

The Long Term Impact of Parental Behavioural Addictions

The Long Term Impact of Parental Behavioural Addictions as Mediated by a Disruptive Family Environment

Keywords

Behavioural Addictions, Addictions, Systemic Approaches, Family Dynamics

Abstract

The current paper looks into the long term impact of parental addiction on individual's likelihood of having substance and behavioural addictions in adulthood and on their well being, while also exploring the mediating effect of family dynamics on these relationships. An online survey included 292 participants who completed questionnaires assessing levels of parental behavioural addictions and family dynamic during childhood as well as substance and behaviours dependency, psychological symptoms and well being. A Multiple Analysis of Variance (MANOVA) found that participants who reported parental behavioural addictions also reported higher levels of behavioural and substance dependency and higher levels of psychological symptoms. They also reported a more disruptive family environment during childhood, which in turn mediated the relationship between parental behaviour addictions and psychological symptoms and partially mediated the relationship between parental behavioural addictions and participants' own behaviour dependency. Overall, the results indicate the long term negative consequences of parental behavioural addictions and the role of family dynamic in that relationship, and support the call for a better consideration of behavioural addictions in the helping professions including social work in both training and practice and systemic based interventions.

The Long Term Impact of Parental Behavioural Addictions

In the past few years, Behavioural Addictions (BA), also known as process addictions, have been a growing area of research. While their definition may vary, they normally refer to behaviours which do not involve substance use but involve a diminished control over the impulse to engage in them and a failure to cut down or give them up despite adverse consequences, including damaging one's self or others (Grant et al., 2010; Griffiths, 2000; Potenza, 2006; Wareham & Potenza, 2010). Behavioural Addictions can be found in a wide range of behaviours, including internet, relationships and sex, shopping, and gambling. There are various estimations of prevalence of behavioural addictions in the general population with 1%-2% estimate for gambling, 5% for sex and relationship, less than 1% online addictions (but 6% among internet users), 1%-6% buying addictions, and 3% for eating addictions, and while there are no epistemological studies on work addictions some claim that it is as high as 25% of the working population (Freimuth, Waddell, Stannard, Kelley, Kipper, Richardson, & Szuromi, 2008).

The majority of research into behavioural addictions concentrated on their nosology and definition (i.e., whether they should fit under impulse control or compulsions; Grant et al., 2010), prevalence, co-occurrence with other addictions (both behavioural and substance), or correlation with mental health conditions such as depression, anxiety, personality disorders, phobias (Freimuth et al., 2008). Some research has also been done on the predictors of developing certain BA, linking them to an "affectionless control" parenting style which refers to high level of protection and control and low levels of affection from parents (Grant & Kim, 2002; Siomos et al., 2012; Villalta, Arévalo, Valdepérez, Pascual, & de los Cobos, 2015). Very little, however, has been researched on the long term impact that growing up with a parent/s with behavioural addictions has on a child. The current study will therefore look at the long term impact that having a parent with a behavioural addiction has on the individual and the role that a disruptive family environment plays in this relationship.

The Long Term Impact of Parental Behavioural Addictions

In the absence of substantial body of research in the area, we can draw on the literature about children who grew up with parental substance addictions (SA), where it is reported that children of parents with SA reveal higher levels of antisocial behaviours, depression, anxiety, low self-esteem, substance abuse and eating disorders than other children (Arria, Mericle, Meyers, & Winters, 2012; Biederman, Faraone, Monuteaux, & Feighner, 2000; Forrester & Harwin, 2006, 2008; Fraser, McIntyre, & Manby, 2009; Hussong, Zucker, Wong, Fitzgerald & Puttler, 2005; Velleman, & Templeton, 2016). An examination of long terms impact of parental SA on children revealed a higher risk of developing SA and other mental health conditions in adulthood (Catalano, et al., 2002). While there is no dispute over the adverse short and long term impact that parental SA has on children, the views on the pathway of impact and how it occurs vary and include complex interactions of multiple variables including genetics (Agrawal, Edenberg & Gelernter, 2016; Agrawal & Lynskey, 2008) , environmental factors and a disruptive family environment (Barrocas, Vieira-Santos, & Paixão, 2016).

Beyond the genetic assumption of an in born tendency or predisposition for addiction, parenting has been considered as a major mediator and moderator factor. Within the impact of parenting discussion, some focus on the pharmacological effects of drugs and alcohol on parenting whilst ‘under the influence’ (Corbett, 2005; Hill, Laybourn, & Brown, 1996) while others argue that it is not the intoxication that causes harm but rather a family dysfunction in families with addiction, referring to instances such as a child worrying constantly about the parent, being forced to take sides between conflicting parents, being subjected to unpredictable behaviours, lack of consistency, guidelines or structure (Barocas et al., 2016). This can be exacerbated, when considering environmental factors such as parental illegal behaviours (consumption-related), legal proceedings and financial problems which lead to a stressful and unpredictable environment (e.g., Barnard, 2007; Catalano et al., 2002; Keller, Catalano, Haggerty, & Fleming, 2002) as well as to potential parental neglect (Testa & Smith, 2009).

The Long Term Impact of Parental Behavioural Addictions

According to Dvir, Ford, Hill, and Frazier (2014) in traumatic family environments, a child internalizes these negative sensations which in turn result in long term symptoms including dissociation, depression and addictions.

Findings in the area of SA can be applied to behavioural addictions, especially environmental and familial, with previous research indicating for example that gambling and shopping addictions can also lead to stress due to difficult financial implications (Ledgerwood, Weinstock, Morasco & Petry, 2007; Villella et al., 2011) and that relationship addictions have been found to lead to marital conflict (Grant et al., 2010). It is not clear whether these environmental factors will apply as easily to other types of behavioural addictions (e.g. internet, exercise), however, both behaviour and substance and alcohol addictions share one aspect of a disruptive family environment - when addictions are present, whether substance or behavioural, the primary focus of the parent becomes the addiction and the child's physical and/ emotional needs may not always be met. Indeed, one study (McPherson, Clayton, Wood, Hiskey & Andrews, 2013) found that parental sex addiction (but not parental alcohol, drug or gambolling addictions) together with emotional abuse predicted levels of sexual compulsivity in adulthood. Nevertheless, with a lack of sufficient literature in the area, the impact of parental behavioural addictions on children and the pathways of this impact are yet to be established.

It is also worth to note that unlike substance addictions, behavioural addictions are mostly hidden and mostly undiagnosed (Freimuth, 2009) which makes it less likely for the parents to receive any help or support both in terms of managing their addiction and the impact on their family. Indeed, when looking at gambling, Manthorpe, Norrie and Bramley (2018) highlighted the little interest and awareness that social workers have on problematic gambling and, we argue, on behavioural addictions in general. In their review, Manthorpe et al. (2018) revealed the invisibility of gambling to social workers which for them was

The Long Term Impact of Parental Behavioural Addictions

indicated with very little presence of social work and workers in research in the area, very little training on the issue of qualifying social work programmes which was also highlighted in Engel, Bechtold, Kim and Mulvaney's (2012) survey of MSW programmes, and too little recognition of the impact that gambling has on social work clients. They put forward a few possible explanations for this "invisibility", including having to rely on the person or others to disclose the issue in order to identify the problem and lack of skills and resources among social workers and training staff (Engel et al., 2012), but also seeing gambling as a low priority, a "lesser evil" in comparison to SA. All of the above can be applied to behavioural addictions in general, creating a situation where families with these types of addictions are less likely to receive support, which in turn can reduce children's exposure to resilience factors that can buffer the impact of the addictive behaviour.

Indeed, while the negative impact of parental addictions, especially substance addictions, is well documented, not all children of parents with addictions reveal long term negative implications (Huxley & Foulger, 2008). When looking at children of alcoholic parents, Park and Schepp (2015) carried out a systematic review highlighting both vulnerability and resilience. They believed that risk and protective factors can be considered on four different levels: individual level (e.g. age, gender, cognitive and academic abilities, temperament, self regulation and self-esteem), parental level (e.g., attachment style, parent-child relationship, parentification), familial level (e.g., family violence, family cohesion, trusted family members and parents' co-morbid mental health conditions), and a social level (e.g., social support, extra-curricular activities, positive relationships later in life). Similarly, Ungar (2015) also looks at resilience as a process of interaction between the individual and the environment and suggests various sources of resilience for children who are growing up in an abusive environment including their temperament and psychological coping styles; environmental factors (i.e., safe streets, adequate housing, food, education); social and mental

The Long Term Impact of Parental Behavioural Addictions

health support and interventions by official organisations (e.g. social workers, education provider); and finally policies that influence available resources. Considering the potential positive impact that social workers and other services can have on children of parents with addictions, it is crucial to increase awareness in the area, especially in relation to the impact of behavioural addictions.

With that in mind, and in light of the various findings in relation to the long term impact that parental addiction has on children and the assumption that through a disruptive family environment the impact of parental behavioural addictions may have a similar path of impact we have hypothesise that:

1. Participants who reported parents with behavioural addictions will show higher levels of substance and behaviour dependency and lower levels of mental health and well being than those who reported parents with no addictions.
2. Participants who reported parents with behavioural addictions will show a more disruptive family environment than those who reported parents with no addictions
3. The relationship between parental behavioural addictions and participants' own substance and behaviour dependency, mental health and well being will be mediated by the a disruptive family environment during childhood.

Methodology

Participants and Procedure

Our sample included respondents to an online survey. Overall 607 people visited an online survey which was published on a specific website via the link“www.substancevsprocess.com” and advertised both on social media (i.e. Facebook), specific websites for people with addictions, and through visiting cards distributed randomly to the general public in central London, UK. Out of the 607 people who visited the survey

The Long Term Impact of Parental Behavioural Addictions

292 (48%) completed it. The average age of the sample was 32.86 ($Sd = 12.37$), 76.12% were women, 22.9% were married, and the majority (84.93%) identified themselves as White. In terms of annual household income, 18.8% were earning below the full time employment UK minimum wage (less than £10,000), 19.1% were earning between £10,000-£19,999, 14.3% between 20,000-£29,999, 10.2% between £30,000-£39,999, and the rest (37.6%) £40,000 and above.

When comparing between those who reported parents with behavioural addictions to those who did not report parental addictions, no significant differences were found between the groups in any of the above biographic details.

Measures

Biographic questionnaire: included general background questions about participants such as age, gender, ethnicity, household income and marital status.

Family Member Impact (FMI) Questionnaire (FMI; Orford et al., 2005) - a 16-item questionnaire which was originally designed to assess the harmful impact (stress) that drinking or drug-taking of a family member has on other family members or the family as a whole. We have adjusted the wording of the questionnaire and the instructions in order to adapt allow participants to reply without making references to a particular addiction. In terms of instructions, we replace the original instructions which make reference to the last three months and to drinking/drug use with instructions that asked participant to note if, in their knowledge, any of the items occurred in their childhood. We changed the wording on some of the items, replacing “relative” with “parent/s” (e.g. “Does your relative have very changeable moods?” into . “Did your parent/s have very changeable moods?”) and in items 9, 13, 14 and 16 the term “drinking/drug use” was replace by the general term “behaviour”.

As in the original questionnaire, response options for each item are: not at all, once or twice, sometimes and often and were scored, respectively, 0, 1, 2, 3. While scoring can

The Long Term Impact of Parental Behavioural Addictions

potentially produce two sub-scale scores reflecting worrying behaviour and active disturbance, we have used an overall mean score to reflect the general impact of the behaviour on the family. In previous studies (Chan, Dowling, Jackson, & Shek, 2016) the questionnaire revealed an internal consistency of 0.82-0.85 and in our study Cronbach's alpha was 0.899.

Severity of dependence scale (SDS; Gossop et al, 1995) - The original Severity of Dependence Scale is a 5-item questionnaire that provides a score indicating the severity of dependence on drugs. Items refer to the extent to which participants feel that: (a) their drug use is out of control, (b) not taking the drug will cause worry/anxiety, (c) they worry about their drug use, (d) they wish they could stop, (e) they think it will be difficult to stop. Each of the five items is scored on a 4-point scale (0-3). The total score is obtained through the additions of the 5 ratings. The higher the score, the higher the level of dependence. In order to adapt this questionnaire to a range of substance and behaviour addictions we used a general term of "the following behaviours" followed by a list of behaviours: being online (email, text, twitter), exercising, over/under eating, drinking alcohol, using drugs, relationships, work, gambling. In the original study (Gossop et al., 1995) the questionnaire revealed an internal consistency of between 0.8-0.9 and in our study Cronbach's alpha values for each behaviour was as follows: being online 0.85, exercising 0.66, over/under eating 0.9, drinking alcohol 0.91, using drugs 0.9, relationships 0.85, work 0.8, and gambling 0.78. The internal consistency of all the behaviour addiction items together was 0.86 and for alcohol and drugs .09.

Symptoms rating test (SRT; Kellner and Sheffield, 1973) – A symptom checklist which assesses the extent of mild to moderate physical and psychological ill-health. Respondents rate whether or not they have experienced each of 30 symptoms in the last 3 months on a scoring scale of never (0), sometimes (1) and often (2). Research (Matson, 1995; Welch, McColl, & Peace, 1989) suggested that a two factors structure: psychological symptoms and physical

The Long Term Impact of Parental Behavioural Addictions

symptoms. For the current study, only the 17 items in the psychological factor were used and the overall score was the average of these items. The original authors (Kellner & Sheffield, 1973) did not report internal consistency figures but did report high levels of test-retest reliability and validity indicators. In the current study the Cronbach's alpha for this scale was 0.93.

Parental Addiction Questions. - Participants were asked whether when looking back at their childhood they think that their parents might have had an addiction to a list of behaviours: gambolling, shopping, sex/pornography, work, exercise, screens (computer, TV, Phone), relationship or food (under/over). For each of these participants were asked to choose between the options "yes", "no" or "maybe". For the purposes of the current study, only responses of "yes" were considered as a report of parental addiction.

Happiness question – participant were asked a general question; 'How happy are you on the scale of 1–10?'

Results

Before commencing the analyses, an examination of the study variables revealed that all but one variable (participants' substance and alcohol dependency) were approximately normally distributed with all Skewness scores falling between 0.15 and 0.81 and all Kurtosis scores falling between -0.9 and 0.25. Participants' substance and alcohol dependency levels Skewness was 2.01 and Kurtosis 4.64. We therefore used a transformation, adding 1 to all participants to avoid 0 values followed by a log transformation after which the Skewness was 0.53 and Kurtosis -1.12.

In order to examine Hypothesis 1 we have performed two Analyses of Multiple Variance (MANOVA) comparing those with reported parental substance and behaviour addictions to those without reported parental behaviour addictions.

[Please Insert Table 1]

From Table 1 we can see that the Hypothesis 1 and Hypothesis 2 were mostly supported as participants who reported having parents with parental behavioural addictions also reported significantly higher levels of substance and behaviour dependency, psychological symptoms and family dysfunction than participants who reported parents with no addictions. When looking at effect sizes, the medium-large effect sizes were found in family environment and behaviour dependency, while psychological symptoms and substance dependency revealed relatively small-medium effect sizes.

In Hypothesis 3 we predicted that the relationship between parental addictions and participants' substance and behaviour dependency and well being will be mediated by the participants' level of family dysfunction. Muller, Judd and Yzerbyt (2005) define mediation as an attempt to identify the process by which one variable leads/is linked to another by identifying and intermediate processes. They outline the 4 sufficient conditions to establish mediation: (a) there has to be a significant between the dependent and independent variable (b) there has to be a significant relationship between the independent variable and the mediating variable (c) There is a significant relationship between the dependent variable and the mediating variable when controlling for the impact of the independent variable (d) The residual direct relationship between the independent variable and dependent variable must be smaller (in absolute value) than the direct relationship without the mediation. In order to test Hypothesis 2 we followed Muller et al steps and examined their conditions. The relationships which complied with all 4 conditions were the relationship between parental behaviour addictions and participants' behaviour dependency levels and psychological symptoms. For each of these relationships a series of regressions and hierarchical regressions were performed. The results of these are presented in Figure 1.

[Please Insert Figure 1]

In Figure 1 we can see that family environment fully mediated the relationship between parental behaviour addictions and psychological symptoms and thus it seems that the path of impact runs through the disruptive family environment in childhood. There was also a partial mediation between parental behaviour addictions and participants' behavioural dependency (Sobel test = 3.88, $p < 0.001$), so that while family environment accounted for some of the relationship between parent's behaviour addictions and their children's behaviour dependency there were other factors also involved in this relationship.

Discussion

In the current study we looked at the relationship between participants' reports of parental behavioural addictions and their own levels of substance and behaviour dependency, psychological symptoms and well-being. We also examined what role a disruptive family environment plays in these relationships. Corresponding to studies in the area of substance abuse (e.g., Arria, et al., 2012; Biederman et al., 2000) we have found that participants who grew up with parents with behavioural addictions were more likely to have higher levels of dependency on alcohol and drugs themselves. We also found that they were more likely to suffer from psychological symptoms which also corresponds to previous research on parental substance abuse and addictions (e.g., Forrester & Harwin, 2006, 2008; Fraser et al., 2009; Hussong, et al., 2005; Velleman, & Templeton, 2016). Finally, as we expected, we found that children of parents with behavioural addictions reported a more disruptive family environment than those who reported parents without such addiction. This is in line with previous studies on substance addictions (Barnard, 2007; Catalano et al., 2002; Keller, Catalano, Haggerty, & Fleming, 2002) which reported a traumatic, unpredictable and chaotic family environment which includes worrying constantly about the parent's well being, arguments, conflicts, erratic parental behaviour, lack of consistency, guidelines or structure,

The Long Term Impact of Parental Behavioural Addictions

and added stress due to legal proceedings and financial problems. The clear negative impact of parental behavioural addiction which is found in our study highlights that while they may be invisible, these addictions are just as disruptive and damaging to the family as substance addictions are and may indicate a need to revisit the explicit and implicit prioritising of substance addictions over behavioural ones which has been noted to exist among social workers and services (Engel et al., 2012; Manthorpe et al., 2018).

The need to readdress practice and training on behavioural addictions is even more pronounced when considering the clear impact that a disruptive family environment has on the long term negative impact on children which we have found in this study. In the current study we have found that a disruptive family environment, including factors such as interruption to child's social life, withdrawal behaviours, disruptive atmosphere (e.g. threats and arguments) and financial difficulties caused by the addiction, accounted for the development of psychological symptoms and to a degree to developing behavioural addictions in adulthood. This suggests that, potentially, involvement of services and interventions can have a meaningful positive impact on children, by supporting the family or helping children build resilience, in a similar way which is found in the literature on SA and resilience factors (Park & Schepp, 2015; Ungar, 2015). However, in order to be able to achieve that, there is a need to reverse the invisibility of behavioural addictions and bring them out into the open. This will need to happen both in services by allocating resources and upskilling staff in the area and in training programmes, helping social workers and students to understand the importance of identifying these addictions, including within the remit of safeguarding children, while recognising their adverse impact on the family and offering suitable support and interventions.

It should be noted that our study indicates that beyond a disruptive family environment there might be other factors which are involved in the link between parental

The Long Term Impact of Parental Behavioural Addictions

behavioural addictions and their children's risk of developing their own behavioural and substance addictions. It may be that these are linked to genetic factors (Agrawal et al., 2016; Agrawal & Lynskey, 2008) or other environmental and parental factors (Velleman, & Templeton, 2016). Further studies will be able to consider these factors and enhance our understanding of the pathway of impact which will in turn improve our ability to consider and offer more successful interventions and support to families and individuals.

The above findings, however, should be considered within the limitations of the current study. The study is a cross-sectional survey and while the mediation analysis may imply directionality we can of course not establish a direct cause and effect among any of our variables. Nevertheless, we believe that the findings, albeit if correlational in nature, still provide a strong indication for the importance of seriously addressing the impact of behavioural addictions and that the role of a disruptive family environment in this impact should be considered. Another limitation stems from the way in which participants were recruited. We have used an online survey and as Johnson (2002) and as Chiauzzi, DasMahapatra, Lobo and Barratt (2013) note, online surveys often include non-representative self selected samples which impact on the ability to reliably generalise the findings. And indeed, our sample included predominantly young white women and while there were no significant differences between those with parental addictions and those without on any of the biographic details that we have measured, we do not assume that our sample is representative of the general population. Nevertheless, we are also mindful of the recognised need to find a balance between methodology and the value of data (Chiauzzi et al., 2013) and believe that the findings in this study are of theoretical and practical value and that future research will be able to extend our findings and examine the impact of behavioural addictions while also considering different social, cultural and gender groups.

The Long Term Impact of Parental Behavioural Addictions

With the above limitations in mind, this study indicates a similarity between the long term impact that parental behavioural addiction has on children and that which is found in substance addictions, and highlights the need to review our attitudes towards these addictions both in terms of research knowledge and skills, and in terms of resources, policies and priorities.

Ethics

Ethical approval for this project was given by Goldsmiths University of London the Department of social Therapeutic and Community Studies ethics committee.

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The Long Term Impact of Parental Behavioural Addictions

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Table 1

Multiple Analysis of Variance Comparing Parental Behavioural Addictions and No Parental Addictions on Family environment and Participants' Levels of Behavioural and Substance Dependency, Psychological Symptoms and Happiness.

	Parental behavioural addictions (Wilk's Lambda = 0.84**)		
	Yes (<i>n</i> = 123)	No (<i>n</i> = 153)	
Family environment in childhood	<i>M</i> = 1.46 <i>Sd</i> = 0.69	<i>M</i> = 1.03 <i>Sd</i> = 0.64	<i>F</i> (1, 274) = 29.23** Cohen's <i>d</i> = 0.65
Alcohol and substance dependency ^a	<i>M</i> = 4.4 <i>Sd</i> = 5.85	<i>M</i> = 2.83 <i>Sd</i> = 4.56	<i>F</i> (1, 274) = 5.56* Cohen's <i>d</i> = 0.3
Behaviour dependency	<i>M</i> = 22.18 <i>Sd</i> = 11.3	<i>M</i> = 13.31 <i>Sd</i> = 9.52	<i>F</i> (1, 274) = 29.98** Cohen's <i>d</i> = 0.85
Psychological symptoms	<i>M</i> = 1.07 <i>Sd</i> = 0.5	<i>M</i> = 0.95 <i>Sd</i> = 0.5	<i>F</i> (1, 274) = 4.19* Cohen's <i>d</i> = 0.24
Happiness	<i>M</i> = 6.29 <i>Sd</i> = 2.02	<i>M</i> = 6.13 <i>Sd</i> = 2.04	<i>F</i> (1, 274) = 0.41 Cohen's <i>d</i> = 0.08

Note. ^a Analysis was done on log transformation but the values in the table are from the original variable pre-transformation. **p* < 0.05, ***p* < 0.001

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Figure 1

Mediation Analysis for Family environment as Mediating the Relationship between Parental Behavioural Addictions and Participant's Behavioural Dependency and Psychological Symptoms Levels

