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The Dark Shadow of Virtual Reality

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Virtual Reality (VR) technology are entering nursing education at a rapid speed (Foronda et al., 2017). VR has been reported in the nursing literature to significantly improve students' performance (Jenson & Forsyth, 2012; Park, 2016; Foronda et al., 2017) even though the body of evidence in terms of the number and research quality of peer reviewed research papers is not yet substantial enough to identify VR technology's effectiveness. However, VR is not actually reality. VR may not actually reflect reality. Young people (and even adults) may not perceive the different between reality and VR. They may not yet be mature enough to distinguish the difference. However, VR technology are going much further than traditional educational methods by allowing humans to experience a much higher level of immersion through a virtual image. Even the gap between advances in VR technology and its application to education science is widening, causing serious concern.

The advance in VR technology is value-neutral. As with all things, whether something is good or bad depends on how humans use it. VR can be useful, for example, when it enables scholars to attend an international conference without traveling to the physical convention center. VR provides the ability to speak, listen, and discuss in real time. Those using VR can choose to view a featured or real-time image of the other participants as if they were actually at the conference. Further, remote participants can feel touch through electronic sensors attached to their body. How amazing!

The problem with VR lies in the fact that we are not ready to cope with any possible harmful influences caused by advances in VR technology. But what is the "Dark Shadow of VR," and why does it cause concern, particularly in pedagogy? Luc Besson's 2017 film Valerian and the City of a Thousand Plants showed an exceptional VR world, "Big Market," a shopping-focused VR platform. But such a world is no longer strictly science fiction: many large commercial companies are really building gigantic VR platforms (Kim, 2017). VR developers boast that the platforms can be categorized based on the purpose of the VR platform, e.g., Media, Communication, Travel, Education, Games, Medicine, the Military, and even Adult Movies (Kim, 2017). Also, the platform itself may be another "false" real world built up in the VR platform that mirrors our current real life (Kim, 2017). Imagine: a person could have a dual identity for (1) real life and (2) VR life (Kim, 2017). It sounds fantastic, does it not? Unfortunately, it may not be true.

Suppose that a person selects the "Adult Movies" VR platform. Using Head Mounted Displays (HMD) device and electronic sensors, a person would not only experience a vivid and lively video, but also feel a "real-life" touch. Such an option is very dangerous to adolescents because they are particularly vulnerable to sexually explicit content (Adeolu, Owoaje, & Olumide, 2016). While we cannot begin to fathom the implications, it is possible that this technology could lead to higher rates of teen pregnancy or sexually transmitted diseases (STDs) in reality (Kann et al., 2016). Young people might also lose touch with reality, mistaking the virtual world as being more "real" than reality itself. For example, a young couple with a baby were playing a video game in which they were trying to save a baby from harm while neglecting their own baby to the point that the baby died (Kang, 2016).

Further, what if the real economy began to operate just like the "Big Market"? In fact, VR developers are already creating such a VR platform (Kim, 2017). Since real estate is unlimited in the VR world, so is the amount of investment. This strongly suggests that VR as well as Artificial Intelligence (AI) can ensure that the winner (primarily developers such as Data Scientists and AI algorithm makers) takes all. Is such a situation fair and just? Here is another example: What if a person's account were unintentionally deleted in the VR platform or removed by someone? If the account is not renewable, another socio-economic problem might arise.

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We should be mindful of the possible harmful consequences, the "Dark Shadow of VR," while adopting and applying advances in VR technology to all areas of pedagogy. No matter how effective educational outcomes the integration of VR technology into pedagogy produces, nothing is more important than delivering the highest quality of education – i.e., "Putting People First" – to our next generation.

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