The Social Media Trap - How Knowledge Workers Learn to Deal with Constant Social Connectivity

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Abstract

People are connected to their colleagues, customers, family and friends almost all the time and everywhere via virtual communication channels. However, constant social connectivity is a two-edged sword bringing about positive as well as negative effects especially in the professional context. Knowledge workers suffer from pervasive interruptions, escalating engagement, ineffectiveness, but also social overload due to the increasing use of social media. Therefore, they have to learn how to deal with constant social connectivity. Based on an exploratory case study involving 41 interviews with members of a large-scale, international IS project, we found that knowledge workers develop coping measures in order to deal with the negative effects of social media use. Drawing on social learning theory, our results indicate the triggers of learning and that knowledge workers acquire and internalise connectivity skills by direct experience, modelling and self-control. We revealed that matched-dependent behavior is particularly important in the connectivity field.

1. Introduction

Constant connectivity, i.e. the phenomenon that professionals are always connected and feel aligned to work, acts as a two-edged sword: While it might lead to higher efficiency, greater flexibility and mobility, and the freedom to work anywhere and anytime [1-4], constant connectivity could also lead to unintended negative consequences, such as disengaged behavior, e.g., to be absent even while present, sleep deprivation, distraction, ineffectiveness, feeling too much control, [5, 6] or social overload, where individuals experience fatigue, while using social network sites [7].

Constant connectivity embraces not just task-related connectivity for building and maintaining relations between people such as the use of social media platforms and applications [1]. Regarding companies’ communication structures it has become apparent that the use of social media is not restricted to the private context but is increasingly used in the professional context as well. Thus, an interesting question is how knowledge workers learn to cope with this constant social connectivity [1, 8].

ICT and especially social media play an important role in facilitating and even accelerating connectivity [1]. There are two important issues of constant social connectivity that are reinforced by the use of ICT, in particular social media, such as Facebook, WhatsApp, twitter or Skype: First, constant social connectivity might lead to a blurring of occupational and private life putting extra strain on professionals [9]. Nowadays people rarely entirely disconnect but rather seamlessly switch between different work and life contexts as they see their mobile devices as their permanent companions and port to the virtual world [1, 5]. For example, they tend to check their Facebook account during working hours, send messages and pictures around via WhatsApp or read new posts on Twitter.

The second issue is a direct consequence of the above, which is reacting to constant social connectivity and is related to the changes in practices and norms that guide the interaction between individuals while coping with constant social connectivity. Here, the use of ICT is seen to create practices and norms such as vigilant availability, expected responsiveness, and escalating engagement [10]. Again, social media is playing an important role in shaping ‘connectivity’ norms and practices by increasing the pressure to be always available and constantly responsive. For example, people are stressed because they feel urged to respond to social support requests such as “responding to a friend’s comment” or “liking the colleagues’ photos” [7].

While prior research has addressed these issues by investigating how ICT, in particular email and mobile
devices, have changed the practices of knowledge workers and shed light on the reasons and the negative and positives consequences e.g., [11, 12], there are two gaps notable. First, there is no research addressing the issue ‘how knowledge workers actually learn to deal with constant social connectivity’. This is particularly important as knowing about such learning practices is the first step to effectively control dysfunctional connectivity by project managers. And second, most research to date has only looked at single ICT, such as email or smartphone use, ignoring the fact that constant connectivity is influenced by a plethora of communication channels and especially social media.

We address these gaps by investigating the private and professional use of social media by knowledge workers and how they learn to cope with constant social connectivity [1, 8]. Our focus is on social-related connectivity as knowledge workers spend a lot of time and effort to design and interact on social media platforms leading to a situation of true constant connectivity [1, 13, 14].

We argue that knowledge workers have to acquire a new social skill to cope with constant connectivity and social media in particular [6, 15]. So called connectivity skills, defined as a repertoire of capabilities employed when interacting with other people at an interpersonal level [16] become more and more important in our interconnected world [17].

2. Constant Connectivity

A literature review was conducted prior to this study and highlights the different streams of connectivity [18]. One stream investigates the paradoxical implications of (near) constant connectivity [1]. Due to extensive technological infrastructures people can connect anywhere and anytime, however, such opportunities shift expectations, norms and attitudes towards using ICT which could end up in unconscious pressures to be connected everywhere and all the time [3, 5, 10, 12].

Another theme deals with using ICT as one of the biggest challenge of our interconnected society. To know when to connect and to disconnect in today’s professional but also private life is crucial to avoid the negative effects of constant connectivity [2, 19]. Handling connectivity and learning to lead online is important for managers as project teams are often distributed around the world, home office becomes more popular and an increasing number of meetings are conducted online [20]. While one stream of literature emphasizes the disruptive effect of email messages and the negative consequences of using ICT, another stream views technology as integral part of our everyday work life as technology-enabled connectivity is essential to fulfill tasks and jobs at hand [13, 14].

There is also increasing research dealing with the evolution of connectivity patterns i.e. if, when, and with whom people connect in the virtual world. The spiral of escalating engagement and diminishing autonomy for example results from whipping up the actual behavior of individuals and the collective expectations concerning responsiveness and availability [10]. It is the interplay between individuals and community that changes the amount of connectivity and therefore the connectivity patterns of the individuals. On the basis of different usage patterns [2] people can get into different states of connectivity i.e. hyper-, hypo-, and requisite connectivity. Hyper-connectivity is defined as exposed to an excess of connectivity, leading to longer and more intensive work modes, however, can revert into information overload, drain due to tightly synchronized workflows and continuous interruptions. Hypo-connectivity is the state of having levels of connectivity insufficient to fulfill tasks and jobs, e.g., sluggish Internet connections, poor telephone reception, lack of social capital or cross-cultural understanding. People who feel a lack of connectivity may miss important opportunities for engagement and will experience the “out of connection – out of the loop” phenomenon [5, 15]. Requisite connectivity represents the optimal level to fulfill tasks at hand [15], experiencing ‘flow’ [4] while being connected, as a state where people work highly efficient and productive and experience connectivity as supporting [15]. People interact with technology in a way that they can focus on their task and lose any sense of time [5]. Most of the current studies lean towards “the dark side of connectivity”, emphasizing the passive victimhood. However, there is also research pointing to autonomous knowledge workers who exercise agency and regulate self-dependently the amount of connectivity like “water from a tap” [1, 14]. While the former one claims that knowledge workers are lost in a vicious circle of over-engagement and shifting norms in terms of availability and responsiveness, the latter regards them as mature, self-confident and capable persons who are in control of connectivity. We claim that there is a learning process involved which helps knowledge workers to escape from dysfunctional states of connectivity. The connectivity skills acquired through learning allow them to control connectivity according to their needs.

Therefore, the purpose of this study is to explore the learning processes of how to handle constant
3. Social Learning Theory

Social learning theory is as multifaceted as learning itself. The bottom line of social learning theory is that people, except for their elementary reflexes, cannot access a multifaceted and broad repertoire of behavior patterns, but they can learn these patterns. Likewise, knowledge workers do not have a “natural” capability to cope with constant social connectivity. However, they can learn and develop measures how to deal with it. Bandura refrains from traditional learning theories that claim that human behavior is solely the outcome of personally experienced response consequences (reward or punishment) as a result of a given action [21]. He claims that new response patterns are either acquired by (1) direct experience, (2) modelling or (3) self-control [21-23]. The subject of change in social learning theory is observational behavior. Transferring this term to our “connectivity vocabulary” we would translate observational behavior into connectivity patterns, i.e. the way if, how and when knowledge workers interact in the virtual world.

Knowledge workers learn (1) by direct experience how to handle situations where they have to decide to act in this way or another. Each mode of behavior will evoke either favorable or unfavorable effects which in turn reinforce the person to act in a way which produces positive outcomes in the future [21]. As a result, they adopt the successful alternatives of behavior and discard the remaining ones. We focus on the two well-accepted functions, (a) informative, and (b) motivational function of response consequences of given actions [23]. The third one (reinforcing function [22] is still much debated in social learning theory and thus not part of our study. The (a) informative function draws on the cognitive capabilities of individuals as people do not only produce responses but also reflect upon the effects those responses evoke. They develop hypotheses entailing information about the suitable behavior in the respective situation and therefore guide an individual’s future behavioral patterns [21, 23]. The (b) motivational function describes the anticipatory capacities that people have to motivate themselves to enact or neglect a certain behavior by thinking about future consequences. Therefore, individuals motivate themselves by prospective consequences of their behavior [21, 23].

If learning took place only through reward and punishment of performed actions, learning would be tremendously drawn-out and hazardous [21]. Thus, most of human behavior is learned by (2) the influence of an example (a model) and imitation of the model’s behavior. Especially for complex processes like the elimination of behavioral deficits, reductions of inhibitions and transmission of self-regulative systems, learning by example, i.e. modelling, is essential [21, 24]. Miller and Dollard [25] distinguish between: same behavior, copying and matched-dependent behavior. Same behavior occurs if two people conduct the same response independently, however, are stimulated by the same cue, but have learned this response by themselves [25]. Copying is described as learning how to model the observer’s behavior on that of the model. Finally, matched dependent behavior mostly happens if one person is more experienced, more clever or more skilled than another, who learns a lesson from the former one and matches their behavior with him [25].

Connectivity patterns are influenced by the environment, but also by personal decisions. People construct their own framework with given rules and boundaries of behavior and discretely reward and punish their actions according to this system of rules [23]. The aspect of “self-determination” respectively “self-control” (3) is crucial in developing connectivity skills as people have to resist against their own online addictiveness [26]. Human beings have been described to act as some kind of moral agent and develop some form of “super-ego” as they evaluate their own behavior and express the result of this evaluation via “self-satisfaction”, “self-pride”, “self-dissatisfaction”, and “self-criticism” [22, 23].

According to Skinner there are various control techniques such as control by physical restraints, avoiding temptation, and aversive stimulation.

4. Research Design and Methodology

We used an exploratory case study approach with an interpretive lens [27] to reveal how knowledge workers acquire connectivity skills in order to deal with constant social connectivity. The main source of data are interviews with project team members of a large EU-funded research project aiming to develop ICT support for workplace practices in small and medium-sized enterprises. This inter-organizational collaboration project started in November 2012, will last for four years and comprises 17 partner organisations with a total of more than 80 team members. The project comprises theoretical, empirical, design, development, implementation and
evaluation activities pursued in parallel. The goal is to develop IT services, tools which are bundled and integrated in a software platform.

While the majority of studies mentioned before focus on one specific type of ICT, it is evident that the usage of various ICT and social media channels will constitute our personal connectivity patterns [3, 5, 28]. Thus, we decided to include all ICT artifacts, which (potentially) enable to be connected and all social media channels, where individuals and groups co-create, communicate, share and modify the user-generated content [14, 29]. Examples are text chat and videoconferencing tools, (e.g., Skype, Flashmeeting), co-authoring tools (e.g., GoogleDocs, Wiki), social networking sites (Facebook, Twitter), file-sharing tools (e.g., Dropbox, Google Drive), or emails and phone calls.

The interview guideline focuses on the interviewees’ critical experiences with the use of ICT, particularly social media and how they coped with them. For interviewing we used the critical incident technique [18]. This technique is well suited to gather important and detailed information about behavior in defined situations. A critical incident is an observable human activity in a specific situation where the purpose and consequences of the act are fairly clear to the observer and allows conclusions about the actor [18]. In the field of constant social connectivity, we narrow our focus on the incidents of hyper-, and hypo-connectivity as we try to explore how actors deal with and learn how to cope with these situations. We asked how they felt in those situations, and what they perceive as triggers for too much or too little connectivity. Talking about critical incidents where they consciously noticed and reflected upon their own and their project partners’ connectivity patterns helped us identify and further analyze the way how distinct connectivity patterns were shaped and learned.

We carried out pilot interviews with two project team members to check understandability of the interview guideline. Overall, we conducted 41 interviews (duration: 30-80 mins. each) with project team members, team leaders and consortium managers in February and September 2014. Their professional background ranged from consultants, ICT experts, senior researchers to experts representing the professional domain. Demographic diversity was guaranteed by conducting interviews with members of every age cohort between 20 and 60 years.

The interviews were recorded and notes were taken during the whole process. Interviews were transcribed, coded and analyzed with the help of NVIVO. We used the axial coding technique [30], and conducted an iterative textual analysis of the interview transcripts to understand the learning process which could help to avoid dysfunctional states of connectivity [2, 5, 10]. We particularly coded (1) the triggers and contextual situations which evoked learning, (2) the way how knowledge workers actually acquired their coping measures to handle the dysfunctional states plus (3) which coping measures they developed and how they helped them to work more efficiently and productively.

5. Results

As described in the following quote by a team leader, “connectivity skills” are soft skills respectively social skills in our information society. Knowledge workers have to learn how to cope with large amounts of data and prioritize what is important and what is not.

“So things cannot just flow without decisions so in order to make the connectivity useful there needs to be some management skills from each of the node that connect meaning that’s not somebody oversees but that people have to learn, I think it is like a soft skill of these times, you have to learn to manage information and to select what is important […].” (Team leader D)

Many of our interviewees have switched on the notifications of their mobile apps and email accounts in order to “stay in the loop” and know immediately when a new message arrives [5].

“Well, yeah the most obvious cue for that is of course my mobile because it’s vibrating any time and I am receiving messages from gplus, from twitter, from Facebook, from email and that’s vibrating very often so during the time we were talking here I received I can tell you 5 emails plus two notifications via twitter, two via Facebook, yeah that’s it.” (Team Leader A)

The interviewees do not always consider the blurring of social and professional boundaries as negative, especially if the social sphere steps into the professional context as described in the following quote. Due to the features of social media platforms and applications they always have the chance to have a chat with their friends and family during work time which evokes a blurring between the two environments but is seen as completely natural by now.

“if you really want to be left alone yeah then it’s not so good but in terms of being connected with your friends, because I am also connected with my friends
on my mobile and all the other social media channels and I am also texting during work time with them just shortly how is it going and so on. Yeah that’s a parallel activity which is kind of funny, I think everybody does it.” (Team leader A)

Drawing on social learning theory, we reveal how knowledge workers can acquire “connectivity skills” and develop coping measures by learning via three approaches: (1) direct experience, (2) modelling or (3) self-control. We claim that a person with connectivity skills possesses a repertoire of capabilities, i.e. coping measures which can be applied in order to counteract the negative consequences of blurring between professional and private sphere and the shift of norms and expectations.

5.1. Learning by direct experience

The senior researcher in the following quote reports about her experience as a blogger. At the beginning she had put a lot of effort to get familiar with the new methods, spent a lot of time online and was exposed to the increasing pressure to publish innovative ideas and concepts leading to hyper-connectivity. However, over time she reflected upon the negative effects of constant social connectivity and realized that there are more important goals in her life. Here, the informative function of learning by direct experience comes into play and she draws on her cognitive capabilities by reassessing her priorities, i.e. she deemphasized the goal of having influence on the scientific community by writing and promoting her blog entries. As a personal coping measure she reduced the frequency of her blog entries. “I was blogging really much, now I do sometimes, some posts if I read some papers or I really use it like a documenting what I read or my research ideas. […] in the beginning it was probably because we wanted to get familiar with all the stuff but then you have to do it by yourself, now I, since there are so many new things also to learn this new stuff especially producing content it takes a lot of time so I don’t have so much time to be in social media and I also don’t like, I don’t put so much anymore into being the centre of some network or to be important or professionally important or influential (Senior researcher A)

People have realized that the blurring of work and private life, which results from working overtime and during the week-end is not healthy in the long run. [5]. Due to replete workdays with hardly any breaks, people tend to work on their tasks and respond to their social media commitments during the evening or at night leading to a 24/7 connectivity. Having experienced this situation, the team leader in the following quote tries to find his balance. Here, the motivational function comes into play. Guided by his anticipatory capacities he tries to set clear boundaries for work to avoid a shift towards constant availability. “And then in the evening I typically go home earlier I used to stay here at the XX last year at around 6 or 7 o’clock but it was not very healthy, so basically I go home now at 5 o’clock, go to the gym, meet some friends and after that I was working also hard last year but I am trying to change that because I stayed up always like till 1, 2, 3 o’clock in the morning working on some papers, research, and so on because there was no time during the day for that, doing also some social media but yeah that’s currently changing.” (Team Leader A)

5.2. Learning by modelling

In the field of constant social connectivity, people sometimes feel hyper- or hypo-connected due to an overwhelming amount or a lack of work- and social-related commitments. They became clairaudient how others cope with these negative effects of constant social connectivity and copy their behavior if they assume to improve their situation with this coping strategy. In the following quote, one of the junior researchers envies people who are able to quit Facebook. As a coping strategy, she would like to copy their behavior, however, she postpones this decision and is conscious that her behavior is still different from that of her role models. “I mean I always admire people who say, they quit Facebook. Maybe, I think, I become a little more of such a person who can be able to quit it, but right now I don’t think that’s the case right now, that I can delete my account. Especially because I am thinking about going on this big vacation and then, especially then you want to be in contact and in touch with people back home.” (Junior researcher A)

The underlying adaptation process of the matched dependent behavior seems to happen quite frequently in the field of constant social connectivity. Communication partners observe the connectivity patterns of each other and adapt to them. In case of group communications single members adapt to the most common media of the crowd as they do not have the power to enforce their favorite communication channel. A senior researcher adopts
the connectivity patterns of his youth group who feels most convenient with using WhatsApp which is described in the following quote.

“...some of them say Facebook, so we can be Facebook friends but it was not a good idea because they put a lot of silly things there, they are teenagers, they are 14 so it was clear it was not a good idea and they said, okay let's make a WhatsApp group and it was the first time. I mean I have never used WhatsApp before, so I installed WhatsApp to use the same technology as they were using and it worked perfectly because for them it was very natural and I only needed it to adapt myself. (Senior researcher C)

In this scenario the senior researcher learned a new communication tool in order to enable and facilitate the coordination within his group. As described in this and the following quote, the role models tend to take over the adaptive role in many of their relationships. They adopt their connectivity partners’ connectivity patterns to facilitate communication and to prevent burdening others with changing their patterns and media. Therefore, learning is triggered by the willingness to improve the communicative process. As described in the following quote, the senior researcher is responsive to her communication partners’ preferences in order to achieve the most out of their conversation.

“Because there is a difference in the quality. So if the quality of the conversation is better for somebody who is shy to text instead of use voice or video, if there is more content, then I prefer that. So in this sense I would let the other person choose, what is better for them and I also choose many times myself.” (Senior researcher D)

Those role models are open towards new technologies and extend their connectivity skills by broadening their repertoire of new communication channels.

“I don’t talk to her on Skype or SMS or email, I WhatsApp her. But only with her I use WhatsApp, I use Viber only with my one friend, I have this installed program, because my friends like that. I adapt to them. (Senior researcher D)

However, they do not always take the adaptive role, there are situations in which they persist on their way of communication as in the following quote.

“So if I am not in the mood to see video or I want more time to think about something, then I use text.”(Senior researcher D)

It became evident that our interviewees build up a diversity of different connectivity patterns with different connectivity partners. They scan their connectivity partners’ environments and contextual factors like job role, family situation, IT affinity, stress level etc. in order to understand the others’ connectivity patterns and finally adapt to them.

“And for instance she is used to send messages with the IPhone, so in some sense she has influenced me, I know that for her it is easier if it is like, we don’t have time, for her it’s more useful to send an SMS instead of an email. So, ya, I changed my behavior in this case...” (Senior researcher E)

5.3. Learning by self-control

According to Skinner [26] there are various techniques of control which we also found in our data set in terms of coping measures to develop connectivity as a social skill.

As described by a team leader, he physically restraints himself from the mobile device so that he does not receive notifications or incoming calls on communication channels bound to that device and therefore risking to get hyper-connected. As a personal coping strategy to avoid the blurring of work and life, he distances himself from mobile applications like WhatsApp but is connected on the Laptop via skype or email in the evening.

“And usually when I am coming home when I come in the door I put the mobile in the charger. I discover that the difference to other therefore, I don’t respond to kind of things like WhatsApp that are bound to a device. Because I don’t have them simply, I don’t have the device and it is also switched on silence so I also do not receive the calls so that’s a bit special.” (Team leader B)

Secondly, the junior researcher in the following quote eliminates the stimuli, the temptation of social media platforms during work time to avoid blurring of private and work life and the state of social overload which could easily lead to hyper-connectivity.

“I blocked Facebook for me in my browser, so I can’t access Facebook between 9 in the morning and 4 in the afternoon, I have a blocking in here.” (Junior researcher A)

Our interviewees consider social media as distracting due to the urge of seeking the news and “fishing for compliments” via likes which are indicators for social overload and hyper-connectivity. As an individual coping strategy, the following team leader avoids the temptation by turning the apps off or closing the browser window.

“I don’t know if I mentioned this last time but I certainly turned Twitter off all the time now but now I turn Facebook off, sometimes actually close it down.
it becomes a bit too addictive looking to see how many likes you get, especially if I’m trying to write a paper and I just need to focus on it so I turn it off, I just close the browser” (Team leader C)

The senior researcher controls her behavior by repeating to herself to lay her smartphone away to be physically disconnected from social media and not affected by notifications as triggers to connect. With this aversive stimuli she arrives to concentrate on her work, avoids the distraction of private topics during her working hours and therefore succeeds to get in a state of requisite connectivity.

“And not trying like to be ohhh I have a Facebook message, I try to do this, but sometimes it is difficult. I repeat to myself that I have to put my smartphone in another room and try to be disconnected from this information.” (Senior researcher E)

6. Discussion

On the basis of our results we investigated the development of connectivity skills including the idiosyncrasies of ICT and especially social media which provoke constant social connectivity, the triggers which evoked how people learned to cope with constant social connectivity, the learning processes and the coping measures as single occurrences of connectivity skills.

In the field of social media, researchers have investigated the general usage, the addictive behavior which is linked to social media use, the functionalities of social media like collaboration support and the attributes of social media [8, 31-33]. Although, there are more attributes in the literature we found that especially visibility, reputation building and associations are the most important drivers for constant social connectivity [29, 33].

First, visibility is defined as the possibility to see the behavior and information of other users via posts, comments, status updates, votes, revisions or pictures [33]. Many social media platforms and applications indicate if someone is online, is writing, has read the message or is liking a picture or comment. So, online behavior is partly visible to related people which is idiosyncratic to social media in comparison to conventional media like emails. As stated by our interviewees for example Facebook could evoke an addictive behavior and lead to a blurring of work and life boundaries. People seek for status updates, new comments or posts also during their working time which induces the phenomenon of constant social connectivity as people just switch between task-and social related connectivity and do not disconnect anymore [1]. Secondly, reputation building is one of the most important motivators to engage in social media interactions and is therefore able to explain the often extensive participation in online conversations [34].

Blogging, as described in the results section is one of these social media usages to gain reputation which, however, requires a certain regularity of creating and posting content. To maintain the popularity therefore implies to spend effort and time online and in turn increases the level of connectivity. Thirdly, associations focus on relationships including the linkages between individuals or between individuals and content. These associations enable construction and preservation of social connections, access to shared information and emergent connections which in turn increases the amount of connectivity due to more possibilities of interactions [33]. As described by our interviewees the easy access to their private network via social media entices people to break out of their workflow and switch to private conversations during working hours which again blurs the boundary between the work and private sphere.

Having revealed how the idiosyncrasies of social media trigger constant social connectivity, more precisely social overload and a state of hyper-connectivity we found that these dysfunctional states of connectivity present the antecedents of the three different learning approaches, especially, for learning by experience and by self-control. In the case of modelling the triggers are rather observation processes of others’ successful coping measures and the willingness to avoid the counterparts’ effort to deal with new ICT in order to enhance the quality of the communication. Here, a strict separation between the situation that triggered learning and learning itself is not possible.

Regarding the learning processes, we revealed that all three learning approaches arising from the social learning theory are apparent in our sample, however, learning by experience and self-control are not independent from each other. For example, if one user learns by direct experience that he should block Facebook during his working hours there is always some self-control involved to resist cancelling the blocking. In turn our interviewees enact self-control not until they experience hyper-connectivity in terms of too many interruptions and distractions through the use of social media like Twitter or Facebook. These two learning approaches are intertwined and often appeared in combination in our data set. Moreover, the matched-dependent approach in terms of adapting the own connectivity patterns to the counterpart is the prevalent learning approach in this case study. However, our interviewees do not take over the role
of the observer and the role of the role model, they could be rather seen as “adapter” and “passive deciders”. We call them passive deciders as they do not determine consciously the way and medium of communication, however as the “adapter” takes over their connectivity patterns they indirectly decide upon their common way of communication. Therefore, the former role model takes over the learning task and acquires new connectivity patterns while the former observer who is now the decision maker adopts the passive role. The “adapters” who seem to be more technology affine than their counterparts are at ease to learn the handling of new communication tools in order to facilitate the conversation and to improve collaboration. The adapters have learnt how to handle a great diversity of different communication channels. They often possess a great skill repertoire of usage and adaption patterns and therefore connectivity skills [35]. The so-called “passive deciders” specify the medium and the way of communication, but more or less indirectly. Being an adapter or a passive decider always depends on the connectivity dyad. Therefore, a person can act as an “adapter” in dyad A taking over the connectivity patterns and adapting to the counterpart’s way of communication and as a “passive decider” in dyad B indirectly determining the way of interaction. The question of who adapts to whom is an interesting one and should be addressed in future research.

The outcome of the learning processes are distinct coping measures which sum up to so-called connectivity skills. The definition of “connectivity skill” as a social skill is rooted in the idiosyncrasy of connectivity patterns that are not just shaped by actor agency i.e. the free will of individuals if, when and how to connect, but also by social pressures forcing the individual to interact in a certain manner [1]. Therefore, organizational behavior, in this case the behavior how to interact with social media, results from the interplay of personal and environmental i.e. social determinants [23]. Due to the importance of social determinants in the field of social media, “connectivity skill” can be described as a social skill.

Mahoney [35] claims that the ability to cope especially with stressful situations depends on the available skill repertoire. As knowledge work is commonly perceived as challenging, knowledge workers have developed their own coping measures in terms of how to handle social media, like blocking Facebook during work hours, reducing the amount of blogs or putting away the mobile phone. Our results show that the coping measures described above are the outcomes of the learning processes “by experience”, “modelling” and “self-control” [21, 23].

Being able to classify connectivity skills as social skills we have a closer look at the definition of social skills. Hargie [16] defines social skills as “a set of goal-directed, interrelated, situationally appropriate social behavior which can be learned and which is under the control of the individual” (p.12). Our presented coping measures have the common goal to cope with the intrusiveness of social media, they are interrelated as for example aversive stimulation and implementing physical restraints. People can put their mobile device away from themselves, however without aversive stimulation as a form of self-control they can pick up the phone anytime again. This behavior is appropriate for certain situations. This applies especially for the matched-dependent learning approach where people adapt their connectivity patterns not just to the situation but also to their connectivity partners and their situations by using their counterpart’s favorite communication channel. Moreover, those presented coping measures are all learnable either by (1) direct experience, (2) modelling or (3) self-control and are controlled by individuals themselves.

7. Contributions and Limitations

The purpose of our study was to investigate the learning processes knowledge workers go through in order to control their use of ICT and social media. In our literature review we revealed that one stream of literature claims that knowledge workers tumble into a vicious circle of constant connectivity resulting from the whipping up of individual and collective use of ICT. Another stream points to the interference of knowledge workers and their ability to regulate the amount of connectivity dependent on the situation [1, 2, 5, 10]. We state that knowledge workers can learn how to cope with the phenomenon of constant social connectivity with its chances and risks so that they are able to regulate it and benefit from its opportunities.

We revealed that (1) social media and its attributes support the blurring of work-and life boundaries and enforce the shift towards constant availability and responsiveness i.e. constant connectivity. Furthermore, we explained (2) how knowledge workers learn either by direct experience, by modelling or self-control how to handle constant social connectivity and revealed the different triggers for learning adherent to each learning approach. Hereby, we found that (3) learning by experience and by self-control are not strictly separate from each other. We also brought about that (4) the matched-dependent approach is the most prevailing approach
with our interviewees. Moreover, we showed how knowledge workers (5) developed their own coping measures to handle constant social connectivity. These coping measures form a repertoire of capabilities as part of a persons’ connectivity skills [1].

In terms of managerial implications we give aspiration to companies whose teams suffer from hyper-, respectively hypo-connectivity in terms of showing them the process of how knowledge workers can escape from such dysfunctional states of connectivity. Furthermore, we build on the findings of Mazmanian [2] who claims that allowance for heterogeneous practices of ICT is the only way to escape the negative effects of constant connectivity. However, tolerance for heterogeneous ways how to use ICT might often hardly be given in companies due to group pressures, expectations, dependence on other colleagues and perception of work quality [5, 10].

The research has some limitations that must be acknowledged. In addition to the limitations of an exploratory case study of the single case of an international IS project, all interviews were conducted in English, hence, a language barrier can influence the results due to misunderstandings of questions and misinterpretations of answers. While all interviewees were fluent and comfortable with the English language, not all were native English speakers. As just one researcher coded the transcripts, results may be biased by her interpretations even though the results were discussed with the other two authors of this paper to increase the shared understanding and to interpret the results.

8. Conclusion

In our information society ICT became the constant companion of knowledge workers and can have some anti-social and addictive effects [3, 36]. We show that in order to escape the vicious circle of escalating engagement and shift of norms and standards of availability and responsiveness, people learn by direct experience, modelling and self-control to cope with this intrusive urge to get connected and develop connectivity skills [2, 5, 10]. Here, we found that the matched-dependent behavior is particularly important and that learning by direct experience and self-control are tightly intertwined. Therefore, we could show the complete process of how knowledge workers learn to avoid the negative effects of constant social connectivity.

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10. References


