



RESEARCH ARTICLE

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On Contemplating Causes of Affective Disorders

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ABSTRACT

Aim: The aim was to investigate causes of affective disorders. Evaluation of published medical research revealed that it is still believed that they are largely caused by genes with some environmental input even though there is no evidence to support such beliefs. Psychological research revealed that there are several relevant hypotheses regarding environmental cause.

Hypothesis: Affective disorders are environmentally caused in the physically normal human. Cause is also multifactorial.

Data: Original evidence consisted of three case studies of people known to the author who had already been diagnosed by independent medical personnel as having some type of affective disorder (bipolar and unipolar). Data collection consisted of using qualitative methods including observation and conversation analysis.

Results: Although evidence was limited there is sufficient to conclude that it is likely that affective disorders are caused by the presence of negative social learning (observation) and or conditioning that prevent essential psychosocial need provision and lead to the development of dysfunctional negative schema. The consequence is development of affective disorder behaviours.

Conclusions: More research is needed into psychosocial need provision and schema development that provides enough detail for more definite answers. There is sufficient evidence to make a general finding that all affective disorder cause is environmental and multifactorial.

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Introduction

The research question concerns factors that cause affective disorders. Affective disorders include bipolar disorders and clinical depression (unipolar) in particular. However, there are other subcategories, according to both the DSM [1] and ICD [2]. But data available here cannot deal with all subcategories, thereby ensuring limits to findings.

Nonetheless, this is an extremely important question as such disorders involve some of the most serious psychiatric ailments, occasionally leading to suicide [3,4], yet exact cause has never been determined. Therefore, endeavouring to establish cause, or at least, point to need for further specific areas of research, is an overdue necessity for prevention as well as treatment.

Much research has already been done, both within psychiatry and psychology. In their meta-analysis, those causes elucidated by Rowland and Marwaha [5] include biological and environmental factors, such as genetic, child abuse, prenatal and perinatal factors, substance misuse, psychological stressors, medical comorbidities, and large studies investigating

multiple risk factors. They examined 49 studies and concluded that in spite of comprehensive investigations, no one knows what causes affective disorders, but the belief is that genes are probably largely responsible but may well be influenced by environmental issues such as drug addiction, child abuse and so on. There were many studies cited that investigated gene-environment interaction (e.g. Aas et al. [6], Hosang et al. [7], Oliveira et al. [8] and De Pradier et al. [9] but were still not able to provide evidence of cause. These authors further suggested that cause is probably multifactorial.

Because of the impact of such studies, it is also essential to evaluate those that purport to demonstrate a degree of genetic influence, and in particular reveal high monozygotic twin concordance rates. Such studies are conducted after onset of bipolar disorders and have no record of genetic structure before onset. It is known that alleles are changed by experience on a daily basis (Idaghdour et al. [10]; Ridley [11]; Slatkin [12], Joseph [13]; etc). In other words, our daily experiences cause change in genetic microstructures, but we have no data about genes before the study began so it is impossible to know if genes are

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responsible. Therefore, this is a type 1 error; that is, researchers have made a false positive error whereby they have untruthfully claimed that findings are significant when they have occurred either through chance or through the presence of extraneous or confounding variables. This is a chronic problem in studies regarding causes of mental health [14] and contribute to failure to understand cause of many serious issues including schizophrenia.

Secondly, twins share the same psychosocial environment, and so it would be expected that monozygotic twins in particular would have higher concordance rates than non-twin siblings or more distant relatives. Instead of suggesting that high concordance rates for monozygotes is evidence of genetic influence, it would be more correct to point out that such statistics provide evidence of familial environmental influence, which has not been controlled for and is ignored.

Furthermore, an editorial by Schatzberg [15] summarises different types of research and their findings. He assumed that examining a group of mentally ill people and comparing results with a group of normal people, and finding differences, provides evidence that biological abnormalities are causative. Environmental differences are ignored. Again, these research findings make the usual type 1 error; they erroneously accept the alternative hypothesis.

All of these studies, including those of behaviourists such as, for example, Kanter et al. [26] as well as the studies cited by him, ignore the most important environmental factors of human life, that of the psychosocial needs of humans. They delve into unimportant details that ignore overall and important frameworks. In so doing, they are not able to extrapolate rules or patterns that describe and explain cause. Examining human psychosocial need provision can only be achieved through qualitative methods as sufficient detail can only be accomplished through use of semi or unstructured interviews or naturalistic observation, psychometric tests, or similar, due to lack of detailed knowledge that exists contemporaneously. This is a new and paradigm changing approach. The author suggests that it is such detail that will eventually expose patterns that disclose cause. Such methods are often regarded as unscientific and therefore inferior as can be seen from examining all research methods used within psychiatry. This demonstrates regrettable prejudice that limits understanding of affective disorders, not to mention knowledge and understanding of research methods.

Psychology produces additional ideas. Seligman [16] talked about 'learned helplessness', which happens when a person learns that attempts to escape from negative situations are futile. However, there must be underlying issues not accounted for by such behaviour. More resilient people might find ways to overcome difficult situations and not develop a disorder leading to the idea that psychosocial issues are probably present.

Beck [17] believed that people with depression develop negative self-schema as a result of issues such as death of a parent or sibling, parental rejection, criticism, overprotection, neglect, or abuse, bullying at school or exclusion from a peer group. He talked about the 'cognitive trio', that is, three mechanisms

that he thought were responsible. They were negative automatic thinking, negative schemas and errors of logic or faulty information processing. But this ignores how these three originated. Attitudes are learned from early childhood, so his suggestions ignore underlying cause that predate such experiences.

Piaget [18] was the first to suggest that schema are cognitive frameworks that are the bases of human knowledge organisation that enable us to make continuous sense of our environment. They enable us to form mental representations of the world. Piaget defined schema as:

"a cohesive, repeatable action sequence possessing component actions that are tightly interconnected and governed by a core meaning." page 7

But we still know very little about schema construction, even though it is an essential psychosocial need and is basic to human existence [19]. There have been studies that demonstrate schema existence such as Bartlett [20], Brewer and Treyns [21] and Anderson and Pichert [22]. However, a serious criticism is that it is not entirely clear how schemas are acquired in the first place and how they influence cognitive processes. It is not possible to actually observe schema processing taking place within the brain although we can observe outcome of construction of ideas.

It is well documented within behaviourism that at least some of the explanation for cause of depression can be partly accounted for by operant and or classical conditioning [23]. However, such hypotheses on their own are inadequate for fully accounting for cause as overall patterns are absent. Behaviourism ignores human psychosocial need, family dynamics and the impact of conditioning on the individual's self. For example, operant conditioning can involve punishment. There are different types of punishment, some minor, while some extreme. Some individuals are more resilient than others, and the impact of punishment can be minimal while on others, the same can be more serious due to less resilience as a consequence of different family backgrounds. Examining factors from the perspective of psychosocial need might provide additional useful detail.

Aim

Therefore, the aim of this article is to provide a description of affective disorder causes based on observing behaviour from community case studies matched with the perspective of specific psychosocial causes using Saunders' [19] itemised table of all human psychosocial needs, and consequences of privation.

Hypotheses

1. Affective disorders are caused by environment in physically normal humans.
2. Cause is multifactorial.

Evidence and analysis

Evidence was collected through previous covert participant observation of people in the community. In the first case study, Hermione was a post graduate student, and well known to the author. She had already been diagnosed as having bipolar

disorder at age of thirty and was in the care of a psychiatrist. It took her seven years to complete her doctorate as every time there was a deadline for submission of a chapter of her thesis, she would go into a depressive state and need to take time out on medical grounds, sometimes an entire term. Because we saw one another regularly for around three years, and have maintained some contact since graduation, the author was able to observe long term behaviour patterns. We were also part of a peer group of postgraduate students who did many activities together, thereby facilitating participant observation.

Her background is instructive. She was the middle child of three sisters. By her own account the other two sisters used to gang up against her and bullied her. Parents were supportive and praised her a lot. This was an authoritarian church going middle-class family. Hermione described her parents to the author as kind, caring people, but nonetheless, it is apparent to the author from conversations that she fears, and unnecessarily expects, criticism. This would suggest negative schemas about the self, that had developed as a result of childhood experiences. However, the author met with Hermione and parents on one occasion. The manner of greeting was subdued and formal—no hugs or kisses. The author was made to feel that she was a child, due to mother's attitude, and so Hermione must have been also. In retrospect, it would appear that parental attitude of treating an adult as though a child, explains much. It appears to be the cause of Hermione always playing the role of child at crucial moments [25]. Moreover, Hermione herself never made personal comments about people and gave the impression of not understanding people.

On one occasion the author discovered her in a catatonic state. Her college domestic bursar had told Hermione that she had to change rooms by a certain date. Friends including the author told her that they would help her on the Sunday before. I arrived at her room around 10 am, knocked on her door, but no response. Hermione was nowhere to be found in the entire building in spite of extensive search, even though she was expecting me. I then sat outside her bedroom door for more than twenty minutes expecting her to appear from another direction. Instead, the bedroom door eventually opened and there was Hermione in her pyjamas, mute and slumped. I followed her into her room and she sat on her bed, in silence. I asked her questions and made comments as I was perplexed and worried about her, wondering whether to call for a doctor. There was no reply; her face was blank, lacking expression. I kept talking and asking questions. Eventually Hermione did speak. I asked another question, but it was around five minutes before there was any response. I persisted with another question and again it was several minutes before there was any response. However, gradually the length of time between question and answer decreased, and she eventually explained about her depression. A while later other friends arrived and the emotional contact stimulated Hermione to respond more, to the extent that she was able to phone her psychiatrist and even though it was Sunday, make an appointment for that afternoon. In the meantime, we all packed her possessions, organised her and moved everything to another building. By late afternoon she was her normal but subdued self, having seen the doctor who increased her medication.

In a second case study, the author and Meryl were friends through undertaking the same university course, and were in the same class for around three years. From then on, we saw one another over the years on an irregular basis. She was the oldest of three children. Mum was a forceful, kindly but authoritarian churchgoing woman, while dad was quiet and inoffensive. The second child was a female, Jan, who bullied her older sister. The author observed the parents ignoring Jan's unpleasant interactions with Meryl on several occasions. The third child was a boy who was also quiet and inoffensive, like father. Meryl was also a non-conflict addressing person, as modelled by her parents, who chose to try to rise above her sister's abuse. As Meryl grew older, she completed higher education and moved away from family for work purposes. Her attitude was always to carry on relationships as though certain behaviours did not exist. Eventually this led her to marry a man who most people would regard as having significant mental health issues. They had three children together before splitting up. Meryl moved away from him but maintained relations with her parents and siblings. Whenever possible Jan dominated and controlled her older sister through being extremely bossy and critical of her. Eventually, when in her forties, Meryl was placed in a psychiatric hospital where the author visited her. All the while Jan's attitude to her sister was never addressed, and the bullying continued on a life-long basis. The mother did not seem to know how to handle Jan's behaviours, while dad regarded behaviour regulation as being the role of mother. Meryl regarded it as being socially and morally unacceptable to criticise her sister, due to internalisation of norms that this is how to behave in everyday life, and looked up to Jan whose norms were substantially different. Such differences may well be due to learned behaviours as a result of different position in the family.

A final case study was that of Tanya, a seventeen-year-old psychology student. The author was her teacher, and had been told that Tanya had suffered from depression since primary school days. In class she had a good relationship with another female student, and could be seen smiling and animated, which did not suggest depression, but her work was of a poor standard. She claimed she could not do her work as I did not help her enough with explanations, even though all other students in the class were able to do the same work with the same amount of input from myself. They told her so when she complained to them about me. After a couple of weeks in my class, she developed disruptive behaviour. Every time I said something, she would cry out some negative comment. To my surprise, she claimed I was a terrible teacher; I had thought that I had a good relationship with her. Eventually she was causing so many problems for the entire class, as it was not possible to do any teaching with her in the room, she was told to leave the class. Lessons were set for her and she did the work in a separate room. Her mother reported me to the head teacher several times. Eventually the sixth form head, and myself met with Tanya and her mother. The head asked Tanya what the problem was. Tanya let forth many criticisms of me, many of which were irrational. The head then asked for my perspective. When I started talking, Tanya immediately started crying and turned to her mother exclaiming 'see what I have to put up with', whereupon mother would say, 'yes I can see' and give her a hug. The head eventually sent her

out of the room as she would not permit me to speak. We tried to talk to mum, but she was defensive and was not going to listen to any comments that I made about her daughter, further claiming that I was a bad teacher and that was the source of the problem. It became clear that the criticisms of myself were scapegoating behaviours (ego defence mechanism). Tanya was acting out. It was the mother who was causing Tanya problems, but Tanya could not address this issue as mother constantly gave her hugs, and made soothing, supportive noises, thereby providing positive attention which was what she wanted, or not. After this incident the author contacted the school safeguarding team and Tanya was provided with appropriate counselling.

Discussion

From the perspective of operant conditioning, Tanya's antisocial behaviour was rewarded by mother, thereby ensuring that it continued. But Tanya was confused at the outcome because this was not in her interests from the perspective of personal development, and developed delusional ideas as a defence mechanism. It appeared that mother was frightened of being alone after her four children left home, Tanya was number four, and so, like 'June Field's' mother [24] page 148; developed behaviours that endeavoured to prevent the final child from leaving. That is, there was no plan B after her children left home and she was not needed any more for basic parenting purposes.

In Meryl's family, her sister controlled her thereby causing conflict. The author is an experienced class room teacher and parent. If antisocial behaviour in a class room is allowed to continue without any strategy to resolve the ensuing conflict, then the class would become uncontrollable. It is essential to actively manage student behaviour to ensure homeostasis is established. The same is true in families. Parents need to manage situations so that all offspring are able to live without conflict. It is essential for boundaries to be created. The consequence of no intervention by parents and therefore no boundaries, in these families was mental health issues.

As a teacher, the author has encountered other students who behaved in a similar way to Hermione. If essays were due on such and such a date, but a student was not able to complete in time he or she would ask for an extension on medical grounds. Even accounting for such behaviour through operant conditioning, it does not explain the origins of such patterns of behaviour. Why does the simple task of submitting an essay on time or moving rooms present such a challenge to some people? This is where behaviourism is inadequate for a convincing and complete explanation. For most people we complete such tasks without any problem and even when we find an essay topic difficult, we ask for help or do extra reading or similar in order to comply with administrative requirements. That is, we behave as adults [25]. Something is happening to prevent these people from emotionally developing into adults.

In the case of Hermione, it is clear that positive attention and interaction from others had an ameliorating effect. The more people paid positive attention to her, the less she was depressed. Operant conditioning can account for such behaviour: Stimulus = depressed person; response from others = nurturing, supportive attention; result = reduction in depression. This does

not however, explain why the depression existed in the first place, nor why she reverted to a depressive state when positive attention and or medication ceased and responsibility for some situation or issue began.

This leads into considering depressive behaviour from a different perspective, that of human psychosocial need, but in tandem with behaviourism, because, as has been claimed by others, affective states are complex [26]. Referring to Saunders' [19] list of all human psychosocial needs is useful. In addition, she has claimed in her book [27] that humans need certain levels of attention for normal development. If attention is too much, or too little (neglect), then the person's mental health is affected. Too much attention was demonstrated in the case study mentioned above, by Laing and Esterson [24] when 'June Field' became catatonic in order to escape from her abusive mother who constantly lied about the nature of family relationships. Mother, by her own admission, never left June alone. This was excessive and abusive attention, while professing to be parental care, but in reality, was dominating and controlling behaviour leading to reduced personal development and dependency on mother, which was what mother wanted.

The author's hypothesis is that in the case of people who develop clinical depression or bipolar disorder, within the family of origins, situations have developed whereby the child experiences episodes of intense negative and damaging attention but also neglect when some form of positive attention was needed to neutralise the damage caused by the negativity. These episodes of negative attention involve coercion and belittling, while neglect ensures that the child is ignored and does not feel valued, and so the power balance or homeostasis, is not restored. The belittling causes the person to feel worthless, but feeling valued is a vital psychosocial need; positive attention therefore is essential to repair damage to prevent the development of deviant behaviour, that is, some form of mental disorder. Furthermore, the child is not able to exercise control over its life and take responsibility for its actions due to the impact of incessant criticism on its ego, that is, its sense of self. The word 'ego' here is used in its anthropological and not Freudian sense. The bullying ensures that the child is not permitted by others to have agency within relationships. These are all essential human psychosocial needs [19]. This potentially ensures that the person is not able to develop and remains in a childlike state, emotionally stultified by others' emotional abuse.

Recently, Hermione admitted to the author by email, that she is still working on self-improvement, including becoming more adult-like; but her depressive episodes have diminished and she now experiences roughly one per year. She is now a middle-aged female. Therefore, this is evidence that events of her childhood had a lasting and negative effect on her entire life. It is clear that dysfunctional schemas had been constructed. There is no other possible psychosocial factor in situ that could account for this, according to current knowledge.

A further relevant need is the ability to construct positive schemas in order to continuously explain the way the world works and then choose to act accordingly in response. Destructive

experiences lead to the construction of destructive schemas. Saunders [14] Page 11, has made the same observations regarding causes of schizophrenia, and has discussed the role of observational learning as set out by Bandura, that amount to showing how schema form [28] Page 25. We need to be able to organise information in order to make sense of our psychosocial environment in the same way we organise knowledge of our physical environment. As Bandura has pointed out [28] this is done by constant observation and extrapolating rules that enable comprehension to take place. Although he did not use the word 'schema', this must be a consequence. This must happen in tandem with conditioning.

In the case of Hermione, she had been told so many times that she was inadequate by others that this had caused her to construct negative schemas about herself. Every time it was essential to take some sort of responsibility for her own actions, she retreated into depression and even a catatonic state due to this excessive fear that had been constructed in response to the behaviour of others. Thus, dysfunctional family relations affect schema construction in the affected person, which are difficult to rectify without targeted help in the form of counteracting the negativity with continuous positive ideas and attitudes until negative schemas are replaced with positive schemas. Moreover, Hermione's ego and self image have been severely affected by familial behaviours.

There had been criticisms of Hermione from some peer group members as she consistently was not able to take responsibility for some decision making and take action accordingly with the consequence that the peer group were not infrequently coopted into assisting. That is, she existed emotionally in a childlike state [25]. But such consistency in behaviour suggests underlying psychological structures in situ that ensured consistency in response to a need to playing the role of adult. In short, such consistency seems to provide evidence for the existence of schemas. Therefore, it also suggests that schemas were directing long term behaviours. She was not able to modify learned behaviour from childhood and construct more positive self-schema, even though she had graduated with first class honours, was top of her science class, acquired a doctorate, and had thus demonstrated that she was very capable, due to other schemas that ensured that she believed that she was not capable. That is, there were conflicting schemas in situ and it appears possible that it was this conflict that ensured inertia at crucial moments, that was labelled 'depression'.

This is one possible explanation for behaviour patterns of depressives. But due to not being able to witness schema construction, this can only be a hypothesis at this point in time until more research results emerge that support or refute this. In addition, consistency in behaviour clearly has become a personality trait. That is, when people are not allowed to develop into adults, a dependency personality develops. In all three cases cited here, the women had developed dependency issues. This appears to suggest that schema formation are the basis of the development of personality traits, and therefore the human ego. Such long term consistent behaviour is evidence of personality type. This also appears to be evidence regarding how personality traits are formed.

In first two cases cited above, the individual experiences negative attention from one or more siblings. Parents did not provide support, that is, neglected to address the impact the abuse was having on the child, possibly not understanding that such behaviours were a form of abuse, leading the child to feel worthless. This caused the child to develop schemas resulting from learned behaviour. Eventually depression is diagnosed.

In the third, mother ignored Tanya's psychosocial needs in preference to her own, leading to depression and a delusional state. Tanya controlled her mother; this is not normal as children need parents to be in control and direct their offspring's behaviour and not vice versa. This led Tanya to transfer her feelings to the author, possibly due to the author being a psychology teacher and therefore more insightful than family members, instead of addressing her mother. She needed her mother to be in control. Mother was not setting boundaries and standards in relationships. She drew attention to her plight by her attention seeking and delusional behaviour.

The psychosocial need issues are need to feel valued and accepted as a valued human, need for autonomy to behave as the individual feels appropriate, control over destiny, adequate positive attention, adequate and appropriate direction, absence of abuse and presence of homeostaticity, establishing of appropriate boundaries for all parties, stimulation of ideas for personal growth, plus ability to learn and develop from a variety of sources, both internal and external to the family unit.

These first two case studies provide insightful but limited information. They are about middle-class families whose offspring have had university level education. Marital relations were stable and the children would be described as coming from a 'good home'. Parents were church going, and authoritarian. As such, it cannot be called a definitive description of all affective disorder cause. These two case studies deal with conflict between siblings which is ignored by parents. This is very specific and limited in application. However, it is the beginning of providing information that can lead to prevention and treatment, that is more comprehensive and efficacious than has been elsewhere to date.

When listing issues in families above, it should be noted that around a half dozen variables are mentioned as possible contributing issues, thereby supporting the hypothesis that cause is multifactorial.

When addressing the issue of operant conditioning, certain patterns can be seen to emerge. Stimulus: dysfunctional family behaviour; Response: dysfunctional schema development; result: mental health issues. However, it is beyond the scope of this article to definitely prove that dysfunctional behaviour leads to dysfunctional schema development and then mental health issues. Nonetheless, it can be concluded that affective disorders are probably caused by the presence of negative social learning experiences and or operant and or classical conditioning behaviours that prevent essential psychosocial need provision and lead to the development of dysfunctional negative schemas resulting in abnormal behaviours.

With bipolar disorder, it appears that boundaries are not being set with the result that moods fluctuate excessively with no behavioural responses in situ to prevent this. Setting limits to behaviour with appropriate consequences for non compliance, ensures emotional stability and thereby limits emotional response and excessive fluctuations. Additionally, providing a calm and supportive environment will also ensure that stability ensues, an essential psychosocial need for normal development.

Saunders [27] has pointed out that children need direction, that is, guidance about how to behave from senior figures in their lives. In the first two cases it is apparent that parents did not always do that. Although parents were caring, there was an absence of direction regarding behaviour expectations resulting in an absence of insight into understanding of psychosocial needs and behaviours. These first two cases demonstrated that both women did not understand their psychosocial environment.

Using covert participant observation as a research method ensures high validity; it is impossible for social desirability bias to invalidate observations. It therefore can reveal natural behaviour patterns not interfered with by confounding variables. Recording data after events can produce the most valid and accurate descriptions of behaviour due to being an insider [29] p925.

Conclusions

In general, due to inability to ascertain cause with total certainty in spite of extensive research, there needs to be a paradigm change in research methods as well as acknowledging that existing beliefs surrounding causes are false. Research has shown that genes cannot be responsible for affective disorder cause, but some family behaviour patterns are, as they apparently lead to the development of destructive schemas. Evidence provided here is insufficient for conclusive proof, due to limited data, but there is sufficient evidence to suggest that this is likely to be true, and therefore there is a need for further research to be undertaken. What is further necessary is investigation into human psychosocial needs. It appears that patterns in some family behaviours result in schema construction that are dysfunctional leading to disordered behaviour that contravene norms and result in destruction of lives. The creation of appropriate boundaries with appropriate consequences for non compliance, appears to be crucial regarding bipolar disorders in particular in order to prevent excessive emotional fluctuation. Schema formation appear to influence personality type development. Cause is multifactorial. Evidence provided here has high validity due to being retrospective recording of events the author has participated in.

All names and some data about people have been changed in order to maintain confidentiality and anonymity.

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