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Empirically Grounded Clinical Interventions

Clinical Implications of a Psychological Model of Mental Disorder

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Abstract. Kinderman (2005) presented a psychological model of mental disorder, based on a critique and reformulation of the biopsychosocial model. Kinderman suggested that disruption or dysfunction in psychological processes is a final common pathway in the development of mental disorder. These processes include, but are not limited to, cognitive processes. This 'mediating psychological processes model' proposes that biological and environmental factors, together with a person's personal experiences, lead to mental disorder through their conjoint effects on these psychological processes. The clinical implications of this model are discussed further here. It is proposed that formulations rather than diagnoses should predominate clinical planning, that these formulations should detail the hypothesised disruption to psychological processes or mechanisms, that psychological therapies should receive higher priority, and that medical, social and even psychological interventions are most likely to be clinically effective if they are designed on the basis of their likely beneficial impact on underlying psychological mechanisms.

Keywords: Psychological processes, biopsychosocial model, psychological interventions.

Introduction

Many recent reports by professional bodies, strategy documents from policy makers and proposed changes in legislation emphasize the role of psychologists and of psychological perspectives in mental health. The first clinical guideline issued by the UK's National Institute for Clinical Excellence concerned the treatment of schizophrenia, and recommended that "100%" of people in receipt of the diagnosis of schizophrenia should be offered cognitive

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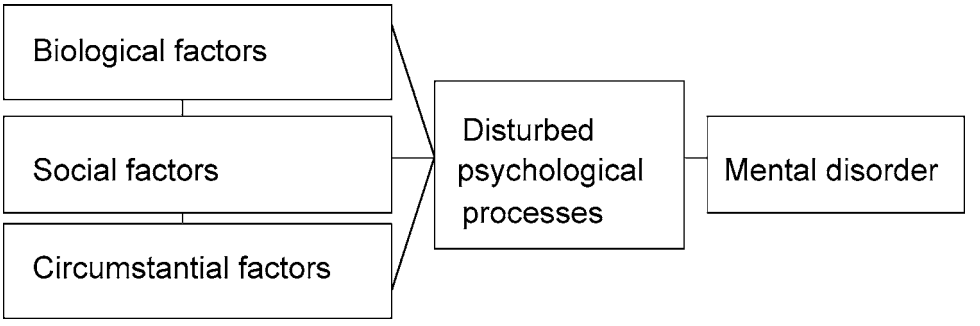

Figure 1. The central role of psychological processes

behavioural therapy (National Institute for Clinical Excellence, 2002) (p. 55). Recent academic reviews have emphasized the role of psychosocial influences on mental illnesses and psychotic experiences (British Psychological Society Division of Clinical Psychology, 2000) and major grant-funded randomized controlled trials have repeatedly demonstrated the effectiveness of psychological therapeutic approaches in a range of mental health problems (Department of Health, 2001; Nathan and Gorman, 1998; Lambert, 2001).

Until very recently, the most appropriate conceptual framework for accommodating such factors into a predominately medical healthcare structure has been George Engel's biopsychosocial model (Engel, 1980). The biopsychosocial model located mental disorder within a human system that has both physical elements (a biological nervous system) and psychosocial elements (relationships, family, community and wider society) (Ghaemi, 2003). Although the biopsychosocial model has been widely advocated (Goldberg and Huxley, 1992; Falloon and Fadden, 1993; Brown and Harris, 1978; Department of Health, 2004a), take-up by clinical psychiatrists has been patchy (Moncrieff and Crawford, 2001, Pilgrim and Rogers, 2005; Read, 2005). The biopsychosocial model has also been criticised (Pilgrim, 2002; McLaren, 1998). Such criticism comes both from those who stress the benefits of a more strongly biomedical model of mental disorder (Kandel, 1998; Roth and Kroll, 1986) and from those who feel that the biopsychosocial model fails to challenge such biomedical approaches (Ross and Pam, 1995; Rogers and Pilgrim, 1991; Breggin, 1993).

Kinderman (2005) took this further, suggesting that the biopsychosocial model fails to address issues related to the different status and nature of the different elements – the unresolved issue of "primacy" (Guze, 1989; Rashkis, 1979) – and that the nature of psychological factors itself needed further attention. Kinderman suggested that, instead of assuming that biological, social and psychological factors are co-equal partners in the aetiology of mental disorder, disruption or dysfunction in psychological processes is a final common pathway in the development of mental disorder. Kinderman's "mediating psychological processes model" proposes that biological and environmental factors, together with a person's personal experiences, lead to mental disorder through their conjoint effects on these psychological processes. This psychological model of mental disorder is illustrated graphically in Figure 1.

In this model, biological abnormalities or physical insults are believed to lead to mental disorder because those biological factors may adversely affect psychological processes. Similarly, the mediating psychological processes model argues that social factors such as poverty and social deprivation may lead to disillusionment, hopelessness and learned helplessness; a realization that there is little or nothing that one can do to improve or change

one's lot in life, and perhaps even that one's actions have no effect or purpose (Mal, Jain and Yadav, 1990; Evans, Saltzman and Cooperman, 2001; Seligman, 1989). Finally, and of course only a single example among many possible, Kinderman (2005) argued that circumstantial factors and life events, such as childhood sexual, emotional or physical abuse, may lead to a wide variety of mental disorder as a result of the impact on the ways in which the children (and later the adults) appraise themselves, the important people in their lives, their actions and the consequences of their actions, and the ways in which relationships and social intercourse should be governed (their cognitive schemas) (Young, 1999).

Some commentators would suggest that the final common pathway in the development or identification of mental disorder is social, not psychological (Coulter, 1973; Thoits, 1985). This is a valid point, and Kinderman (2005) contributed to the long-standing debate between competing models of mental disorder. A more detailed discussion of this issue, including a more detailed discussion of the relationship between social and psychological factors in the context of socioeconomic deprivation, can be found in Kinderman (2005). In part this paper contributes to that debate, but is more specifically focused on the clinical implications of a psychological model.

It is also more common for "models" within the cognitive psychology literature to include considerable detail and specificity on the processes and mechanisms lying behind particular disorders. In that context, it could be argued that the current paper presents a "framework". This, however, is derived from a fuller model (Kinderman, 2005), which discussed detailed and specific psychological processes and mechanisms. That included extended discussion of the importance of feedback loops – for example, the effects of childhood trauma on brain development, or how cognitive factors such as expected reward (or punishment) may alter physiological arousal.

Kinderman (2005) outlined a range of empirical research support for the mediating psychological processes model; which is outside the scope of the present paper. There is, however, considerable empirical evidence that psychological factors "add value" to explanatory frameworks that otherwise focus on biological or social factors (Lewontin, Rose and Kamin, 1984). Even in psychosis, explanatory models invoking psychological factors and interventions have demonstrated considerable benefit (British Psychological Society Division of Clinical Psychology, 2000). In terms of clinical impact, recent reviews of psychological and drug treatments for depression and anxiety (Hollon, Stewart and Strunk, 2006) reveal that psychological treatments convey specific and particular benefits, particularly in reducing the risk of subsequent return of problems.

Kinderman (2005) briefly outlined some of the implications of such a model: for health service policy, for research and for clinical practice. Necessarily, however, discussion of these implications was limited. The current paper expands on the clinical implications of that model.

Diagnosis and formulation

The weakness, statistically and theoretically, of diagnosis has been discussed elsewhere (Bentall, 2003). Psychiatric diagnosis can be unreliable (van Os et al., 1999), especially when the ideal conditions for accurate and reliable diagnosis are absent (McGorry et al., 1995). Diagnosis is also of doubtful validity, with incomplete consensus as to what the criteria for any particular diagnosis are. The utility of psychiatric diagnoses is also limited; treatment based on observed phenomena appears more effective than treatment based on diagnostic categories (Moncrieff, 1997).

Psychological classification. One possible conclusion might be to advocate a new approach to classification, based not upon a theoretically neutral, phenomenological, approach or indeed a biomedical approach, but rather on psychological principles. A plausible approach could be to classify patients' problems on the basis of the presence of identified dysfunctions in psychological processes. Although plausible, such an approach is unviable.

First, the so-called symptoms of mental disorders themselves exist on continua with normality (Bentall, 2003). Even psychotic experiences such as hallucinations and delusions appear to be common in the so-called "normal" population (Tein, 1991; van Os, Hanssen, Bijl and Ravelli, 2000; Poulton et al., 2000). It also appears that the measurable aspects of the underlying psychological processes lie on continua. Personality traits – whatever one thinks about their nature and significance – appear well distributed in the general population (Tillfors, Furmark, Ekselius and Fredrikson, 2001; Lenzenweger and Korfine, 1992). Dysfunctional beliefs of the kind integral to the cognitive models of a range of disorders appear to be similarly common (Lester, 1993; Oliver and Baumgart, 1985). In short, there is considerable evidence that the psychological processes integral to the mediating psychological processes model of mental disorder are disturbed to a greater or lesser extent (or in subtly different ways) in different people. It is not the case that some people possess intact psychological processes and others possess dysfunctional psychological processes. Finally, psychological processes are impinged upon by events. It is obvious that relevant psychological processes are changeable and state dependent. For example, the induction of negative mood can lead to the activation of dysfunctional (extreme and self-defeating) belief systems in vulnerable people (Mirander, Gross, Persons and Hahn, 1998). In such an analysis any classificatory system, even one based on psychology rather than biology, would be invalid.

In general, classificatory approaches fail adequately to reflect the multi-factorial basis of mental disorder (van Os et al., 1999). Dimensional or "transdiagnostic" approaches (Harvey, Watkins, Mansell and Shafran, 2004) attempt to reflect the fact that many disruptions or dysfunctions of psychological processes – such as negative self appraisal or attentional biases – are present across diagnoses. This approach has been used with people with panic disorder and other co-morbid problems (Tsao, Mystkowski, Zucker and Craske, 2005). This suggests that if the psychological processes implicated in panic disorder are successfully addressed, then the other co-morbid problems also reduce in severity. Moreover, in contrast, attempts to treat each disorder separately appear less effective.

This argument has a personal, ethical or even political element as well as a scientific one. The positivist tradition of psychiatry has been criticized by some for its reliance on classification and invocation of disease entities, becoming impersonal and reducing individual meaning (Pilgrim and Rogers, 2005). In contrast, an approach based on psychological formulations has been argued to be more inclusive and person-centred (British Psychological Society Division of Clinical Psychology, 2000). This argument would extend to "psychological classification". It is likely that psychological categories of dysfunction, even if they were to escape the trap of becoming classifications of people, would similarly tend to obscure the personal and dynamic nature of human experience.

Psychological formulations. Mental health practitioners should instead use individual clinical formulations. Psychological formulations sum and integrate the information acquired through the assessment process (Hawton, Salkovskis, Kirk and Clark, 1989). Psychological formulations attempt to explain why people are experiencing difficulties. They usually consist

of a list of problems and hypotheses as to the possible psychological reasons for these (Persons, 1989). Formulations usually incorporate the events of people's lives, and how the individuals have interpreted and reacted to these. Formulations are hypotheses about the nature and origin of problems, which are tested out over time (Brewin, 1988), and therefore tend to evolve over the course of both assessment and therapy. Psychological case formulations are complex and may commonly incorporate several hypotheses, based on a variety of psychological theories, each drawing on scientific research.

The use of psychological formulations is not synonymous with being a clinical psychologist. Many individual clinical psychologists may fail to provide psychological formulations. Many medically trained psychiatrists welcome formulation; either as an adjunct to diagnosis – the flawed but iconic DSM-IV suggests that diagnosis is only a start – or as an alternative to diagnosis (Bracken and Thomas, 1998).

It is not necessary to invoke the mediating psychological processes model (Kinderman, 2005) of mental disorder in order to appreciate the benefits of clinical case formulations. An argument for clinical case formulations can be built upon the unreliability of diagnostic approaches and the benefits of the alternative. Indeed, formulations have been preferred to simple diagnoses for many years, and were advocated by influential early psychiatrists such as Meyer and Abraham. But the mediating psychological processes model does suggest the nature of appropriate formulations.

Despite the central role given to formulation as a basis of the professional activity of clinical psychologists (British Psychological Society Division of Clinical Psychology, 2001), relatively little has been written on the subject in the academic literature. Beck and colleagues (Beck, Rush, Shaw and Emery, 1979) discuss formulations from a cognitive therapy perspective in terms of the, now ubiquitous, dysfunctional attitudes and negative automatic thoughts. In terms of the mediating psychological processes model (Kinderman, 2005), however, it makes scant and implicit reference to underlying cognitive processes of belief formation and what might best be described as heuristic reasoning. Some mention is also made of behavioural processes (activity scheduling is recommended as a therapeutic intervention in its own right in addition to providing a stimulus for the discussion of cognition), but this is again implicit and limited.

In the "five factor" model of formulation (Padesky and Greenberger, 1995), biological, environmental, cognitive, behavioural and affective factors are all recommended for inclusion in the clinician's formulation. Psychological processes, other than those already addressed in Beck's approach, are not emphasized.

Persons (1989) offers the most straightforward framework for psychological case formulation. This approach consists of a problem list (a description of the person's actual experiences or problems), provisional hypotheses concerning possible precipitants, vulnerability and maintaining factors and protective factors (developed collaboratively between client and therapist) and collaborative hypotheses concerning possible effective interventions. Once again, psychological processes appear to have relatively lesser status.

The mediating psychological processes model (Kinderman, 2005) places psychological processes – and the disruption to psychological processes – central in the formulation of mental disorder. This implies a rather different approach than a focus on possible precipitants, vulnerability and maintaining factors and protective factors. In this model, such elements are seen as influencing mental health indirectly, through their impact on psychological processes. This focus applies, initially, to the assessment process.

Assessment. Clinicians following the approach advocated here will change what they assess and how assessment is conducted. Of course, there must be a basic or general assessment, which will include a risk assessment. As in other approaches to psychological formulations, the person's problems should be assessed in detail, attending to specific phenomenological elements, and with particular emphasis on behaviours, cognitions and affect (Beck et al., 1979). However, these are particularly important in that they point to putative psychological processes. Thus, while the first step must be a clear outline of the presenting problems, the second, and crucial step in the formulation process is therefore is to identify the psychological processes involved in the target phenomena.

It would be difficult, and probably inappropriate, to try to specify all of the assessments that could be employed – it is clearly possible that any (and any combinations) of psychological processes identified could be relevant for any individual. However, a reasonable assessment may examine the processes of belief-formation and interpretation that shape the person's world-view. Thus both "core dysfunctional beliefs" (Beck et al., 1979) and "core dysfunctional schemas" (Young, 1999) may be the subject of evaluation, leading to examination of the person's appraisal of and beliefs about the self.

Such an assessment may lead from beliefs to attributions – causal attributions are important evaluative processes that have been linked to a range of psychological problems (Brewin, 1985; Kinderman and Bentall, 1997). Assessment of the patient's appraisals of events (attributions) may lead to an assessment of the patient's understanding of the psychological problems themselves; from identification and appraisal of internal states (Pallant, 2000) to health beliefs as they apply to psychological problems (Lobban, Barrowclough and Jones, 2003). This is likely to lead to an assessment of possible problems with processes of metacognition (Wells, 2003).

If, for instance, a person were to identify depressed mood in their problem list, a formulating clinician should investigate processes of self-esteem maintenance (Brown, Bifulco and Andrews, 1990), learned helplessness and self-efficacy (Mal et al., 1990; Evans, Saltzman and Cooperman, 2001; Seligman, 1989) and the extensive literature on negative cognitive schemas (Beck et al., 1979; Kumari and Blackburn, 1992). These latter considerations should extend to interpersonal schemas (Young, 1999). Of course, similar considerations must apply in respect to other identified problems – the presence of auditory hallucinations a problem list would suggest assessment of the possible involvement of processes of misattribution of inner thought or inner speech (Rankin and O'Carroll, 1995) and secondary appraisal of psychotic phenomena (Morrison and Haddock, 1997), the presence of delusions would lead to an appraisal of biases in causal attribution (Kinderman and Bentall, 1997) and "jumping to conclusions" (Huq, Garety and Hemsley, 1988; Dudley, John, Young and Over, 1997) and so on.

In addition to possible differences in the variables assessed, in the model presented here, differences may emerge in the reasons for or purpose of assessment. Assessment is not intended to identify abnormal processes for the purposes of classification, nor to identify some notion of internal "badness". Rather, it is believed that all people, including people with psychological problems, use a range of psychological processes to make sense of the world (Bentall, 2003), Distress and disorder, in Kinderman's model, emerges not from abnormal process per se, but from dysfunction of these normal processes. This distinction alters our conceptualization within clinical practice.

This approach to formulation contrasts with that advocated by psychologists with specialist interests in particular forms of therapy – such as CBT. In such approaches a general assessment

is typically followed by assessments exploring the one particular set of processes associated with that form of therapy. Thus, CBT practitioners assess core beliefs and negative automatic thoughts, behavioural therapists explore patterns of contingent reinforcement etc. In the mediating psychological processes approach, assessment may be much broader and more eclectic. This places some demands on the practitioner for greater erudition and a wider set of competencies, but also allows for a more comprehensive assessment process. The mediating psychological processes model (Kinderman, 2005) also allows for this broad set of possible assessments to be placed in a coherent framework. What sets this model apart is that such assessments have a clear and specific aim – the identification of the disruptions to or dysfunctions of psychological process.

Disruption to psychological processes or mechanisms

Central to Kinderman's model (Kinderman, 2005) is the idea that disruption or dysfunction in psychological processes is a final common pathway in the development of mental disorder. The model proposes that biological and environmental factors, together with a person's personal experiences, lead to mental disorder through their conjoint effects on these psychological processes. Clearly, then, formulations should focus on these processes.

The third step in a framework of formulation based on the mediating psychological processes model (Kinderman, 2005) is therefore to examine the possible contributory role of biological, social and circumstantial factors in the disruption of these processes. This serves to clarify the steps taken in Persons' approach of identifying possible precipitants and vulnerability, maintaining and protective factors (Persons, 1989). Thus, in terms of precipitants, the mediating psychological processes model necessitates examining what circumstantial factors might have precipitated any identified disruptions in psychological processes. More interestingly, vulnerability factors, maintaining factors and protective factors should be considered in the framework of biological, social and circumstantial elements, as well as in how these factors might have impacted on the key psychological processes.

The difference between identifying vulnerability factors for an identified problem (as in the Persons approach) and identifying social factors that might pose a vulnerability for the disruption of specific psychological processes (as the mediating psychological processes approach would imply) is subtle but important. The mediating psychological processes model (Kinderman, 2005) made clear that the relationship between biological, social and circumstantial elements and the mental disorder per se is mediated by disruption of psychological processes. Identification of vulnerability factors for identified problems directly, then, misses out on the crucially important mediating variables. But placing greater emphasis on this element – the disrupted or disturbed psychological processes themselves – the explanatory framework is strengthened; just as a path analysis that takes proper account of mediating variables explains more variance.

In the case of depressed mood, factors such as monoamine abnormalities (Charney, 1998) social disadvantage (Reijneveld and Schene, 1998) and sexual, emotional or physical abuse (Mueser, Rosenberg, Goodman and Trumbetta, 2002) would be considered, but these would be examined in more forensic detail, exploring how these factors impact on representations of behavioural contingencies or on interpersonal cognitive schemas. Similar considerations might examine dopaminergic abnormalities, central executive dysfunction, or adverse childhood events in the case of hallucinations and delusions (Bentall, 2003).

The mediating psychological processes approach (Kinderman, 2005), of course, is not limited to cognitive processes. Behavioural mechanisms such as learned helplessness (Mal et al., 1990; Evans et al., 2001; Seligman, 1989) and classical conditioning (Dadds, Davey and Field, 2001), and interventions such as systematic desensitization (King, Muris and Ollendick, 2005), activity scheduling (Beck et al., 1979) and behavioural experiments (Bennett-Levy et al., 2004), and psychodynamic factors such as the role of family processes (Lopez et al., 2004) and relationships with formal and informal carers (Ryan, 2002) can be integrated into the formulation.

Psychological imperialism versus integration

Kinderman (2005) makes a confident, even bullish defence of a psychological model of mental disorder. The recent interest in CBT as an intervention and in psychological approaches more generally means that claims for a psychological model are "flavour of the month". This need not lead to psychologists becoming dogmatic and "imperialist" – psychological orthodoxies come and go, and many psychological practitioners are relatively detached from academic psychological science (Cheshire and Pilgrim, 2004). This means that advocates of psychological models should be cautious and open-minded. Psychology does not claim to be able to explain everything and solve any problem, but it may be helpful.

One clear practical implication of Kinderman's (2005) model to clinical practice is that it offers a coherent framework for integrating various psychological approaches. It can also link such psychological approaches with other professional perspectives. While multidisciplinary working in mental health care is strongly and widely welcomed (National Institute of Mental Health in England and Royal College of Psychiatrists, 2004), eclecticism in psychological therapies is often viewed with scepticism (Markotwitz, 2005; Lazarus, 1995). In the mediating psychological processes model, however, it is entirely appropriate to develop integrative formulations that allow psychological processes to be understood directly – rather than as components of any specific approach. Thus it is entirely appropriate to invoke models of dysfunction in behavioural processes (such as learned contingencies of reinforcement), and, at the same time, incorporate models of abnormalities in cognitive processes such as attribution and belief-formation and psychodynamic models. Perhaps most importantly, the mediating psychological processes model (Kinderman, 2005) explicitly states that such a variety of psychological processes should be integrated with an understanding of social circumstances and biological factors, and the impact of these variables on the psychological issues. This approach, therefore, offers an opportunity to develop truly eclectic, multidisciplinary and systemic formulations that are nevertheless theoretically valid and coherent. Of course, the end-point of formulation is intervention. Again, the mediating psychological processes model can offer important guidance to clinicians.

This fundamentally integrative approach, flowing from the mediating psychological processes model (Kinderman, 2005), differs substantially from more traditional approaches. Not only does this approach allow different psychological traditions to be integrated, but it allows integration of biological, social and psychological approaches. It is not uncommon, even in otherwise well-integrated multi-disciplinary teams, for different approaches to the understanding of mental disorder to be (as it were) on different tracks – with medial-style diagnosis paralleling psychological formulation, and the prescription of psychoactive medication accompanying psychological and social therapies. The mediating psychological

processes model (Kinderman, 2005) allows these potentially parallel tracks to converge. What sets this model apart is that the formulations are designed around the central notion of disruptions to or dysfunctions of psychological process.

This approach also has additional, significant, implications for service design (Kinderman, 2005). In addition, inevitably, to increasing the emphasis on psychological competencies in mental health services, those services themselves should be designed in a manner that permits and facilitates such approaches. This will involve addressing the needs of the workforce (from recruitment, through training and continuing professional development to clinical supervision) the managerial structure of services (how referrals are processed, how clinical decisions are made, the "hierarchy" of professional decision-making etc) and even the place of mental health care in the health services – should the care of people in personal distress even be a matter for "health" services? These issues were addressed briefly in the original exposition of the mediating psychological processes model (Kinderman, 2005).

Interventions

The most significant implication of this psychological model in respect to interventions for mental disorder is to advocate a more central role for psychological therapies. Since psychological processes are a central feature, a final common pathway, in the genesis of mental disorder, it clearly makes sense to provide the opportunity for direct psychological intervention. This is not, in itself, too radical. In the UK (Department of Health, 2004b) the Department of Health is proposing a major investment in the provision of psychological therapies, and the plans for the development of competencies in a range of professions include the aspirations that a wide range of staff will, in the future, provide such psychotherapy.

One implication of this model of mental disorder for clinical practice is that more time may be spent with patients developing collaborative explanatory models. Building such frameworks for understanding their difficulties, using this model, would in itself be an intervention. There is a danger that, in conventional approaches – whether psychiatric or psychological or other – people experiencing distress could be offered particular frameworks of understanding (for instance models of "illness", or models based on the presence of negative automatic thoughts, or interpersonal conflicts) as possible prototypes for helping to make sense of their experiences. The danger here is two-fold. First, offering a series of choices between clinical explanations is clearly imperfect. Second, the clinical decision-making may degenerate into a question as to whether, for example, a diagnosis can be made, or whether negative automatic thoughts can be identified.

It is likely, following this model, that normalization will be facilitated. Thus, people experiencing distress should find that it is relatively easier to appreciate simultaneously that their difficulties may arise from identifiable dysfunction (i.e. that there is something "wrong" and that it is explicable, identifiable and understandable) but also that the disruption to their psychological processes is normal and there are things they can do to recover. This point is a fine one, but an important one. There is, within this model, a clear difference in meaning between an abnormality per se (the medical model) and the emergence of problems following the dysfunction of a set of normal psychological processes. That is, this model does not necessitate the involvement of a new, different, process (an illness or disease process) but rather suggests that normal processes, present in all people, can occasionally be disrupted or malfunction.

This framework of understanding is closely related to the concept of recovery (Ralph and Corrigan, 2005). Rather than curing diseases, this model suggests that recovery involves recognizing and ameliorating the disruptions and dysfunctions in process.

As mentioned above, the mediating psychological processes model (Kinderman, 2005) explicitly supports eclectic, multidisciplinary and systemic formulations that are nevertheless theoretically valid and coherent. This will support theoretically coherent eclectic intervention. It is, in accordance with this model, entirely appropriate to use behavioural interventions to address dysfunctions in behavioural processes (such as learned contingencies of reinforcement) and, at the same time, employ techniques from cognitive therapy that effectively address abnormalities in cognitive processes such as attribution and belief-formation. And none of this is inconsistent with also exploring the possible benefits of prescribing antidepressant medication and addressing a person's social circumstances. This should support increased (and more effective) multi-disciplinary working, and help to erode the distinctions between different traditions of psychotherapy (behavioural, clinical and psychodynamic) and indeed distinctions between different disciplines of psychologist (counselling, clinical, forensic).

The mediating psychological processes model (Kinderman, 2005) differs significantly from the status quo in respect to therapeutic interventions. It is true that, at present and in itself, it does not suggest a specific and unique therapy. That is, behavioural therapies are incorporated, as are cognitive therapies and psychodynamic therapies. Moreover, the mediating psychological processes model is entirely open to the incorporation of social and physical (pharmacological) therapies. Within this model, however, such therapies have a clear and specific aim – the amelioration of the disruptions to or dysfunctions of psychological process identified through the assessment and formulation procedures.

Concluding summary

Kinderman's (2005) mediating psychological processes model of mental disorder offers a coherent account of the role of dysfunctions in psychological processes in the genesis of mental disorder. This model has clear implications for clinical practice. Rather than invoking single theoretical approaches, the mediating psychological processes model suggests that a wide range of different psychological processes must be considered. Assessment, case formulation and intervention, therefore, will necessarily be broad and eclectic.

Clearly, any model of mental disorder that places disruption or dysfunction of psychological processes central will also place greater emphasis on psychological therapies. In this case, however, a slightly different emphasis is also placed on social and pharmacological therapies. In the mediating psychological processes model, such therapies are hypothesized to have their effects through the impact on psychological processes. This may affect the therapeutic choices made.

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