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**The Effect of Pornography on Marriage and its Societal Impacts: A Neurobiological
Perspective**

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The Societal Benefits of Marriage

Marriage...the cornerstone on which our society rests, has begun to deteriorate, contributing to the downfall of our social, emotional, and economic health. The decoupling of marriage and family has taken our society to a place where one in three babies born in the United States are born into a single-parent household (The Annie E. Casey Foundation, 2022). Children are now growing up in broken families which is leading us to a broken society. Adolescents growing up in intact families are more likely to graduate high school, pursue higher education, and less likely to commit crimes (Jonsson & Gahler, 1997; Demuth & Brown, 2004). Furthermore, marriage decreases a child's likelihood of living in poverty by 82% and increases children's physical and emotional well-being. (Robert, 2012; Anderson, (2014). What are the health determinants behind the deconstruction of American families?

The Impact of Pornography on Marriage

According to a study by Perry in 2017, 56% of all divorces involve one individual's compulsive interest in porn. Furthermore, in 2012, "pornography use [was] seen as the 2nd strongest predictor of marital satisfaction" (Fagen, 2009). Over 90% of all sexually explicit media portray sex as being only for self-pleasure (Leonhardt, et. al., 2019). This has been shown to significantly decrease sexual intimacy, connection, and sexual quality of long-term relationships. In addition to this, men who viewed violent pornography were more than 3 times more likely to engage in sexual teen dating violence (Rostad et. al., 2019). Contrary to the view that pornography is "empowering" and increases sexual pleasure, research continues to show that porn negatively impacts relational satisfaction, closeness, and experienced affection (Black &

Hendy, 2019). How can the consumption of visual material have such a drastic influence on one's relational health?

A Neurobiological Perspective

The physiological impact of explicit media use on the brain testifies alongside the relational and mental implications. Pornography consumption has been seen to decrease brain matter in the Prefrontal Cortex (PFC), a “core region” in romantic love and one of the main regions responsible for understanding and recognizing people's emotions (Muller, 2018; Zeki, 2007). The Prefrontal Cortex grey matter is responsible for self-control and awareness of actions, emotions, and behavior. Upon pornography consumption, Dopamine (DA) floods the limbic system and increases the Cerebral Blood Flow (rCBF) and neuron firing rate in the PFC with so much intensity that the addict becomes almost impaired from choosing a different behavior. After the PFC is stimulated, DA is decreased which often results in depression, grief, and low self-esteem, increasing an individual's desire to escape these feelings by continuing the behavior. Eventually, the PFC becomes familiar with the stimulation and requires increasing amounts of DA and rCBF to receive the same pleasure. Similarly, when an individual engages in romantic affectional behavior, dopamine, oxytocin, and adrenaline are released which also causes an increase in rCBF to the prefrontal cortex. The rCBF in the PFC caused by pornography consumption desensitizes the PFC to the pleasure experienced by the “feel good” love chemicals.

The portions of the PFC that are affected by pornography addiction are the Dorsolateral PFC (DLPFC) which controls daily decisions and the Ventrolateral PFC (vlPFC) which is associated with lower self-control, emotional regulation, and executive function (Ueda, et. al., 2018). The vlPFC is especially important in sustaining long-term relationships as it influences an individual's ability, to exhibit executive control when interacting with attractive alternatives

(Ueda, et. al., 2018). This phenomenon is known as the derogation effect and is highly dependent on the function of the vIPFC. The stimulation of the vIPFC starts the intoxication stage of addiction through impaired thinking in which the brain is stimulated by the idea of pornography and its absence “increases its thought until the participant can recognize the viewing of pornography as the logical response to the stimulus”. The conditioning of the vmPFC programs the participant to desire pornography as an escape from undesirable emotions. The implications of a damaged prefrontal cortex on specifically long-term romantic relationships affirm previous research on the effects of pornography consumption on marital relationships.

Conclusion

Based upon previous findings on the societal and economic implications of divorce and its association with pornography consumption, both the complexity of explicit media and its dangers are made evident. It is clear that explicit media consumption holds a far greater impact on relational well-being than many individuals attribute as only 14% of young adults (18 – 24) believe that porn is “very bad” for society (McDowell, 2016). It is imperative that future research capitalize on pornography intervention and prevention strategies, as evidence-based, theory-grounded prevention programs may hold additional positive impacts on both divorce rates and societal wellbeing.

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