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Title	Virtual internships as employer-led initiatives: Success criteria and reflections on the diversification of internships
Authors	Jeske, Debora
Publication date	2022-09-06
Original Citation	Jeske, D. (2022) 'Virtual internships as employer-led initiatives: Success criteria and reflections on the diversification of internships, in: Papagiannidis, S., Alamanos, E., Gupta, S., Dwivedi, Y. K., Mäntymäki, M. and Pappas, I. O. (eds) The Role of Digital Technologies in Shaping the Post-Pandemic World. I3E 2022. Lecture Notes in Computer Science, vol 13454, pp. 167–179. Springer, Cham. doi: 10.1007/978-3-031-15342-6_13
Type of publication	Article (peer-reviewed)
Link to publisher's version	10.1007/978-3-031-15342-6_13
Rights	© 2022, IFIP International Federation for Information Processing. Published by Springer Nature Switzerland AG. This is a post-peer-review, pre-copyedit version of a paper published in Lecture Notes in Computer Science. The final authenticated version is available online at: https://doi.org/10.1007/978-3-031-15342-6_13
Download date	2026-11-03 16:00:39
Item downloaded from	https://hdl.handle.net/10468/13707



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Virtual Internships as Employer-led Initiatives: Success Criteria and Reflections on the Diversification of Internships

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Abstract. Many employers have trialed virtual internships over the past two years. Employer-led virtual internships (e-internships) have a long history that predates the Covid-19 pandemic. Previous research has already demonstrated the importance of how employers design their internships, and how they subsequently support, train and mentor interns for internship success. Fifty-one virtual interns completed a survey in 2020 about their virtual internships experience with employers in various countries. The survey examined predictors of internship satisfaction and usefulness. Multiple regression showed that information accuracy, perceived support (e.g., resources, access to help) and usefulness (in terms of knowledge advancement and consolidation) all significantly and positively predicted internship satisfaction. Social influence and perceived support also increased the ratings of perceived usefulness among virtual interns. The relationship between perceived support given by employers and internship satisfaction was partially mediated by perceived usefulness of the internship. This highlights the importance of employer-led provisions and the extent to the design of internships influence virtual interns' subsequent evaluations. The study concludes with a discussion of practical implications and reflections on the need to differentiate and study the various virtual internship types that have appeared to analyze which one will add value and which types might be less beneficial or even exploitative of talent wishing to gain more experience via virtual internships.

Keywords: Virtual Internship, e-Internship, Expectation Management, Perceived Support, Mentoring, Training, Covid-19, Diversification

1 Introduction

Virtual internships have been proposed, trialed, and examined for well over fifteen years. An early example here is the work by van Dorp (2008). This author was one of the first to propose the introduction of educationally focused virtual internships as a result of an educational research project. The European Social Fund has since funded several virtual internship projects over the last ten years. Numerous researchers, including the author of this paper, have studied the use of virtual internships over many years, numerous industries and countries – including the current author (Jeske & Axtell, 2013,

2014, 2016, 2018). Traditional internships are "temporary (non-permanent) work placements that reflect a period of transition from higher education to the world of work" (Bayerlein & Jeske, 2018a, pg. 29). E-internships are virtual internships that are entirely computer-mediated transitionary periods. These internships rely on numerous communication tools that support remote working (as these internships emerged alongside the remote working concept). In contrast to educational initiatives, most virtual internships run by employer are not focused primarily on supporting educational objectives such as placement requirements. However, these types of internships have hitherto been considered by both educators and many employers as less "real" and valuable, resulting in many virtual interns having their internship experience discredited in favor or more "traditional", on-site internships (Jeske & Axtell, 2014).

The Covid-19 pandemic changed these beliefs to some degree. During the last two years (2020 to 2022), virtual internships have been rolled out by both educational and commercial organizations across the world. Yet, a significant research, theory and knowledge gap remains as to how virtual internships are run and what makes them effective. The lack of specific theoretical advancements can be attributed to the fact that these internships build on concepts from several different disciplines: From learning theory, to ICT, career development, and work-related concepts (such as the psychological contract). Part of this situation can also be attributed to the fact that we are still researching the fundamentals – such as how internships are defined and what their key characteristics are. The current paper thus wishes to contribute to clarifying fundamental basics regarding virtual internships and aims to answer the following research question: *What are the key benefits that virtual internships can provide to interns?* The current article outlines recent findings based on a study with 51 virtual interns and reiterates many of the key insights about the benefits of virtual internships when employers proactively consider the needs of their interns, their expectations and social environment. In addition, this conference paper identifies practical implications and outlines recent internship developments which speak to the diversification of virtual internships.

2 Success Factors for Employer-run Virtual Internships

Many recent virtual internship initiatives have reportedly met with limited success (McKenzie, 2021). While several other studies have confirmed the value of virtual internships run and organized by employers – if certain conditions are met (Jeske & Axtell, 2016; AlGhamdi, 2022). A short review of conditions will provide some insights – and also clarify why many recent initiatives failed. This includes the importance of having a meaningful and work-applied internship experiences (rather than focusing on educational imperatives which many universities pursue, see AlGhamdi, 2022; Zehr & Korte, 2020). For virtual internships to be effective, they need to be complemented by effective mentoring (Jeske and Axtell, 2017) and networking. They need to foster a realistic, long-term employability perspective (e.g., by considering virtual interns as part of the potential recruitment pool, AlGhamdi, 2022; Jeske & Axtell, 2016; McKenzie, 2021).

Recent findings about employer-led virtual internships (e-internships) validate what virtual internship researchers have known for a long time – that you can effectively onboard, teach, and develop interns if you put some effort and infrastructure in place (Jeske & Axtell, 2016, 2017, 2018; AlGhamdi, 2022). In addition, when both the interns' predisposition for learning and the supervisors' willingness [or expectations] to support learning are high, both traditional and virtual interns are more likely to develop and grow effectively during their internship (Holyoak, 2013; Maini et al., 2021; Zehr & Korte, 2020). Virtual interns will benefit directly from these internships in their careers through the networking, references, and the experiences that they have gathered. Interns need to see the clear, practical benefits of their internship and role in their career success. A number of specific success factors are worth mentioning that will be relevant to both employers and interns alike. I outline some of these here in more detail.

2.1 Information Accuracy (Expectation Management)

A number of researchers have explored the effect of appropriate expectation setting (through expectation setting, correct information, goal clarity) and how these aspects can shape how interns ultimately evaluate their experiences (Jeske & Axtell, 2017). This is also in line with traditional internship research that demonstrates the importance of perceived fit for interns when they select their internships (Stremersch & van Hoye, 2020). If the initial information is flawed or inaccurate, interns will likely take more time to adjust to very different circumstances and feel less trusting of information that is shared by the employer, all of which may increase the likelihood that they report lower satisfaction as a result. The preparedness of both interns and employers is therefore critical to success (Maini et al., 2021; Zehr & Korte, 2020). This makes information accuracy an important control variable in the analysis of internship reports. Based on these findings I propose the following:

H1: Information accuracy is a significant predictor of internship satisfaction, with less accurate information resulting in less satisfaction.

2.2 Social Influence (Role of Important and Significant Others)

Interns are often influenced by their social network in terms of how they rate new opportunities and the degree to which they are supported in their endeavors (Jeske & Axtell, 2014). This is similarly the case when it comes to whether they feel supported when taking up internship offers. The preference towards traditional, on-site internships is deeply anchored in educational and experiential history: The parents of most college-age adults will not have been exposed to teleworking and virtual internships. Doubts about the validity and relevance of virtual internships remain a concern (McKenzie, 2021). As a result, the social influence that important others can have on interns should not be underestimated. Accordingly, I propose that:

H2: Social influence has a significant effect on perceived usefulness ratings, with more support leading to more positive evaluations of internships.

2.3 Support and Assistance (Resources, Mentoring and Training)

The main goal of an internship is to enable the intern to gain relevant work experience with an employer while simultaneously learning more about their chosen or prospective profession, the employers, and industrial sector (Van Dorp, De Egana, & de los Monteros, 2011). As a result, the training and support mechanisms in place for interns (e.g., in terms of a clear internship plan, access to help, software, tools, mentors, and training) are critical for the successful completion of the internship (e.g., AlGhamdi, 2022; Jeske & Axtell, 2016). Evidence in support of this comes from research that has shown that self-reported performance by interns is higher when interns feel valued, they are more satisfied, and they receive training (Jeske & Axtell, 2017). Mentoring is a very important for interns and their internship satisfaction (e.g., Jeske & Linehan, 2018; Maini et al., 2021). These variables may further predict how virtual interns rate the usefulness of such internships for their skill development and knowledge acquisition (see AlGhamdi, 2022; Boehm et al., 2021; Nghia & My Duyen, 2018; Teng et al., 2021). This leads to the final set of hypotheses:

H3a/b: Perceived support and the training experience are significant positive predictors of internship satisfaction (H3a) and the perceived usefulness of the internship (H3b).

3 Methods

3.1 Data Collection Procedure

The study was approved by the Ethics Committee of the author's institution before data collection commenced. Participants were invited to complete the online survey using the author's network and social media connections (via LinkedIn). No limitations were placed on location of potential participants. The survey was only available in English and to those participants over 18 who had completed a virtual internship in 2020 or expected to complete one by 2021. The participants were further informed that their participation was voluntary and anonymous. IP addresses were not collected. Following an introduction to the survey, all participants were asked to first give their consent. They were subsequently presented with several subsections to assess how accurate the initial internship information had been, the impact of significant others in their life and the support during the internship (social influences, perceived support), their mentoring and training experience, and the perceived usefulness of their internship plus the satisfaction with the internship overall. At the end, demographic details were collected.

3.2 Participant Description

The survey was from July to December 2020 and received 118 hits. Participants who completed traditional/on-site internships and those that internships that involve simulated tasks/work environments (without contact to an actual internship provider) were excluded. Sixty-five participants gave consent and 51 completed the survey. The final sample included 26 women, 15 men, and 10 individuals who did not share their gender.

The average age was 25 (M = 24.73, range 20-37). At the time of completion, 41 were still enrolled in education; 23 had already completed their virtual internship while another 26 indicated they were still completing the internship (2 missing cases), with 39 reporting that the internship was at least 90% remote/virtual, which reflects pre-Covid-19 reports for virtual internships (Jeske & Axtell, 2018). One participant had completed high school, 14 were in the process of completing their Bachelors, 22 were in the process of completing post-graduate education (e.g., MBAs), and three were pursuing PhDs at the time of the survey. On average, they had three years of work experience to date.

3.3 Measures

The following section outlines the number of items and origins of all scales. At the beginning of the survey, all participants were first asked to the location of the internship provider, the degree to which they worked remotely, in which sector, and type of organization. Please contact the author for a complete list of all items (d.jeske@ucc.ie).

Information Accuracy. All interns were asked "How accurate was the internship information you had before you started the internship?" and were presented with five response options from (1) 'not at all' to (5) 'to a very great extent' (M = 3.32, SD = 1.17, n =45).

Social Influence. Social influence was measured using three modified items by Venkatesh et al. (2012), including "People who are important to me think that I should make the most of virtual internships." Response options included (1) 'strongly disagree' to (5) 'strongly disagree' (α = .81, M = 4.01, SD = 0.79).

Perceived Support. Using four modified items from Venkatesh et al. (2012), participants were asked about access to support in their internship. One such example item was "I had the resources necessary to work remotely as a virtual/e-intern". Other items focused on access to help, software, platforms, and expertise. Response options ranged from (1) 'strongly disagree' to (5) 'strongly disagree' (α = .82, M = 4.15, SD = 0.73).

Training Experience. This was assessed using three items based on questions posed by Geertshuis et al. (2002). Participants were asked to respond to items such as "The training was relevant for my work", "The training was pitched at the right level", and "Was there enough time to absorb/practice the new information". Response options included (1) 'not at all' to (5) 'to a very great extent' (α = .88, M = 3.59, SD = 1.03).

Mentoring Experience. The mentoring experience was assessed using four items, including items from Ragins and McFarlin (1990). The original scale had seven response options, this was reduced to five ranging from (1) 'not at all' to (5) 'to a very great extent' (α = .87, M = 4.13, SD = 0.73). In addition, we asked them if they had a mentor. The results of the analysis showed that ≈80% (40/51) had a mentor at work.

Satisfaction with Feedback. This was assessed using one item: "Did you receive any performance feedback on the tasks you completed?". Participants had the option to say (1) 'Yes' and (2) 'No'. Followed up by "How satisfied are you were with the feedback you received about your work?" followed by five response options ranging from (1) 'very unsatisfied' and (4) 'very satisfied' (M = 3.30, SD = 0.82) and the option to

select 'not applicable' (n = 1). This suggested that the large majority received some feedback, but it was of varying quality.

Satisfaction with the Internship. These four items were based on a satisfaction scale proposed by Brayfield and Rothe (1951) but modified to reflect internship satisfaction. An example item was "I felt satisfied with my virtual internship". The original response range was changed from six to five agreement responses from (1) 'strongly agree' and (5) 'strongly disagree' (α = .82, M = 3.65, SD = 0.80).

Perceived Usefulness (Skills and Knowledge). Six items taken from Nghia and My Duyen (2018, pg. 76) were modified in reference to virtual internships. The first three items measured advancement and the second set of three items measured consolidation of professional skills and knowledge. An example item was "Completing a virtual/e-internship helped me to develop professional skills". Response options were changed to an agreement scale in line with other questions in the survey and ranged from (1) 'strongly agree' and (5) 'strongly disagree' (α = .87, M = 4.15, SD = 0.64).

Demographics and Work Experience. All participants were asked to share their gender, age, location, highest level of qualification, and work experience.

4 Results

4.1 Description of the Internship Experience

A short overview provides more context to the internship experience of the current sample. Out of the 51 interns, 25 were paid by their employer. They completed internships in various sectors such as: education, healthcare, consulting, banking/insurance, IT, and telecommunications. Employers included 29 for-profit organizations, 3 non-profits, 4 governmental and 13 educational institutions. Over half of the participants worked for small organizations with up to 49 employees (n = 18) and medium-sized organizations with up to 199 employees (n = 8). The other half worked for employers that had up to 500 ($\underline{n}$ = 6) and more than 500 employees (n = 17). Over half of the interns would have been unable to commute to the site where the employer was located (n = 28), which suggests that they would not have been able to take up a similar, on-site internship opportunity with the employer without relocating. Participants completed internships in one of eight locations: India, USA, Germany, Ireland, Australia, Mexico, the UK, and Finland (most frequently represented are listed first).

Internships lasted from six weeks up to 12 months. The average number of working hours each week was about 20 (this ranged from a minimum of 5 to 40 hours) in teams. Team size ranged from two to 30 team members (average ranged about five or so team members). Thirty-eight reported that there were also other virtual interns working for the same employer at the same time. The average number of hours interns dedicated to their virtual internship was 633 hours, the median was 422 (due to some outliers; hours reported by participants ranged from the minimum of 56 to 3600 hours for a one-year virtual internship).

Twenty-eight received equipment and software from their employer to enable them to work effectively. The virtual internships had been located via university message

boards and career services, through LinkedIn, personal and social networks, as well as special programs run by corporations (e.g., Google Summer of Code). Motivations to take up an e-internship varied. Twenty-four participants completed the internship for academic credit (e.g., because their programs required an internship/placement). Many switched from a traditional to an e-internship due to necessity (e.g., due to Covid-19). In addition, the interns wanted to gain more experience in specific industries/areas to improve their employability as well as chances to get accepted to graduate school).

4.2 Correlations and Group Comparisons

The measures correlated weakly to moderately, as expected; there was little evidence of multi-collinearity with correlations above .7 (except in the case of training experience, see Table 1). Some correlations are noteworthy. The correlation coefficients for mentoring and training experiences showed that both correlated positively and quite strongly ($p < .005$) with how accurate the information had been that employers had shared with their interns prior to them starting the internship. This speaks to the importance of setting appropriate expectations for interns from the get-go. The high correlation ($r = .727$, $p < .001$) between training experience and perceived support speaks to the interconnected nature of training and how interns access software, help, and other resources during their internship. Due to this multi-collinearity, all the following analyses were conducted with the perceived support variable alone (see Table 1).

To assess the influence of potential situational variables, I additionally checked if the internship status (having completed the internship vs. still completing it) had any significant effect on reports (using t-test). This was not the case for any of the variables listed in Table 1. Similar nonsignificant results were obtained when I compared the answers of paid vs. unpaid interns, and those who completed the internship for academic credits vs. those who did not (this also applied when I looked at payment/credit categories together). Further group comparison between female and all other participants (those who selected 'male' and opted out) did not reveal any group differences except one for mentoring ($t(49) = -2.030$, $p = .048$). The mentoring experience ratings from the female participants suggested they did not have as positive an experience ($M = 3.35$, $SD = 1.03$, $n = 26$) compared to participants who did not identify as female ($M = 3.84$, $SD = 0.63$, $n = 25$). Internship hours correlated significantly and positively with perceived usefulness ($r = .299$, $p = .048$), but not internship satisfaction.

Table 1. Correlation coefficients for all measures ($N = 51$)

Measures	1	2	3	4	5	6	7	8
1. Information accuracy	1							
2. Social influence	.245	1						
3. Perceived support	.544**	.419**	1					
4. Training experience	.543**	.368**	.727**	1				
5. Mentoring experience	.421**	.182	.343*	.396**	1			
6. Feedback satisfaction	.370*	.081	.236	.299*	.343*	1		
7. Perceived usefulness	.198	.571**	.540**	.421**	.275	.209	1	
8. Internship satisfaction	.441**	.292*	.629**	.620**	.345*	.450**	.570**	1

Note. * $p < .05$, ** $p < .01$.

4.3 Hypothesis Testing and Exploratory Analyses

To assess the effect of the control and independent variables (information accuracy, perceived support from the employer, social influence, mentoring experience, feedback satisfaction) on the dependent variables (satisfaction with the internship, perceived usefulness of the internship), a number of hierarchical regressions were computed. Control variables such as age and gender were not significant control variables and thus not included in the regression analyses.

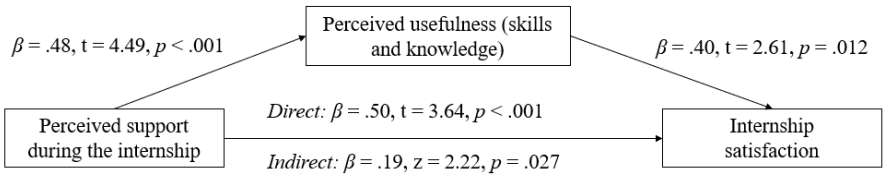
Satisfaction with the Internship. Controlling for information accuracy (β = .322, t = 3.219, p = .002), regression analysis showed that the satisfaction with the internship overall was predicted by the perceived support interns received (β = .358, t = 2.296, p = .027) as well as the perceived usefulness of the internship (β = .338, t = 2.530, p = .015) in the way that it advanced and consolidated their professional experiences. These results lend support for the role of information accuracy (H1) and the role of perceived support (H3a) on internship satisfaction. The positive correlations between mentoring experience, training experience, feedback satisfaction and internship satisfaction further speak to the importance of interns receiving all three (mentoring, training, feedback) to increase their overall satisfaction (see Table 1).

Perceived Usefulness of Internship. Controlling for information accuracy (β = .277, t = 1.846, p = .072), regression analysis showed that the perceived usefulness of the internship was predicted by social influence as well (β = .418, t = 3.024, p = .005), even when we included perceived support (β = . 366, t = 2.228, p = .032). This suggests that even when we consider the role of perceived support interns received during their internships, the influence of significant others in their social environment likewise had a positive effect on how useful they rated the internship (in support of H2 and H3b).

This suggests that the social and the employer-backed support interns receive will positively influence how they evaluate internships (e.g., they had the backing of those around them to complete the internship). It is noteworthy that in the case of perceived usefulness, only training appeared to be a positive correlate (but not mentoring and feedback satisfaction, see Table 1). This may be the case because training experience can be more readily transferable to new roles, while this might not be the case for mentoring and the feedback one received during the internship.

Exploratory Mediation Analysis. Given the earlier results, I wanted to examine whether perceived usefulness potentially mediated the relationship between perceived support during the internship and overall internship satisfaction. To test this exploratory hypothesis, I analyzed the mediation using the PROCESS macro (Hayes, 2013), using the bootstrap procedure with 1000 samples (Model 4, vs. 2.16.1). As expected, perceived support was a significant and direct predictor of perceived usefulness (β = .48, t = 4.49, p < .001) but also internship satisfaction (β = .50, t = 3.64, p < .001). Usefulness in turn was a significant direct predictor of internship satisfaction (β = .40, t = 2.61, p = .012). The indirect effect of perceived social support on satisfaction via usefulness was likewise significant, suggesting partial mediation (β = .19, z = 2.22, p = .027). All variables explained 29.1% of the variance (R = .64, R^2 = .29, F(1,49) = 20.15, p < .001; Figure 1).

Figure 1. Mediation analysis with perceived usefulness as mediator



5 Discussion and Conclusions

Given the Covid-19 pandemic, many traditional internships in 2020 and 2021 were quickly converted into virtual internships – with possibly very different degrees of success in terms of the learning that was facilitated in these newly designed internships (e.g., Maini et al., 2021; McKenzie, 2021). The current study with 51 virtual interns from different countries focused specifically on e-internships which were run and hosted by employers for several weeks to months (Jeske and Axtell, 2016; Jeske, 2019). The results reflected the findings of several other recent research reports. I summarize the key findings here briefly.

Expectation management was argued to be an important precursor to satisfaction, specifically, information accuracy surrounding the role the intern was expecting to take (Jeske & Axtell, 2017). As expected, more accurate information resulted in a more internship satisfaction (H1), potentially because interns were accurately prepared and briefed on what they would be doing. This matches other pre-pandemic findings on the importance of goal clarity (Jeske & Axtell, 2017) and the importance of having clear internship deliverables planned out (AlGhamdi, 2022). Interns were moreover influenced by the support and understanding others had shown to them, both in their personal environment and during the internship (Zehr & Korte, 2020). This is in line with the relational investment that has shown to be critical for the psychological contract that virtual interns form with their employers (Jeske & Axtell, 2018).

And lastly, as expected, positive social support from important others (H2) and perceived support from the employer (in form of training, software, access to help) predicted both perceived usefulness of the internship (H3a) and internship satisfaction (H3a). This suggests that interns' evaluations will be in part independently influenced by how others in their personal environment view their internship, and how much support they are receiving during the internship from the employer (AlGhamdi, 2022; Maini et al., 2022,). This reflects pre-pandemic findings for such internships (Jeske & Axtell, 2016, 2017; Teng et al., 2021). More positive training experiences also increased the sense of internships being useful (H3b), potentially because such experiences are transferable and increase skills as well as knowledge acquisition (Nghia & My Duyen, 2018).

5.1 Practical Implications and Key Lessons

The current findings point to several areas where employers can be active. First and foremost, meaningful, and valuable experiences are as important to employees as to virtual interns. The same goes for obtaining buy-in and setting the stage for positive experiences. This means that addressing expectations, promoting accurate information sharing and goal clarity from the outset are clearly important predictors of internship satisfaction. Both interns as well as mentors need to be prepared to support virtual internships (Jeske & Linehan, 2018; Maini et al., 2021). In addition, employers might need to recognize that how interns evaluate their experiences may also be shaped by actors outside their area of control, such as significant others. This speaks to the importance of sharing more information about the merits of their internship schemes online where this information might be accessible to important others such as educational advisors and parents. And lastly, the current findings suggest that investments in training experiences, appropriate mentoring (for all groups, particularly female interns), and feedback frequency appear to be as relevant for employees as for interns. Further practical guidance for employers can be accessed in several published resources (e.g., Jeske & Axtell, 2016; Jeske, 2019; Zehr & Korte, 2020).

5.2 Limitations of Current Study

The current research was based on a small, self-selected, voluntary sample that provided self-reports. This may have introduced some other variables due to cultural or regional differences (e.g., acceptance of and access to internships). However, most virtual internship research is likely to incorporate these elements due to the often-global nature of these internships. More research based on programs run in specific locations may provide more detailed information for a comparative analysis of these findings.

5.3 Future Research Trajectories

Several research gaps continue to exist. The following two suggestions provide some suggestions for researchers interested in contributing further to our understanding of virtual internships.

Theoretical Development. The lack of theoretical exploration will require more work to provide a good foundation for future research. Future theoretical work in this domain may wish to explore areas and theories related to work environments (such as team and group dynamics), the role of personality (and how personality may determine success in remote work settings that are common to e-internships), usability and inclusiveness in computer-mediated environments (in terms of diversity and learning), and career developmental theories (that could help explain the career benefits and developmental growth of professionals as they are moving towards a specific career or changing their career trajectory).

Diversification of "Virtual" Internships. Over the last few years, virtual internships diversified. However, not all internship research has clearly differentiated these types nor realized the importance of who is leading the initiatives. There is some evidence emerging that educationally initiated and oriented internship programs may be

less beneficial than those organized by employers themselves (see a critique by Al-Ghamdi, 2022). In short, each of these types offer different learning options and limitations. The following section provides an overview here on these types and possible research gaps.

In this conference paper, I have focused on e-internships only -- employer-led internships of significant duration, time investment (e.g., minimum of 240 hours), focused on real-world tasks which featured interpersonal exchanges with team members, mentors, and the wider social environment. That said, several other "virtual" internship types exist that have very little in common with these e-internships. This circumstance is further complicated by how the research is often aggregated by researchers and journalists alike – without the necessary differentiation. Here are some other forms worthy of research.

Micro-internships have appeared over the last two years. While these are often called online or virtual internships, this type has more in common with gig work as they feature temporary (e.g., normally hourly assignments) that may involve no contact, feedback, or support from the actual organizations that put forward those experiences. As a result, several researchers criticized that these micro-internships are not meaningful learning experiences (e.g., McKenzie, 2021; see details in Hora et al., 2021). While often pushed by educational initiatives to replace traditional internships that had been cancelled during the Covid-19 pandemic, these "experiences" have actually very little in common with e-internships. More work is required to fully understand at which point (hours and type of work) will generate the most benefits for the interns.

Other more recent types include "virtual experiences" where people can test their skills when completed real-world tasks set by companies, but again these are temporary and feature no real-world interaction as such with employers. These experiences share some similarities with a third category: gamified "internships". Both offer short-term skill development opportunities only. The gamified "internships" offer computer-simulated tasks and interactions that are often part of university programs (e.g., featuring real-world tasks, avatars). These internships feature no interactions with real individuals, have no long-term career potential, and are often very specific to enable students to train certain skills only. Given the focus on situation-based and task-specific learning, these "internships" carry some potential learning benefits like other simulated learning exercises (Bayerlein & Jeske, 2018). In both cases, both "virtual experiences" and gamified "internships", there is a clear absence of actual involvement with an employer – in contrast to e-internships – which therefore limits the opportunities for virtual interns to apply, collaborate, and interact with others on real-world live projects that set the stage for meaningful and applied learning experiences to foster their employability.

Finally, there are virtual internships "for sale". The trend of more and more students opting for paid-for virtual internships is the unfortunate by-product of the lack of internships in several countries over the last ten years. Very little is known about these since they are not evaluated systematically, however, they appear to be more employer-led. In conclusion, more research in the pros and cons is urgently needed to better understand research findings and take account of how the diversification of internship leads to differential, positive and negative, effects for virtual interns. Stakeholder investment and involvement are also a worthwhile area to investigate in order to understand when interns' own goals or those of employers and/or educational objectives are being pursued and prioritized in internships (Zehr & Korte, 2020).

In short, numerous areas of interest exist where more research and investigation efforts could generate insights and practical recommendations for employers and educators interested in running and supporting meaningful internships.

Acknowledgements

The author would like to thank the virtual interns who shared their experiences as well as all authors who made their recent research on virtual internships readily available.

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