

## Introduction

I was responsible for recruiting Residential Social Workers at the Cotswold Community from 1979 – 99. We took great care to select the right people by having a series of informal visits and extended visits before making a decision as to an applicant's suitability. Despite this we were puzzled why people who seemed ideal candidates didn't last the course. This wouldn't have mattered so much except for the way it impacted on the children and certainly didn't help resolve their attachment problems. This is why I turned to Olya Khaleelee. This paper, and the one she wrote with Patrick Tomlinson describes how the Defence Mechanism Test was used as a tool to gain greater understanding about the work we were asking people to do and the personality characteristics we should be looking for in the selection process.

John Whitwell

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## THE DEFENCE MECHANISM TEST AS AN AID FOR SELECTION AND DEVELOPMENT OF STAFF

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*ABSTRACT: Following a period of concern about staff turnover, the management of the Cotswold Community, a residential school for disturbed boys, initiated a pilot project in order to understand better what attracted staff to the Community, why they left and whether staff brought particular personality characteristics to their work. Eleven people participated in the pilot study. Despite the small sample size the predictions proved to be largely accurate. As a result of the study, the Community substantially altered its selection procedure.*

## Introduction

During 1989 there had been growing concern about the level of staff turnover at the Cotswold Community. Their length of stay was if anything shorter than that of the boys. High turnover was costly, because of the substantial investment in recruitment, selection, induction, training and several months of experience before a new staff member became more of an asset than a liability; and it was also disruptive to the treatment of the boys.

Prior to the study described below, joining staff fell into three fairly marked categories. Those in the first category stayed less than a year, and it was usually clear within six months that they would not survive. The majority left after two or, at most, three years, only a third were longer-term stayers. The Community is located in Wiltshire, in a rural area some distance from the nearest town. It provides care for boys who are severely emotionally

damaged. Fitzgerald, in his study of ten therapeutic communities for children and young people describes such children:

„They may have suffered early physical, sexual or emotional abuse or neglect and have developed acute behavioural problems as a result. Effectively, they were deprived of the capacity to thrive in their own families, within their peer groups, or in ordinary schools or care settings. These children had no foundation on which to build a sense of self-worth ..... The severity of their problems requires an environment that is more specifically therapeutic than can be achieved by alternative forms of care. This environment provides for all their needs to be met in one setting. (Fitzgerald, 1990, p.7)

The problem of staff turnover was clearly related to the demands of working with these difficult and demanding children. Barbara Dockar-Drysdale distinguishes between pre-neurotic and neurotic children. Whilst the latter can recover through the provision of a therapeutic environment with psychotherapy, the former require the provision of primary experience.

„Such provision will include the opportunity for either a regression or a progression. Regression in this context implies total regression as described by Winnicott (1958). At the deepest point the therapist and the child may even reach that stage at which a baby is still part of the mother. A child who can regress must have achieved some degree of integration; that is, have reached a point from which to regress. The regression group includes the “caretaker selves” and the false “selves”, described by Winnicott (children who have built elaborate systems of defence at a very early stage in emotional development as the result of severe deprivation).

„A progression pursues a different course since it is needed for the child who has never been able to separate out from its mother; there has been a traumatic break, but not a gradual separating. Such a child can only *merge* with another person; the progression is to integration and separate dependence with realisation of boundaries of individual personality.

„In the progression group are the “frozen” delinquents ..... and the “archipelago” children – islets of ego growth in a chaotic sea of unintegration, our task being again to achieve integration, to turn the archipelago, as it were, into a continent. (Dockar Drysdale 1990, p.75).

A worker at the Community who presented a paper to a meeting of the managers in January 1990, corroborates her view: „The nature of the work ... is essentially founded on regression, dependency and maternal provision as specific aspects of treatment. Staff (male and female) are supported and trained into this particular area of work to try and meet the needs of children ..... (Millar, 1990, p.7).

The need to provide effective primary and secondary provision together with the behaviour of the boys, creates high levels of stress which threaten the staff members own integration – their strength of ego-functioning. Although staff were selected and, indeed, self-selected for their commitment to intensive work with difficult children, it seemed that a major factor in early leaving was the realisation that the psychological threat was too cripplingly great. For the second category, staff who left after two or three years, the experience was threatening but also therapeutic, and that may have entered into their motivation for joining: the staff member was able to rework unresolved issues and reach a new level of integration. Many valued this. The fact that both staff and children were going through parallel processes was probably beneficial for the treatment task.

Bettelheim (1974) apparently had a similar experience of losing two-thirds of his staff by the end of three years. They had gone far enough. Unconsciously, perhaps, they recognised that to go further would mean going deeper. The defences that served to support the level of integration now attained would again come under threat. Bettelheim suggested that those robust enough to face this threat and continue were likely to move to a further level of more mature integration.

One other small category of „survivors“ needs to be mentioned. These were staff who arrived so well defended that they were relatively invulnerable. For that reason, although they may have stayed, the quality of their relationships with the boys could only be superficial.

The question arose as to whether one could devise ways of predicting more accurately which category prospective staff fell into. It was thought that the Defence Mechanism Test, which explores the effects of stress on the personality, was a promising instrument, probably taken in conjunction with a brief interview.

### **The Defence Mechanism Test**

The Defence Mechanism Test (DMT) was developed by Kragh during the 1950s as the result of a high level of failure in the selection of Swedish trainee fighter pilots. Their failure was to do with an inability to accurately perceive the reality around them and to take appropriate action at the right time. During a long programme of research at the University of Lund, Kragh attempted a systematic experimental study of how the perception of complex stimuli is built up over time. The assumption was that if stimuli which raised anxiety were used, one could gain insight into perceptual processes by looking at the different strategies individuals mobilised for coping with the anxiety.

His work on these processes and their relationship to personality was reported in the mid-50s (Kragh, 1955), and with other researchers, was taken further during the next two decades (Kragh and Smith, 1970). Kragh suggests the need to distinguish between (1) the visual organisation, which denotes the visual form reported by the perceiver; (2) the meanings given to

what is perceived, which may be in terms of associations and recollections and (3) the structure, by which he meant a construct, the contents of which are derived from the information given in organisation and meanings. This is drawn from the personality and how meaning is given to perceptions.

Cooper (1988) clarifies the three basic principles of percept-genetics: „The first is that perception develops through two qualitatively different stages, from the initial global impression to the final differentiated form. Secondly, this process is held to resemble the development of perception which occurs in childhood. Finally, every normal perception should be seen as a rapid process. The DMT can, through “fractioning”, slow down the perceptual process so that the misperceptions, distortions and transformations which constitute the normal perceptual process can be examined in detail.

This is achieved by using a tachistoscope to show the subject a series of 18-20 exposures of a stimulus picture with a peripheral threat at gradually increasing levels of illumination. After each exposure, the subject makes a sketchy drawing of what he/she sees or of what he/she thinks is depicted and gives a verbal report. A manual is used to score the test and build up a developmental profile of the subject. The subject's responses to the DMT are examined and a number of features (sign variants) are coded as present or absent. These sign variants are the common distortions which are thought to result from the operation of defences. They are weighted according to their position in the DMT sequence and through this the ways in which anxiety is dealt with can be elucidated. Scores of sign variants are combined to produce scores on ten signs which correspond to the major Freudian defence mechanisms. The numerical value attached to each sign is believed to reflect the strength of the defence mechanism.

Thus, by examining the perceptual process, the test purports to measure the defence mechanisms mobilised by the ego to cope with the anxiety generated in stressful situations. Freud (1923) argued that neurotic conflict takes place between the ego and the id. The ego tries to bar expression of certain instinctual impulses and to do this employs mechanisms of defence. These mechanisms are unconscious and aim to protect the ego from pain. So, for example, the defence mechanism of repression refers to the „the denial of entry into consciousness to the mental presentation of the instinct. (Freud 1915). The mental energy which belongs to these repressed instincts is transformed into affects – anxiety. Freud (1926) elaborated other defences including isolation, denial, reaction formation, projection and regression.

The theoretical postulate is that firstly, the more psychic energy required to defend the personality against threat, the less is available for coping with external realities. Secondly, the defences alter perceptions and the meanings given to them. Heavy defences, such as denial, will thus be linked with misperception, poorer reality testing, impaired decision making and a slower capacity to respond in times of crisis.

The DMT has been used and validated in studies covering a wide range of activities, such as trainee and qualified air-traffic controllers (Svensson &

Trygg, 1991), commercial and fighter pilots (Neuman, 1971 and Torjussen and Vaernes 1991), divers (Kragh 1962), footballers, and senior managers. It has also been used in research on subjective fear in parachute jumps and in training for parachute jumping (Vaernes 1982), on the assessment of serious drinking and driving offenders, on determining the personality disorders of psychiatric patients and on the efficacy of programmes of group therapy (Sundbom *et al.*, 1989, Armelius *et al.*, 1990 and Hessle 1990).

Given the strong, consistent links between defence mechanisms and performance on tasks which are thought to demand swift and accurate responses under conditions of stress, one can see the immediate value of the DMT for applications where tolerance of sudden stress is a key feature.

Pintab Associates, a partnership specialising in psychological assessment, has used the DMT as the core of its assessment process for the selection and development of senior managers since it was established in the UK during the 1970s. The DMT has proved to be extremely accurate in predicting the capacity of senior managers to respond appropriately to continual as well as to sudden stress. In conjunction with other measures, it has also proved useful in providing an in-depth, psychodynamic assessment of the fit between their personalities and their roles. Because of this it was thought that Pintab might be able to elucidate the fit between personality and the role of staff in the different setting of a therapeutic community.

### **The Pilot Study**

A sample of 8 staff were tested and interviewed by two of Pintab's psychologists\* in March 1990 and a further 3 were tested and interviewed later in the month. As the sample was small, the data and resulting hypotheses clearly needed to be regarded as extremely tentative.

Of the initial 8 staff, 6 (3 men and 3 women) were „first-years and 2 (a man and a woman) had worked at the Community for longer than 3 years. The three tested later in March included a woman who had been at the Community for longer than three years, one „first-year woman who had been asked to leave (and who had returned to participate in the study) and another „first-year man who had recently handed in his notice. Those participating in the study were invited to have a follow-up session when Pintab returned to the Community at the end of the month and some of them took up this opportunity.

Although hypotheses about an individual's functioning and defence mechanisms can be generated from the DMT alone, it is impossible to give rich meaning to the data without an understanding of the subject's experiences. The interview seeks to provide this and consists of a family sketch and an interview about the subject's formative experiences and what had brought them to work at the community. From this and the DMT result,

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\*the author and her colleague, Etienne de Villiers.

working hypotheses were formed about the subject's personality development and unconscious motivation for engaging with this work.

One of our assumptions was that people who choose to enter the helping professions as doctors, social workers, nurses or psychologists are in part motivated by an unconscious desire to put something right within themselves. This is not a bad state of affairs in itself. What is important is that the capacities, strengths and abilities that the person arrives with (which may be enhanced by professional training) will out-weigh existing problem areas within the personality. If this is not the case, then the risk exists that the worker would be gratifying his/her own needs at the expense of the client or that the worker will become a casualty of the therapeutic relationship. The task then is to attempt to identify both sides of the equation: strengths and assets on the one hand and pathology on the other. The DMT and interview were used to help formulate hypotheses about both, and emphasis was placed on the importance of looking at them in the context of the tasks to be performed at the school.

Taking into account the pleasure/pain principle operating through selective perception – the notion that we tend to see things that make us feel comfortable rather than anxious – we are able to form hypotheses about the defence mechanisms that individuals mobilise in order to fend off aspects of a reality which are uncomfortable.

In our experience, each individual has a different DMT profile and their own unique combination of assertive and integrative defence mechanisms. Although Freudian theory postulates that the fewer defences the better, we work on the assumption that defence mechanisms, as the „shock absorbers of the mind, are a necessary part of normal functioning and contribute to the formation of individual differences. Our evidence suggests that people who exhibit predominantly assertive defences are often those who may appear sociable but who are able and often prefer to work in a setting that offers considerable autonomy. They can also be „loners in the sense that they do not emotionally need other people in order to carry out their work. Indeed, too much contact with others may lead to a need for time to oneself, and where that is not possible, they will tend to assertively „switch off inside themselves. Individuals with predominately integrative defences, however, generally find it difficult to work alone. They are gregarious team members and genuinely sociable. They need the group environment, to be with other people, and may feel lost or isolated when left to work alone or in an uncertain setting. Their identity is therefore defined by and is more dependent on the presence of the group as an integrating force.

### **The Results of the DMT and Interview**

The results of the pilot study were somewhat inconclusive. The DMT scores of those who participated were analysed and a developmental profile was created for each subject, indicating which defences were primarily used to

fend off anxiety. The interview data helped to establish what it was about their life experiences and family dynamics which might have contributed to the formation of a particular defensive profile. The incidence of defence mechanisms were then compared with length of stay in order to see if any patterns existed. Although there was no clear pattern to correlate with stayers, there appeared to be some indicators which were thought might correlate with „leavers – those who left within the first year of employment at the Community:

Individuals with few defences overall, who might therefore have fewer „natural ways of defending themselves against stress.

The tendency to be *low* on a constellation of defences including regression and isolation, with few assertive defences. This would suggest that such individuals may find it difficult to „isolate their feelings whilst getting on with the task. The lack of assertive defences would perhaps imply that the subjects needed the support of the group rather than being content to operate more independently. This might make the projections of the boys harder to bear, particularly for those subjects who found it hard to ask for help.

The presence of introjection as a defence. According to Hinshelwood (1989) „Introjection is one of the important mechanisms used to build up a secure personality through the experience of having good objects introjected and safely located inside, with the ensuing experience of an internal sense of goodness or self confidence and mental stability. Introjection therefore implies a sense of integration in the individual s personality.

On the basis of the DMT results and interview data and taking into account career aspirations, the researchers made a set of predictions about how long the „first years would stay at the community. These predictions were based largely on the second indicator above but taking the other two indicators into account. They were placed in sealed envelopes to be opened by the Principal when the individual staff members left. Table 1 outlines the predictions and actual length of stay which proved to be largely accurate.

**Table 1 Predictions of Length of Stay of Participants in Pilot Study**

<i><b>Predictions</b></i>	<i><b>Actual</b></i>
Mr A: has only one element of the constellation and would be expected to leave within or shortly after 1 year. (Mr. A also had very few defences.)*	1 year
Miss B: has only one element of the constellation and is expected to leave within or shortly after 1 year.	11 months
Mr C: has two elements of the constellation and we predict will stay more than two years.	2 years 2 months
Miss D: she has only one element in the constellation	

and would be expected to leave, but not within the first year. Her career may be a mitigating factor.	2 years 2 months.
Miss E: has two of the three elements in the constellation and on this basis would be expected to stay 1-2 years. As working at the school is a career step for her, this may be a mitigating factor in how long she stays. (Miss E had very few defences.)*	1 year 6 months
Mr F: has all the elements in the constellation and we predict will stay more than three years.	4 years 6 months (left briefly at 1 year 2 months.
*Comments in brackets added for the purpose of this paper.	

**Table 2 Analysis of Defence Mechanisms Employed by Staff**

<b>Indictors of Leavers</b>	<b>Stayers</b>		<b>1-2 years</b>		<b>Leavers</b>	
	<b>OPS*</b> <b>1m, 2f+</b>	<b>S&amp;D</b> <b>6m, 1f</b>	<b>OPS</b> <b>3m, 3 f</b>	<b>S&amp; D</b> <b>3m, 1 f</b>	<b>OPS</b> <b>1m, 1f</b>	<b>S&amp;D</b> <b>1m</b>
Few Defences	0	1	2	0	1	0
Defensive Constellation :						
Regression (AR)**	1	5	0	2	0	0
(TR)	2	1	4	1	1	1
Isolation	3	7	3	3	0	0
Assertive Defences	2	5	4	2	0	1
Introjection	1	4	4	3	1	1
<p>* OPS = Original Pilot Study S&amp; D = Data gathered from subsequent selection and development work</p> <p>+ Distribution of men and women in the sample, total of 15 men and 8 women</p> <p>** AR = Actual Regression TR = Tendency to Regression</p>						

Since the completion of the study, a number of current and ex-staff have been assessed for developmental purposes. The results of their DMT profiles have been analysed and set against the indictors of leavers in Table 2. Analysis of the follow-up data when set against the data from the original pilot study show firstly that the defence of introjection is not a significant indicator of leavers as two-thirds (66%) of the developmental sample exhibits this feature. Secondly, although the idea that a low defensive constellation of regression, isolation and a lack of assertive defences, is an indicator of leavers, not all those who stay exhibit all elements. On further examination, it appeared that, with one exception,



stayers exhibiting more than one sign of regression in their DMT profile had a greater tendency to show early isolation as a mechanism of defence. The presence of multiple signs of regression would suggest a high level of sensitivity in the subject and a tendency to be „thrown when confronted by stressful events. The mobilisation of isolation might therefore have the function of putting a boundary around the subject's sensitivity for the sake of mental stability. The exception was an individual with many defences on his DMT profile which were predominantly integrative in orientation. This person's defensive armour was apparently so strong that there was no need for the compartmentalising function of isolation, so this subject could continue to function and still be essentially a gregarious team member.

Stayers therefore tended to fall into two categories; either becoming „tough isolators, able to „cut off inside themselves; or those without regressive signs who exhibit more resilient profiles and therefore do not need to use heavy isolation as a defence.

### **Discussion**

What became clear is that mitigating circumstances needed to be taken into account in making predictions which otherwise could give rise to exceptions that appeared surprising. For example, one candidate tested for selection who appeared to be reasonably well suited to working at the Community and who from his test results could have been expected to stay for up to two years, nevertheless left after 7 days. What had not adequately been taken into account was his school and work history which showed multiple changes and indicated a difficulty at persisting with tasks and relationships. Another individual who might from the test results have been expected to leave after quite a short time at the Community in fact remained much longer, probably because it was providing an appropriate integrating environment for working through personal childhood issues.

The interview material generated four hypotheses about the motivation of staff coming to the Community:

- 1        because they identified unconsciously with a „damaged mother and were trying to „repair her or do a better job.
- 2        because they identified unconsciously with an „impoverished/damaged child and wanted to make the child „better.
- 3        because they were unconsciously trying to repair their relationship with a lost, „damaged or „damaging father. For several, paternal authority had either been absent or was experienced as sadistic, leading to an inability to identify strongly with male authority.
- 4        because they consciously saw their employment at the school as part of their career development before moving on to something else.

These factors also needed to be taken into account when thinking about the fit between individual and role and length of stay. Given that the process of working at the Community was perceived as potentially therapeutic for staff, it was acceptable for all these motives to be present, provided that the effectiveness of their role was not adversely affected.

Going „back to school“ could therefore be seen as a „regression in the service of the ego“, providing an opportunity to rework internal processes, and, in parallel with the children, to repair and integrate aspects of their personalities. In this context it was also interesting that all but one of the stayers tested – 6 men and 3 women – turned out to be eldest or middle children in their own families of origin, which may link with their capacity to take up caring roles in relation to the children at the Community.

### **Outcome**

One important result of the study was that the Cotswold Community scrutinised its selection process and implemented a new interviewing procedure based on psychodynamic principles. When in doubt, potential new employees were also given the DMT and a psychodynamic interview in order to glean further information about their capacities and resilience. In addition the Community created a three-month „transitional space“ through which new employees passed before taking on the full staff responsibilities of a close therapeutic relationship with individual children. This gave them an opportunity to get used to the pressures of working in a therapeutic community and to assess their capacity to work effectively. It also meant that children were not exposed to the risk of forming a close therapeutic relationship with someone who might shortly leave, thereby compounding the emotional damage which the Community environment was trying to repair.

At the end of this period new staff were expected to write an essay about their work to demonstrate that they were beginning to understand the therapeutic principles on which the work at the Community was based. Following this they had the option of leaving or committing themselves to at least two years employment. Once they had made this commitment they were allowed to become involved with the treatment of individual children but not before. The evidence at the time of writing is that staff turnover has declined substantially.

### **Conclusions**

The pilot study and subsequent development work has shown that the Defence Mechanism Test, taken in conjunction with a psychodynamic interview, has provided a sound basis for aiding the selection of staff.

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