iLEISURE: CONCEPTUALIZING YOUTH ONLINE LEISURE AND QUALITY OF LIFE

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ABSTRACT
This paper addresses young people's Internet facilitated leisure and its relationship to quality of life. While there is a large body of literature examining the role of communication technologies in the shaping of contemporary society, relatively little attention has been given to the influence of technology on the organization and experience of leisure. In Australia, the rapid shift from dial up to broadband has allowed affordable, continuous, and fast Internet access to homes with young people who use and enjoy current technological innovations for leisure purposes. A comprehensive literature review is provided identifying key issues related to the high-speed Internet access; interactive leisure services and youth leisure consumption and quality of life. The paper develops a model framed in an experiential consumption approach and a set of propositions of youth online leisure and quality of life suitable for empirical estimation. The paper concludes with a discussion of implications and future research directions.

Key words: youth; internet; high speed broadband; interactive services; wellbeing

INTRODUCTION
Leisure is a vital part of life, with research indicating that satisfaction with leisure is an important determinant of quality of life (Lloyd & Auld 2001). It is one of the basic human rights guaranteed by the Universal Declaration of Human Rights (Article 24). Consumer expenditure for leisure may be as high as 25% of overall consumer expenditure in developed economies (Veal & Lynch, 2001). Leisure is strongly associated with youth and youth sub-culture (Passmore & French, 2001). Some have argued that, particularly in Western societies, leisure occupies 40% of young people's waking time (Robertson, Kent, Kaivola & Lee 2008). Advances in the Internet, innovative technologies and interactive services (Sullivan Mort & Drennan, 2007) have allowed access to a continual supply of information, changed the nature of businesses and enabled enhanced leisure activities—in ways inconceivable even in the recent past. Current research (Dusseldorp Skills Forum 2007; Vromen 2007; OECD, 2006) indicates that interactive services are most likely to be utilised by young people and, with young people having less need for business and government service applications, their increasing usage is directed towards leisure. While there is a large body of literature examining the role of communication technologies in the shaping of contemporary society, relatively little attention has been given to the influence of technology on the organization and experience of leisure (Bryce 2000). In particular, there is little research addressing the recent advanced internet facilitated interactive leisure services and implications for quality of life for young people.
The purpose of this paper is to examine the extant literature in order to develop a model and set of propositions of the relationship of consumption of online leisure and quality of life for

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young people. The literature review proceeds first by identifying the changing technology environment supporting accessibility and the use of interactive leisure services. In building the framework for this paper the literature review examines the interactive services available to the Australian consumer resultant of being able to be supported through high-speed Internet access. Second, the review proceeds to a focus on the increasing options for online leisure services and youth leisure consumption. This paper then expands on the experiential nature of online leisure and its relationship to attracting young people. The paper develops a model and set of propositions relating online leisure to young people's overall quality of life and concludes with implications for further research.

TECHNOLOGY ENVIRONMENT

Australian consumers have had access to affordable dial up services (Clarke 2004) since the 1990s. The recent influx of accessible broadband services has changed the dynamics of online consumption patterns with large-scale deployments and the reduction of prices of broadband services contributing to the shift away from dial up to broadband technologies (ABS 2008; The Broadband Advisory Group, 2003; ACCC 2006). The Organisation for Economic Cooperation and Development (OECD) (2003) defines broadband as 'a set of digital communication technologies with the capacity to transmit significant amounts of data at a high rate, supporting the delivery of a range of digital services, some or all of which can occur simultaneously' (OECD, 2003, p2). For the purpose of this paper the operative words within this definition are; *capacity* to support heavy download data; *high rate* or immediacy of access to information and *simultaneously* or continuous access to many differing applications at the same time at the user's discretion.

This increased access to Broadband has led to accessibility of the Internet beyond the educational and work environment. Recent statistics found 74% of households within Australia have readily accessible technology available within the home (ABS 2007). With this number of households using the Internet and Broadband technology, understanding the characteristics of the typical youth consumers using Broadband capabilities and applications accessed from home, and the impact of applications with faster download capabilities, is paramount for the development of knowledge regarding youth online leisure.

YOUTH END USER CHARACTERISTICS

Broadband services have offered an estimated 9.9 million Australians [(private non-business users) (ABS 2008)] streamlined access to information, interactive applications, video, pictures and music downloads. The largest use of the Internet (Table 1) is found in households with children under the age of fifteen, with high levels of income, located in metropolitan areas (ABS 2007). A significant portion of youth have been found to be users of high speed Internet technologies with more than 75% of children aged between 5-14 years accessing the Internet from home more than once a day (ABS, 2006). The majority of industry and academic reports have highlighted the use of interactive Internet services as particularly prevalent in youth. This appear to be due to their enhanced technological confidence, interactive ability and a willingness to try new methods of communicating and obtaining information, yet little to no empirical research has focussed specifically in this area or on this cohort (Gross 2004; Valkenburg & Peter 2007; Ofcom 2008a; Lenhart, Madden, Macgill & Smith 2007).

Table 1 : Household Internet usage				
Household with children—Internet usage				
	2005/06		**2006/07**	
Children				
Without children under 15	3,048	46%	3,356	66%
With children under 15	1,683	49%	1,782	71%
Household income				
$0–$39,999[2]	990	38%	921	56%
$40,000–$79,999	1,311	43%	1,304	65%
$80,000–$119,999	892	50%	921	70%
$120,000+	722	61%	865	78%
Region				
Metropolitan	3,182	53%	3,448	72%
Outside metropolitan areas	1,548	35%	1,691	59%
Total	**4,730**	**47%**	**5,138**	**68%**

Source: Australian Bureau of Statistics (ABS) (2006/07) *Household Use of Information Technology* (cat. no. 8153.0); Australian Bureau of Statistics (ABS) (2006) Children's Participation in Cultural and Leisure Activities (cat no. 4901.0); Screen Australia, 2008.

This paper adopts the middle school and high school demographic definition of youth as the age segment ranging from 10-18 years (DEEWR 2008). Research indicates daily Internet consumption increases with age and maturity (ABS 2006). Table 2 depicts 37.7% usage for age 5-8 year olds, increasing to 75.6% for 9-11 year olds, further increasing to 88.7% for the 12-14 year olds (ABS 2006). Patterns of Internet use indicate an increase in the use of messaging in the 12-14 year old cohort compared to the 9-11 year old group (Australian Bureau of Statistics Cultural and Leisure Participation Study 2006). Livingstone (2003) describes Australian young people as early adopters of Internet technology, integrating online communication to supplement and support offline friendships and leisure activities (Wilska 2003, p441).

Table 2: Youth Internet Consumption	
Age	Accessed the Internet
5-8yrs	37.7%
9-11yrs	75.6%
12-14yrs	88.7%

Source: Australian Bureau of Statistics (ABS) (2006), *Children's Participation in Cultural and Leisure Activities* (cat. no. 4910.0), p46.

Youth are not only the primary users of interactive media as stated previously, but are considered to be increasingly technologically confident, inquisitive, socially attentive and possess a high degree of influence over their parents (Berson & Berson 2005; Bennett 2006). Young people participate in online activities, but also have other commitments (Dusseldorp Skills Forum 2007; ABS 2006). Recent statistics suggest 86% of 15-19 year old Australians are undertaking fulltime work or study commitments (Dusseldorp Skills Forum 2007), 63% participated in organised sports and 97% spent 20 hours or more watching television and videos (Screen Australia 2007). Table 3 highlights several of the key statistics related to youth activity in Australia.

Table 3: Participation in Offline Activities	
Participation in Offline Activities	
Activity	Age – 15 -19
Full Time Work/Study	86%
Organised Sports	63%
20 + hrs watching Television	97%

Source: Dusseldorp Skills Forum 2007; ABS 2006; Screen Australia 2007.

Current research also suggests that traditional media methods are losing appeal, with 74% of 18 year old university students stating they 'would rather lose their television than their computer' (Screen Australia 2007; ABS 2006) and spend more time supporting their lifestyles surrounded by the Internet (Screen Australia 2007; ABS 2006). Roy Morgan Research's Young Australian Survey (2007) highlighted youth are 'avid consumers, heavily influenced by contemporary cult of culture and technological freedom and their view of technology is [as] a means to an end' (Roy Morgan Research 2007). What we can infer is that young people live demanding lives and may use interactive technologies for culture and general leisure and to keep in touch with friends and family allowing them to manage their hectic schedules (Roy Morgan Research 2007). The interrelationship of usage of interactive online technology services with overall consumption patterns and youth quality of life support the need for better conceptualization of youth online leisure.

THE EVOLUTION OF INTERACTIVE SERVICES

Traditional methods of communication including landline calls and face-to-face interactions are losing appeal and popularity to technologies that allow greater interactivity (Bargh & McKenna 2004; Hinduja & Patchin 2008). Synchronous methods of communication enabled in real time have become the interaction preference (Lenhart et al. 2007; Valkenburg & Peter 2007; Castells 2007). Richards (2005) recently suggested 'technology has the ability to respond to a user's inputs or talk back to the user' (Richards 2005, p532). Younger consumers are drawn to the use of interactive services for a range of leisure options; real time social interactions, entertainment and gathering information to share. They are also drawn to use interactive services to establish channels to communicate about teenage identity issues and the transition to adulthood (Bargh & McKenna 2004; Valkenburg & Peter 2007; Suler 2005). Teenage angst is a popular term used to describe negative emotional experiences relating to experimenting with identity, establishing belonging, seeking to become independent from parents, in particular frustration and anger (Suler 2005; Ingrey & Colvin 2005; Pera & Hancock 2006). '[I]interactive technologies have enabled young consumers to produce fast, high quality reproductions of their lives and what is important to them (Arthur et al. 2006).

Youth may use the Internet for informational purposes to pursue general interests through surfing the internet but it is the ability to communicate through the use of interactive services which remains an area of particular interest. Research indicates the commonly used interactive Internet services for adolescents include a range of synchronous and asynchronous services. Asynchronous communication services include websites (ideas and information); blogs (in the form of an online diary) and email and email groups ('ongoing exchange' or group email, 'intimate exchange'). Synchronous communication services include instant messaging (discussed in depth in the next section), chat rooms and multi-user dimension's (MUD) or massively multiplayer online role-playing games (MMORPG) and forums or discussion groups (dubbed a home away from home and can be asynchronous or synchronous depending on application) (Suler 2005, Wang, Khoo, Liu & Divaharan 2008).

CONCEPTUAL DEVELOPMENT OF THE MODEL

Surfing websites

Surfing the web is one of the first identified online activities with a general leisure orientation. Surfing has the connotation of undirected, repetitive but enjoyable behaviour. Websurfing, cybersurfing or surfing the (inter)net, is sometimes identified as jumping from website to website, in a similar way to channel surfing on TV. At this level, it may constitute a type of passive leisure activity (Livingstone 2003). Some use surfing the web as an overall categoirization of any online activity, especially that undertaken by young people. However websurfing may also be a type of general exploratory behaviour and a more directed search activity to find information (Borzekowski & Rickert 2001) or investigate an interest or topic in the online environment requiring attention, engagement and decision making ability constituting a more active leisure activity, which is the approach adopted here. High speed access enhances the experience of surfing the net making the movement between websites a seemless and thus more enjoyable experience, not disrupting engagement or flow (Bryce & Rutter 2001; Csikszentmihalyi 1997). This leads to the following proposition:

Proposition 1 Surfing websites enhances young people's online leisure and overall quality of life.

Instant messaging and chatrooms
The use of chat applications to instant message (IM) via a technological device is one of the most popular methods for adolescent leisure to conduct social communication (on the Internet) (Green, Hilken, Friedman, Grossman, Gasiewski, Adler & Sabini 2005; Greenfield & Subrahmanyam 2003; Thulin & Vilhelmson 2007; Ling & Baron 2007). The Pew Internet and American Life Project (2001) indicate almost 74% of adolescents utilise chat functions such as instant messages and approximately 68% use IM at least three days per week (Lenhart et al. 2007). Popular instant messaging services include MSN, Yahoo Messenger and Google Chat (Olsen, 2005). Synchronous, efficient and real time communication are the primary features of such media and the reason for popularity amongst the younger generation (Suler, 2004). Instant messages can be viewed by the online public or blocked to support only private contacts assigned at the user's discretion. This further adds to popularity. High speed Internet access allows the use of the interactive features associated with instant messaging media such as group chat functions, conferencing services (voice and video), conversation logs, games and file transfers (Garrett & Danziger 2008).

Virtual visual chat rooms (webcam) emerging as a favourite amongst adolescents (Suler 2005; Thulin & Vihelmson 2007). The virtual visual chat room experience may be heightened if 'avatars' or personalised characters are developed to represent the individual (Suler 2005; Yee, Bailenson, Urbanek, Chang & Merget 2007). Anonymity is available as the user is able to take on a different persona usually only limited by the young person's imagination. The benefits of chat rooms and instant messaging are a sense of social belonging, personal (though virtual) interaction and the ability to meet many people in a single site or online community (Green et al. 2005). However, research cautions users that these emotional connections are not as strong as those developed in a bricks and mortar environment and should not be used as a substitute for these (Thunin & Vihelmson 2007; Greenfield & Subrahmanyam 2003). The foregoing discussion leads to the following proposition:

Proposition 2 Instant messaging and chatrooms enhance young people's online leisure and overall quality of life.

Social networking sites
The use of social networking sites (SNSs) has expanded phenomenally from the inception of social networking sites such as My Space, Facebook, Bebo and Pixco. Reid and Grey (2007) note 92 popular social networking sites worldwide with user counts ranging from over one billion to under 100 (Reid & Grey 2007). These social networking sites are widely used for online communication (Boyd 2007; Gross & Acquisiti 2005; Ofcom 2008b; Raacke & Bonds-Raacke 2008; Ellison, Steinfield & Lampe 2006; Hargittai 2007) with over 50% of American teens between the ages of 12-17 years creating personalised My Space or Facebook profiles (Lenhart et al. 2007).

Social networks have been defined as 'personal or professional set of relationships between individuals' or 'a set of people (or organizations or other social entities) connected by a set of social relationships, such as friendship, co-working or information exchange' (Victorian Scrutiny of Acts and Regulation Committee 2005, p239). Online SNSs are web-based services that allow individuals to construct a public or semi-public profile within a bounded system [of social connections or relationships]. These SNSs aim to allow communication to a list of others with whom they share a connection and allow individuals to view and navigate their list of connections and those made by others within the system (Boyd & Ellison 2007,

p210; Gross & Acquisiti 2005; Raacke & Bonds-Raacke 2008). The underlying dynamics involved within social networks are sometimes difficult to evaluate, however, due to the public and exhibitionist nature of computer mediated interactive social networking, researchers have the ability to gain insights into the ties and evolutionary nature of the relationships developed via online social networking amongst individuals (Jones, Feerreday & Hodgson 2006; Boyd, 2007).

Social networking sites seek to provide users with the ability to create profiles and share or allow their personal interests and relationships to be publicly expressed with other users of the networking medium, inviting comment and discussions (Barnes 2008; Boyd 2007; Raacke & Bonds-Raacke 2008). Classed as a voyeuristic medium, individuals can provide what is personally relevant to them on an SNS that can be viewed on a worldwide scale, only restricted in the first instance to those connected to the Internet (Boyd 2007; Kim & Yun 2007; Mayer & Puller 2007). Whilst the majority of SNS sites reflect relationships between individuals with common interests, attitudes and beliefs, a SNS can also allow communication among those without such common interests but connected through common acquaintances (Boyd & Ellison 2007). Such social networking sites reach beyond the faceless blog and allow users to create personas, often referred to as online profiles, to trade messages with one and another and those outside their regular circle of friendship and upload and share photos (Boyd 2007). Uploading photos, videos and other forms of multimedia is a crucial factor in a young person life, as this is often a re-creation of what is essential and central to their lives (Arthur et al. 2006). This discussion leads to the following proposition:

Proposition 3 Social networking sites enhance young people's online leisure and overall quality of life.

User generated video and music applications
User generated video and music download sites, such as YouTube, draw over 6 million viewers per day (Goo 2006). Since its inception in 2005, YouTube has received massive acceptance amongst young consumers as a form of social interaction and networking (Cheng, Dale & Liu 2007). The appeal of YouTube is essentially due to content being primarily user generated, individualising and personalising the viewing experience and encouraging response and reactions ultimately facilitating social communities and networks (Cheng et al. 2007; Lange 2007; Karch 2008). Goo (2006) describes YouTube as a medium to allow a person 'their one chance of fame' (Goo 2006). More importantly, posting videos often encourages conversation and initiates a social interaction amongst those with similar interests (Lenhart et al. 2007). As much fun as it is to express personal identities through YouTube, a risk is posed as youth may take comments allowable in a negative manner, affecting overall self-confidence (Lange 2007). Anonymity is reduced as youth place themselves on public display which may lead to risky behaviour in attempt to attract comments and viewer attention. Facilitating YouTube's success is access to readily available high-speed Broadband, allowing consumers to upload and download media rich content with minimal grief (Shields 2008). The preceding discussion leads to the following proposition:

Proposition 4 User generated video and music applications enhance young people's online leisure and overall quality of life.
*Massively multi player online role playing games (*MMORPG)
Massively Multiplayer Online Role Playing Games (MMORPG) or Multi User Dimensions (MUD) are other forms of interactive services that allow users to assume new identities and

function in a global online environment. MMORPG and MUD are 'played online over the Internet in a [constant] world with hundreds, or even thousands of people simultaneously connected' (Achterbosch, Pierce & Simmons 2008, p2). Due to MMORPGs being data heavy, usage of such services has grown, as young people are able to access high speed broadband from home. MMORPGs complexity is minimal, catering for a wide segment of Internet users including youth (Kolo & Baur 2004). The most readily accepted MMORPGs amongst young people include Runescape, Club Penguin, GuildWars and SecondLife, although there are hundreds available to suit any language and culture (Softpedia 2008). MMORPGs are similar to SNSs and instant messenger, are played in real time, are entertaining, offer identity experimentation, and foster social interactions (Ducheneaut, Yee, Nickell & Moore 2006).

MMORPGs offer anonymity and the creation of a world built on fantasy (Whang & Chang 2004; Duecheneaut et al. 2006; Allison, Wahlde, Shockley & Gabbard 2006; Childress & Braswell 2006; Kolo & Baur 2004). Whang and Chang (2004) describe the characteristics of MMORPGs as 'in these virtual worlds, people are able to express their values and lifestyles as they might do in the physical, real world' (2004, p592). Young people are drawn to MMORPGs due to the experience offered by playing a game with known or unknown friends (Allison, et al. 2006). Current literature suggests both positive and negative outcomes of online gaming. Medical problems have also been linked with the excessive use of MMORPGs such as seizures and reports of death, yet empirical evidence is limited. Others (Allison et al. 2006; Chuang 2006) state MMORPGs can lead to social introversion and psychosocial problems. The excessive amount of time spent playing the game, the neglect of other life commitments (Wagner 2008), the development of obesity (Carvalhal, Padez, Moreira & Rosado 2007) and exposure to violence (Waddington 2007; Collier, Liddell Jr & Liddell 2008), have been emphasised as detrimental to youth, with the positives overlooked.

The development of online and offline friendships referred to as fellowships (Blais 2008; Axelson & Regan 2002) gains little attention in literature, however, is offered by gamers as an integral reason for play. Moreover, outcomes that contribute to improved quality of life such as the development of positive social behaviour and learning from the simulated environment, exposure to simulated social structures and the offline commonalities created by the game, assisting gamers to form friendship groups, are also rarely addressed (Walmsley 2008; Axelson & Regan 2002; Prensky 2002). Aspects of content and accomplishment also contribute to the positive outcomes of gaming practice and are rarely included in literature. Some argue MMORPGs have the ability to facilitate learning new skills as young people enjoy the experience and the flexibility to choose features representative to their personal identities (Childress & Brasswell 2006). Problem solving, deciphering of online requirements, working within structured sets of rules and action learning, coupled with the development of autonomy and control are all positive outcomes for gamers (Muncy 2006; Axelson & Regan 2002; Prensky 2002; Blais 2008). Prensky (2002) specifically offered issues focussed on the development of levels of learning related to gaming. These levels included but were not exclusive to aspects of pattern recognition, assimilation of multiple forms of information, physical, and mental dexterity development, exposure to specific context and content in game form aiding learning, strategy development, and cultural relativity through global networks. This leads to the following proposition:

Proposition 5 Massively multiplayer online role playing games enhance young people's online leisure and overall quality of life.

File sharing peer-to-peer

Peer-to-Peer (P2P) networks are typically used for connecting users via largely unplanned connections. These networks have been useful for many purposes including sharing content files in real-time transfer that contain audio, video or data to anything in digital form. The digital content that is transferred is stored on and served by the personal computers of the users. Most people who engage in file sharing on the Internet both provide files for upload and receive files as downloads. Peer to peer file sharing is distinct from file trading which does not require users to upload (Heidmiller 2002).

Most of the academic research on P2P systems has concentrated on building systems that work without any centralized control, rather than on the usage and consumer behaviour. The rise of many P2P services such as Napster and Grokster and the dramatic decline in music and video sales (Levin, Conway, Dato-on & Rhee, 2004) have prompted the recording industry to take aggressive legal actions on a global scale to curtail unauthorized distribution of copyrighted materials (Heidmiller 2002). This explains the lack of recent academic literature in this area and the lack of focus of online consumption of shareware. Since the demise of Napstar and its fellow shareware applications, no one technology has been developed that creates an absolute and clear advantage in securing or overcoming unauthorized file-sharing activities. Most often peer-to-peer technology is considered to refer only to file-sharing services that let you get free music, movies, and pornography over the Internet (Xiaohe 2006). However, peer-to-peer technology is about much more than violating the copyright of big record labels (Chen 2007). Apart from the legal issues, further downsides of the networks such as Napster and GNUtella downloads of share files include common interruption or cancellation entirely, or clients becoming unresponsive or logging off the network and dropping all their open connections are still evident in the newer applications (Chen 2007). Research has found that with P2P technology many users free ride by contributing fewer resources than they use, with the fear of viruses and other security breaches (Xiaohe 2006). These constraints make downloading of resources very difficult and less popular and for newer P2P applications to be widely accepted, these must first be addressed.

Several applications of peer-to-peer technology are evident in the current online interactive environment, yet none is as popular as Napstra, KaZa and Limewire (Chen 2007). Practices such as streaming multimedia, cool streaming, broad catching, pod casting and peer casting are all on the increase in popularity and usage. Streaming multimedia refers to media constantly received by, and normally presented to an end user while it is being delivered by a streaming provider. Cool Streaming is a P2PTV (peer-to-peer television) technology that enables users to share television content with each other over the Internet. Peer casting is a method of multicasting streams, usually audio and/or video, to the Internet via peer-to-peer technology. It can be used for commercial, independent, and amateur multicasts. Broad catching is the downloading of digital content that has been made available over the Internet using RSS syndication. The main aim of broad catching is to bring together web feeds and download material for viewing; an emergent concept of the virtual classroom is adopting this practice (Manson & Rennie 2004). Broad catching is closely aligned with pod casting, which is a series of audio or video digital-media files, which is distributed over the Internet by syndicated download, through Web feeds, to portable media players and personal computers. A pod cast is distinguished from other digital-media formats by its ability to be syndicated, subscribed to, and downloaded automatically when new content is added (Chen 2007). This leads to the following proposition:

Proposition 6 File sharing peer to peer technology enhances young people's online leisure and overall quality of life.

Technological confidence
Technological confidence is a feeling of self-efficacy in using the interactive applications currently available through high-speed Internet access (Bure 2006; Bandura, Barrabaranelli, Vittorio & Pastorelli 2003; Tung & Chang 2007). Recent research describes youth as 'active agents who can manipulate, adapt, create and disseminate ideas and products through communication technologies' (Berson & Berson 2005, p29). As educational institutions incorporate skill building in compulsory curriculum for students, a degree of interactive ability (media literacy) and resulting feelings of (technological) confidence results (Dwyer 2007; Ofcom 2008a). Up to 90% of students state 'confidence in the use of the Internet and interactive technologies' (Thomson & De Bortoli 2007; OECD 2006). Contributing to the compulsory skills acquired within the schooling system, 94% of Australian students have access to computer technologies at home supporting skill development (OCED average 79%) (Australian Council for Educational Research 2007: http://www.acer.edu.au). Further findings suggest Australian technology skills as above average in comparison to other OCED countries ((Australian Council for Educational Research: http://www.acer.edu.au))

- 100% of Australian students reported having access to a computer at school.
- 70% of Australian students reported frequent use of a computer for word processing (OECD average 48%).
- 10% of Australian students reported frequent use of educational software (OECD average 13%).
- 74% of Australian students reported frequent use of the Internet 'to look up information about people, things or ideas' (OECD average 55%)
- 90% of Australian students reported being confident internet users.

Research suggests that with maturity, young people's media literacy (interactive ability) expands as they adapt to the ongoing technological advancements and innovations (Ali 2007). This leads to the following proposition:

Proposition 7 Technological confidence moderates the relationship between young people's online leisure and overall quality of life.

Youth online leisure
Leisure is freedom from occupation or time spent doing what you want. "Young people seek 'quiet' time away where it is possible to reflect and interact with friends away from adult supervision" (Robertson, Kent, Kaivola & Lee 2008). Increasingly, they find opportunities for leisure using online interactive services. The influx of high-speed broadband access resulting in unlimited accessibility of synchronous interactive services (Lenhart et al. 2007; Boyd & Ellison 2007) allows young people to immerse themselves in an enriched leisure environment. This has led to the experiential nature of consumption in the online environment being identified (Wilson 2006; Okazaki 2008).

Experiential consumption is above all a personal occurrence, often with important emotional significance, founded on the interaction with the products consumed (Holbrook & Hirschman 1982). Experience is a central element of the life of today's consumer (Vézina 1999), a consumer who is looking to make sense of life and self. The way to enhance life is to allow multiple experiences both emotionally, as well as through reason, utilizing all the aspects of

being human. Life is to be 'produced and created, in effect, *constructed* through the multiple experiences in which the consumer immerses' (Firat & Dholakia 1998, p. 96). Products which are experiential in nature are difficult to describe, as there is an inability to undertake a pre-purchase evaluation of the quality of a product (service) (Varlander 2007). The high degree of emotional involvement associated with an experiential product is often more important than the functional objective of the consumption process (Varlander 2007, p328; Novak, Hoffman & Duhancek 2003; Bigne, Mattila & Andreu 2008; Caru & Cova 2008). The emotional, intangible nature and the difficulty of pre-assessment of the service exchange all contribute to the complexities of the experience.

For interactive online services, as with other new products high in experiential characteristics (Fiore & Kim 2007), consumers gain greater knowledge after they become more widely available and begin to be used, or in the first instance symbolically adopted (Nabih, Bloem & Poiesz 1997; Sullivan Mort & Drennan 2005). Addis and Holbrook emphasize 'consumers are feelers as well as thinkers and doers' (2001, p50); leading to the necessity of providers of interactive services to capture the market by creating an experience which is compelling for the consumer (Addis & Holbrook 2001; Bigne, Mattila & Andreau 2008; Kim 2004; Novak et al. 2003). Catering to the hedonic needs of consumers; the 'fun, pleasure and excitement', (Binge, Mattila & Andreau 2008, p303), can create higher levels of customer satisfaction, positive word of mouth and a source of differentiation (Novak, Hoffman & Yung 1999). In the online environment focussing on creating and delivering the experiential service elements can contribute to the experience of youth leisure online. Overall, satisfaction with leisure is an important determinant of quality of life (Lloyd & Auld 2001). This leads to the following proposition:

Proposition 8 Youth online leisure enhances youth overall quality of life.

Quality of life
Quality of life is a measure of an individual's perceived level of well-being and happiness (Lloyd & Auld 2001). Subjective consumer well-being is a substantive issue requiring attention by those investigating the impact of consumer consumption patterns (Cornwell & Drennan 2004) Subjective well-being is 'a broad category of phenomena that includes people's emotional responses, domain satisfactions, and global judgments of life satisfaction' (Diener, Suh, Lucas & Smith 1999, p. 277). New technologies, new audiences and new uses challenge researchers in the area of technology (Haddon 2006; Hekkert, Suurs, Negro, Kuhlmann & Smits 2007) to expand beyond the study of individual cognitive processes and to consider the longer-term consequences for individual and social behaviours of technology consumption (Hekkert et al. 2007) and its relationship to quality of life.

MODEL OF YOUTH ONLINE LEISURE AND QUALITY OF LIFE

The preceding discussion leads to the proposed model of youth online leisure and quality of life (Figure 1).

Figure 1 Model of Youth Online Leisure and Quality of Life
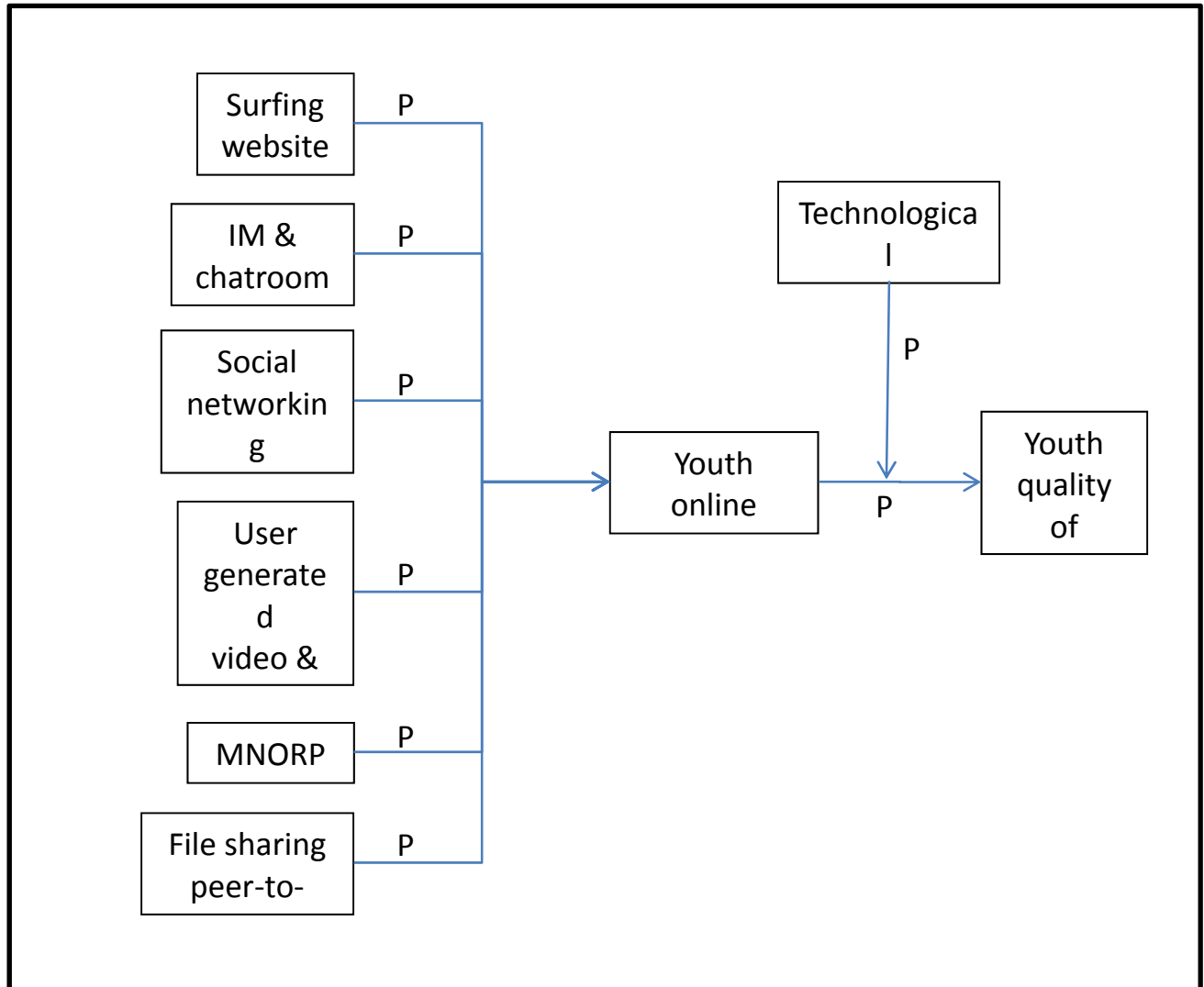
The model is founded on the conceptualisation of youth online leisure in an experiential consumption framework (Bigne, Mattila & Andreau 2008; Firat & Dholakia 1998; Holbrook & Hirschman 1982) modelled within the overall relationship between leisure and quality of life (Lloyd & Auld 2001). The model proposes causal relationships which invite empirical estimation.

The proposed model of youth online leisure and quality of life is framed in a positive direction; indicating enhanced quality of life derived from online leisure. However, a number of factors associated with online activities or unintended outcomes of online activities potentially may have negative impacts on overall quality of life. These potential negative impacts include: risks to privacy resulting from disclosure of personal identity (Cox Communications 2007), incidental exposure to pornography (Flood & Hamilton 2003), potential for bullying and sexual victimization in the less protected online environment

(Hinduja & Patchin 2008; Wolak et al. 2008) and possible negative health outcomes such as depression and loneliness if social skill development is delayed or distorted by the online environment (Ha, Kim, Bae, Bae, Kim, Sim, Lyoo & Cho 2007). Empirical operationalization and testing of the model should allow for the incorporation of additional moderators to capture the potential negative impacts on overall youth quality of life from online leisure.

CONCLUSION

Young people spend an increasing amount of their leisure in an online environment, yet this area is at an early stage of research development and lacks a rigorous conceptual framework. The proposed model provides a feasible path of investigation for researchers aiming to build a consistent body of knowledge about youth online leisure by providing a conceptualization grounded in experiential consumption and linking leisure and quality of life issues. To test the model advanced here, and its associated propositions, a two stage approach is recommended. The first stage is to assemble data from multiple sources, including multiple informants, to triangulate findings and maximize reliability. Interview data needs be collected to develop detailed narrative histories. The final step should involve a quantitative stage requiring empirical estimation using a causal modelling approach. The proposed model has implications for policy makers and practitioners by embedding youth online leisure in a quality of life context, which may serve to highlight the existing positive aspects for youth leisure online and to stimulate further potentially valuable online leisure opportunities. The context of this conceptual development has been specified as applicable to the Australian technology environment with its recent enhanced broadband access. It is framed to be generalizable to youth online leisure more broadly where access to online interactive leisure services are widely and cheaply available.

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