

PR Professionals' Technology Use: Emotional, Financial, and Professional Ramifications

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ABSTRACT

This study examined Information and communication technologies (ICT) use by public relations practitioners and its influence on work-life conflict, income, and professional outlook through a random national survey (n = 820) of Public Relations Society of America (PRSA) members. We found that practitioners primarily use direct media more than network-building media and visual media. ICT use (direct and visual media use) was a significant predictor of time-based work-life conflict. Some types of ICT use significantly enhance practitioners' income and influence their professional outlook.

INTRODUCTION

Information and communication technologies (ICT), including social media, communication software programs, and personal communication devices, have transformed not only how publics communicate with each other, but also how public relations professionals reach out to the publics. Industry leaders predicted that public relations practitioners should manage and “own” social media (Goodwin, 2013). Practitioners constantly search and explore the “best” way to measure return on investment of ICT (e.g., Goodwin, 2013; Swallow, 2011; Warren, 2011; Wasserman, 2013).

On the other hand, academics have also focused on documenting and describing the use of ICT by public relations practitioners and further investigating its impact. For example, Wright and Hinson (2014) for the past eight years have annually examined how public relations practitioners are actually using social media at work. They further identified the benefits of social media, including offering organizations “a low-cost way to develop relationships with members of various strategic publics” (2010, p. 13). Similarly, others (e.g., Kanter, 2009) suggested additional benefits of social media; it deepens existing relationships, ignites potential relationships, and allows for individuals to self-organize around causes through interaction and collaboration.

As the newest addition to the ICT family, it is understandable that most research and professional conversations centered on social media. However, emphasis has been put more on social media's impact on *organizations* that public relations practitioners represent, little has been done to shed light on social media's (and ICT overall) impact

To cite this article

Shen, H. and Fussell Sisco, H.K. (2015). PR Professionals' Technology Use: Emotional, Financial, and Professional Ramifications. *Public Relations Journal*, 9(2). Available online: <http://www.prsa.org/Intelligence/PRJournal/Vol9/No2/>

on *public relations practitioners themselves*. As managers and champions of the new communication technologies, public relations practitioners' own lives are largely transformed as well. As these new ICT appear with increasing frequency, public relations practitioners must adapt new strategies to manage expectations both at work and at home. A study by the Pew Research Center found that working Americans have mixed views about the impact of these growing technologies on their work lives (Madden & Jones, 2008). Questions about the extent to which working activities can spill into personal time have become more pervasive as the use of new communication technologies are integrated into many workplaces.

In addition to its influence on practitioners' work-life integration, ICT has immense financial implications for practitioners. Despite the bleak U.S. economic outlook, social media-related jobs were on the rise (Lytle, 2013). Does it mean skills and use of ICT, including social media, may increase public relations practitioners' income? Also, in terms of career development, how does ICT use affect practitioners professionally, such as their job productivity, work schedule, and professional relationships? These important questions have remained unanswered in existing public relations literature. Our study seeks to examine these issues by conducting a random national survey (N = 820) of members of the Public Relations Society of America (PRSA) and providing a comprehensive look at ICT's implications in public relations practitioners' professional as well as personal lives.

LITERATURE REVIEW

ICT Use in Public Relations

More than half of employed Americans are using communication technologies at work. These "networked workers" (Madden & Jones, 2008) are not only using these technologies during office hours but also at night, at home and on weekends. Employees that are required to use email and Internet on their jobs are also more likely to use a wider range of technologies outside of the workplace, such as texting, tweeting, blogging, and photo-sharing.

As a profession, public relations practitioners are expected to be at the forefront of ICT. ICT vary in the level of engagement, from traditional workplace technologies like email, Intranet and video conferencing to the more connected PDAs, social networking, instant messaging, and microblogging. Practitioners are expected to utilize these tools and maintain connectivity more than ever before. The overall expansion of ICT has made it more feasible for public relations practitioners to stay connected to work at all times.

While some may argue that the use of technologies has improved communication for practitioners, it has also blurred the line between working hours and non-working hours. Whether it be checking your smartphone for tweets during your commute or responding to emails while on vacation, the connection to work has become much harder to break with the use of these technologies. According to Fenner and Renn (2004), these types of technologies have "enabled an anytime-anywhere connectedness of employees to

their work” (p. 184). Ladner (2008) found “that the use of mobile technologies does indeed render the home/work division more permeable, but it is not their use alone that determines this effect. Rather, it is the underlying social relations of workplaces that affect how individuals negotiate the use of these technologies in non-work time and space” (p. 465). For the public relations practitioner, ICT use may benefit their professional lives but can also impact their private lives as well. We discuss below ICT use in relation to work-life conflict, practitioners’ income, and their professional outlook.

ICT Use & Work-Life Conflict

Work-Life Conflict. Work-life conflict is commonly known as the incompatibility between one’s work and life responsibilities or roles (Greenhaus & Beutell, 1985; Holahan & Gilbert, 1979). An individual’s work roles interfere with his/her nonwork obligations, thus creating work-life conflict.

When the individual’s work responsibilities take up most of his/her time, making it difficult to fulfill his/her family and social roles, this individual then is experiencing *time-based work-life conflict* (Rotondo, Carlson, & Kincaid, 2003). For instance, a last-minute business meeting results in a worker missing his/her son’s graduation ceremony.

When emotional strain (e.g., fatigue, anxiety, and tension) resulted from one’s job prevents a worker from meeting family and social expectations, the worker then is confronted with *strain-based work-life conflict* (Thomas & Ganster, 1995). For example, an employee may bring home the anger from an office fight.

Lastly, *behavior-based work-life conflict* occurs when an employee fails to transition from their work-appropriate behavior to home-appropriate actions. A manager may be expected to be authoritative and aggressive at work but nurturing and caring at home. Failure to adjust accordingly brings about conflict (Greenhaus & Beutell, 1985).

The Technological Impact. ICT use has enabled employees to work in any place and at any time. The possibility of easy access and availability often creates expectations (Roberts, 2007). Bosses and colleagues expect employees to be always available to work. At the same time, employees feel compelled to work on weekends or other odd hours to demonstrate their career commitment to employers (Towers, Duxbury, Higgins, Thomas, 2006). Employees may also be contacted at any time by their coworkers and bosses for work during off hours. The inability to “switch off” creates immense conflict between work and life for employees in different industries, including computer science, civil engineering, business management, and education (e.g., Ahuja, Chudoba, Kacmar, McKnight, & George, 2007; Christensen, 1987; Osterlund & Robson, 2009; Roberts, 2007; Towers et al., 2006; Tremblay, Paquet, & Najem, 2006).

ICT have been labeled as “time thieves,” and “space invaders,” and recognized as overburdening by workers in various studies in different countries (e.g., Ahuja et al., 2007; Christensen, 1987; Osterlund & Robson, 2009; Towers et al., 2006; Tremblay et al., 2006). For example, Ahuja et al. (2007)’s analysis of IT road warriors (i.e., IT

workers who spend most of their work time away from home at client sites) demonstrated heightened work-life conflict due to the reality of having to juggle family and job duties while working distant client sites during the week. Christensen (1987) surveyed employees in three American companies and concluded that the presence of work materials at home creates interference with home duties, hence conflict. In like manner, Tremblay et al. (2006) analyzed Canadian workplace employment survey data of more than 23,000 employees from 6,000 plus firms and revealed that technology-assisted telework resulted in increased level of work-life conflict. They further found that it was the employers' requirement that workers bring work to their homes. Similarly, Osterlund and Robson's (2009) survey of teaching assistants in different majors at a Canadian university concluded that email, as a common type of ICT, increased these academic workers' workload and added pressure between life and work.

The 24/7 mentality is more pronounced in public relations. As the No. 5 "hot career" to watch in 2013, public relations specialists' expertise are sought out by organizations to build a better reputation or maintain a better image with their stakeholders because "with instant access to social media, it is more important than ever for individuals and organizations to get professional help maintaining a positive public image" (Armstrong, 2012). The advent of new technologies helps contribute to the 24/7/365 media environment, thus a never-off reality for public relations professionals (Schwartz, 2012).

The high expectations of an always-available public relations practitioner make it hard for them to negotiate between life and work. Similar to their peers in other industries, public relations practitioners may be equally vulnerable to the work encroachment on family time (time-based work-life conflict), accompanying stress from blurred work/life boundaries (strain-based work-life conflict), and difficulty in shifting between work roles and home roles (behavior-based work-life conflict). For example, Mrva-Montoya (2012) pointed out that because ICT (e.g., social media) are used in most individuals' personal lives and professional lives, public relations practitioners find these tools distracting and have a hard time dividing their attention (behavior-based work-life conflict).

Based on the above reviewed literature, therefore we proposed the following hypothesis:

H1: ICT use is positively related to public relations professionals' perceived work-life conflict, including time-based, strain-based, and behavior-based conflict.

ICT Use & Income: The Financial Implications

The public relations industry is heading an upward turn in the past couple of years. PR Daily's first "salary and job satisfaction survey" indicated that 71% of public relations professionals received pay raises in 2012 and most participants expected a raise in 2013 as well (Sebastian, 2013). Similarly, PRSA (2013) reported that entry-level public relations practitioners on average earn \$52,200 in salary in 2013, a 5% increase from 2012. The job growth in our field is expected to continue and increase by 23% between 2010 and 2020 (Armstrong, 2012).

Many of these jobs are driven by the advent of social media, a type of ICT (Armstrong, 2012; Schwartz, 2012). As social media are believed to have “revolutionized public relations” (Finnegan, 2013), practitioners see financial benefits from their skills in building relationships and managing organizational reputation with stakeholders both online and offline (Schwartz, 2012).

Empirical evidence linking ICT use and workers’ salaries has been documented in other fields, both domestically and internationally (e.g., Diaz-Chao, 2008; Entorf & Kramarz, 1997; Haltiwanger, Jarmin, & Schank, 2003; Timmer & Ark, 2005; Torrent, 2008). For instance, Entorf and Kramarz (1997) found that the use of new technologies added around 1% to the wages of workers using such technologies. Haltiwanger et al. (2003) compared longitudinal survey data of over 14,000 U.S. manufacturing firms from 1999 to 2003 and more than 26,000 similar German firms from 2000 to 2001 and found that adoption of ICT increases workers’ wages, with a greater impact in the U.S. than in Germany. Diaz-Chao’s (2008) assessment of survey data from the Spanish National Institutes of Statistics uncovered a similar positive link between knowledge (generated by use of new technologies) and employees’ salaries.

Extending the findings to public relations, we hypothesized a positive association between frequency of ICT use and public relations practitioners’ income. The following hypothesis was proposed:

H2: ICT use is positively related to public relations professionals’ reported income.

ICT Use & Its Professional Impact

A worker’s *professional outlook* involves many aspects, such as their work competence, productivity, work autonomy and job-affiliated stress (Ahuja et al., 2007; Haltiwanger et al., 2003; Towers et al., 2006). In the present study, professional outlook refers to enabling and disabling factors contributing to a worker’s professional identity, a process by which people assert their membership to a particular group (Cheney & Tompkins 1987; Edwards & Peccei, 2007; Sha, 2009). The enabling factors or positive professional outlook include a worker’s ability to carry out tasks required at work, possibility to remain productive, an environment that encourages workers to share ideas and cultivate relationships with coworkers. These aspects of a worker’s professional outlook enhance an employee’s commitment and identification with his/her job, organization, and profession (Edwards & Peccei, 2010). On the other hand, the disabling or negative factors consist of long working hours, occupational stress, and excessive workload, which erode a worker’s identification with his/her job, organization, and profession.

The Double-Edged Sword. ICT use has been documented as a dual-edged sword in terms of its effect on employees’ professional outlook (e.g., Golden & Geisler, 2007; Fallows, 2002; Hartman & McCambridge, 2010; Heijstra & Rafnsdorrit, 2010; Towers et

al., 2006). On the one hand, some research has shown that the use of technologies offers professionals more control over their work-life boundaries, allowing them to integrate or segment their work life and personal life as they choose (Golden & Geisler, 2007). Other studies have found that ICT not only aid people in doing their jobs but also help to build their professional networks and shape their professional identities (Hartman & McCambridge, 2010).

On the other hand, the negative impact of ICT use on professional outlook was evident across different fields. For example, a 2010 study of academics found that new technologies make “some features of the profession less complicated, like the possibility of working at home, it also initiates a proliferation of the workload, triggers a prolonging of the workday and enhances a demand for extensive availability” (Heijstra & Rafnsdorrit, 2010, p.158). Likewise, the Pew Research Center (Fallows, 2002) found that most “wired workers” say that the Internet, email, cell phones, and instant messaging make it harder for them to forget about their work at home and on the weekends. Perlow (1998) reported that jobs that heavily use technology are often associated with increased job-related stress. Furthermore, in a study of young managers and professionals, Stoner, Stephens and McGowan (2009) found that ICT “permitted a greater range of options regarding when and where work was done, this same connectivity provided constant availability to work and often drove expectations that more must be done, thereby increasing the likelihood of longer work hours and — surprisingly — leading to a diminished sense of flexibility” (p. 67).

The same dual-impact of ICT use has been observed in public relations. Public relations practitioners strive to establish and maintain relationships with their publics. ICT (including social media) allow these professionals to create and connect more than ever before. Furthermore, collaboration is a core value of the public relations profession (Grunig, 2000); social media grant practitioners easy access to their publics, colleagues, as well as competitors. ICT allow practitioners to “improve research, increase productivity, and advance two-way symmetric communication in their organization” (Johnson, 1997).

But at the same time, this feeling of being tethered to a technological device or a social media account can be a burden to public relations practitioners. Managing online communities or responding to various publics through social networks requires a commitment of time and constant attention (Johnson, 1997).

Based on the above literature, it is clear that ICT use can contribute to both the negative and positive aspects of public relations practitioners’ professional outlook. Therefore, we proposed the following hypothesis:

H3: ICT use is positively related to professional outlook, including positive and negative impact.

METHOD

The Sample

Professionals with workable email addresses ($n = 4,714$) in the PRSA database were invited to participate in the online survey¹. A total of 18.6% ($n = 876$) responded to our invites and completed the survey. Excluding responses from the retired practitioners and academic members, we used a final sample of 820 in our analysis. On average, participants were 42 years old with 15 years of public relations experience and mean income of \$78,000. The majority of participants were female (53.9%), Caucasian (60.4%), married or living with a partner (49.6%), and well educated (34.4% with a Bachelor's degree, 9.3% with some graduate work, and 21.3% with a Master's degree).

The Instrument

ICT use. We used a four-point 11-item scale (Madden & Jones, 2008) to assess practitioners' ICT use, with 1 being "none" and 4 being "a great deal." Questions asked practitioners' frequency of use of different types of ICT. Exploratory factor analysis (EFA) was performed, with Varimax rotation. Two cross-loaded items were deleted. The finalized scale consisted of three components: network-building media use (social networking, microblogging, blogs), visual media use (videoconferencing, podcasts, and intranet), and direct media use (email, PDAs, and text messaging). The finalized scale was moderately reliable with Cronbach's $\alpha = .62$.

Income. We measured practitioners' income by asking them to report the dollar amount of their annual income. We then used the logarithmic transformation of income for the follow-up regression analysis.

Work-life conflict. We adapted nine items by Carlson, Kacmar, and Williams (2000) to assess work-life conflict. EFA identified three factors, time-based conflict (Cronbach's $\alpha = .93$), strain-based conflict (Cronbach's $\alpha = .90$), and behavior-based conflict (Cronbach's $\alpha = .81$). The scale overall is highly reliable: Cronbach's $\alpha = .87$.

Professional outlook. We used a four-point eight-item scale (Madden & Jones, 2008) to assess practitioners' professional outlook, with 1 being "not at all" and 4 being "a lot." Two components emerged from EFA results: positive outlook (enhanced job ability, job productivity, idea sharing, professional relationships, and flexible hours) and negative outlook (increased workload, work hours, and job stress). Positive outlook had a Cronbach's α of .75 and negative outlook had a Cronbach's α of .88. Overall professional outlook was moderately reliable: Cronbach's $\alpha = .72$.

¹ The authors thank PRSA for its support.

RESULTS

We performed hierarchical linear regression to test the three hypotheses. Descriptive statistics were obtained to shed light on practitioners' use of ICT, perceived work-life conflict, and perceived professional outlook.

Descriptive Statistics

On a four-point scale, practitioners used direct media (email, PDAs, and text messaging) most often ($M = 3.58$, $SD = .54$), followed by network-building media (social networking, blogs, and microblogging) ($M = 2.82$, $SD = .76$), and visual media (videoconferencing, intranet, and podcast) ($M = 2.28$, $SD = .66$). On a seven-point scale, practitioners reported a great deal of time-based work-life conflict ($M = 4.44$, $SD = 1.67$), slightly less strain-based conflict ($M = 3.83$, $SD = 1.66$) and behavior-based conflict ($M = 2.71$, $SD = 1.36$). Regarding professional outlook (four-point scale), practitioners perceived similar level of negative ($M = 3.10$, $SD = .85$) and positive outlook ($M = 3.25$, $SD = .58$).

We also conducted one-way Analysis of Variance (ANOVA) to explore gender differences among practitioners' ICT use. However no significant difference was found except for visual media use: $F(1, 287) = 4.59$, $p < .05$). Female public relations practitioners used visual media (videoconferencing, intranet, and podcast) ($M = 2.13$, $SD = .64$) significantly less than their male counterparts ($M = 2.32$, $SD = .71$). Their uses of network-building media (social networking, blogs, and microblogging) and direct media (email, PDAs, and text messaging) were approximately the same as men's: network-building media ($M = 2.85$ for both men and women, $SD_{female} = .83$, $SD_{male} = .68$); direct media ($M_{female} = 3.52$, $M_{male} = 3.51$, $SD_{female} = .62$,

$SD_{male} = .61$).

Hypotheses Testing

H1 predicted a positive association between ICT use and work-life conflict. Regression analysis showed that ICT use was a significant predictor of *time-based work-life conflict* only. Specifically, direct media use and visual media use explained a small portion of variance in time-based conflict: $R^2 = .04$, $F(3, 530) = 7.31$, $p < .01$. Direct media use was a borderline significant influencer: $b = .27$, $t(534) = 1.89$, $p = .06$. Visual media use showed significant impact: $b = .45$, $t(534) = 4.00$, $p < .01$. No significant impact emerged for strain-based ($R^2 = .01$, $F(3, 528) = .92$, $p = .43$) and behavior-based conflict ($R^2 = .01$, $F(3, 526) = 1.06$, $p = .36$). H1 was partially supported.

H2 expected ICT use to be an income-enhancing antecedent. Regression results revealed all three components of ICT use significantly affected practitioners' income: $R^2 = .07$, $F(3, 443) = 11.74$, $p < .01$. Specifically, network-building media use showed a negative effect: $b = -.11$, $t(447) = -3.60$, $p < .01$ whereas visual media use ($b = .15$, $t(447) = 4.38$, $p < .01$) and direct media use ($b = .14$, $t(447) = 3.15$, $p < .01$) demonstrated a positive impact. H2 was partially supported.

H3 anticipated ICT use as a positive influencer of professional outlook. Regression results partially supported the hypothesis. Different components of ICT appeared to be significant predictors of both negative and positive professional outlook. In terms of positive professional outlook, network-building media use ($b = .09$, $t(531) = 2.68$, $p < .01$) and direct media use ($b = .24$, $t(531) = 4.97$, $p < .01$). Overall they explained 9% of the variance in positive professional outlook ($R^2 = .09$, $F(3, 527) = 17.67$, $p < .01$). With regards to negative professional outlook, visual media use ($b = .14$, $t(532) = 2.53$, $p < .01$) and direct media use ($b = .30$, $t(532) = 4.14$, $p < .01$) were found to contribute significantly to the negativity ($R^2 = .06$, $F(3, 528) = 10.34$, $p < .01$).

DISCUSSION

This study examined the use of ICT by public relations practitioners and the influence of ICT on work-life conflict, income, and professional outlook through a random national survey ($N = 820$) of PRSA members. We found that public relations practitioners are primarily using direct media (email, PDAs, and text messaging) more than network-building media and visual media in their jobs. Hierarchical regression analysis further showed that ICT use (direct and visual media use) was a significant predictor of time-based work-life conflict. ICT use (except network-building media use) also significantly enhances practitioners' income. Lastly, different components of ICT appeared to be significant determinants of both negative and positive professional outlook.

Visual Media Use Generates Conflict (Time)

The first critical finding from this study is that visual media use requires significant amount of practitioners' time at work, interfering with their nonwork schedule and responsibilities. Just as the scarcity theory (McMillan, Morris, & Atchley, 2011) stated, one can only have so much time to devote to so many tasks. Having to be stretched to participate in videoconferences, make podcasts, and attend to intranet tasks (visual media use) at work, practitioners' appeared to have less time to engage in their personal and family roles. Also notable is that females use visual media less than male practitioners. Coupled with our finding that public relations practitioners across genders use visual media the least compared with direct and network-building media, the conflict-engendering potential of visual media is noteworthy.

A possible explanation for the above findings can be that technologies such as videoconferencing, podcasting, and intranet may require more "face time" or preparation time than other categories of ICT use such as direct or network-building media use. Emails and text messages can be done more quickly (direct media use). Microblogs/blogs and social networking use (network-building media use) could be more time-consuming than direct media use but do not require practitioners' "face time" as much. These tasks can be conducted at their convenient times, thus creating less conflict with practitioners' personal/family lives.

Although only borderline significance was identified between direct media use (email, PDAs, text messaging) and time-based work-life conflict, the finding still highlights the time-commitment expected of public relations practitioners. Even though text messages and emails could be responded quickly, their forever presence eats away practitioners' quality time in their personal/family lives.

In light of existing research on work-life conflict in public relations that a supportive organizational environment can reduce employees' experienced work-life conflict (Jiang & Shen, 2011), theoretically our study enhanced our understanding of work-life conflict in public relations by adding another antecedent of work-life conflict: ICT use, particularly visual media and direct media use. Practically, this finding provides more insights to organizations' efforts to build a supportive environment for their employees. Specifically, organizations should evaluate their time demands of visual and direct media use. Future research may further examine the relationship between ICT use and supportive organizational environment and the extent to which they interact to affect practitioners' work-life conflict experiences, if at all.

Nuanced Financial Benefits

In terms of financial benefits, all three categories of ICT use (visual, network building, direct) had a significant impact on income. Visual and direct media use appeared to be income-enhancing while network-building media income reducing. This finding added more nuanced understanding of the impact of ICT use in public relations. Visual media and direct media use may be time-consuming (as discussed above), but the financial return is apparent, which could probably account for why practitioners would be willing to sacrifice time for their nonwork responsibilities (time-based work-life conflict). Practically, this finding suggests that public relations job seekers may want to refresh their visual and direct media use skills, given the income-enhancing potential.

The lack of financial return of network-building media use may be attributed to the characteristics of blogs, microblogs, and social networks. These tools have been associated with user addiction in public health research (e.g., Thomée, Dellve, Harenstam, & Hagberg, 2010; Thomée, Härenstam, & Hagberg, 2011). Although practitioners are using these network-building media frequently (possibly additively), their productivity may not be as high. Therefore, the financial returns could be low. This finding suggests that it is not the *frequency* of using network-building media tools but the *quality* of using such media that matters. Theoretically and practically, this further highlights the importance of measuring social media effectiveness and return on investment. Counting the number of blogs, microblogs and social networking updates posted is the least useful and financially reasonable way of measurement. These network-building media tools should not only be linked to practitioners' own income but also revenues of the organizations they represent. Future research could further explore the financial implications of ICT use at both the individual and organizational level.

Layered Professional Benefits

Technology is lauded as providing multiple benefits to people's everyday lives. Often people overlook some of the negative aspects of living in a constantly connected world. This study found that in terms of the professional benefits of ICT the results are varied.

The use of network-building and direct media had a positive impact on public relations practitioners' professional outlook. These technologies and devices improved the ability of practitioners to do their job in a more effective way. It also enabled them to connect with others and build relationships outside of the confines of a 9-to-5 system. As the practice of public relations integrates these technologies, an increasing amount of work will be performed in nontraditional places with the aid of laptops, PDAs and various social networking sites. It is encouraging to see that practitioners feel these technologies can help them perform more efficiently and advance in their careers. These technologies empower the practitioner to build networks and build bridges of information to increase engagement among their peers and various publics. It seems that practitioners are benefiting professionally from the changing 2.0 world of public relations (Breakenridge, 2008). Organizations should encourage practitioners to use these ICT, specifically social media to grow their connections and build a stronger foundation to communicate with a larger audience.

In contrast to these improvements to the practitioner, the use of visual media and direct media negatively impacted public relations professionals' job. Practitioners felt these types of technologies increased their workload, the number of hours they spent working, and increased their job-related stress. As previously mentioned, the increased amount of time using these types of technologies can feel like a burden for practitioners. The more complicated media such as podcasts, intranet and videoconferencing seem to increase the amount of work practitioners must do at home or outside of working hours. Although practitioners may feel an increased connectedness to work through these technologies there are some professional consequences. This is consistent with the finding that these technologies increase time-based work-conflict for public relations practitioners. The ease of these technologies can be a hindrance since practitioners may feel that it is increasingly difficult to disconnect them from work when away from the workplace. As practitioners adapt to a 24/7 connection to work activities, organizations may begin to expect this type of commitment from all practitioners, in turn, this could increase job dissatisfaction and occupational burnout.

Only direct media, such as email, PDAs, and text messaging, provided both a positive and negative professional outlook for public relations practitioners. These technologies are clearly more individually focused than visual or network-building media. As of December 2012, the Pew Research Center reported that 87% of Americans owned a cellphone and 45% had a smartphone (Brenner, 2013). The overwhelming ease of direct communication through these devices allows practitioners to receive constant updates from both professional and personal connections. Practitioners may benefit from being informed about a work situation but they may also struggle with the need to respond immediately after receiving such information.

Practically, organizations and public relations professionals should be cautiously optimistic about the integration of technologies in their professional lives. Practitioners should clearly understand the guidelines and policies that may accompany a work-related smartphone or social media account. Organizations should also manage their expectations of professionals' availability and flexibility outside of work hours. ICT can provide both the practitioner and their organization/clients tremendous professional benefits but they must be wary of the stress that may accompany them as well.

Limitation & Future Research

The findings in this study are based only on a random sample of PRSA members, which does not represent the entirety of the public relations profession. Findings in this study thus should not be generalized beyond the current scope without further evidence. The present study is only the beginning of a continued research stream that theorizes on ICT use in public relations. Future research may further verify our findings in other professional associations in public relations.

Gender differences can also be examined as many trade media as well as academic research have discussed in general the dominance of females on various social media platforms, such as Pinterest, Twitter, and Facebook (e.g., McCandless, 2012; Wagstaff, 2012). We did not find a significant gender difference in the uses of network-building media (social networking, blogs, and microblogging) and direct media (email, PDAs, and text messaging) between men and women in public relations. Women used visual media (videoconferencing, intranet, and podcast) significantly less than men did. As a feminized profession, the role gender plays in public relations practitioners' ICT use should be further investigated as well.

REFERENCES

- Ahuja, M. K., Chudoba, K. M., Kacmar, C. J., McKnight, D. H., & George, J. F. (2007). IT road warriors: Balancing work-family conflict, job autonomy, and work overload to mitigate turnover intentions. *MIS Quarterly*, 31(1), 1-17.
- Armstrong, L. H. (2012). Eight hot careers to watch in 2013. Retrieved July 10, 2015 from http://web.archive.org/web/20130507055818/http://education.yahoo.net/articles/careers_for_2013_and_beyond.htm
- Breakenridge, D. (2008). *PR 2.0: New media, new tools, new audiences*. Upper Saddle River, NJ: FTPress, Pearson Education.
- Brenner, J. (2013). *Pew Internet: Mobile*. Washington, DC: Pew Internet & American Life Project.

- Carlson, D. S., Kacmar, K. M., & Williams, L. J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior, 56*, 249-276.
- Cheney, G., & Tompkins, P. (1987). Coming to terms with organizational identification and commitment. *Central States Speech Journal, 38*(1), 1-15.
- Christensen, K. E. (1987). Impacts of computer-mediated home-based work on women and their families. *Office: Technology and People, 3*, 211-230.
- Diaz-Chao, A. (2008). Salary gaps in the knowledge economy: An empirical analysis of Spain. *UOC Papers*, Retrieved March 11, 2013 from <http://www.uoc.edu/uocpapers/6/dt/eng/diaz.html>
- Edwards, M. R., & Peccei, R. (2007). Organizational identification: development and testing of a conceptually grounded measure. *European Journal of Work and Organizational Psychology, 16*, 25-57.
- Edwards, M.R., & Peccei, R. (2010). Perceived organizational support, organizational identification, and employee outcomes. *Journal of Personnel Psychology, 9*, 17-26.
- Entorf, H., & Kramarz, F. (1997). Does unmeasured ability explain the higher wages of new technology workers? *European Economic Review, 41*, 1489-1509.
- Fenner, G. & Renn, R. (2004) Technology assisted supplemental work: construct definition and a research framework. *Human Resources Management Journal, 43*, 179-200.
- Fallows, D. (2002). *Email at work*. Washington, DC: Pew Internet & American Life Project.
- Finnegan, O. (2013). Social media revolutionizes public relations. Retrieved March 5, 2013 from <http://www.socialmediatoday.com/content/social-media-revolutionizes-public-relations>
- Golden, A. G. & Geisler, C. (2007). Work-life boundary management and the personal digital assistant. *Human Relations, 60*, 519-551.
- Goodwin, S. (2013). 6 reasons PR pros should manage social media. PR Daily. Retrieved March 11, 2013 from http://www.prdaily.com/Main/Articles/6_reasons_PR_pros_should_manage_social_media_13488.aspx
- Greenhaus, J. H., & Beutell, N. J. (1985). Sources of conflict between work and family roles. *Academy of Management Review, 10*, 76-88.

- Grunig, J. (2000) Collectivism, Collaboration, and Societal Corporatism as Core Professional Values in Public Relations. *Journal of Public Relations Research*, 12(1), 23-48.
- Haltiwanger, J., Jarmin, R., Schank, T. (2003). Productivity, investment in ICT and market experimentation: Micro evidence from Germany and the U.S. Diskussionspapiere/Friedrich-Alexander-Universität Erlangen-Nürnberg, Lehrstuhl für Arbeitsmarkt- und Regionalpolitik, 19, Retrieved March 10, 2013 from <http://hdl.handle.net/10419/28302>
- Hartman, J., & McCambridge, J. (2011). Optimizing millennials' communication styles. *Business Communication Quarterly*, 74, 22-44.
- Heijstra, T. & Rafnsdorrit, G.L. (2010). The Internet and academics' workload and work-family balance. *Internet and Higher Education*, 13, 158-163.
- Holahan, C., & Gilbert, L. (1979). Interrole conflict for working women: Careers versus job. *Journal of Applied Psychology*, 64, 86-90.
- Jiang, H., & Shen, H. (2011). *Toward a theory of public relations practitioners' own conflict: work vs. life*. Paper presented to the Public Relations Division of the Association for Education in Journalism and Mass Communication conference in St. Louis, MO, August 9-13, 2011.
- Johnson, M. (1997). Public Relations and Technology: Practitioner Perspectives, 9(3), 213-236.
- Kanter, B. (2009, May 22). 4 ways social media is changing the non-profit world. Retrieved March 18, 2011 from <http://mashable.com/2009/05/22/non-profit-social-media/>
- Ladner, S. (2008). Laptops in the living room: Mobile technologies and the divide between work and private time among interactive agency workers. *Canadian Journal of Communication*, 33(3), 465-489.
- Lytle, R. (2013). 10 qualities of an effective community manager. Retrieved March 10, 2013 from <http://mashable.com/2013/01/27/community-manager-qualities/>
- Madden, M., & Jones, J. (2008). *Networked workers*. Washington, DC: Pew Internet & American Life Project.
- McCandless, D. (2012). Social media by gender. Retrieved March 10, 2013 from http://www.huffingtonpost.com/2012/06/20/social-media-by-gender-women-pinterest-men-reddit-infographic_n_1613812.html

- McMillan, H. S., Morris, M. L., & Atchley, E. K. (2011). Constructs of the work/life interface: A synthesis of the literature and introduction of the concept of work/life harmony. *Human Resource Development Review*, 10, 6-25.
- Mrva-Montoya, A. (2012). Social Media: New Editing Tools or Weapons of Mass Distraction?, *The Journal of Electronic Publishing*, 15(1), Retrieved on March 31, 2013 from <http://dx.doi.org/10.3998/3336451.0015.103>
- Osterlund, K., & Robson, K. (2009). The impact of ICT on work-life experiences among university teaching assistants. *Computer & Education*, 52, 432-437.
- Perlow, L. (1998). Boundary control: The social ordering of work and family time in a high-tech corporation. *Administrative Science Quarterly*, 43(2), 328-357.
- Spring Associates, Inc. (2013). Salaries for public relations professionals. Retrieved March 13, 2013 from http://www.prsa.org/jobcenter/career_resources/resource_type/tools_tactics/salary_information/salaries_pr/
- Roberts, K. (2007). Work-life balance – the sources of the contemporary problem and the probable outcomes: A review and interpretation of the evidence. *Employee Relations*, 29, 334-351.
- Rotondo, D. M., Carlson, D. S., & Kincaid, J. F. (2003). Coping with multiple dimensions of work–family conflict. *Personnel Review*, 32, 275–296.
- Schwartz, M. (2012). “PR specialist” shaping up as one of the fastest growing careers. Retrieved March 11, 2013 from <http://www.prnewsonline.com/water-cooler/2012/12/27/pr-specialist-shaping-up-as-one-of-the-fastest-growing-careers/>
- Sebastian, M. (2013). Most PR pros got raises last year, PR daily survey finds. Retrieved March 4, 2013 from http://www.ragan.com/Main/Articles/Most_PR_pros_get_raises_last_year_PR_Daily_survey_46186.aspx#
- Sha, B.-L. (2009). Exploring the connection between organizational identity and public relations behaviors: How symmetry trumps conservation in engendering organizational identification. *Journal of Public Relations Research*, 21(3), 295-317.
- Stephens, P. R., Stoner, C. R., McGowan, M. K. (2009). Connectivity and Work Dominance: Panacea or Pariah. *Business Horizons*, 52(1), 67-77.

- Swallow, E. (2011). Marketers optimistic about finding social media ROI [study]. Retrieved March 10, 2013 from <http://mashable.com/2011/02/08/social-media-roi-2/>
- Thomas, L. T., & Ganster, D. C. (1995). Impact of family-supportive work variables on work–family conflict and strain: A control perspective. *Journal of Applied Psychology, 80*, 6–15.
- Thoméé, S., Härenstam, A., & Hagberg, M. (2011). Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults - a prospective cohort study. *BMC Public Health, 11*, doi:10.1186/1471-2458-11-66.
- Thoméé, S., Dellve, L., Harenstam, A., & Hagberg, M. (2010). Perceived connections between information and communication technology use and mental symptoms among young adults - a qualitative study. *BMC Public Health, 10*(1), 66.
- Timmer, M., & Ark, B. (2005). Does information and communication technology drive EU-US productivity differentials? *Oxford Economic Papers, 57*, 693-716.
- Torrent, J. (2008). Electronic skill-biased technological change (e-SBTC), employment and salaries: The state of the question. *UOCPapers*, Retrieved March 11, 2013 from <http://www.uoc.edu/uocpapers/6/dt/eng/torrent.html>
- Towers, I., Duxbury, L., Higgins, C., & Thomas, J. (2006). Time thieves and space invaders: Technology, work and the organization. *Journal of Organizational Change Management, 19*, 593-618.
- Tremblay, D-G., Paquet, R., & Najem, E. (2006). Telework: A way to balance work and family or an increase in work-family conflict? *Canadian Journal of Communication, 31*, Retrieved March 10, 2013 from <http://www.cjc-online.ca/index.php/journal/article/viewArticle/1721>
- Wagstaff, K. (2012). Men are from Google+, women are from Pinterest. Retrieved March 10, 2013 from <http://techland.time.com/2012/02/15/men-are-from-google-women-are-from-pinterest/>
- Warren, C. (2011). Measuring social media: Who has access to the firehose? <http://mashable.com/2011/03/13/sxsw-smaroi/>
- Wasserman, T. (2013). 5 dead simple ways to track social media ROI. Retrieved March 10, 2013 from <http://mashable.com/2013/02/13/roi-social-media/>
- Wright, D. K. & Hinson, M. D. (2014). *A longitudinal analysis tracking a decade of social and emerging media use in public relations practice*. Paper presented at the annual International Public Relations Research Conference, Miami, FL.

Wright, D. K. & Hinson, M. D. (2010). An analysis of new communications media use in public relations: Results of a five-year trend study. *Public Relations Journal*, 4 (2).
http://www.prsa.org/SearchResults/view/6D-040202/0/An_Analysis_of_New_Communications_Media_Use_in_Pub

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