Individuals' preference for multiple media use - underlying motives.

1. Introduction

'Media users are using different media platforms at different times and in different places for different purposes - the best available screen for their location' (Enoch and Johnson, 2010, p.125). Continuing technological developments enable multiple media consumption and communication through a combination of traditional and contemporary forms of media. Consistently, it is possible for individuals to retain a high level of control of their media use, for example, through on-demand media services such as television time-shift viewing systems (Webster and Ksiazek, 2012). As highlighted by Pilotta and Shultz, 'the audience determines the media exposure, not the media delivery system. The consumer selects the media form(s) they will access and use. They determine the amount of time they will spend' (2005, p.21). Accordingly, consumers might choose to multitask by watching a television programme whilst using social media, or listening to the radio whilst reading a magazine and attending to text messages.

Multitasking is recognised as a behavioural concept; 'performing multiple tasks where performance requires a conscious shifting from one task to another and performance on multiple tasks, with shifts in attention, must occur over a short time span' (Oswald et al., 2007). Furthermore, multiple media use, the subject of this study, is acknowledged as a specific case of multitasking by Rosen et al. (2013). Uses and gratifications theory is considered a fitting backdrop for the exploration of the phenomenon of multiple media use. The four basic assumptions of this theory are outlined by Katz et al. (1973): Firstly, media audiences are active, with goal directed media use. Secondly, individuals are considered to take the initiative when making the link between their need gratification and media choice. Thirdly, media are assumed to compete with other sources of need gratification and lastly, the gratifications sought from media are thought to vary according to the social roles and psychological disposition of individuals. The uses and gratifications tradition is described as 'one of the most influential theories in the field of communication research' (Lin, 1996, p574). Succeeding the work of Katz et al (1973), the uses and gratifications tradition has been applied extensively in media communications research (for example, Eighmey and McCord, 1998; Ferguson and Perse, 2000) and in the context of commercial media (for example, O'Donohoe, 1994; Grant, 2005; Dou et al., 2006; Peters et al., 2007).

The behavioural phenomenon of multiple media use is examined in a limited number of empirical studies; where combinations of multiple media use and rate of switching behaviour are investigated (for example, Bardhi et al., 2010; Brasel and Gips, 2011; Carrier et al., 2015; Foehr, 2006; Pilotta and Shultz, 2005; Yeykelis et al., 2014). A variety of prevalent media combinations are revealed in extant empirical work, including: television with Internet or newspapers; radio with newspapers; email with text and instant messaging with music (Pilotta et al., 2004; Pilotta and Shultz, 2005; Carrier et al. 2015). Moreover, whilst individuals are multitasking, attention levels between media are found to vary, suggesting that a foreground and background medium exists (Pilotta and Shultz, 2005). Brasel and Gips (2011) observational study, using a TV and computer multitasking scenario, further supports this notion. In relation to the rate of switching between media, the Brasel and Gips (2011) study reveals that switches in media between TV and computer during multitasking are extraordinarily fast and frequent at an average rate of four switches per minute. Corresponding empirical work by Yeykelis et al. (2014) confirms this finding, with switches in media content on

personal computers recorded every 19 seconds during a one day period; further contributing to the understanding of individuals' approaches to multiple media use. In this evolving research domain (Lin, 2009), although studies are predominantly descriptive in nature and limited to two-way media combination analyses, the occurrence of media multitasking is verified. Nevertheless, to advance knowledge of this behavioural phenomenon, it is necessary to consider the precursors of multiple media use.

Antecedents of multiple media use are examined in emergent empirical work, revealing ownership and availability of media, alongside assorted audience characteristics, as predictors of media multitasking behaviour (for example, Jeong and Fishbein, 2007; Wang and Tchernev, 2012; Kononova and Chiang, 2015). Age is widely identified as a key audience feature (for example, Carrier et al., 2009; 2015; Wang and Tchernev, 2012; Konova and Chiang, 2015). Further examination of the media multitasking audience confirms the 'Net Generation' (or 'Digital Natives', Prensky, 2001); born between 1980 and the present day as the predominant media multitasking group (Carrier et al., 2009), which is unsurprising since this group has grown up within a period of rapid technological advancement. Similarly, Bardhi et al. (2010), assert that 'media multitasking is the way young consumers interact with commercial media' (2010, p.328). Although not widely supported, gender has also been revealed as a differentiating factor, with females dominating multiple media use (Jeong and Fishbein, 2007; Duff et al., 2014). In addition, sensation seeking (Jeong and Fishbein, 2007; Duff et al., 2014); creativity (Duff et al., 2014) and motives such as: personal control; efficiency; information; connection and entertainment, are also revealed as antecedents of media multitasking (for example, Bardhi et al., 2010; Duff et al, 2014; Kononova and Chiang, 2015; Hwang et al., 2014). Moreover, the literature indicates that the behavioural phenomenon of multiple media use is determined through individuals' preference for performing multiple tasks (Srivastava et al., 2016), known as polychronicity (for example, Bluedorn et al., 1999; Konig and Waller; 2010). Consistently, the relevance of polychronicity is also emphasised in a recent conceptual paper by Robinson (2016), in agreement with emergent empirical work by Kononova and Chiang (2015).

To progress the understanding of multiple media use, it is necessary to ascertain the underlying motives of such behaviour, which lie in the domain of polychronicity. While extant literature reveals combinations of multiple media use, indicating what media consumers are doing; with the exception of the qualitative study by Bardhi et al. (2010), the motives for multitasking with media are not examined. The paradoxical nature of multiple media use is emphasised by Bardhi et al. (2010), whose study uncovers a limited range of young consumers' perceived benefits of media multitasking (efficiency; assimilation; control; engagement) alongside associated costs. Furthermore, selected antecedents of multiple media use are found in emerging literature, including the preference for such behaviour, known as polychronicity. However, a comprehensive range of dimensions of polychronicity pertaining to multiple media use are not yet determined. Hence, a notable gap in understanding of the scope of individuals' underlying attitudes towards multiple media use is revealed. Accordingly, the focus of this study is polychronicity, 'the preference to multitask with media'; in pursuit of a greater depth of understanding of this concept. This qualitative study builds upon the work of Bardhi et al. (2010), updating and extending the scope of the exploration of individuals' attitudes towards multiple media use. Specifically, this study explores the underlying motives of individuals' preference for multitasking with media; to fully establish the dimensions of polychronicity.

2. The concept of polychronicity

The extant definitions of polychronicity are presented chronologically in Table 1, where some disparity in conceptualisation is apparent. Early definitions focus exclusively on behaviour and the involvement in more than one activity at a time, within a cultural context (Hall, 1959; 1983). In a succeeding definition, Hall (1998) also incorporates the view that individuals perform multiple activities at the same time due to some particular value to them.

[Table 1: Here]

In an alternative interpretation of the concept of polychronicity, the definitions by Bluedorn, Kaufman and Lane (1992) and Bluedorn et al. (1999) focus exclusively on the notion of preference; rather than behaviour. A conceptual paper by Bluedorn, Kaufman and Lane (1992) argues that there are degrees of polychronicity with individuals' orientations varying from '(monochronicity) a preference for doing one thing at a time, rather than doing two or more things simultaneously (polychronicity)'. However, a succeeding definition emphasises only the preference of individuals to be involved in 'two or more tasks or events simultaneously' (Bluedorn et al., 1999, Table 1); a view of polychronicity also endorsed by subsequent authors such as; Palmer and Schoorman (1999), Shell and Conte (2008) and Conte and Gintoft (2005). Although a revised definition is not offered, Persing (1998) extends the debate in relation to creativity in an organisational context, arguing that cognitive tasks should also be considered in the contemplation of polychronicity. Consistently, the most recent definitions of polychronicity also emphasise the preference for multiple tasks; 'the preference for doing several things at a time' (Konig and Waller, 2010; Poposki and Oswald, 2010). Collectively, it is evident that although disparities exist regarding the inclusion of: groups or individuals; simultaneous tasks or tasks within a time frame and whether or not cognitive tasks are important, polychronicity is firmly established as the preference to multitask.

In conclusion, from the preceding review of literature, it is apparent that although contradictions are present in earlier definitions of the concept, recent definitions of polychronicity underline only individuals' preference for doing several things at once. Furthermore, acknowledging the preceding debate, Konig and Waller's (2010) proposal that 'the term polychronicity should only be used to describe the preference for doing several things at a time, whereas the behavioural aspect of polychronicity should be referred to as multitasking' (p.175), is accepted. It is evident from extant literature that the concept of polychronicity has predominantly been considered in relation to the organisational context. Thus far, the dimensions of polychronicity relating to multiple media use have not been investigated. Although the study of media multitasking behaviour by Bardhi et al. (2010) highlights the perceived benefits of: efficiency; assimilation; control and engagement among young consumers, further work is needed to extend the scope of exploration of multiple media use. Accordingly, to advance knowledge in this domain, this study attempts to reveal the underlying dimensions of polychronicity, 'the preference to multitask with media' from the perspective of the individual multiple media user.

3. Aim of the study and research design

The aim of this study is to advance our understanding of the behavioural phenomenon of multiple media use, through the discovery and identification of a comprehensive range of dimensions of

polychronicity. Consistently, the overall research objective is: to uncover the underlying motives for individuals' preference to multitask with media.

Given the emergent nature of the empirical study of multiple media use, coupled with the intention to gain an in-depth understanding of the concept of polychronicity; an exploratory research design is needed. Furthermore, qualitative research techniques are considered appropriate (Mariampolski, 2001). Consistently, individual and triad group interviews are used, allowing respondents to express ideas, attitudes and motives in relation to their multiple media use (Malhotra and Birks, 2007). A semi-structured approach was used; facilitating comparison between individual respondents' motivations to multitask with media, whilst allowing interesting points to be developed (Savin-Baden and Howell Major, 2013). The following two stage research design was developed, wherein Stage 1 comprised individual interviews. Subsequently, informed by Stage 1 findings, where the dimensions of polychronicity emerged; Stage 2 of the study comprised triad group interviews, to allow supplementary exploration, further probing of noteworthy findings and confirmation of the features of the exposed dimensions.

Using non-probability quota sampling, face to face in-depth interviews and triads were conducted among Digital Natives, (born since 1980, Prensky, 2001) aged between18-36, consistent with Carrier et al. (2008). During Stage 1, the study was conducted in the U.K., Germany and Australia; chosen primarily for convenience and accessibility, but also since differences in media consumption pattern, availability and sophistication are evident (Reuters, 2012). In total, thirty four in-depth interviews were conducted; twelve each in the U.K. and Germany and ten in Australia, with each country gender balanced (Duff et al., 2014; Jeong and Fishbein, 2007). By this point, there was a reasonable expectation of theoretical saturation (Bryman and Bell, 2011; Richie and Lewis, 2003). Following Stage 1 data analysis; in Stage 2, four triad groups were conducted to verify the credibility, transferability, dependability, and confirmability (Bryman and Bell, 2011) of the dimensions of polychronicity and to deepen the investigation of this aspect of the research. Furthermore, through the use of three country samples and subsequent triad groups, triangulation is assured (Denzin and Lincoln, 2011). As Stage 1 findings revealed no material differences between the dimensions identified from each of the three country samples; the four triads were conducted in the U.K, where the sample comprised two female and two male groups, split by age (18-24 and 25-36).

Interviews and triads were conducted in mutually agreed locations lasting from one to one-and-a-half hours. All interviews and triads were audio tape recorded and transcribed verbatim. In Germany, interviews were conducted in German, and backward translated prior to analysis. Miles and Huberman's (1994) analysis procedure was applied, including data reduction, data display and verification; whereby the coding process utilised open, axial and selective codes. At Stage 1, data analysis of all individual interview transcriptions followed a manual coding procedure, aided by Computer Assisted Qualitative Data Analysis Software (CAQDAS) (Rettie et al., 2008), specifically NVivo 10, which assisted in data management and the identification of key themes. During Stage 2, for the triads, analysis of the four transcriptions initially followed a similar analysis procedure. Subsequently, these triad findings were mapped against the Stage 1 interview findings; to confirm the dimensions of polychronicity.

This study was conducted in accordance with the four qualitative research quality criteria specified by Yardley (2000). 'Sensitivity to context' is confirmed in relation to multiple media use, as current

information about the media environment (in which this behavioural phenomenon exists) and extant academic literature were both used to inform the research design. 'Commitment and rigour' is applied to all stages of the qualitative research process, in which a systematic approach was taken in the collection and analysis of data as specified in the preceding sections. 'Transparency and coherence' is evident, since research methods are clearly identified and justified, with detailed records kept for all stages of the research process; for example, the storing of all interview and triad guides and transcriptions for future reference. In addition, 'impact and importance' criteria are met, since our study is set within the context of previous empirical work in the domain of multiple media use and the concept of polychronicity. Furthermore, the implications of the findings for the academic community and industry practitioners are pursued later in the paper (section 5), alongside future research proposals in this domain.

4. Findings: the dimensions of polychronicity - 'the preference to multitask with media'.

Multiple media use is regarded as an integral part of daily life, wherein the notion of switching between media is widely accepted among the respondents. Although the sample comprised male and female respondents, gender differences were not evident in the findings of this study in relation to their reasons for multiple media use. Pursuing the objective of this study; to uncover the underlying motives for individuals' preference to multitask with media, the findings are considered. Respondents' motives for multitasking with media revealed an assortment of themes; emerging from the Stage 1 (S1) analysis of individual interviews as eight distinct dimensions of polychronicity 'the preference to multitask with media'. Furthermore, the subsequent analysis of triad group interviews, during Stage 2 (S2) of the study, confirmed these dimensions. Table 2 presents an inclusive summary of the eight dimensions of polychronicity: comfort with multitasking; multi-channel preference; effectiveness and efficiency; convenience; emotional gratification; information and knowledge; social benefits and assimilation. In turn, each of these dimensions of polychronicity comprises associated facets, as discussed in the following sections.

[Table 2: Here]

4.1 Comfort with multitasking:

At Stage 1, the analysis revealed an overwhelming sense of respondents' comfort in relation to their multiple media use, with which they consider themselves proficient within their chosen media combinations; *'I suppose I'm just quite good at multitasking'* (S1 (Stage 1), U.K. (U.K. Sample): 3 (Interview 3)). These feelings of comfort when multitasking with media are confirmed at Stage 2 and are commensurate with the preference by respondents for such an activity, *'it all just feels natural…it all just falls into place'* (S2 (Stage 2), T1 (Triad 1)). Furthermore, participants report that multitasking with various combinations of media is habitual behaviour, which comes naturally to them as illustrated in these quotes:

> *'Like I said it's in our consciousness and when you're on the internet you do find yourself logging in automatically, it's just scary how you're already putting in your password and you don't even realise 'hang on I'm on Facebook at the moment', it's incredible. So yeah, the habit is really strong now, and I think the same with TV, just having a bit of background noise'* (S1, U.K.: 10)

> *'Same sort of routine most weeks, unless I am going out in the evening…so three nights a week I am probably watching the TV whilst doing other (media) things at the same time'* (S2, T1).

However, for some respondents, there is a feeling that their media multitasking is such a habit, that it has become *'a kind of compulsion'* or even verging on addiction as illustrated in these quotes from Stage 1 of the study:

> *'I constantly feel the urge to look at something if I use media. It's hard to stop myself from doing it…it has become a compulsion, even a fear of missing something'* (S1, Germany: 8).

> *'I feel like I check it all the time… it gets a bit obsessive'* (S1, Australia: 6)

Consistently, the following quote from Stage 2 endorses these attitudes; *'We're all just becoming addicted'* (S2, T2).

4.2 Multi-media channel preference:

At both stages of the study, the findings reveal a clear preference among respondents for switching between media, within their pre-selected media portfolios, as emphasised in this quote; '*I like to do several things at a time' (S1, Germany, 6)*. During Stage 2, specifics emerged from the triad groups with regard to the intricacies of switching behaviour while multitasking. Unsurprisingly, switches in media are synchronised with shifts in attention between media activities, with the focus (at any one time) on the medium which captures the greatest attention, as illustrated in the following quotes:

> *If you're doing one thing…then you may do something else, but you sort of fade back into whatever you were doing. I'd always decide to do one thing and then I'd always come back to that and then my attention would slide somewhere else, but then I'd always come back to the first thing'* (S2, T1)

> *'You do one thing, then switch to another thing…but the other thing is still going on…everything is all going on at the same time, it's just which has your focus'* (S2, T2)

Respondents favour multiple streams of stimulation, preferring to juggle several media activities at once, for example: *'I don't like just having one thing at a time'* (S1, U.K., 4); *'I have to do something else at the same time'* (S1, Germany, 3). These sentiments are confirmed by the following Stage 2 respondents:

> *'TV's always on in the background whatever I'm doing, I like it as background noise, I'm often on the phone to my girlfriend…I'll be plugged into that with a headset, while watching TV and playing a game and usually have my laptop on the coffee table as well…so look up things should I need to find something out or buy something quickly'* (S2, T4)

> *'I can watch something (TV), whilst being able to talk to someone (text), whilst being on my laptop; and watch a programme while being able to research something. It's the fact that each of the devices has different uses…and it's beneficial to be able to do them all at once'* (S2, T3)

Consistently, many participants associated a loss of interest or boredom with a single media activity.

4.3 Effectiveness and efficiency:

From the findings of Stages 1 and 2 of the study, the preference for multiple media use is closely linked with personal productivity by participants, who feel that multitasking with media helps them

to be more effective and get things done quickly; thus adding value to their experience. Examples of such benefits are illustrated here:

'Sometimes it is nice just to get home (from work) and catch up quickly on stuff, like finding the news out whilst having fun with music or Facebook or stuff. So it's time effective I think' (S1, U.K.: 10)

Furthermore, there is a clear indication from all respondents that multiple media use helps them to 'juggle', making things easier for them, as suggested in this quote:

'Everything links, you're on one thing, you check another thing…I'll see something on TV, I Google it to see if it's on social media…post it on this (iphone) it is all like one big chain' (S2, T4)

In addition, it is believed that the use of multiple media feels efficient; saving time and helping to alleviate a universal feeling of constant time pressure. In the following quote, this sentiment is effectively illustrated: *'Benefits include saving time and being able to do multiple things at the same time'* (S1, Australia: 10). In a similar vein, Stage 2 findings confirm these feelings of efficiency:

'It's so fast, literally you don't realise you've done it…flicking from telly to phone…you wouldn't be able to tell how many times you'd done it in a night' (S2, T4)

4.4 Convenience:

Stage 1 of the study revealed that convenience is an important feature in the preference to multitask with media, *'media multitasking is very convenient'* (S1, U.K.: 7); a finding also supported by Stage 2 analysis. The ease of navigation between media devices; for example, TV, laptop and smartphone and between media on a single device represents convenience in the minds of respondents, as illustrated by the following quotes:

'It's just extremely convenient…if you're watching something and you want to send a text message…you can let your TV run in the background' (S2, T4)

'It's just quick and easy I guess and when I'm working on my laptop, I can just have the phone next to me and do a quick email refresh without having to change anything on my laptop, I guess that's why I have so many things on at once (radio in the background)' (S2, T2)

Additionally, it is thought that advances in technology and the portability of media, on devices such as tablets and smartphones, are important features in the preference for multiple media use. Furthermore, the options to use multiple media in different locations, for instance; at home; at work; on the bus or train, add to the perceived convenience of multitasking with media. As one respondent explained, *'Sitting on the train or something…every time I get on a train, I look around and every single person is holding a phone or an ipad, everyone!'* (S2, T2).

4.5 Emotional gratification:

Motives for multiple media use also include emotional gratifications; for instance, the need for background noise or to feel less alone. At Stage 1 of the study, many respondents referred to television and radio as their background media, for use alongside other media in a multiple media use scenario, *'Since I live on my own and it's often very quiet in my apartment, I use my TV in the background'* (S1, Germany: 4). This finding is confirmed by Stage 2, *'I have the radio on all day long cos I am on my own in the house, so the radio is just my company...the laptop is always on and the*

phone is beside me' (S2, T2*)*. Additionally, media multitasking is claimed as an emotional support, providing general wellbeing, as it helps individuals to relax and is considered enjoyable and fun, as illustrated in the following quotes:

> *'It's nice to listen to music in the background while using another medium at the same time…and it makes me feel relaxed. It's just fun.'* (S1, Germany: 1)

> *'Mine tends to be mainly in the evening, I use that really as my sort of wind down…sit down and watch something on the TV…but at the same time I'll have my phone or I'll get my ipad'* (S2, T2).

The analysis of Stage 1 findings and the confirmatory Stage 2 study revealed an overwhelming sense that multiple media use is a primary source of entertainment, which provides *'a welcome distraction'* and a means of relieving boredom. Furthermore, multitasking with media is perceived to induce feelings of satisfaction by respondents who consider it a form of relaxation: *'I can have the television on while doing work, it's a welcome distraction'* (S1, U.K.:4); *'If you're at home with the laptop on, with something that you like doing, or the ipad, shopping and watching a film, then that's really enjoyable'* (S2, T4).

4.6 Information and knowledge:

Findings from Stage 1 of the study suggest that respondents prefer multiple media use as a means to keep up to date with everything; the news, sport and social media, as they do not want to miss anything. Respondents consider that the simultaneous access to a variety of information sources through multitasking with media is of value, enabling them to be better informed. Correspondingly, different kinds of supplementary information and knowledge are gained, enabling a better understanding; *'Media multitasking provides me with an added value, because I can look up things immediately that I would otherwise forget…'* (S1, Germany: 10). Accordingly, a sense of possession of different points of view is felt, allowing the possibility to see the 'bigger picture'. These opinions are supported by Stage 2 findings, with the following quotes used to illustrate:

> *'Information I suppose, I do like to look at sport and news, current affairs interest me'* (S2, T1)

> *'If I'm playing a game, and I want to find something out about the game, then I'll use the laptop. Or, if I'm watching a movie and I want to find something out…who that actor is or where they've been in the past, I'll use the laptop to find the information'* (S2, T4)

4.7 Social benefits:

There is a strong impression from Stage 1 that the preference for multiple media use is to allow respondents to stay in touch with friends and family all of the time, even while they are engrossed in other media; *'It gives me peace of mind that people can get in touch with me at any time'* (S1, Germany: 3). This finding is also corroborated by the triad group findings during Stage 2 of the study; *'Staying connected…I have to always be connected to my friends…social media, current affairs; I always have to be with it…everyone's moving ahead, I don't want to be left behind'* (S2, T1). Furthermore, respondents report that the ability to stay in touch while multitasking with media gives them a feeling of connectedness. It is clear that respondents' multiple media use takes place in a social environment offline, but also online, allowing them to stay connected in a virtual world. Preference for multiple media use is based around the desire not only to communicate with friends and family, but also to remain available for them even while using other media.

For some respondents, the preference to multitask is linked specifically to a particular social occasion associated with multiple media use. For example, while watching a television programme, several respondents claim to conduct a running commentary with friends or family (in other locations) for the duration of the programme in a dual media multitasking scenario; *'I do it with my friend every week with X-Factor and we share the commentary and it is like we are together. I do it with my Mum as well. So it's bringing people together without getting people together. All watching the same thing and you're all talking about it, but you're in completely different places'* (S2, T2). Others report similar behaviour in relation to online game playing as part of a multiple media scenario.

4.8 Assimilation:

Stage 1 of the study revealed that an important motive for respondents' preference to multitask with media, is to enable them to digest the large volume of information and entertainment currently available from an array of media channels; *'So, advantages would be having access to so many things, so many options, you've got research…there's just…you can learn a lot from the comfort of your own home and your media channels when media multitasking'* (S1, Australia: 8). The desire to cope with the quantity of information with which they are bombarded is reinforced by respondents in Stage 2; *'I multitask because I'm so busy, I've got so much to do that if I just sat and looked at Facebook I'd feel bad cos I'm not getting the other stuff done so…I'm doing my work, but then I'm going to get a cup of tea now so I'll just quickly look at Facebook, but I've got to get back to work...I've got to carry on with this work, so we multitask just to get it all done'* (S2, T2). Consistently, many respondents reported that their preference to multitask is driven by fact that multiple media use allows them to assimilate a greater proportion of the media content available.

5. Discussion

Multitasking with media is confirmed as a common behaviour, in line with previous work in this domain (for example, Pilotta et al., 2004; Pilotta and Shultz, 2005; Foehr, 2006; Brasel and Gips, 2011; Carrier et al, 2015). In accordance with Brasel and Gips (2011) and Yeykelis et al., (2014), there is clear evidence of temporary pauses in multitasking, which allow multiple media to be managed more effectively by individual media users. While previous empirical work examines combinations of multiple media use and selected antecedents of media multitasking, this is the first reported study to provide a detailed explanation of the underlying motives of individuals' preference for multitasking with media (polychronicity). The theoretical and managerial implications associated with the discovery of the eight dimensions of polychronicity are now considered, followed by related limitations of the study and recommended future research directions.

5.1 Theoretical implications

In pursuit of a comprehensive understanding of the motives for polychronicity, the in-depth exploration provided by this qualitative study substantively advances our understanding of this concept. The objective of the study was to uncover the underlying motives for individuals' preference for multiple media use among our sample of Digital Natives, to establish the dimensions of polychronicity. Consistently, a full range of motives are identified, making a considerable contribution to knowledge in this emerging domain and substantially augmenting the findings of Bardhi et al. (2010); who exposed a limited range (efficiency; assimilation; control; engagement) of

perceived benefits of media multitasking. Several additional motives for individuals' preference to multitask with media are discovered in this study, revealing eight distinct dimensions of polychronicity: comfort with multitasking; multi-media channel preference; effectiveness and efficiency; convenience; emotional gratification; information and knowledge; social benefits and assimilation. Furthermore, each of these eight dimensions includes multiple facets; for example, 'comfort with multitasking' comprises: habitual behaviour which comes naturally; a feeling of being good at media multitasking and a compulsion to multitask (as illustrated in Table 2).

The dimension of 'Comfort with multitasking' aligns with previous findings with respect to the habitual nature of media multitasking (Bardhi et al., 2010; Hwang et al., 2014); while the compulsion to multitask with media embraces a similar, but less intense feeling than the addiction to media multitasking identified by Kononva and Chiang (2015). The liking for multiple streams of stimulation and switching between media in a multiple media use setting is strongly expressed by respondents in 'Multi-media channel preference'. Within this dimension, the identified preference for switching accords with findings of Brasel and Gips (2011) and Yeykelis et al. (2014), who also report rapid switches between media. Furthermore, the preference to use more than one medium concurs with empirical work by Srivastava (2016). In addition, the newly discovered 'Convenience' dimension of polychronicity encompasses feelings of the ease of navigating effortlessly between portable media; when multitasking in a variety of locations, enabled by technology.

Feelings of personal productivity are also associated with multiple media use, while 'effectiveness and efficiency' emphasises time saving and a sense of speed of getting things done. Consistently, the facet of efficiency is found in previous empirical work by Bardhi et al. (2010) and Kononova and Chiang (2015). However, the facet of effectiveness, providing an impression of added value, is a new finding of this study. Gaining instant access to 'information and knowledge' is also cited by respondents as a motive for multiple media use, enabling access different viewpoints; in accord with previous findings by Hwang et al. (2014) with regard to the facet of information. Furthermore, the ability to gain knowledge from a variety of information sources is a new facet of polychronicity uncovered during this study. In a similar vein, the ability to successfully filter and manage information while media multitasking, labelled 'assimilation' is also revealed, in accordance with previous empirical work (Bardhi et al., 2010; Kononova and Chiang; 2015).

The affective dimension of 'emotional gratification', including: keeping one company, enjoyment, entertainment and relaxation, also feature in the preference for multiple media use. Elements of this dimension of polychronicity, namely the facets of enjoyment and entertainment, verify previous motives to multitask with media determined by Hwang et al. (2014) and Kononova and Chiang (2015) respectively; whereas the elements of 'keeping one company' and 'relaxation' are newly uncovered. Correspondingly, 'social benefits' emphasise a sense of belonging and feelings of connection and closeness to others when multitasking with media. While the facet of connection concurs with earlier findings by Kononova and Chiang (2015), the emphasis on staying available for friends and family is exposed for the first time in this study.

From the preceding debate, it is evident that one of the key contributions of this study is the establishment of order and clarity to the investigation of the motives of individuals' preference to multitask with media. Whereas previously, motivations have been arbitrarily linked with multiple media use, this study has initiated a comprehensive exploratory investigation. Moreover, eight

dimensions of polychronicity are established; contributing to theory development by clarifying the understanding of what the concept of polychronicity represents in relation to multiple media use. Furthermore, careful examination of each of the eight dimensions of polychronicity (and their associated facets) reveals that they are closely aligned with the four basic assumptions of uses and gratifications theory (Katz et al., 1973). While it is evident that the findings of this study represent a considerable advance in theoretical knowledge, the importance of their contribution to practitioners' understanding of this behavioural phenomenon must also be addressed.

5.2 Managerial implications

For the marketing communications or advertising planner, the phenomenon of multiple media use further increases the complexity of the role. As these findings suggest when multitasking, the presence of another medium (such as a computer or mobile phone) allows users to avoid advertising and hence may be considered a threat. Conversely, multiple media use may also provide a synergistic media opportunity; if audience motives for multitasking with media are fully understood by media channel planners, endeavouring to optimise media budgets on behalf of their clients. To leverage the potential benefits resulting from multiple media use, such as individuals' increased attention and engagement with marketing communication messages, communicators must develop campaigns that tell a single story across multiple media forms. This technique, termed 'transmedia storytelling' by Scolari (2009), delivers distinctive pieces of commercial media content in each channel to form one cohesive narrative. Accordingly, the audience engagement with each successive media form will increase the consumers' comprehension, entertainment and affection for the story and hence the brand advertised. Transmedia storytelling is closely related to the concept of Integrated Marketing Communications (IMC), in which campaigns with a single-minded and coherent message are implemented as part of an integrated strategy, facilitating the development of a consistent brand image (for example, Hackley, 2010; Percy and Rosenbaum-Elliott, 2012).

Pursuing this stance, the unique understanding provided by this empirical study, revealing the eight dimensions and associated facets of respondents' preference for multiple media use (polychronicity), is particularly pertinent to practitioners seeking to deploy clients' budgets effectively and efficiently. For instance, in the planning of a multi-media campaign involving: social media, television and radio; these findings are invaluable. For this multi-media combination, in seeking to match the media to the target audience effectively and efficiently, a communications planner would typically consult a range of information sources to determine; demographics, media habits and brand usage in relation to the chosen audience. Consistently, the enhanced understanding of the motives of media multitasking individuals, afforded by the eight dimensions of polychronicity uncovered in this study, provides a rich supplementary information source, allowing an enhanced briefing of media and creative teams. Furthermore, drawing on this knowledge, practitioners in media and creative roles, responsible for placing and producing advertising messages in multiple media campaigns, are better equipped to deliver accurately placed and relevant messages to their target audiences. More specifically, considering for example the dimension of 'Emotional gratification'; the associated facets of 'fun' and 'entertainment' (Table 2) might be reinforced in the creative and media delivery of advertising messages. Similarly, in the quest for outstanding IMC campaigns, it is recommended that all eight dimensions of polychronicity are taken into consideration by marketing communications and media channel planners. As a consequence, the synergistic benefits of a particular media multitasking combination (such as the aforementioned

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scenario) are enhanced. Moreover, it is evident that the findings of this study have the capacity to generate enhanced impact for marketing communications practitioners and their clients.

5.3 Limitations and future research directions

The limitations of this study are those associated with qualitative research methods. The study involved a non-probability sample of Digital Natives, and although quality criteria are applied and triangulation is confirmed by the two stage research design, the findings require further testing for generalisability to a wider population. Nonetheless, as discussed, these new findings are extremely valuable to academics and practitioners. Future research should initially include supplementary qualitative work among Digital Immigrants (those born before 1980), who have learned to use technology later in life and consequently have 'digital' as a second language (Presnky, 2001).

Furthermore, the earlier review of literature confirms the connection between the concepts of polychronicity and multitasking in the context of multiple media use. Polychronicity is regarded as the preference to behave and multitasking as the actual behaviour. Hence, it follows that the preference to behave should precede the behaviour itself, leading to the suggestion of a probable relationship between the two concepts. An evaluation of measures of polychronicity concludes that although a definition is now agreed upon, the extant measures are not acceptable for work in this domain (Robinson, 2016). Consistently, the next suggested phase of research concerns the development of a new scale for the measurement of polychronicity in the context of multiple media use; using the eight dimensions uncovered in this study (and their associated facets) for the development of scale items. Following this, the predicted relationship between polychronicity and multitasking with media may be examined.

6. References

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Associated tables for Paper: Individuals' preference for multiple media use - underlying motives

Table 1: A chronological summary of the definitions of polychronicity

Definition: Polychronicity	Reference	Emphasis
'doing more than one thing at a time' (polychronicity)	Hall (1959)	Behaviour Culture
'a cultural variable involving two different ways of organising activities: monochronically-involvement in events one at a time; and polychronically-involvement in two or more events at the same time'	Hall (1983)	Culture Behaviour
'a polychronic culture is a culture in which people value and hence practice, engaging in several activities and events at the same time'	Hall (1998)	Behaviour and Value
(monochronicity) 'a preference for doing one thing at a time, rather than doing two or more things simultaneously' (polychronicity)	Bluedorn, Kaufman and Lane (1992)	Preference
'the extent to which people in a culture: (1) prefer to be engaged in two or more tasks or events simultaneously; and (2) believe their preference is the best way to do things'	Bluedorn, Kallaith, Strube and Martin (1999)	Culture Preference and Belief
Three components: time use preference; time tangibility and context. Time use preference: 'the extent to which people within a culture prefer to do things one at a time or in coordination. Time tangibility: 'the extent to which time is perceived within a culture as being quantifiable. Context: high and low context cultures (Hall, 1998)	Palmer and Schoorman (1999)	Culture Preference Time
'the preference for doing several things at a time'	Konig and Waller (2010)	Preference
Polychronicity is a non-cognitive variable reflecting 'an individual's preference for shifting attention among ongoing tasks, rather than focussing on one task until completion and then switching to another task'	Poposki and Ozwald (2010)	Preference

Table 2: The dimensions and facets of polychronicity - 'the preference to multitask with media'

Comfort with multitasking	Multi-media channel preference
Habitual behaviour: o It comes naturally now (to me) **Comfort with multitasking:** o I'm just good at multitasking **Compulsion to multitask with media:** o Constant compulsion to receive information o A kind of compulsion o Some kind of addiction	**Preference for switching:** o Attention shift between tasks o Liking for switching back and forth **Liking for multiple streams of stimulation/multi-channel stimulation:** o Preference to juggle o Don't like just having one thing (media) at a time o Loss of interest if only doing one thing o Boring to only watch TV o I like to do several things at the same time
Effectiveness and efficiency	**Convenience**
Effective (in relation to time pressure): o Feels effective o Added value o Makes things easier/ gets things done quickly o Helps me to juggle things **Efficiency (feeling efficient):** o Time pressure, so need to save time o Time saving o Efficiency in flicking between things o Makes you extremely productive	**Convenient/ easy to multitask with media:** o Easy to navigate between devices/ media o Portable media, so can carry around o It is there…so you can use it o So many options o At home/ at work
Emotional gratification	**Information and knowledge**
Emotional gratification: o To feel less alone o Keeps me company o Background noise **Multitasking with media is:** o Enjoyable/ fun / feelings of satisfaction o Facilitates relaxation/ to relax o To entertain myself **Relieves boredom:** o A welcome distraction o Avoiding boredom o Mindless	**Stay updated:** o Keep up to date with everything…news, social media o Don't want to miss anything **Instant information access:** o Points of view/ bigger picture o Supplementary information o Different kinds of information at the same time (from different sources) o Gaining knowledge
Social Benefits	**Assimilation**
o Stay available for friends and family o Stay in touch/ in contact o To communicate with friends/ family o Stay connected (in virtual world)	o To cope with the volume of information bombarded at you all the time o Bombarded with media, so have to assimilate somehow o To make sense of all of the information