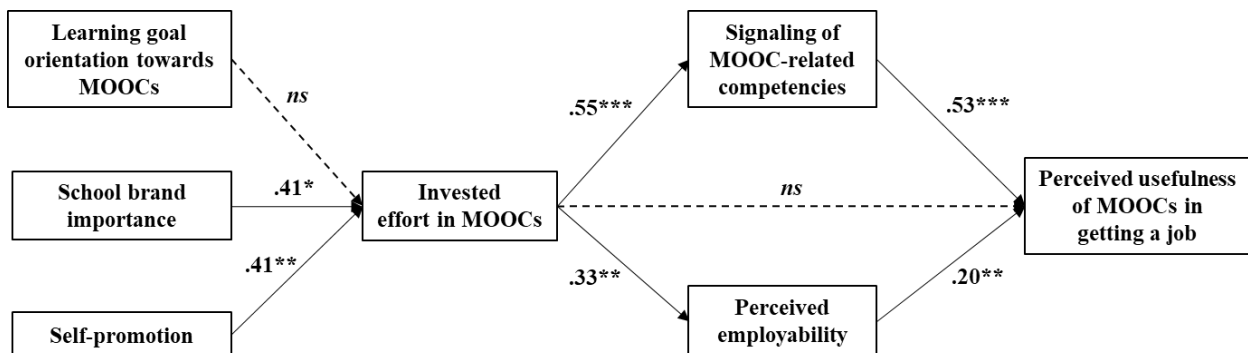


Figure 5.1. Results of structural equation model. Parameter estimates are from the completely standardized solution significant at * $p < .05$, ** $p < .01$, and *** $p < .001$. Nonsignificant paths are shown as dotted lines. This model explains 37% of all variance ($R^2 = .37$).

Hypothesis 2 argued that invested effort in MOOCs will be positively related to the perceived usefulness of MOOCs in getting a job. The path coefficient for that relationship was not significant ($\beta = .01, p = .86$), hence Hypothesis 2 was not supported. Hypotheses 3 and 4 suggested a positive relationship between invested effort in MOOCs and signaling of MOOC-related competencies and perceived employability. Invested effort in MOOCs was positively and

significantly related to both signaling of MOOC-related competencies ($\beta = .55, p < .001$) and perceived employability ($\beta = .33, p = .003$), supporting Hypotheses 3 and 4.

Hypotheses 5a and 5b stated that signaling of MOOC-related competencies and perceived employability are positively related to perceived usefulness of MOOCs in getting a job. The regression coefficients for the paths from signaling of MOOC-related competencies perceived employability to perceived usefulness of MOOCs in getting a job were positive and significant ($\beta = .53, p < .001$ and $\beta = .20, p = .002$, respectively) indicating support for Hypotheses 5a and 5b.

Hypotheses 6a and 6b suggested the mediation effects of invested effort in MOOCs on perceived usefulness of MOOCs in getting a job via signaling of MOOC-related competencies and perceived employability, respectively. The standardized indirect effects of invested effort on the perceived usefulness of MOOC in getting a job via signaling of MOOC-related competencies and perceived employability were positive and significant (estimate = .08, 95% CI [.03; .15] and estimate = .02, 95% CI [.01; .05], respectively). Thus, Hypotheses 5a and 5b were supported.

5.4.4 Additional Analyses

We performed several additional analyses to measure the indirect effects of school brand importance and self-promotion on perceived employability and signaling of MOOC-related competencies via invested effort in MOOCs. Conceptually, it is plausible that a credential attests one's association with a prestigious academic institution and helps position that individual favorably compared to others. Thus, getting a certificate could be a mechanism through which individuals signal their value to potential employers. Both indirect effects on perceived employability were significant: estimate = .13, 95% CI [.03; .26] for school brand importance and estimate = .11, 95% CI [.03; .22] for self-promotion. The indirect effects of school brand

importance and self-promotion on signaling of MOOC-related competencies via invested effort in MOOCs were stronger (estimate = .23, 95% CI [.08; .52] and estimate = .26, 95% CI [.09; .43], respectively), suggesting that school brand importance and self-promotion impact signaling behaviors more than the feeling of being employable.

5.4.5 Qualitative Findings

The complementary qualitative evidence sheds some light on how job seekers use MOOCs to gain employment. We will begin with discussing the themes and their sub-themes related to the reasons for taking MOOCs and then proceed with the discussion on how these courses help signal one's professional value and add to one's perceived employability.

5.4.5.1 Reasons to do MOOCs

In the interviewees' reflections on the reasons for taking the MOOC(s), learning orientation, the school brand, and the desire to self-promote clearly stood out as the most salient reasons.

Regarding the learning goal orientation towards MOOCs, several interviewees found their motivation in the overall desire to stay competitive on the labor market through learning new things and gaining competence. One of the interviewees noted: "From a professional point of view, it was time for me to prop up my new skills, because I did my master's degree in 2006, and things have changed a lot, so I needed something to give me an extra boost, and one of the aspects that was missing was a new trends in technology, and marketing, so I had to do something." Another interviewee echoed this idea: "I am taking the Pricing MOOC because it is a topic that I did not learn much about in my undergraduate program, learning about pricing is something that can get me good knowledge and skills when I go to the industry in the future." The following quote, probably, captures best the sentiment that the learning effort is most salient

when the content of the course is aligned with career planning: “I am registered in probably over ten MOOCs, but it is about six MOOCs that I am taking seriously, because they are more related to data science and analytics. That is my aspiration for my next career move”. These comments provide some insight on the reasons for why learning orientation was found to be not directly related to the invested effort in MOOCs. In particular, the learners’ motivation may have less to do with learning orientation per se, but with the desire to be competitive on the labor market.

Talking about the school brand, interviewees explained the importance of the school name and its reputation in their decision-making process. For instance, one of the interviewees suggested that he only chose MOOCs from universities that are on the Financial Times MBA ranking: “[I am] taking a UK-based short course, which costs five to seven times more than a MOOC. Besides, that short course – despite its cost – may not carry the same weight as this [business school name] MOOC, by a renowned university”. The opportunity to receive a qualification from a prestigious school had a greater weight than the actual course content mattered less, as this interviewee alludes to: “[business school name] is one of the best business schools in Europe and for me even the course content looks fine”. At the same time, several interviewees were talking about the school brand as a proxy for educational quality, like this interviewee: “In [business school name] the professors are better, the material is better, it gives me more opportunity and qualifies me for practical work.” So, it is possible that the school brand has more than one motivational angle: On the one hand, MOOC learners go for the bigger brands as a career tactic to signal association with a prestigious institution, and, on the other hand, for them a bigger brand appear to signal higher quality of educational experience.

What concerns the self-promotion, interviews referred to several manifestations of their self-presentation motivation to take MOOC(s). For instance, they were talking about their brands

(“recently, I started thinking how to build my own business, my own brand, so by chance I see the course, the marketing mix, and I thought that would be really fit to purpose”; “this certificate, this course – this is confirmation that I get the knowledge, and I am able to work at any company in a marketing position”), self-positioning (“From a certification point of view, it is not a degree. I do not expect them to help me directly as a recognition of my skill set, but in the longer run, they can help me position myself to make this move into insights”), and differentiation (“if I have some more knowledge in brand and product management, it is a tool that I have in my deck of cards, that could make my candidacy more attractive”). One of the interviewees dwelled further on how MOOCs could be used as a self-promotion tool: “These MOOCs send a signal to employers that the person is constantly learning, it is not just a person who comes to workplace, sits there for eight hours and goes home, but it is a person who wants to know something and create something and to really work.”

5.4.5.2 Using MOOCs to signal professional value

Interviews have seen employability to be an important outcome of investing in MOOC. The qualitative findings also lend support to the view that individuals use MOOCs as a signaling tool. Mentioning the MOOC on the LinkedIn profile was a recurring theme throughout the interviews. An interviewee told us, “So far I have done only one MOOC from Bocconi, which I have used on my LinkedIn profile. And that has really helped me. People get to know that I am an accomplished faculty with a certificate from one of the most accomplished institutions in the world and that really adds value to it. It is the reputation of the school, and the certificate.” Similarly, several respondents reported mentioning the MOOCs on the resumes: “I can tell you my motivation to get a certificate from you: I know your business school <...> so I have already put your school on my resume, to open doors for me”; “I list these MOOCs on my resume, when

I feel that they are relevant for the position, I list them. When they do not fit the position, then I do not because I do not want to look like somebody who does not know what she wants”. These job seekers seem to be selective about which courses they feature of their resumes in order to present a coherent story to the employer. Also, there are instances when the motivation to complete a course is clearly linked to the goal of using the certification in job search, like this interviewee: “My only objective is to do the capstone so that I can resume build.”

One of the surprising ways that individuals use MOOCs is to prepare for the interviews, as we heard from several interviewees. For example, one of them said, “I was going to have an interview for a job that was about data analyst, but the industry was very specific, it was retail industry, I had no experience with retail. In order to improve my vocabulary at least, if not my knowledge, I searched Coursera with the word ‘retail’ and then for two days I watched this MOOC”. This is one of the cases when learners may audit the course without the intention to get the official credentials, pursuing interview preparation as a concrete objective.

5.4.5.3 The Value of MOOCs

The quantitative data indicated that invested effort in MOOCs led to greater perceived employability: Associating oneself with a prestigious school brand, even if it only involves taking a MOOC from that school, brings about positive career outcomes. Yet, our interview findings point to the fact that some of the learners do not believe that the human resources professionals and the hiring managers have embraced the idea of MOOCs as an alternative credible learning option yet. The answers varied from the interviewees from different countries, which may indicate some cultural differences in approaching recruitment across cultures. For example, one of the interviewees explained “I have put MOOC courses on my LinkedIn profile, but I do not think that that will be really recognizable by the employer.” Other interviewees

noted: “There is not much recognition for MOOCs in Singapore at this point. Probably employers do not know that these MOOCs exist at the moment in Singapore” or “Employers in Russia, they look at it and then they just check you when you start working. Because in Russia you can buy diplomas”. Interestingly, the interviewees from Western countries were more optimistic about potential employers’ recognition of MOOCs: “MOOCs do make a difference to employers, but it also depends on how much time we invest in the MOOCs, so it goes both ways” and “I have experience with two managers. One of them said that she does not approve MOOCs and she believes only in real business experience. And the others they said, we are very impressed that you took all these MOOCs, it looks like you really want to improve yourself”. It appears that there are cultural differences across geographies in how employers view the value of knowledge and skills conferred via MOOCs, as well as individual differences among various managers.

5.5 Discussion

Finding a job remains an acute issue in today’s rapidly changing work environment, characterized by such phenomena as digitalization (Gandini, 2016), a gig economy (Gandini, 2018), an aging workforce (Thijssen, Knies, & Leisink, 2014), and precarious employment (Vallas & Christin, 2018). Rapid upskilling and re-careering are deemed essential career competencies in this context, which can be supported by various technology-enabled learning options, such as MOOCs. The main goal of this paper was to understand why people invest effort in doing MOOCs and how it leads to positive job search outcomes. Our findings revealed that of the examined reasons for investing effort in doing MOOCs, school brand importance and self-promotion were the key motivations for doing so, while learning goal orientation towards MOOCs was not. Furthermore, our study explains why MOOCs are related to positive career

outcomes. Specifically, the results of the SEM analyses revealed that invested effort in MOOC was positively related to perceived usefulness of MOOCs in getting a job through both signaling of MOOC-related competencies and perceived employability. However, the effect of signaling was stronger than that of perceived employability. This may indicate that investing effort in MOOCs relates to beneficial career outcomes more due to signaling one's professional value than increasing one's human capital. With these findings we make several important contributions.

5.5.1 Theoretical Contributions

First, using Côté and Levin's (1997) motivational typology of the reasons to pursue higher education as a framework to structure the antecedents of invested effort in MOOCs, we expand the knowledge of the reasons why individuals pursue MOOCs. So far, previous studies have focused on primarily demographics and personal qualities (Greene, Oswald, & Pomerantz, 2015; H. Macleod, Haywood, Woodgate, & Alkhatnai, 2015; Williams et al., 2018), course characteristics (Alraimi et al., 2015), and utility (Tracey, Swart, & Murphy, 2018). The present study explored the economic motives to signal professional value and self-presentation motives to self-promote. We provide evidence that school brand importance and self-promotion are important drivers in the decision to invest effort in MOOCs, which enhances the learner's ability to signal MOOC-related competencies in line with the signaling theory and increases perceived employability, as explained by the human capital theory.

Second, much to our surprise, we did not find that learning goal orientation towards MOOCs was significantly related to invested effort in MOOCs. This could be explained by the fact that individuals high in learning goal orientation towards MOOCs would choose to audit the courses and not necessarily pursue the certification. As one interviewee said, "I try to pick up as

much, be up to date with what is going on in the industry and I thought that doing the MOOCs would help me be current”. Prior research showed that MOOC learners joining the course with a salient reason to receive a certificate of completion demonstrated significantly lower perception scores in general learning compared to those doing MOOC with a primarily learning motivation (Watson et al., 2016). Similarly, in a different study, those low in self-regulated learning were vague about their learning goals but very specific about the extrinsic motivations, i.e., obtaining a MOOC certificate (Littlejohn, Hood, Milligan, & Mustain, 2016). These results point towards the careerist-materialist motivation of the Côté and Levin’s (1997) framework being more dominant than the personal-intellectual development motivation for the MOOC learners who are not in employment. The qualitative insights deepened our understanding of the different reasons why people take MOOCs and with what career outcomes. The finding about the differences in the employers’ perceptions of MOOC certification is of particular interest, and it adds to our knowledge of how recruitment is organized in diverse cultures (Ma & Allen, 2009).

Finally, another contribution of this paper lies in the finding that invested effort in MOOCs, such as getting a certificate or taking several courses belonging to the same specialization, leads to positive career outcomes, such as getting a job. Specifically, we found that invested effort in MOOCs is strongly related to signaling of the MOOC-related competencies and perceived employability, which, in turn, are positively related to perceived usefulness of MOOCs in getting a job. Coined as “employability 2.0” (Bridgstock, 2019), we should continue studying this phenomenon of relying on and using technology to engage with information and learning to be competitive on the labor market. Also, this paper extends the research on signaling in job search (Bangerter et al., 2012) by adding the element of emerging

technologically-enabled learning opportunities to upskill oneself to stay abreast of the fast changing work requirements.

5.5.2 Limitations and Directions for Future Research

This study has some notable limitation. First, we acknowledge the use of self-reported measures in our study. While the use of such measures is justified in the research of motivation and subjective career success, it would add robustness to include other sources of data, such as others' assessment of the learner's employability or difference between the last and new salaries.

Second, our primary focus was to study using signaling of MOOC-related competencies among those who are not in employment at the time of taking the course. This study offers valuable insights regarding using MOOCs as a job search strategy and sheds light on the antecedents of the effort invested in completion, but further research is needed to establish the generalizability of the findings. Such research also should extend beyond one particular business school, the marketing specialization that the courses belonged to, and the specific MOOC platform to better understand how MOOCs uniquely contribute to career success across a variety of settings.

Another limitation of this study is that the data were collected at one time only. Although two of the predictor variables, namely self-promotion and learning orientation, are strongly driven by personality characteristics or deep-rooted beliefs that do not change quickly (see, e.g., Bourdage et al., 2015; Dweck, 2008), which allowed us to include them in the proximal part of the model, future studies should measure the predictor and outcome variables at several times to mitigate the common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). We cannot be fully confident in drawing conclusions from cross-sectional data.

Lastly, the scope of this study was to examine a small part of the motivational spectrum to engage in MOOCs. Future studies could look at other predictors, such as level of education to test the hypothesis that people turn to MOOC certificates in order to make up for their lower educational level, the prestige of the person's current educational qualifications, macroeconomic indicators of the country of residence (e.g. number of highly ranked universities or GDP per capita).

5.5.3 Practical Implications

We suggest three implications for the practice at the industry, institutional, and individual levels. Overall, our finding that learning orientation was not significantly related with invested effort provides support to Ho et al.'s (2014) recommendations for MOOC providers to re-think the metrics for the impact of MOOCs, as many MOOC learners may merely audit the courses to gain new knowledge and skills with no intention to obtain official certification. On the employer side, companies should formulate their internal philosophies around the weight they assign to MOOCs that the job candidates have completed, and they also should consider whether MOOCs are a viable alternative to traditional courses. An interviewee who was launching his startup commented:

In this instance as a business owner, the question is, would I use a MOOC or would we compensate for a MOOC? Potentially, if it was applicable, we do pay for our employees to get certifications, so if they take a test and pass the test, we'll pay for that test. I guess the importance for us as a business is not necessarily that they have a certification... It is too early to answer your question because we have just started sending our managers to a MOOC environment, and I am not sure if we are going to require that they get a certification to complete the course, or just audit it.

There is a marked trend to integrate MOOCs into the overall employee development strategy, but also there are many unleveraged opportunities: Companies have been cautious in using MOOCs to upskill their employees (Hamori, 2018). Thus, the topic of the employer sentiment towards MOOCs needs to be addressed in the future research.

Second, the topic of university branding has attracted much attention recently (Eldegwy, Elsharnouby, & Kortam, 2018; Nguyen, Melewar, & Hemsley-Brown, 2019; Rauschnabel et al., 2016). In a study conducted by Hollands and Tirthali (2014) higher education institutions cited that the initiative to enter the MOOCs area was a strategic goal to achieve better branding, positioning, and attracting new students. However, if previously the status and brand of a university was defined by academic parameters, increasingly it becomes a “rankings game”, where business schools may care more about the image than the educational value they provide (Corley & Gioia, 2000). Therefore, the academic institutions should maintain balance between their brand positioning and the value that they signal with the MOOC credentials. It would be an interesting avenue for further investigation to see whether such balance, indeed, confers positive benefits to both the institution and the learners.

Finally, our findings could serve as practical guidance for individuals in their job search activities. Specifically, doing a MOOC in the area aligned with the requirements of the desired role could be an effective career tactic. McKinsey & Company, an authoritative management consulting firm, suggests that continuous learning through MOOCs is not enough for career success unless made visible through personal branding (Brasse, Van Dam, & Coates, 2019):

[Individuals] can use social media tools to help convey that brand and their skill set. For example, it's possible to earn digital badges for a LinkedIn profile through online

learning vendors such as Coursera, edX, Lynda.com, and Udemy. Such badges demonstrate not only a person's skills but also their commitment to continued growth.

5.6 Conclusion

In their review of literature on business school education, Pfeffer and Fong (2002) concluded that grades or degrees had little or no bearing on future career success, while the brand of the school did: "It is not education in business but selectivity that is being assessed" (p. 82). This paper suggests that when seeking greater employability factors other than learning goal orientation may be more important: Just getting new knowledge and skills does not guarantee gaining employment. Therefore, pursuing a prestigious school brand may be more effective in signaling professional value than learning the subject matter in detail.

In the context of contemporary careers, characterized by frequent changes of employment settings, employees are increasingly more responsible for own career development (Guan et al., 2019). They are likely to change several employers and professions along the course of their careers, and it requires investment in own education and growth. This paper has expanded the repertoire of theoretical lenses for understanding why individuals engage in MOOCs as a strategy for signaling own professional value and maintaining employability in order to obtain employment. A recent article in *The Economist* talks about novel MOOC-like solutions to enable learners switch jobs faster in such traditional areas as nursing, with plans to expand the offering to the spheres with the biggest job shortages (*The Economist*, 2019). It is our hope that this article serves as a small stepping stone in broadening the research on signaling in job search that leverages novel learning solutions.