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Jeske, D. and Axtell, C.M. (2018) The Nature of Relationships in e-Internships: A Matter of the Psychological Contract, Communication and Relational Investment. *Journal of Work and Organizational Psychology*, 34 (2). pp. 113-121. ISSN: 1576-5962

<https://doi.org/10.5093/jwop2018a14>

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Journal of Work and Organizational Psychology

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The Nature of Relationships in e-Internships: A Matter of the Psychological Contract, Communication and Relational Investment

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ARTICLE INFO

Article history:
Received 16 February 2018
Accepted 12 April 2018

Keywords:
Virtual internship
e-Internship
Psychological contract
Computer-mediated communication
Technology

Palabras clave:
Prácticas virtuales
e-prácticas
Contrato psicológico
Comunicación a través de ordenador
Tecnología

ABSTRACT

Virtual internships (or e-internships) represent unique transitional and temporary learning experiences that have not been studied widely. Using 18 interviews conducted with interns and internship providers, the authors explored the extent to which psychological contracts appear to emerge and operate within this computer-mediated context. The results were analyzed using thematic analysis. The findings indicate that while e-internships are temporary and hence transitional, they are not inevitably transactional. Relational and balanced contract characteristics are not necessarily uncommon in e-internships when these feature supervisory engagement and commitment to the e-internship as well as the customized use of technology to interact, monitor, and engage with interns.

La naturaleza de las relaciones en las e-prácticas: una cuestión de contrato psicológico, comunicación e inversión en relaciones

RESUMEN

Las prácticas virtuales (o e-prácticas) representan experiencias únicas de aprendizaje temporal y transitorio que no han sido muy estudiadas. Usando 18 entrevistas realizadas con estudiantes en prácticas y con los proveedores de éstas, los autores exploraron hasta qué punto en este contexto mediado por ordenador parecen surgir y operar contratos psicológicos. Los resultados se analizaron usando análisis temático. Los hallazgos indican que aunque las e-prácticas son temporales y, por ello, transitorias, no son inevitablemente transaccionales. Contratos con características equilibradas y relacionales no son necesariamente infrecuentes en las e-prácticas cuando las mismas presentan el compromiso y la implicación de la supervisión con las e-prácticas, además del uso personalizado de la tecnología para interactuar, controlar, e implicarse con internos en prácticas.

Employment relationships are undergoing rapid change as both organizational, industrial, and technological changes alter the expectations that employees and employers have of each other. Today, technology provides the means for internship programs to be virtual, involving interns and organizations that are geographically distant from one another. These types of computer-mediated internships are also known as virtual or e-internships (Jeske & Axtell, 2013; van Dorp 2008). Two virtual types of such internships exist (Bayerlein & Jeske, 2018): those learning experiences that are entirely simulated to support knowledge and skill acquisition (e.g., Arastoopour, Shaffer, Swiecki, Ruis, & Chesler, 2016; Bayerlein, 2015) and those learning experiences that are inspired by tele-working, involving an actual employer but featuring remote working situations (e.g., Jeske & Axtell,

2013; Jeske & Axtell, 2016a, 2016b). Virtual internships represent special temporary employment situations that feature specific challenges in terms of how information is shared and the extent to which information will be similarly interpreted and accessed.

Reports based on internship postings for e-internships and self-report data from e-interns working with employers suggest that these internships may last from a few weeks to more than 12 months (Jeske & Axtell, 2013; Jeske & Axtell, 2018). Most e-internships last for up to three months, with more than two thirds working part-time 10-20 hours per week (Jeske & Axtell, 2013; Jeske & Axtell, 2018). However, in many cases the duration and hours worked per week are flexible in line with the fact that most virtual interns to date are studying at the time they take up virtual internships, a situation that may change

Cite this article as: Jeske, D. & Axtell, C. M. (2018). The nature of relationships in e-internships: A matter of the psychological contract, communication and relational investment. *Journal of Work and Organizational Psychology*, 34, 113-121. <https://doi.org/10.5093/jwop2018a14>

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as these become more well known outside academia. As such tend to lack the permanency and continuity usually associated with other forms of employment (De Cuyper et al., 2010). Employers offering e-internships have been recorded in over two dozen countries, and include organizations such as non-profits, for-profit companies, and government agencies (Jeske & Axtell, 2013; Jeske & Axtell, 2018). Qualitative research further suggests that many employers are small and medium-sized employers, including start-ups and entrepreneurs (Jeske & Axtell, 2016a, 2016b).

It is currently unknown to what extent the computer-mediated nature of work or internships influences the expectations and beliefs formed by employers and interns, and thus, the nature of psychological contracts in e-internships. These internships forms have been around for about 10 years but not been studied in terms of the performance, training, and general management challenges that arise for supervisors in such computer-mediated settings.

The focus of this article is to consider whether and which type of psychological contracts may emerge in e-internships. This research builds on two particular references. First, McLean Parks, Kidder, and Gallagher (1998) discussed how contingent work arrangements mapped onto the psychological contract. They argued that the dimensions of the psychological contracts may be more generalizable across other work arrangements, national boundaries, and jobs than previously assumed – moving the emphasis away from the content of the psychological contracts. Their suggestion is revisited in the context in the e-internships as these are indeed contingent and cross national boundaries, and may occur in a number of sectors. The second reference pertinent to this work is the work by Pate and Scullion (2016). These authors considered how international assignments, specifically flexpatriation. This describes a situation where individuals take frequent international business trips abroad without relocating. E-internships may similarly require immersion without long-term commitment. Like McLean Parks et al. (1998) previously, Pate and Scullion (2016) utilized the psychological contract to examine specifically the human resource management challenges. The next two sections provide more context. The first section summarizes the main characteristics of the psychological contract as a concept. The second section captured our research questions regarding the nature of e-internships in terms of psychological contract characteristics, also reflecting on the issue of technological determinism via the reliance on computer-mediated communication (CMC).

The Psychological Contract

The concept of the psychological contract has been researched, defined, and shaped by a variety of prominent researchers such as Argyris (1960), Levinson, Price, Munden, Mandl, and Solley (1962), and Blau (1964). This paper utilizes the work by Rousseau (1989), as her approach focused on the very individual nature of perceptions and beliefs surrounding the psychological contract and its content which, given the computer-mediated nature of e-internships, represents the most suitable framework, as e-internships are usually temporary but may be long-term, characteristics in common with psychological contracts (Rousseau 1995). Psychological contracts may be further differentiated in terms of the performance requirements (Rousseau 1995), which may vary in terms of their generality and specificity.

These characteristics are components of the four psychological contracts that have been proposed in the literature – transactional, relational, balanced, and transitional contracts. Transactional contracts tend to involve the “short-term exchange of specific benefits and contributions that are highly monetary or economic in focus” (Hui, Lee, & Rousseau, 2004, p. 312). The work within such a contract typically takes place in a limited time frame, requires little or no personal involvement and the job may include no room for flexibility or skill development (Millward & Brewerton, 2000). Such

contracts therefore often feature little ambiguity and highly specified tasks (Rousseau, 1995). Beyond completion of these tasks, no other commitment is specified (Millward & Brewerton, 2000; Rousseau 1995). These circumstances also result in weak integration of the short-term employees within their organization (Rousseau 1995).

Relational contracts tend to involve open-ended or longer-term employment situations (Millward & Brewerton, 2000). Both employees and employers invest in the relationship, employees in terms of their skills and the employer in terms of training and reward (Rousseau, 1995). However, the relationship between performance and reward may be less specific (Hui et al., 2004), while the contracts are more subjective, subject to change, and include more implicit expectations. As a result, the relational psychological contract has also been compared to a more traditional working relationship, that of a working partnership (Millward & Brewerton, 2000).

Balanced contracts are those that are open-ended, while also including specific performance-reward contingencies that characterize transactional contracts (Hui et al., 2004). These contracts involve long-term employment situations that are both open-ended and dynamic and offered depending on the organization's success (Rousseau, 2000). In exchange for this work, employees receive performance-based rewards and opportunities to develop their career. They work closely with one another, help each other develop, support each other, and are therefore highly committed to one another (Rousseau 1995).

Transitional contracts are those associated with less desirable characteristics, more likely to be found in short-term employment situations. In other words, it is a contract governing expectations about money for work rendered. It is devoid of any security or commitment expectations. These contracts are often experienced during rapid change in organizations, such as restructuring or mergers. Such unstable situations foster greater ambiguity and uncertainty, which may also lead to unspecified performance terms and expectations, turnover, and terminations (Rousseau, 1995), especially in the absence of performance feedback (Ashford, Blatt, & VandeWalle, 2003).

Psychological Contracts and e-Internships: Research Questions

The differences in terms of how such internships are designed, and the extent to which they allow for social interactions, may shape which beliefs individuals form about their obligations to the company. This may also set the stage for some psychological contract types to be more predominant than others in e-internships (see Figure 1).

In the current paper, three research questions are explored. All questions concern the relationship between the structural components of e-internships and the nature of the relationships that emerge. The selected research questions (RQs) are based on several data collection rounds including the reviews of internship posts, interviews, and self-report surveys with providers and e-interns (Jeske & Axtell, 2013, 2016a, 2016b, 2018). In the next paragraphs we present each question followed by the rationale for this question.

RQ 1: Greater frequency of communication via different media will improve the quality of the relationship, task clarity, and knowledge exchange.

The extent to which e-internships may exhibit features commonly associated with psychological contracts (e.g., balanced, relational, transactional, or transitional contracts) may depend on the specific circumstances encountered in each e-internship. One characteristic may be key, namely, communication from both the employer and intern (see also Guest & Conway, 2002) as the effective use of communication supports clarification of organizational promises and commitments (Guest & Conway, 2002), particularly when employees face change or, we might argue, uncertainty as e-interns (van den

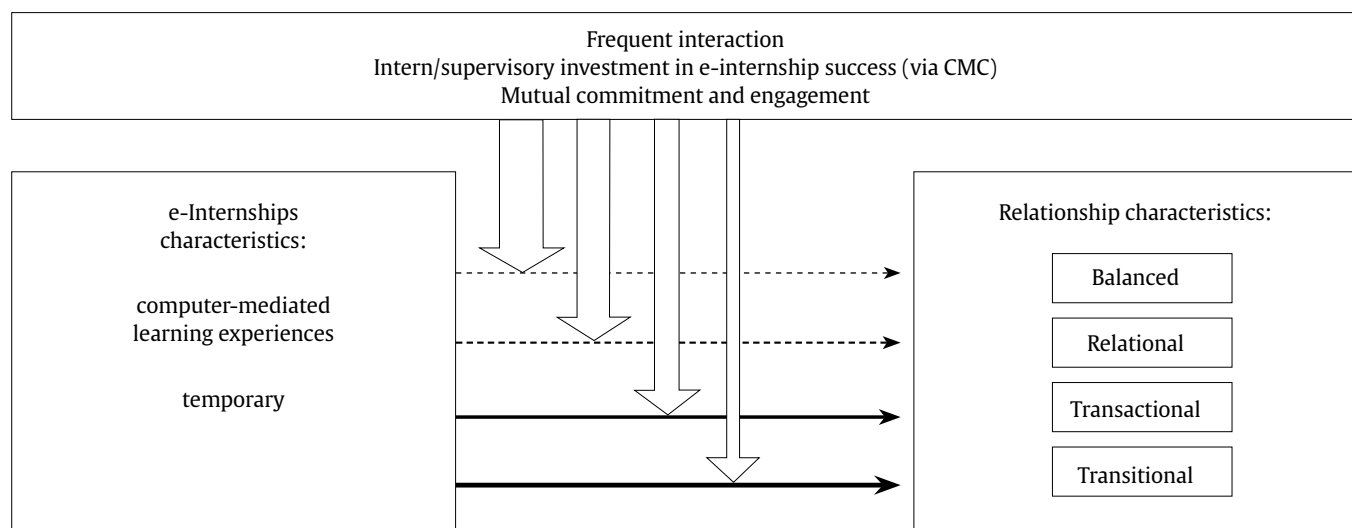


Figure 1. Proposed Default Characteristics of e-Internships and Moderators Influencing the (contract-specific characteristics of the) Relationships that Emerge.

Heuvel, Schalk & van Assen, 2015). Specifically, it is proposed that when technology is employed effectively to balance the needs of the business with the needs of the e-interns, psychological contracts in virtual internships may take more positive forms, reflecting mutually supportive relationships that provide room for skill and personal development. Some evidence for the importance of relationships in e-internships and e-interns' personal and skill development comes from recent work that showed that e-interns feel more appreciated and valued by their employees when they receive training and potentially also remuneration (Jeske & Axtell, 2017). In this paper, we explore which (structural and technology-specific) characteristics – such as communication frequency – may contribute to the creation of more relational and balanced relationships in virtual internships.

RQ 2: Relational (e.g., supervisory) investment (e.g., in terms of training and time) will play an important role in progressing the relationship between the e-intern and supervisor beyond a simple exchange of task-related materials.

Recent work suggested that employees usually interact with numerous others within organizational settings, which may also prompt a change in terms of how psychological contracts are developed via these interactions (Alcover, Rico, Turnley, & Bolino, 2016b). This new conceptualization also changes the relationship from a bilateral (employee to organization) to one including multiple relationships, leading to a more multi-foci exchange model of the psychological contract (see details in Alcover et al., 2016b). This new perspective captures the role of multiple influences in how relationships and exchange expectations are informed, a consideration also for future computer-mediated employment situations as well. But current research suggests that in most instances we are aware of, e-interns still interact with a very limited number of contacts as part of small teams in most cases (Jeske & Axtell, 2018). This normally includes the supervisor and occasionally also fellow peers, in some cases also additional mentors or trainers, a relationship that may feature varying degrees of contact, mutual learning, temporary, and long-term commitment (see also Jeske & Axtell, 2016b).

This means that in contrast to multiple relationships supporting a multiple-foci exchange relationship, or multiple dependencies (see Alcover, Rico, Turnley, & Bolino, 2016a), the relationship with the supervisor in e-internships may be the most important of all – supporting the bilateral rather than multiple relationship focus usually found in the traditional psychological contract literature (e.g., Lester, Turnley, Bloodgood, & Bolino, 2002). This has implications

for the degree to which this one person may shape the experience of e-interns. One of the related suggestions by McLean Parks et al. (1998) is that that psychological contracts of contingent workers are narrower in scope.

However, this suggestion has not been tested in relation to e-internships – and the incorporation of communication technologies and supervisory investment may support contract development in similar form as for other temporary employment. Instead, we posit that balanced and relational psychological contracts are much more likely to arise when all parties show mutual commitment and engagement to make the e-internship a successful as well as rewarding experience for both sides. This commitment also requires a significant investment from the organization. Accordingly, the likelihood of certain contract types to emerge is proposed to be greater (as indicated by the strength of the errors in Figure 1) when the supervisor and e-intern invest and commit to the e-internship. The elements in the top box of Figure 1 therefore operate like moderators, modifying the relationships and depending on their presence or absence, suggesting different relationship outcomes. In other words, exchanges that also allow time for discussion of ideas and sharing of knowledge will also potentially build trust and commitment (although we readily acknowledge that both parties need to be willing to invest effort for these outcomes to be obtained). This means the role of the supervisor in this virtual setting, and as a virtual leader managing an online team, is central for successful interaction and knowledge exchange to occur.

RQ 3: The influence of technological limitations on the formation of psychological contracts in e-internships will be attenuated, or even overcome, by the effective utilization of technological affordances.

The third question connects both the first and second research questions. Some organizations apply technology to the organization or work processes rather than fitting technology to existing processes (Grant, Hall, Wailes, & Wright, 2006). By doing so, they run the risk that the features of the technological systems are either incompatible with practices (creating resistance) or enforce routinization and standardization in places where these may be detrimental to performance, employee engagement/agency, and commitment to the organization. Some evidence of this nature has been observed in call centers that introduced new information systems (e.g., Grant et al., 2006). In the case of e-internships, we might deduce that the heavy reliance on computer-mediated communication and short-term nature of such internships will inevitably result in transactional

relationships by default, suggesting a technologically deterministic stance. However, if the opportunities for social interaction and knowledge exchange afforded by today's technology are utilized in e-internships (resulting in increased availability of supervisory support and resources), psychological contracts may also take the form of relational and balanced psychological contracts. In other words, it should also be possible to balance the technical and social demands and overcome the technologically deterministic default of e-internship as merely transactional arrangements. Such steps may also avoid the ambiguities and misunderstandings of obligations that may arise for e-interns and their internship provider, concerns raised in relation to the ad hoc management of temporary international appointments (as suggested by [Pate & Scullion, 2016](#)).

Method

Procedure

Interviewees were recruited using two means. First, the researchers identified and contacted a number of organizations that offered e-internships. Second, we contacted a variety of e-interns who had completed our online survey on internships and agreed to be contacted about their experience.

All interested contacts were informed about the purpose of the interview and given the set of interview questions ahead of time in order to make an informed decision. They were informed that a number of safeguards were in place to ensure that their personal information remained confidential. All interviews were conducted via Skype. None of the interviews were recorded. All interviews involved extensive note-taking. All materials were used to produce a write-up for each interviewee. All interviewees were asked to read and approve the summary (or amend it) before their information was used in further analysis. In some cases, quotes were retained from email correspondence and clarifications provided by the interviewees on the summary. All personal information was replaced with anonymous codes before data was used for analysis. This ensured both confidentiality of reports and allowed interviewees to clarify their views to avoid potential misunderstandings.

Participants

In total, 18 individuals agreed to participate in the research study. In two cases, the contacts preferred to email their responses. The organizational interviewees were business owners, directors of the companies, managers, and internship coordinators and located in four different countries (eight in the USA, three in India, one in Ireland, and one in Hungary). Seven out of the 13 organizational interviewees worked for micro-sized companies (up to nine employees for start-ups), five for small enterprises (up to 49 employees) and one for a department in a large public organization. The organizations had developed their e-internship schemes between 2000 and 2013, with over half having only started them from 2011 onwards. Ten organizations were for-profit-organizations, three operated as not-for-profit operations. Recruitment for e-interns varied, six organizations only recruited nationally while the other half also recruited internationally. The business activities of the organizations included predominantly marketing, journalism, and public relations activities, as well as consulting, software development, education and assessment.

Across the 13 organizations altogether, around 150 e-interns were recruited per year (minimum of 2 interns, maximum of over 50 interns per organization). All internship organizations had implemented their schemes between 2000 and 2013 (with internships lasting usually from two to six months). The number of interns in each company varied from two to over fifty interns per year.

The e-intern interviewees completed their internships in 2012 to 2013 in the UK, US, and Australia for four for-profit organizations and one not-for-profit organization. Four organizations were SMEs and one was a larger organization. Three of these internships were entirely virtual, while two involved at least one on-site visit. The five e-interns worked on their own rather than in teams. A third of the e-internship schemes discussed by the organizational representatives required teamwork amongst e-interns.

Interview Guide and Evaluation

All interviewees were given a semi-structured interview guide. The topics of the interview focused on: company description, internship selection, application process, work, mentoring and training, evaluation, practical repercussions of the e-internship, and recommendations for the design. The interviewees were also asked to outline their experiences, nature of the work (whether independent or in teams), and outcomes of the experience. The questions were similar for both organizational representatives and interns. Internship and organizational characteristics were also collected. These included: size of the organization, location, company type (for-profit/not-for-profit organizations), the year that internship schemes were first tried in the organization, number of interns usually recruited per annum, overall number of interns recruited so far, remuneration (payment, stipends, commissions, or other monetary rewards), duration of internships (in months), hours per week interns would normally work, focus of internship (independent, teamwork, or both), and traditional and/or e-internship recruitment.

Data Analysis

All data was subjected to template analysis ([Brooks, McCluskey, Turley, & King, 2015](#); [King, 2012](#)). This is a form of thematic analysis that uses a higher coding structure (similar to thematic approach by [Braun & Clark, 2006](#)) and utilizes a priori themes ([Brooks et al., 2015](#)). However, this approach does not differentiate between descriptive and interpretative themes. Since we used a semi-structured interview guide which included questions about critical incidents, this approach enabled us to develop a list of a priori themes which we could redefine upon initial engagement with the literature, with modifications being made to themes in response to the data. A similar approach was also used by [Nadin and Williams \(2012\)](#) to explore employer perspectives of psychological contract violations. Template analysis thus enables the researcher to respond to the richness of information that may be obtained in response to specific research topics. This resulted in a preliminary first-level coding template to support the interpretation of the qualitative data. The data were analyzed from the transcripts without the use of software. Only a number of key quotes were transcribed.

The themes were first identified in the literature on internships and then verified in the three interviews. The main themes were: remuneration, security and commitment (temporary vs. long-term employment), training (or mentoring), and expectations regarding the tasks to be completed. Additional themes emerged in the interviews: ambiguity and uncertainty in tasks/communication, close supervision/support, and availability via different communication tools. The final coding scheme to support second-level analysis was developed to aid interpretation and draw conclusions. This scheme incorporated the characteristics of the different contract characteristics as a framework for the analysis of the interview data, with additional attention paid to the role of communication technology and its use in e-internships. Using this scheme, each e-internship interview was examined in terms of whether or not they met the characteristics outlined for each contract type (right column in [Table 1](#)).

Results

General Characteristics

The general findings of the interviewee reports (see Table 1) can be summarized as follows. First, preliminary analyses showed that on average, across all eighteen reports, the internship reports appeared to share some characteristics from several contracts at a time. All internships were temporary (although a number of organizations also go on to recruit employees from their internship pool). The consideration of the three research questions required us to evaluate our findings across all themes. We tackle the findings in relation to our three questions separately.

All e-internships shared some similarities, most notably in relation to the transitional contracts. As a result, the characteristics were summarized here. The remaining results were summarized (in Table 1). The large majority of interviewees (16 out of 18) reported that the e-internship was temporary. There were no expectations of job security (18 out of 18) or expectations of long-term commitment (17 out of 18). Ambiguity (17 out of 18) and uncertainty in tasks/jobs was low across the board (16 out of 18), possibly due to the clarity that is required for interns to work on their own. All 18 interviewees reported largely clear task expectations. Commitment was expected only for the duration of the internships. Guidelines and performance expectations were seen as relatively clear (15 out of 18). None of the interviewees reported that the organizations were restructuring or undergoing organizational change at the time of the interview. In only very few instances did the e-internship require e-interns to work with one or more team members; almost all interaction were dyadic – as a result of which we are focusing on this dynamic alone (virtual team dynamics were not a core component of the present research).

Transitional contract characteristics were more likely to be mentioned by interviewees who were interns, possibly because they were clearly on the periphery of the employing organization. The large majority of interviewees would meet at least some of the 12 relational or balanced contract characteristics outlined in the introduction. Table 1 provides a short summary which provides an

overview of findings, particularly in relation to the kind of relational or balanced contract characteristics that may emerge in e-internships.

RQ 1: Communication Frequency

RQ 1 hypothesized that the frequency of interaction via different media may improve the quality of the relationship, task clarity and knowledge exchange. We saw some evidence in support of this question in terms of the quality of the relationship and knowledge exchange. Indeed, the e-internships that exhibited transactional contract characteristics often featured limited personal involvement, both from the supervisor and e-intern. These interns would be expected to work alone with minimal or no interaction. The reports from half of our sample suggested that the relationship was very limited and never evolved beyond a temporary arrangement in line with a transitional and transactional contract. Accordingly, there was no room for either flexibility or skill development, which is not uncommon amongst other temporary workers such as agency workers (Chambel & Castanheira, 2012).

Communication frequency appeared to be a major difference between internships that were largely transactional and internships that tended to exhibit more characteristics found in relational or balanced contracts. In transactional internships, daily interaction and informative feedback was limited and often occurred maybe once a week or even less often. Follow-up evaluations of work that had been submitted by e-interns were exceptions rather than the norm. Communication patterns were more one-sided and did not serve as a means to develop a relationship. This was also reflected in the reports of three interns who felt hesitant to contact their supervisors about non-work related issues or ask for help when the communication was predominantly via email.

In contrast, a number of internships involved more regular and frequent communication between interns and their supervisor or teams and a number of training options. In these situations, supervisors tended to use various tools to increase their availability (e.g., all-day via chat during working hours). One organizational representative and supervisor stated: "I'd say that the most important

Table 1. Characteristics across Internships (template elements listed on the left, with evidence across each interview)

Themes	Transactional	Relational	Balanced
Remuneration	A common denominator across all relationships was that the large majority were unpaid. However, this did not necessarily immediately predict the nature of the relationship. How e-interns were remunerated depended on the employer but also the task (e.g., stipends similar to traditional internships). Performance-reward contingencies (7 out of 18) were noted in half of all e-internships that featured several characteristics. In one case, some interns earned small fees for contributing to consulting projects.		
Security and commitment	About a third (5 out of 18) interviewees reported no long-term or mutual commitment (very clearly temporary).	A number of the interviews reported that organizations also considered or have recruited employees from their internship pool (7 out of 18).	High commitment to the e-internship was expected by just about two thirds of interviewees (11 out of 18).
Training (or mentoring)	Half of the interviewees (9 out of 18) reported no skill development of any kind.	Half (9 out of 18) of the interviewees reported that at least some – though often minimal - training was available.	In line with the training report, half of the interviewees reported continued skill development (9 out of 18).
Task expectations	However, there was some uncertainty about performance expectations (3 out of 18, all interns).	Very few interviewees reported variable deliverables (2 out of 18), as overall the e-internships were very highly structured – in contrast to more relational contracts. Since balanced contracts tend to involve closer work relationship (10 out of 18) and mutual support (11 out of 18), we can deduce that task expectations would be clarified as part of this interaction and reduce any ambiguity and uncertainty about the work further.	
Close supervision/support	Just over a third (8 out of 18) reported that the e-internship required no or very limited personal involvement with a supervisor.	Two thirds (12 out of 18) of interviewees found e-internships to be mutually satisfying and supportive.	A closer work relationship with supervisors (10 out of 18) was observed among many internships that shared several characteristics with balanced contracts.
Use of tools	Reports of internships that required less inter-dependent or team working also generally lacked training (4 out of 18), which may explain why interaction frequency and use of tools tended to be less essential.	Some inter-dependent team work is part of relational contracts. This was reported by 12 out of 18 interviewees (less relational and balanced e-internships usually featured less inter-dependencies).	The large majority of interviewees (16 out of 18) suggested that the intern needed to collaborate at least to some degree with the supervisor or a team in order to accomplish the task/project effectively.

Note. The transitional contract was excluded from the list as all internships were temporary arrangements.

structural aspect of virtual internships is to assign very specific, short-term tasks, so you can review the intern's work early on and often in the beginning, and guide accordingly." Another interviewee stated: "... since the world is all connected now, I can rely on outside force work without any problems and track their work through proven systems [... video links, data and communication management tools], where I can follow comments and communicate live with all my workers."

Frequent communication was also linked to the use of performance monitoring tools. Several employers used software and other tools to monitor performance or generate performance metrics for feedback (often using various analytics tools to see hits and shares of blog posts, sales, and similar). This approach also ensured that as interns succeeded, they would be given increasingly challenging tasks (while in transactional internships, the tasks often stayed the same and rarely varied in terms of challenge or their need for creativity and innovation). Another interviewee recommended the following as a sign of good practice: "Feedback is very important for interns, and the Internet cuts that a little, so I would make sure the interns get constant feedback [...]. I would design a system for tracking that."

However, in contrast to what we had expected, ambiguity about what needed to be delivered appeared to be less of a defining characteristic for e-internships. Regardless of how transitional, relational, or balanced the relationship appeared to be, almost all interns were given tasks that were highly structured and templates were frequently provided. The interviews suggested that most interns participated in temporary project-based work featuring very specific deliverables, requirements, and expectations, thus providing clarity in terms of expectations. There was little evidence of high ambiguity, high uncertainty, or unclear guidelines. Ambiguity and lack of access to support was only reported by one intern as particularly problematic. As a result, task clarity was less of a concern across all e-internships.

RQ 2: Relational Investment

In RQ 2, we had proposed that the perceived supervisory investment may play an important role in whether or not the relationship between the e-intern and supervisor exceeds the mere exchange of task-related materials. Relational investment here encompasses all tools, supervisory behaviors, and organizational resources that contribute to the development of a more positive and mutually beneficial relationship between the intern and the organization. As anticipated, the role of supervisory investment (time and training) seemed to be particularly relevant in those internships that shared characteristics of relationships common to relational and balanced contracts. While the first half reported that the e-internship included none to very limited training and interaction (as reported above), the second half reported at least some to much more frequent interactions with supervisors, access to feedback, and training opportunities (via peers, supervisors and online communities).

Several organizations invested time and effort into establishing supportive platforms, and peer and staff mentoring. The training support came in different forms: discussions and feedback sessions with supervisors, online tutorials, and templates. This facilitated

mutual learning, commitment, and successful projects, particularly when the projects involved greater inter-dependence (e.g., the organization was invested in the outcomes of the e-internships). Greater interdependence was usually associated with more training effort (some interns also completed paid consulting tasks for a third party on behalf of their employer). Where career-related mentoring was provided (e.g., from experts to interns with an interest in a certain career track such as becoming an entrepreneur, manager, website administrator, or marketing consultant), it was usually the supervisors supporting the interns and sharing their experiences, supporting their applications, or giving them contacts for those who could mentor them (including staff as well as mentoring buddies). Online endorsements and references were also common features in the internships that featured more balanced and relational contract characteristics.

Internship satisfaction appeared to be high among most organizational interviewees. Ten of the 13 organizations report being satisfied with the outcomes of the internships, while two of the five interns interviewed reported that they were satisfied with the experience. Seven of the organizations also considered their internship pool as a talent pool for longer-term employment (often as freelancers or part-timers), which may have further improved the perceived mutual benefit of the e-internship. It is noteworthy that the three interns and organizations that were less satisfied also appeared to have completed a characteristically transactional e-internship (limited or no training or interaction). It is quite possible that their expectations were not met. As we would argue, limited relational (including training and time) investment may also result in very limited returns from e-internships.

RQ 3: Transactional Internships as an Outcome of Technological Determinism

As an extension to the first two research questions on the role of communication frequency and investment in relationships, the third question suggested that the influence of technological limitations on the formation of psychological contracts in e-internships may be attenuated by, or even overcome, by the effective utilization of technological affordances. Our results suggest that the technology itself is not necessarily the problem, but rather it is *how* technology is used that influences the kind and depth of relationships and trust that is built between different parties. The nature of e-internships, the use of technology to facilitate work, and the distance between interns and organizations results in characteristics commonly associated with transitional and transactional contracts as a default (structural) constellation of e-internships (Table 2).

The previous two sections already hinted at the moderating role of technology and communication practices. As noted in the previous section, more supportive work relationships appeared to emerge when all parties used available tools and adopted communication practices that supported knowledge exchange and learning, as evidenced by the match of internship characteristics with more relational and balanced contract characteristics. In more transitional and transactional internships, the most common form of communication was email, followed by chats, occasional or

Table 2. Psychological Contract and Technology Use in e-Internships

	Contracts	Role of technology
Default (structural) constellation	Transitional/transactional: Internships are temporary; reflect exchange of work for learning experience/improved employability.	Passive and often one-directional: To maintain contact, monitor and manage communication with interns.
Potential constellation	Relational/balanced: Investment in relationship building; recruitment from intern pool.	Proactive and interactive: To teach/mentor interns, build trust/expertise and establish close relationships.

semi-regular meetings (e.g., weekly). Internship reports describing more balanced or relational employment characteristics included communication practices that also provided more room for the development of social interactions and support (e.g., via more frequent communication, peer networks, and team training/online resources). This suggests that supervisors have a role to play in encouraging proactivity amongst their interns by actively engaging with e-interns rather than waiting for them to reach out when they need support (that is, role modelling good communication).

Discussion

The purpose of this paper was to examine whether there was room for more relational or balanced psychological contracts to emerge in virtual internships. Particular attention was paid to the characteristics that may shape different psychological contracts. These characteristics may also help to differentiate between the types of settings that present more compared to fewer opportunities for skill development. Our paper thus makes a contribution by addressing knowledge gaps in three different areas by (a) exploring the role of technology and (b) the role of supervisors to facilitate contract development, thus (c) expanding the work on psychological contracts, virtual leadership (Schmidt, 2014; Ziek & Smulowitz, 2014), and technology in virtual settings such as e-internships.

The results of our study suggest that many e-internships share similar core characteristics (e.g., transitional, frequently unpaid, and by default potentially transactional due to heavy reliance on technology). The role of the supervisor appears to be critical to success. When communication is one-sided, top down, and needs-based, this creates other concerns. For example, according to some of the interviews, some interns experienced more uncertainty and isolation due to limited interactions and feedback. Task-focused instruction may not be sufficient to address emergent learning needs and concerns that interns may experience, as mismatches between expectations may not be anticipated or addressed (see work on mismatches by Bosch-Sijtsema 2007). This is important as training has been shown to increase commitment of temporary workers, a relationship that has also been shown to be partially mediated by the type of psychological contract held by temporary workers (Chambel & Castanheira, 2012). Learning needs and knowledge gaps may be exacerbated when the interns have limited access to support – and thus contribute to lower commitment when the employment relationship is perceived as purely transactional rather than relational or balanced.

In Figure 1, we proposed that the investment, commitment to the internship, and reliance on computer-mediated communication function as potential moderators that are particularly relevant for relational and balanced contracts in virtual settings such as e-internships (RQ 1 and 2). Communication frequency seems to set the stage for more than mere transactional relationships. In terms of our interviews, it became clear that this development was dependent on the organizations and individuals jointly and proactively working to overcome the limitations of distance and technology. Many supervisors employed technological tools that allowed them to share their expertise via blogs, videos, and chat, help interns to learn new materials, and support their career-related decision-making by providing feedback and references (see Figure 1). An essential feature appears to be the interest of supervisors to work with their interns and see them as potential future job candidates (rather than just delegating tasks as appeared to be the case in transactional internships; see results for RQ 1). That means, even in the absence of face-to-face interactions, the use of technology could be employed effectively to support social interaction, address developmental needs, and provide access to resources and potentially mentors (via online communities, online resources, sharing expertise, mentoring,

and career advice; see results for RQ 2). When supervisors invested time and effort in training and feedback (online or on a person-to-person basis), both interns and organizations reported more satisfaction with the e-internship – and internship relationships and mutual benefits that are usually associated with balanced and relational contracts.

In conclusion, the structural features of an e-internship (i.e., its remote nature, lack of contextual information, etc.) might predispose it towards a very transactional (or transitional) contract (RQ 3). However, as we noted, technological determinism and thus a relationship centered on transactional characteristics is not necessarily a given for e-internships. Not all internships could be classed as merely transactional. With some effort, technology can also support more social relationships and support relationship building, although this might take more time (Walther, 1997).

Practical Recommendations

The issues faced by e-interns and their supervisors in e-internships are likely to feature in many computer-mediated settings and similar contingent settings. Our results suggest that supervisors play an essential role in the shaping of the online relationship, specifically in terms of how available they are to the e-intern and the use of various tools that allow them to support the e-intern effectively. Highly structured guidance can go a long way towards ensuring independent working; however, it is also clear that the need and preferences of the e-interns need to align with those of the e-internship and the supervisor. Incompatible preferences in terms of interaction patterns and inter-dependent working are likely to create potential conflicts. This means supervisors as well as applicants for e-internships would benefit from a frank and open discussion regarding work preferences during the selection stage. Since both parties may not interact face-to-face or very frequently (e.g., daily) during the e-internship, very few opportunities may arise to address different expectations about work preferences at a later stage. These may, if not remedied early on, increase the likelihood of e-interns dropping out or lead to a less than satisfactory experience due to perceived violation of the contract. The opportunity for performance assessment using various computerized tools (e.g., Google analytics) also means that e-interns may be assessed more frequently than they expect. In addition, depending on the comprehensiveness of the performance feedback, it will be important to consider the shortcomings of these tools as skill development is unlikely to occur when e-interns are simply presented with statistics, but not given the opportunity to learn from failure via discussion and interaction with more knowledgeable peers or their supervisor. As a result, the computer-mediated reliance on technology can create a number of new challenges on its own.

An important resource here for supervisors of virtual workers and e-interns is the notion of 'social shaping' of technology (see examples such as Genus & Nor, 2005; MacKenzie & Wajcman, 1999; Somerville, Wood, & Gillham, 2007). Rather than simply relying on media alone and thus using a technologically deterministic stance in terms of how work and communication are managed, many facets can influence how technology is implemented to facilitate work interactions and task completion. This work recognizes the role that is played by individuals in terms of how technology is used and employed. In addition, some guidance has already been published on how to design and develop virtual internship programs (Ruggiero & Boehm, 2016). In addition, some work also outlined challenges, opportunities, and recommendations for organizations (e.g., Jeske & Axtell, 2016a, 2016b).

At the same time, the process is not subject to one particular shaping force: economic factors play in role in terms of who has the means to use technology, but also the political goals behind the development and overall use of various technologies. In many ways,

how the technology is used and shaped by different agents is often difficult to anticipate. This means we can only encourage supervisors and organizations to be willing to explore but also experiment with technologies – rather than recommending one solution to all organizations seeking to implement e-internships. Only via adoption and improvements of various technologies will organizations and supervisors, in particular, be able to generate solutions that may suit their specific needs and circumstances. The cultural context is likely to also play in role in terms of the type of technologies that are deemed suitable and appropriate in each context.

Limitations and Future Research

Our findings need to be considered in light of a number of limitations. First of all, Freese and Schalk (2008) reported limited agreement amongst researchers on what characteristics psychological contracts are comprised of. Thus, it is possible that our emphasis may therefore not be shared by other researchers. For instance, Hui et al. (2004) excluded the transitional arrangement contract in their study, arguing that it did not present commitment from either party. Second, e-internships are still relatively rare, which limited us to a cross-sectional sample. We relied on the cooperation of a relatively small sample of career professionals, educators, and former interns who volunteered to be interviewed after a previous survey. One possible limitation is therefore self-selection of participants. Prior to the interview, all potential participants received the potential interview guide. While the majority of interested participants subsequently agreed to be interviewed, it is very likely that the interviewees with more positive reports and more investment in such e-internships would also agree to participate.

The reports from the interviewed interns were somewhat mixed and reflected more transactional experiences. Their reports suggest that some e-internship providers will not invest in their e-interns beyond what they have to, particularly when the focus is on temporary needs. This also raises another point, namely, the extent to which psychological contracts may be impoverished (limited or 'partial') due to the one-to-one and computer-mediated nature of all interactions. And finally, our group of interviewees may have been more motivated to present their internship schemes and experiences in a more favorable light compared to the individuals who did not agree to participate in our research.

We would like to propose a number of starting points for future research. First, we need more information about the reasons why some e-internship schemes succeed and others fail, especially also in terms of how this may be linked to the type of employment relationship each scheme is likely to generate. One possibility is that interns, and potentially supervisors, may find that the effort involved is not balanced out by the potential rewards (see effort-reward imbalance model by Siegrist 1995). If the appropriate resource materials are provided and e-interns explore real-world challenges in a supportive (computer-mediated) environment featuring mentoring and/or peer support, the learning experience and outcome of the e-internship are more likely to be satisfactory for both parties and go beyond being merely transitional and transactional relationships. Both McLean Parks et al. (1998) and Pate and Scullion (2016) provide a number of useful research questions on the psychological contract in temporary international assignments and contingent work settings.

Second, our findings further suggest that psychological contracts in e-internships are likely to be highly individualized given the limited interactions with an organization. More research on the prevalence of so-called 'i-deals' (see Rousseau, Ho, & Greenberg, 2006) and the influence of technological determinism may provide further insight into the dynamics behind expectations and obligations in contract formation. Diary studies may provide an important insight into how interactions support learning (including

how mismatches may enhance learning, see Bosch-Sijtsema, 2007) and the developments of relationships that feature relational or balanced contract characteristics over time. The research by Alcover et al. (2016a, 2016b) on the multi-focus exchange model and the role of multiple actors and dependencies within employment settings may provide important starting points for the development of relationships in traditional and computer-mediated employment settings. At the moment, the dynamics in most e-internships are still relatively traditional and limited in their own way – suggesting a reliance on one or two key contacts. Yet, as Alcover et al. (2016a, 2016b) propose, this constellation may likely change. This is also the future as employment relationship become increasingly moved to the computer-mediated sphere.

Third, future research that considers person-environment fit (as inspired by the work by French and Caplan, 1973) may be helpful to understand the role of poor fit between environmental resources and the values and needs of the individuals involved in the internship scheme. Fit is associated with various attitudes and behavioral outcomes (see work by Kristof-Brown, Zimmerman, & Johnson, 2005). Further research on what promotes drop-out in e-internships may be able to identify what happens when abilities and demands are not matched. One other model worth considering in this context is the job demands-control-support model (see Karasek & Theorell, 1990). Such research may be able to delineate important predictors of drop-out (specifically, as we suggest, the role of alienation in the computer-mediated context). More theoretically driven work with larger samples may enable researchers to test specific hypotheses and interactive effects, in line with existing models.

Fourth, it is unclear to what extent such e-internships promote a sense of alienation – a detachment of the e-intern from their work, which results in limited or no investment in terms of work process and outcomes (O'Byrne, 2011). For example, one research question is how interpersonal competence and the use of communication tools, and potentially the perceived relationship with supervisors, enables interns to cope with work pressures and potential isolation during the e-internship. Another research question is which factors (e.g., personality characteristics and skills) are most likely to contribute to e-internship success. And finally, cross-cultural factors deserve further research as well (DelCampo, 2007), including perceptions of fairness and different expectations of employees and employers in e-internships as they are more geographically independent.

Conflict of Interest

The authors of this article declare no conflict of interest.

Acknowledgements

We gratefully acknowledge the support of the e-interns and e-internship providers who participated in our research. We also thank the editor and reviewers for their feedback and suggestions.

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