Full title:

Organisational and individual factors associated with breakdown of residential placements for people with intellectual disabilities

Abstract

Background
People with intellectual disabilities whose behaviour challenges services are at increased risk of placement breakdown. Most previous research has tended to focus on the role of individual characteristics in predicting breakdown. A small number of studies have suggested that service variables may impact on intervention effectiveness and hence placement breakdown.

Method
This study used a non-experimental group comparison design to investigate potential differences between two groups of residential homes, one of which had experienced placement breakdown, and one of which had successfully maintained placements in the community.

Results
More residents in the breakdown group had inappropriate sexual behaviours but there were no other differences. Services in the breakdown group had more limited procedural guidance for staff, weaker training, supervision and team meetings and less external professional support.

Conclusion
Placement characteristics may be an important determinant of community placement success for people with intellectual disabilities and challenging behaviour. Those selecting and funding residential placements for such people should attend to the technical competence of the placement (in terms of its use of procedural guidance, training and professional advice) and to the extent of support for staff (in terms of training, supervision and team meetings).
Introduction

Problem behaviour continues to represent one of the most important challenges to the development of community-based service models, with approximately 10-15% of people with intellectual disabilities displaying behaviours which present a significant challenge to family carers and support agencies (Emerson, 2001; Kiernan and Qureshi, 1993; Qureshi and Alborz, 1992). People with challenging behaviour are typically among the last to leave institutional care (Wing, 1989). Unacceptable service user behaviour is the most frequently cited cause of placement failure in the community (Intagliata and Willer, 1982; Pagel and Whitling, 1978; Sutter et al., 1980).

However, challenging behaviour does not inevitably lead to exclusion from community settings and hence to institutional care. Schalock et al (1981) found that many of the service users in their study remained in the community despite displaying challenging behaviour similar to that of two re-institutionalised groups. Demonstration projects have shown that it is possible to serve people with challenging behaviour well in carefully-organised community placements (Felce, Lowe and de Paiva, 1994; Mansell, 1994). This implies that, with the correct support, people with intellectual disabilities who display challenging behaviour can live in the community. Exclusion is therefore a result of the lack of appropriate services to adequately support people with challenging needs. The characteristics of services thought to be particularly important include staff training and experience, management leadership and the motivation of staff, and the availability of professional support to the staff team (Allen, 1999; Emerson, 1995, p13; Mansell, Hughes and McGill, 1994).

Staff in intellectual disability services are, in the UK, largely untrained (Ward, 1999). Despite the acknowledged importance of developing positive behavioural approaches to challenging behaviour in people with intellectual disabilities (LaVigna, Willis, & Donellan, 1989; Meyer & Evans, 1989), relatively few people with intellectual disabilities and challenging behaviours in the UK have such strategies in place. Thus, for example, Oliver et al (1987) reported that only 11 of the 596 people with self-injurious behaviour identified within the South East Thames region in the mid-1980s had any form of written behavioural treatment programme. Qureshi (1994) and
Emerson *et al* (1997) reported that only one in four people identified as showing severe challenging behaviour in the North West of England in 1987 and 1995 had any form of written intervention programme.

Staff motivation is as important as training. As Lowe and Felce (1995) observed in their evaluation of specialist support teams: “Ultimately, the long term consequence of the intervention depended on the collaboration of the natural settings, their commitment to the individual with challenging behaviour and their willingness to adopt effective strategies suggested by specialist personnel” While challenging behaviour itself is a recognised stressor for staff (Hatton *et al.*, 1995), its effects appear to be buffered or exacerbated by the organisational context in which staff operate (Allen, 1999). Hatton *et al* (1997) suggests that resident characteristics are relatively poor predictors of staff burn-out. Organisational factors (including alienation from the organisation, poor support, high workloads, conflicting demands in the work situation, lack of job clarity, etc) were found to be better predictors of poor staff outcomes (job search behaviour, sickness leave, high levels of general and work-related stress) than factors related to client characteristics or service resources.

Beyond the individual residential care setting, professional support to residential care staff from psychologists, psychiatrists, speech and language therapists is also identified as a key component in responding appropriately to challenging behaviour (Department of Health, 1993). Schalock *et al* (1981) found that a higher proportion of people who were re-institutionalised came from smaller community programmes, which might reflect the lack or inadequacy of professional services in these smaller services. Jacobson and Schwartz (1983) also found that a shortfall in psychological and mental health services contributed to the relationship between challenging behaviour and placement failure. Where specialist services are available they have been shown to reduce institutional admissions (Allen, 1998). However, there is also evidence that support may be ineffective in a substantial proportion of cases (Emerson *et al.*, 1996). The fact that some individuals still experience placement breakdown despite the involvement of specialist services is possible confirmation that such services cannot realistically be expected to make an impact in the absence of an effective organisational infrastructure within referring agencies (Allen, 1999).
Thus, previous research suggests that the characteristics of residential services in the community may themselves be important determinants of the success or failure of placements of people with intellectual disabilities who have challenging behaviour. However previous studies have not investigated the effect of differences in these characteristics on placement success. This study aimed to find out whether placements which had broken down were different from those which had not. In particular, it investigated four hypotheses:

1. That residents whose placement had failed due to challenging behaviour would not have different characteristics than those whose placements had been maintained.
2. That services where a placement had broken down would have received less advice and help from external professionals such as psychologists, nurses and therapists than services where placements had been maintained.
3. That services where a placement had broken down would provide less management support to staff in terms of training, supervision and team meetings.
4. That services where a placement had broken down would make less use of written guidelines and procedures for working with residents in areas such as eg personal care, individual goals and behaviour management.

**Method**

A non-experimental group comparison design was employed to study potential differences between two groups of service users, one of which had experienced placement breakdown, and one of which had successfully maintained placements in the community for the previous 12 months.

**Participants**

Participants were managers of care homes for people with intellectual disabilities in the South East of England. Participants were asked to base their answers to a questionnaire on ‘the service user who had challenged their service the most severely in the past 12 months’. Questionnaires were sent to all 100 managers on a list of services subscribing to an information-exchange network run by the Tizard Centre, University of Kent. Forty-four managers chose to participate, of whom 39 served people with challenging behaviour. No data is available on the representativeness of
the respondents. These 39 cases were divided into two groups based on the following criteria:

*Placement Breakdown Group:* People with challenging behaviour who experienced either an irretrievable change in address, or who were waiting for another placement to be found (n=19).

*Placement Maintained Group:* People with challenging behaviour who were still living at the same address and who were not waiting for an alternative placement to be found. (n=20).

**Measurement**

Data was collected via a 92-item structured questionnaire. The questionnaire was designed to assess (i) resident characteristics and (ii) the capacity of the residential service to support people with challenging behaviour. The questionnaire was completed by the managers of the residential homes.

**Resident characteristics**

Participants were asked about ‘the service user who had challenged their service the most severely in the past 12 months’. They were asked to indicate the person’s level of intellectual disability (mild, moderate, severe or profound), the presence of specific conditions or additional disabilities (eg autism, sensory disability) and the type and severity of challenging behaviour. Challenging behaviour was rated on a scale including frequency (at least hourly, daily, weekly, monthly, three monthly), duration of behaviour (seconds, minutes, hours, days), intensity (low, medium or high degree of force used or impact of behaviour) and management difficulty (minor – does not cause upset to other people, potential – controlled in present environment but very likely to recur as a serious problem if environment changes, major – staff have to intervene, upsets other residents, marked effect on social atmosphere, unacceptable in public). In order to be classed as displaying challenging behaviour for the purposes of this study, the service user needed to be rated as posing at least a potential management difficulty.
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Information was also gathered on the number of other residents in the home, whether they displayed challenging behaviour presenting a major management difficulty and what proportion of residents had higher or lower adaptive behaviour levels than the individual already described.

Service characteristics

Participants were asked about the support provided by staff to the individual about whom they had answered questions. They were asked how often the resident took part in various daily living activities, whether there was a written activity plan for the individual each day, and how much choice the person had about eg what they ate or what activity to do.

They were also asked whether there were written guidelines for staff in how to support individuals in eg personal care, individual goals and behaviour management. Responses to these questions were used to construct a 4-point scale in which 1 reflected no written guidelines and 4 reflected comprehensive guidelines, with evidence of use and review.

Participants were asked how much in-service training, including both classroom training and hands-on coaching, had been received by staff and what was the frequency of individual staff supervision and of group staff meetings. These items were used to construct a 4-point scale of the extent of management support provided to front-line staff in the service. A score of 4 indicated that supervision and team meetings happened at least monthly and both classroom and hands-on training was provided; 1 indicated that none of these things was present. Information was also collected on staff:client ratio, length of service, availability of extra staff during difficult periods and how quickly staff were replaced when they left employment.

Information was collected about the range of professional disciplines providing advice and support in respect of the individual resident identified, whether staff found the advice easy or difficult to follow and whether respite facilities were available during crises. These items were used to construct a 5-point scale of the extent of professional support available to the placement:
1. No external professional advice, no extra resources available, minimal extra help from eg parents or senior managers
2. External professional advice available, no extra resources available, some extra help from eg parents or senior managers
3. External professional advice available, no extra resources available, more extra help from eg parents or senior managers
4. External professional advice available, some extra resources (eg respite) available, extra help available from eg parents or senior managers
5. External professional advice available and advice easy to follow, extra resources (eg respite) available indefinitely, sufficient extra help (including suggestions for managing the situation, emotional support and hands-on help) available from eg parents or senior managers.

Inter-respondent reliability
Inter-respondent reliability of the questionnaire was calculated on an item by item basis for seven (18%) questionnaires completed by another informant (usually the deputy manager or team leader of the home). Levels of agreement were assessed using Cohen’s kappa (Cohen, 1960). Kappa averaged 0.79 across all items on the questionnaire (range 0.17 to 1.00). The variables for which results are reported below, all produced kappa values of 0.6 or more, except for the item asking how much in-service training had been received by staff, where kappa was 0.5.

Analysis
The data were analysed using the Statistical Package for the Social Sciences (SPSS Inc, 2004). Differences between the two groups of services were explored using Mann-Whitney tests for ordinal data or chi-square for categorical data. It was not seen as appropriate to use other statistical techniques, firstly, because of the non-parametric nature of the data and secondly, because of the exploratory nature of the study. To have used more stringent tests such as the Bonferroni test would have increased the risk of Type 2 errors (even if the data had been parametric). However, in order to account for the large number of analyses conducted the significance level was set at 0.01, in order to strike an appropriate balance between preserving potentially useful information and caution in interpreting the results.
Results

Resident characteristics

Resident characteristics are summarised in Table 1. The placement breakdown group had on average a lower level of intellectual disability than the placement maintained group but this was not statistically significant (U=138.0, Z=1.583, p=0.114). There were no significant differences between the groups for each of the additional syndromes or conditions, nor for dual diagnoses. There were no significant differences between the groups in terms of communication ability or preferences.

- Table 1 about here -

In terms of challenging behaviour, the difference between groups was statistically significant in respect of duration of sexually inappropriate behaviour but not of difficulty, intensity or frequency (difficulty: U=121.5, Z=2.065, p=0.027; frequency: U=111.5, Z=2.128, p=0.022; duration: U=99.5, Z=2.550, p=0.009; intensity: U=106.50, Z=2.290, p=0.015, all one-tailed tests). The placement breakdown group had worse scores for sexually inappropriate behaviour. There were no significant differences between the groups in terms of self-injury, aggression, damage to property, anti-social behaviour or other challenging behaviours, nor for the number of different challenging behaviours shown.

When the individual described was compared with other residents of the home, there were no significant differences between the groups in terms of level of intellectual disability, communication skills or the number of other residents with challenging behaviour. Residents in the placement breakdown group were more functionally able than other residents in the home, though this did not reach significance at the 0.01 level (U=115.5, Z=2.222, p=0.026).

Service characteristics

Service characteristics are summarised in Table 2. There were no significant differences between groups in how often the resident took part in various daily living activities (eg food and drink preparation), whether there was a written activity plan for
the individual each day, and how much choice the person had. Homes in the placement maintained group had better written guidelines for staff in how to support individuals (fuller, used in practice, regularly reviewed) in respect of supporting activity, pursuing developmental goals and managing challenging behaviour (U=103.5, Z=2.542, p=0.006, one-tailed test). Over half the placements in the maintained group were scored in the top category, compared with 16% of the breakdown group.

- Table 2 about here -

There was no significant difference in how much in-service training had been received by staff, in staff:client ratio, hours worked and how quickly staff were replaced when they left employment.

The placement maintained group had significantly better support provided by management (U=99.0, Z=2.844, p=0.002, one-tailed test) in terms of frequency of supervision and team meetings and provision of training and coaching. Double the proportion of services in the placement maintained group scored at the top level of this scale, compared with the breakdown group.

The placement maintained group reported more external support (range of professional disciplines providing advice and support in respect of the individual resident identified, whether staff found the advice easy or difficult to follow and whether respite facilities were available during crises) (U=106.0, Z=2.419, p=0.008, one-tailed test). Double the proportion of services in the placement maintained group scored at the top level of this scale, compared with the breakdown group.

Discussion

This is a relatively small-scale study, using previously untried measures of service characteristics and there are some limitations which it is important to highlight. First, the two groups did not turn out to be comparable in terms of resident characteristics which makes it difficult to be sure that resident characteristics are not a contributing factor. However, differences in challenging behaviour only occurred for duration of
sexually inappropriate behaviour and not for intensity, frequency or difficulty and not for any other type of challenging behaviour. The difference in level of ability is likely to be more important. Given that staff provide less enabling support for people who are more disabled and outcome in terms of measures of quality of life such as engagement in meaningful activity is better in general for those who are more able (Mansell, Beadle-Brown, Macdonald, & Ashman, 2003), then it is likely that ability might indirectly affect placement breakdown through service characteristics such as the quality of staff support or staff care practices, as suggested by Allen (1999). In addition, comparability might have been compromised because data was not available for the maintained group on previous history, making it impossible to know whether they had previously experienced placement breakdown.

Second, it was not possible to demonstrate the validity of the questionnaire developed for the study and this makes it difficult to be sure that, for example, the estimates of level of intellectual disability equate to established measures of ability. This is an area for future research.

Third, given that the questionnaire was specifically designed for the purpose of this study, to collect information on participant characteristics quickly and easily from staff, it is not possible to directly compare this sample to other studies. For challenging behaviour, as might be expected given that placements were at risk of breakdown, this sample is in general much more challenging that other samples in community settings – for example Mansell et al (2002) found 30.4% who showed similar levels of aggressive behaviour.

Given these limitations, the results should therefore be interpreted with caution. However, they do confirm earlier suggestions (eg Allen, 1999; Mansell, Hughes and McGill, 1994; Intagliata and Willer, 1982) that placement characteristics may be an important determinant of community placement success for people with intellectual disabilities and challenging behaviour.

The results indicated that the placement breakdown and placement maintained groups differed both in terms of individual resident characteristics and those of the residential settings in which they lived. Given the existence of differences in both
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resident and service characteristics, it is not possible to say what is the causal direction of influence. The placement breakdown group included more residents displaying sexually inappropriate behaviour than the group in maintained placements. Campbell *et al* (1982) found that sexual behaviour was a significant cause of the admission and readmission of people with intellectual disabilities to institutional care. It may be that staff are less competent or less tolerant intervening to redirect or reshape an individual’s sexual behaviour than in responding to other challenges and that this makes breakdown more likely.

The placement breakdown group also showed lower average levels of intellectual disability and the trend was for this group to have more daily living skills than other residents in their home. Allen (1999) says that “clinical experience suggests that staff express more feelings of frustration and get into far more ‘battles of will’ with more able individuals. The reason for this may be that staff have higher expectations of more able service users. Hence they have a lower tolerance level when it comes to these service users displaying inappropriate behaviours as staff think these service users ‘should know better’”. It may also be that less support than needed is provided to residents perceived as more able. Allen (1999) suggests that the level of support someone is provided is typically based on their functional abilities rather than on their emotional or behavioural needs. While most of the time the resident seems able to cope with limited support, when there is a problem this is not the case and, it is suggested, the situation can quickly escalate to crisis level.

This study also identified several characteristics of the placement which were associated with breakdown. The placement maintained group had better written guidance. They were more likely to have a written intervention programme that involved positive programming, proactive and reactive management strategies. The strategies were more likely to be reviewed regularly and used at all times by the staff team. Incidents were more likely to be fully documented; senior staff and outside agencies were more likely to be informed; and staff were more likely to be debriefed after incidents. This supports the view expressed by Emerson *et al* (2000), that the widespread adoption and consistent implementation of positive behavioural supports could significantly improve the experience of many people with intellectual disabilities.
and challenging behaviour – in this case by protecting them from the negative consequences of crisis and breakdown.

The placement maintained group were also significantly more likely to receive management support. They were more likely to receive training (including classroom training and coaching on the job), supervisions every month and to participate in monthly staff meetings. These are all believed to be associated with maintaining staff motivation and commitment and higher standards of staff care practices in residential services (Mansell et al., 1987) and in relation to the success of placements for people with challenging behaviour (McGill and Mansell, 1995; McGill and Toogood, 1994). This supports the suggestion by Hatton et al. (1997) that organisational factors are more important predictors of outcomes for staff than client characteristics.

Homes in the placement breakdown group had significantly less professional support, in the form of psychology, psychiatry, speech and language therapy, nursing etc. Extra or experienced staff were less likely to be available to offer support. It was less likely that extra resources in terms of staff or respite facilities would be available indefinitely. A number of studies have found several factors to be central to the lack of access to adequate professional support. These factors have included a lack of knowledge among service providers, including specialist providers (Anderson et al., 1996; Desrochers, Hile and Williams-Moseley, 1997); and insufficient resources (Department of Health, 2001).

The implication of this is that those selecting and funding residential placements for such people should attend to the technical competence of the placement (in terms of its use of procedural guidance, training and professional advice) and to the extent of support for staff (in terms of training, supervision and team meetings). This is the advice promulgated by the Department of Health (1993), based on the experience of models of good practice in England. It is also consistent with guidance produced by the Commission for Social Care Inspection (formerly the National Care Standards Commission) (Wing and O'Connor, 2003).

Further research in this area could usefully explore the service characteristics involved in more detail, particularly the content and quality of written guidelines and the
nature of the external professional support required, as well as extending the approach to other situations such as families and day care services.

Acknowledgements
The authors would like to thank the managers who responded to the survey. Thanks are also due to Glynis Murphy and Julie Beadle-Brown for advice during the project.
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### Table 1 Resident characteristics

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<th></th>
<th>Placement breakdown</th>
<th>Placement maintained</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>%</td>
<td>%</td>
</tr>
<tr>
<td><strong>Level of intellectual disability</strong></td>
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</tr>
<tr>
<td>Mild</td>
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</tr>
<tr>
<td>Moderate</td>
<td>36.8</td>
<td>35.0</td>
</tr>
<tr>
<td>Severe</td>
<td>31.6</td>
<td>60.0</td>
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<tr>
<td>Profound</td>
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<tr>
<td><strong>Additional disabilities and conditions</strong></td>
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<tr>
<td>Autism</td>
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<td>Named syndrome</td>
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<td>5.0</td>
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<td>Mental illness</td>
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<td>Sensory disability</td>
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<td>Physical disability</td>
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<td>5.0</td>
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<tr>
<td>Dual diagnosis</td>
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<td>20.0</td>
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<tr>
<td><strong>Challenging behaviour</strong></td>
<td>(potential or major management difficulty)</td>
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<td>Self-injurious behaviour</td>
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<td>Aggression</td>
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<td>Property damage</td>
<td>57.9</td>
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<td>Inappropriate sexual behaviour</td>
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<td>Antisocial behaviour</td>
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<tr>
<td>Other</td>
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<td>30.0</td>
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## Breakdown of residential placements

### Table 2 Service characteristics

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<th>Service characteristic</th>
<th>Placement breakdown</th>
<th>Placement maintained</th>
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<tr>
<td>Written guidelines in how to support individuals</td>
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</tr>
<tr>
<td>1 None</td>
<td>21.1</td>
<td>5.0</td>
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<tr>
<td>2 Weak</td>
<td>26.3</td>
<td>15.0</td>
</tr>
<tr>
<td>3 Moderate</td>
<td>36.8</td>
<td>25.0</td>
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<td>4 Good</td>
<td>15.8</td>
<td>55.0</td>
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<tr>
<td>Management support</td>
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<td></td>
</tr>
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<td>15.8</td>
<td>0</td>
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<tr>
<td>2 Weak</td>
<td>36.8</td>
<td>5.0</td>
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<tr>
<td>3 Moderate</td>
<td>36.8</td>
<td>75.0</td>
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<td>4 Good</td>
<td>10.5</td>
<td>20.0</td>
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<td>External professional support</td>
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<tr>
<td>2 Weak</td>
<td>26.3</td>
<td>20.0</td>
</tr>
<tr>
<td>3 Moderate</td>
<td>26.3</td>
<td>10.0</td>
</tr>
<tr>
<td>4 Good</td>
<td>10.5</td>
<td>40.0</td>
</tr>
<tr>
<td>5 Very good</td>
<td>15.8</td>
<td>30.0</td>
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References


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