Empathy and imagination:  
Nurturing children’s and adolescent’s spiritual well-being in the digital environment

Apostolides, Anastasia  
University of South Africa  
soula.tea@gmail.com

Abstract
Recently, there has been a flurry of publications on children and adolescents turning into “digital junkies”, those addicted are said to be using “electronic cocaine”, or being diagnosed with Internet Addiction Disorder (IAD) or Pathological Internet Use. This article discusses the emerging disorders in children and adolescents who spend too many hours online and how it may affect their spiritual well-being. This article makes a contribution by making a start on specifically looking at how the spiritual well-being of children and adolescents may be affected by too much screen time. Apart from the clinical side effects described by the recent research, it is imperative that the spiritual lives of “digital junkies” be carefully examined.

Key words  
Empathy; imagination; screen dependency disorders; child spirituality; adolescent spirituality

1. Introduction
Recently, there has been a flurry of publications on children¹ and adolescents² turning into “digital junkies”, those addicted are said to be using “electronic cocaine”, or “digital heroin” (Kadaras 2017), or being diagnosed with Internet Addiction Disorder (IAD) or Pathological Internet Use (see Xiuqin et al. 2010, Sigman 2014). Some children and adolescents

¹ “A young human being below the age of puberty or below the legal age of majority.” [Online]. Available: https://en.oxforddictionaries.com/definition/child

² “(of a young person) in the process of developing from a child into an adult.” [Online]. Available: https://en.oxforddictionaries.com/definition/adolescent
spend eight hours and more a day gaming, talking with their friends (via Facebook, Twitter). Twenge (2017a) notes that in the United States, the trend to spend countless hours on smartphones affects all households: “The trends appear among teens poor and rich; of every ethnic background; in cities, suburbs, and small towns. Where there are cell towers, there are teens living their lives on their smartphones.” Most children and adolescents do not know life without digital devices, and therefore digital culture is part of their everyday lives, shaping how children and adolescents form identity and spirituality (Yust 2015:129).

The above publications on digital side effects are a result of research that is being mostly conducted by psychologists. There is hardly any research being done to assess how the spiritual lives of children and adolescents are being affected by spending countless hours online. Identity and spirituality are formed by everyday experiences, and it is, therefore, necessary for scholars and those dealing with child and adolescent spirituality to research and understand how participation in digital culture may shape child and adolescent spirituality (Yust 2015:129). This article wants to make a contribution on researching the spiritual lives of children and adolescents spent on screen time. By putting into perspective the dangers that are presented by the research in the publications, the aim is to explore how these dangers may affect children’s and adolescent’s spiritual well-being while on social media and screen time for too many hours.

Social media and digital culture in this article are not being made out to be the cause of all evils. Used in a responsible manner by all people, social media can be an excellent research, educational and social tool (Apostolides 2017b:3). I will conduct a critical reading of some recent articles (Sigman 2017, Twenge 2017, Margalit 2016, Kardaras 2016), to gain an understanding of how children and adolescents experience their lives in cyberspace for too many hours and the consequences on their spiritual well-being.

2. Children, adolescents and screen dependency disorders

2.1 What are screen dependency disorders?
Screen dependency disorders are newly developing disorders in people who have an unhealthy dependency on social media and screen time on
their devices. According to Xiuqin et al. (2010:401), there are five primary types of addiction, namely: compulsive web surfing, addiction to gaming and programming, gambling or trading and cyber-sexual or relationship addictions. Other problematic addictions such as extreme messaging, and pornography are also experienced (Sigman 2014:610). The above-mentioned addictions take months to develop and can engulf all aspects of a person’s life (Flisher 2010:558).

Research has shown that there is a growing number of children and adolescents becoming addicted to gaming, extreme messaging, and pornography (Flisher 2010:557). Children and adolescents seem to be at a greater risk as too many hours spent on these devices may cause cognitive and neurological problems in children and adolescents (Sigman 2014:611). Screen dependency disorders are treated as substance addictions as they share characteristics and cause dependency in a problematic manner compromising the persons “overall functioning” (Sigman 2017:2, Xiuqin et al. 2010:401). Individuals exhibit some of the following symptoms: low self-esteem, depression, aggression, preoccupation, withdrawal symptoms, loss of outside interest and lying about the extent of use and use to escape adverse moods (Sigman 2017:2; Xiuqin et al. 2010:401).

2.2 Recent research on screen dependency disorders

Yust (2014:134) explains how the internet is the “third space” (the first space being home and the second school), where adolescents congregate to socialise. However, unlike actual places, like coffee shops and community centres, one does not need to go anywhere to interact with others. Yust (2014:125) continues by saying that: “‘community’ within digital culture functions differently than non-digital community and, thus, is likely to affect young peoples’ conceptions of communal life, and therefore their experiences of spiritual connections within the community, through experiences that challenge conventional assumptions.” Hence, this means if there is spiritual experience in the “third place” it will be different to more conventional experiences between people within a face-to-face community. More research needs to be done here, as this does not mean that there is no spiritual experience in this space. Possibly the spiritual experience in this space is different or alternative to what is conventional on the home and school space.
The research articles that will be discussed below are as follows: What screen time can really do to kid’s brains (Margalit 2016), It’s ‘digital heroin’: How screens turn kids into psychotic junkies (Kardaras 2016), Screen dependency disorders: A new challenge for child neurology (Sigman 2017), Have smartphones destroyed a generation? (Twenge 2017). Why has self-harm tripled among tween and teen girls? (Twenge 2017).

What screen time can really do to kid’s brains

It appears that children and adolescents who are exposed to cyberspace for too many hours use their imaginations less than those who use cyberspace in moderation. Everything from stories to images is instantly provided by screen time, hence creating an instant gratification of the senses (Margalit 2016:2). Tablets spoon feed children images and words of pictures all at once, unlike when young children are read to aloud, allowing them the time to process the words and imagine the story, creating their own images in their imagination (Margalit 2016). Margalit (2016) explains that the “device does the thinking for them, and as a result, their own cognitive muscles remain weak.” Young children need actual human interaction, or they may never learn to empathise if they spend too many hours in front of devices (Margalit 2016).

It’s ‘digital heroin’: How screens turn kids into psychotic junkies

Kardaras (2016), a clinical professor who runs a rehab centre in the United States, finds it easier to “treat heroin and crystal meth addicts than lost-in-the-matrix video gamers of Facebook-dependent social media addicts.” To treat digital addiction Kardaras (2016) prescribes a four to six-week treatment with no computers, smartphones or tablets. However, in a world filled with technology, “digital temptations are everywhere.” Often parents fall into the “Distracted Parent Syndrome” as parents are also preoccupied with their phones and other devices.

This research found that when children and adolescents who are addicted to technology are “not plugged in” to their devices they tend to exhibit: aggressive temper tantrums, become bored, apathetic, are uninteresting and uninterested. Brain imaging research has shown that the brain front cortex behaves the same way on excessive gaming (one such game being Minecraft) as it does on cocaine (Kardaras 2016). Kardaras (2016) expresses that prevention is better than cure. For a child and adolescent to develop
into a healthy adult, they need social interaction, creative imaginative play and to be engaged with the real, natural world (Kadaras 2016). Kadaras (2016) says it is essential to make sure that as a parent you talk to your children about excessive use of their devices and limit their time on them.

**Screen dependency disorders: A new challenge for child neurology**

Screen viewing is high amongst toddlers from the age of two, due to infant products (for example, iPad apps) that are designed to help toddlers with, for example, potty training, story-telling and other activities (Sigman 2017:1). Children who have been exposed to screen time before the age of two are more likely to develop screen dependency disorder with long-term effects (Sigman 2017:7). In Europe, children’s and adolescent’s main pastime is TV and social media devices (Sigman 2014:610). Sigman (2014:610) determines that “a child born today will have spent one full year of 24 hour days watching screen media.

By the age of 18 years, the average European child will have spent 3 years of 24 hour days watching screen media.” Sigman (2017:7) argues that it is imperative that screen time is limited in children and adolescents as it affects their neural development. Physical activity has been shown to prevent drug addictions, and suggests that children and adolescents who spend too much time on cyber space be encouraged to do more exercise (Sigman 2017:7). Another vital factor is parent’s consumption of screen time. “Parents who consume high ST have children who are many times more likely to consume high ST” (Sigman 2014:611). Xiuqin *et al.* (2010:405) also concluded parental control of screen time was directly related to internet addiction disorders in children and adolescents and suggested that screen time is put into appropriate perspective in the family environment.

**Have smartphones destroyed a generation?**

Twenge (2017a), an American psychologist who has been researching adolescent generational differences for 25 years, explains that the concern for adolescents goes further than just the neurological problems presented above. Twenge (2017a) calls adolescents who have grown up using iPhones and iPads and who do not know life without social media devices, iGen. It appears that adolescents have underdeveloped face-to-face social skills as they prefer to communicate via their devices. Older adolescents, also seem to be prolonging leaving home and getting driver’s licenses, while
previous generations would relish this kind of independence. Adolescents no longer need to leave the house to socialize and prefer to socialize with their friends via their devices. Twenge (2017a) also points out that even though adolescents spend more time at home, they are not any closer to their parents than previous generations as they are on their devices all the time. Social interaction between people is imperative for spiritual development as it may lead to empathy and therefore an important skill, as will be described below. Twenge (2017a) says she does see hopeful signs of adolescents themselves linking some of their social issues “to their ever-present phone.”

Why has self-harm tripled among tween and teen girls?

It appears that depression and suicide amongst teens has risen since 2007, while the homicide rates amongst adolescents has decreased. “As teens have started spending less time together, they are less likely to kill one another, and more likely to kill themselves” (Twenge 2017a). Girls between the ages of 10 to 14 have taken to hurting themselves via cutting, poisoning and other methods which has led to an increase of this age group of girls in emergency rooms in the United States (Twenge 2017b). “Forty-eight percent more girls said they often felt left out in 2015 than in 2010, compared with 27 percent of boys” (Twenge 2017a). This trend seems to follow in Britain with girls between the ages of 13 to 16, hurting themselves in similar ways. In older girls the trend for self-hurt has increased by 63 percent in the United States. However, children and adolescents are depressed and suicidal for many reasons (genetic dispositions, trauma, and poverty) and not just because of their continuous use of screen time. Twenge (2017a) explains that the connection between depression, suicide and smartphones may, however, come back to the age-old adolescent fear of fitting in. With social media such as Facebook and Instagram, the focus on being left out has intensified. This is especially so with girls who use social media more than boys. Adolescents post images of themselves and then wait for these images to be liked or worse ignored. Twenge (2017b) urges that more research be conducted on the sudden rise of self-hurt and smartphones as the link seems too strong to be ignored.

The more ominous side effects of social media are cyberbullying and sexting, again with more girls being exposed to the consequences (see Apostolides
2017b on cyberbullying and spirituality). Apostolides (2017:5) suggested that to combat the degrading and dehumanising effects of cyberbullying children and adolescents need to have spiritual opportunities to nurture their spiritual lives to help them cope with such incidents.

Many adolescents sleep with their phones next to them and often experience sleep deprivation from looking at social media before they go to sleep, during the night, and the first thing they look at in the morning. Sleep deprivation has been linked to: weight gain, high blood pressure, anxiety and depression. While Twenge (2017a) says, she understands that restricting technology from a generation who needs to be “wired” all the time, it is imperative to help adolescents understand the importance of moderation. Twenge (2017b) advises parents to put off buying smartphones for their children as long as possible and then as a rule not to allow them to be used for more than two hours a day. “This type of intervention has few downsides. In contrast, the downside of doing nothing (the risk of a continued rise in depression and self-harm) is considerably greater” (Twenge 2017b).

2.3 A summary of the effects of excessive exposure to screen time

Excessive exposure to screen time is when people are on screen time for 38 hours or more per week (Flisher 2010:557). From the above research, it appears that:

1. Children who spend too much time online may have an underdeveloped imagination.

2. Children and adolescents may experience problems with neural development with long term effects.

3. Children who interact more with their devices than with humans may have less empathy for others.

4. Children and adolescents whose technology gets taken away react aggressively, get bored easily and are commonly disinterested in anything else.

5. Brain images of children and adolescents on excessive gaming look the same as the brain on cocaine.
6. The younger a child is when she/he is exposed to screen time the more likely she/he is to develop screen dependency disorders with long-term effects.

7. Children of parents who consume too much screen time are more likely to develop screen dependency disorders.

8. Many adolescents are more comfortable with internet socializing than they are with face-to-face interactions.

9. Depression and suicide have risen in the last decade amongst adolescents.

10. The percentage of adolescent girls hurting themselves has risen dramatically and is also linked and may be linked to adolescents feeling lonely or left out of social gatherings that are posted online as they are happening, expounding the adolescents’ loneliness.

11. Some adolescents experience the destructive and humiliating side of screen time in the form of cyberbullying and sexting.

12. Many adolescents also seem to keep their phones on them at all times and near them when sleeping. This may cause sleep deprivation in some adolescents with some dire consequences.

3. The need for the spiritual well-being of children and adolescents

Spirituality is an important aspect of all human well-being and one of the five characteristics of wellness as identified by Witmer and Sweeney (1992:140). The five characteristics (spirituality, self-regulation, work, friendship and love) are crucial for the duration of a person’s life and “relate to the wholeness in mind, body, spirit and community” (Witmer and Sweeney 1992:140). These five characteristics are visually represented as a wheel (wheel of wholeness), and at the centre of the wheel is spirituality. Spirituality is placed at the centre, as it is spirituality that helps people cope with their daily stresses and experiences through the values that people apply to each situation that gives meaning in their lives (Witmer & Sweeney 1992:141).
3.1 Innate capacity of human spirituality

In this article, spirituality is understood as “the intrinsic human capacity for self-transcendence, in which the self is embedded in something greater than the self, including the sacred” (Benson et al. 2003:205). All people have a spiritual life, regardless of any formal religious teachings, that develops and evolves over a lifetime (Apostolides 2017a:15). Spiritual development is understood by Hay et al. (2006:50) as “a self-transcending awareness that is biologically structured into the human species.” Spirituality can be experienced from religious practices or from everyday activities such as movies, reading fantasy novels (Ganzevoort 2014:95). All the practices described may allow for a person to experience transcendence within their everyday lives (Apostolides 2017a:15).

Spirituality gives meaning to people’s lives, “hope or optimism in anticipation of future events and values for guiding us in human relationships and decision making” (Witmer and Sweeney 1992:141). Hence, spirituality may help people place value in their relationships with others and in help people pursue the decisions they make. Spirituality seems to encourage people to go beyond their humanness, and this is expressed by caring not only for oneself but for others too (Rayburn 2012:189).

3.2 Child and adolescent spirituality: The importance of imagination and empathy of children and adolescents

Hart (2006:172) explains that spirituality does not occur in the “I” but in the living out of human encounters “between you and me.” Living out an experience with a person, may allow for people to gain understanding of aspects of life they did not understand before a particular encounter. Hart (2006:172) describes how young people have a great capacity for empathy and are often very aware of another person’s emotions. “Sometimes they may be overwhelmed or confused by the feelings of another person; in other moments that deep connection leads to surprising understandings” (Hart 2006:172). These deep connections and understanding of others may lead to transcendence. Hornberger et al. (2006:459) describe the searching for the meaning of life as an action. This action or effort may result in greater personal awareness, connection to oneself and their environment. Hence, it is important to interact and be with people, to share in their lives
and them in yours. It is in these experiences or actions of the living out of everyday situations where people find spiritual transformation.

Albert Einstein said: “I am enough of an artist to draw freely on my imagination. Imagination is more important than knowledge. Knowledge is limited. Imagination encircles the world” (Viereck 1929:117). The importance of the imagination is also highlighted by J. K. Rowling (2008) who explains that without imagination people would not be able to empathise with what other people have experienced. Hence, imagination and empathy go hand in hand. Empathy is when a person can share the emotions of another person that moves them to act in a certain way in a social context (Overgaauw 2017 et al. 8). As was explained above by Hart (2006:172) young people have a great capacity to empathise with other people. Children and adolescents who are empathetic have the vital ability to constructively adapt to social interactions (Overgaauw 2017 et al. 8). However, the ability to imagine and empathise, Margalit (2016) explains, can be stunted by too much exposure to screen time and too little human interaction.

### 3.3 Nurturing child and adolescent spirituality and healthy screen time

The imagination can be a spiritual space where empathy, personal growth and transformation may occur (Apostolides 2016:3). Children and adolescents who spend excessive time on technology may be denying themselves the chance to experience spiritual situations. The spiritual imagination which is linked to and cultivated by reading fantasy novels, through friendships and community involvement, sometimes provide opportunities for spaces where personal growth and transcendence may be nurtured.

Children and adolescents who read fantasies, have the opportunity to experience other people's lives and the consequences of a particular situation. These situations may allow children and adolescents to experience compassion for a person whom they may never have given a chance in real life because of preconceived ideas about certain types of people (Apostolides 2016:2). Empathising with others who are unlike us in the imagination, may lead to us empathising with similar people, in reality, and within our community. When people empathise with others, they care for them and have sympathy for them (James and Fine 2015:172). Empathy
allows people to grow and may change a perspective of a situation that was previously limited. This kind of growth nurtures spirituality.

Research done by James and Fine⁴ (2015:1721–180) implementing positive youth development (PYD) approach, showed that when adolescents have a coherent concept of their own spirituality, their PYD is higher. The theory of PYD focuses on the approach of how youth thrive through the following factors: competence, confidence, character, connection, caring/compassion, meaningful contribution to self, family community and environment (James and Fine 2015:171–172). The theory behind this model is that all adolescents have these strengths and they can be nurtured through different social environments such as parents, church groups. When adolescents are nurtured to use these strengths, they will make a positive contribution to society.

This study then added how youth conceptualize spirituality into the model to research how spirituality was linked to the above factors. The one concern for the researchers was how adolescents conceptualize spirituality (James and Fine 2015:172). The study concluded that spirituality fluctuates over time and that the more coherent adolescent’s spiritual values were, the higher they scored in PYD. This score was measured by asking the question: “What does it mean to be a spiritual young person?” Researchers then “created three broad spiritual groups based on how youth conceptualize being spiritual” (James and Fine 2015:172). Some adolescents use the above factors to help them establish meaning and to experience spirituality as a positive understanding of life. The research found that adolescents with a higher spiritual PYD have a clearer understanding of worldviews making them confident to behave and contribute to positive internal standards and social environments (James and Fine 2015:179). The study also concluded that it is with the help of parents or practitioners that adolescent can clarify their perception of spirituality.

Apostolides (2017c: 1) argues that adolescents who are allowed to live out their own form of spirituality within their own social youth environment supported by adults will grow into well-balanced adults. Adolescents turn

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⁴ This approach is discussed here as an example. There are other approaches too, such as Developmental Relationships Framework. [Online]. Available: https://www.search-institute.org/downloadable/DevRel_Framework-1-Pager-04-26-2017.pdf
to music, books and movies (mostly fantasy novels with supernatural or mysterious elements, such as the Harry Potter series, Twilight and Star Wars) to search for meaning in their lives (see Apostolides 2017a:14). Often parents, ministers and those responsible for adolescents do not approve of the adolescents’ choices as it contradicts these adults’ beliefs. Apostolides (2017c:5) argues that if adults were more open and supportive of books, movies and music that they may think are not appropriate for their adolescent they may find that there is more to these genres than they first assumed. Often these genres address coming of age difficulties and offer some solutions to what adolescents may perceive as dire. Apostolides (2017c:5) concedes that not all social-cultural activities are beneficial such as certain social media activities. However, adults can play a vital role in nurturing adolescent spirituality by using the above genres as conversation openers on various issues that may be of great importance for the adolescent. “Adults can act as guides to adolescents to make spiritual connections within the adolescents’ own social contexts” (Apostolides 2017c:5). Partridge (2004:141) argues that popular culture has a direct influence on enabling religious participation, transformation, understanding and experience. This type of participation (action) and interaction with popular or youth culture allows for the adolescent to understand something that may have initially been considered beyond them.

When the device that a person is “wired” too, causes anxiety, depression, sleep deprivation and social inadequacy, the wheel of wholeness as described by Witmer and Sweeney (1992:14) cannot exist. The five characteristics (spirituality, self-regulation, work, friendship and love) that are vital for a person’s lifetime are not possible to develop as some of the key components of spirituality through friendship and community do not exist as they should. Likewise, the PYD method of James and Fine (2017:171–180) may not be able to flourish under such circumstances. To nurture PYD and spiritual well-being screen time needs to be limited (Kardaras 2016; Sigman 2017:7).

4. Concluding thoughts
This article discusses the emerging disorders in children and adolescents who spend too many hours online and how it may affect their spiritual well-
This article makes a contribution by making a start on specifically looking at how the spiritual well-being of children and adolescents may be affected by too much screen time. Apart from the clinical side effects described by the recent research, it is imperative that the spiritual lives of “digital junkies” be carefully examined.

Most of the research above concluded that it is vital that more research be implemented with children and adolescents. The research needs to be undertaken with the help of schools, youth groups and other child organisations to have a complete grasp on exactly how children and adolescents are being affected by spending countless of hours online.

If the internet is indeed the “third space”, a space like school and the home, then like at school and at home boundaries and rules need to be set. Too many hours spent on screen time may be depriving children and adolescents the opportunity of a well-developed imagination and the ability to empathise with others. A well-developed imagination allows people the opportunity to empathise with people that they would normally not associate themselves with, or to help children and adolescents imagine alternative discourse to their present ones. It is imperative that children and adolescents be empathetic to each other, their families and society as this creates adults who will contribute positively to their communities.

The effects of excessive exposure to screen time do not seem to be conducive to nurturing a child or an adolescent’s spiritual well-being or positive youth development. Depending on a device for socialising, to receive praise (via the amounts of ‘likes’ a person gets on their ‘posts’), or be a victim of cyberbullying and sexting, cannot enhance spiritual well-being and positive youth development, but rather hinder it. Rather, alternative ways for children and adolescents need to be sought to engage with peers face-to-face. Suggestions by various researchers (Margalit 2016, Kardaras 2016, Sigman 2017, Twenge 2017) have ranged from the importance of physical activity as an alternative to sitting or lying down and looking at a screen for hours at a time, imaginative play, to limited use of devices. Here, the importance of parents actively participating in nurturing children and adolescent spirituality would be a key factor. Parents also seem to get too preoccupied with their own devices (adults can also be addicted to screen time as was mentioned earlier). This means that parents need to assess their
own screen time on their devices and correct excessive behaviour before they can help their children. There is a sense of urgency by researchers to prevent excessive screen time in children and adolescence rather than to try and find ways to cure addicts. Hence, adults need to apply moderation to their own screen time usage and set rules regarding children and adolescent screen time in order to prevent internet dependency disorders. Screen dependency disorders seem only to occur when children and adolescents use screen time excessively. In moderation, the internet is a positive space of learning and socialising. As Yust (2014:125) has suggested, there may be some spirituality occurring in the “third space”. This article finds that for children and adolescents to have truly meaningful spiritual lives they need to be nurtured and guided by adults. While there are aspects of spirituality than can only occur within ourselves, many aspects require people and the community we live in.

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