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FINAL REPORT

TELE-EDUCATION:
A COLLABORATIVE PROJECT IN THE DELIVERY OF MENTAL HEALTH EDUCATION IN RURAL VICTORIA

Bendigo Health Care Group Psychiatric Services

and

Royal Children's Hospital Mental Health Service (MHSKY)

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Foreword

There is a growing literature on the use of telemedicine for mental health services. Most of it relates to adult mental health services where, given the right circumstances, telemedicine is demonstrably successful; the majority of adult telepsychiatry reports relate to clinical work. Telemedicine for children and adolescents, particularly the area of education (continuing professional development), is almost a virgin field. The pioneering work of Bendigo Health Care Group Psychiatric Services and the Royal Children's Hospital Mental Health Service (MHSKY) is therefore particularly welcome, the more so since they have taken the trouble to investigate cost-effectiveness.

There are a number of reasons why the Children's Mental Health Tele-Education Program appears to have been so successful. This was not a telemedicine project that arose out of government dogma; nor were attempts made to impose it from above onto clinicians. Rather, the project was launched in order to address a real need—the lack of educational opportunities for staff in rural areas and was driven by the practitioners themselves. Nor was the program driven by the technology—the technology was only a means to an end, a vehicle to deliver educational material in an innovative way.

The result is one that Victorians can be proud of. It is one of the first such programs in the world, it is demonstrably successful, and it should serve as a model of its type. Indeed, since it follows the principles enunciated by Yellowlees* for successfully developing a telemedicine system, it could act as a model for much broader-based telemedicine work than simply education in children's mental health. The architects of the program deserve congratulation.

Professor Richard Wootton
Centre for Online Health, University of Queensland
7 December 2000

*Yellowlees P. 1997, 'Successful development of telemedicine systems—seven core principles', in *Journal of Telemedicine and Telecare*, 3, pp. 215–22.

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Executive Summary

In the Loddon Southern Mallee Region (LSMR) of Victoria, as in other rural areas, allied health professionals can be the first and ongoing point of contact for families who are seeking help for their children's emotional problems. Working effectively with these children requires knowledge and training in child mental health, which is not easily available in the region. Difficulties accessing high-quality professional development in this specialist area can compound the pressures rural workers are already under due to the multiple demands of their roles.

These issues have a significant impact on recruitment and retention of health workers and, ultimately, on service outcomes.

In response to these concerns, and based on previous pilot projects, Bendigo Health Care Group Psychiatric Services and the Royal Children's Hospital Mental Health Service (MHSKY) worked in partnership to develop a collaborative strategy to promote access to professional development in child mental health to allied health workers in the LSMR.

Due to its effectiveness in addressing barriers of time and distance, tele-education was the mode of choice to provide this six-month professional development program. Program presenters were experts in their field and currently in clinical practice. The program, implemented between October 1999 and March 2000, aimed to deliver a high-quality, needs-based professional development program in child mental health for allied health workers to achieve the following goals.

- Promote increased knowledge and skills in child mental health.
- Enhance clinical practice.
- Disseminate information from the program to agencies involved.
- Facilitate peer support and linkages between participants.
- Develop and document a model of professional development that promotes and strengthens an integrated approach to clinical care.

This project was targeted at allied health workers in child and family agencies in the LSMR. Participants were from a range of professional backgrounds, including occupational therapists, psychologists, nurses, social workers and welfare workers. The majority of participants were direct service providers.

The program was offered in two parts and covered the following topics.

- A Developmental Framework 0–12.
- Early Warning Signs of Mental or Emotional Issues.
- Working with Parents and Carers in Understanding and Managing Children's Behaviour.
- Managing an Anxious Child.
- Managing the Acting-out and Difficult-to-engage Child.
- Understanding and Managing Trauma.
- Working with Attention Deficit Hyperactivity Disorder.
- Family Change and Loss—Addressing the Grieving Process.
- How the Child Learns to Relate: A Developmental Model.

A site coordinator facilitated the program in Bendigo. This role involved distribution of materials, managing the distant classroom, assisting in evaluation and, when required, providing support to participants. The primary teaching mode was interactive video technology. Case studies, group work and the use of innovative teaching strategies to demonstrate counselling techniques for children supported the technology as an educational tool.

This joint project has increased acceptance of tele-education as a training tool on the part of workers who participated in this program, and has demonstrated that, as a tool, tele-education can produce some significant outcomes for rural allied health workers. These include

- increased knowledge in child mental health
- increased confidence in working with children affected by emotional disorders
- changes in clinical practice.

Additionally, this project has facilitated networking opportunities and promoted access to professional development. It has positively impacted on the knowledge base of the agencies from which the workers came.

There are a number of key recommendations that have evolved from this pilot project that can inform the further development of tele-education as a professional development tool for rural workers.

Recommendations

This section presents the key findings that emerged from the experience of implementing the Children's Mental Health Tele-education Project.

One

That organisations planning to undertake collaborative ventures, particularly of an innovative nature, need to invest time and energy in building the initial rapport and trust required for a long-term effective partnership.

While both presenters and participants were provided with instruction in the use of interactive video technology, it is clear from the feedback received, that more formal training would enhance user acceptance of the technology as an educational tool. This would have the additional advantage of demystifying the technology for other uses such as supervision and secondary consultation.

Two

That training packages are developed that upskill participants and presenters in the use of interactive video technology as an educational tool for the distant classroom.

The project identified that education in sensitive areas, such as child mental health, may bring up painful and sensitive issues for participants. The technology makes responding to these issues more challenging.

Three

That organisations undertaking tele-education training develop a collaborative protocol to support participants during and following training. Such a protocol should include support strategies that participants can easily access and should be included as part of the preparatory material for the course.

It is clear from the experience of this project that programs such as this can only be a short-term strategy for promoting access to professional development for rural workers.

Four

That strategies are developed to facilitate a more enduring impact on rural workers' professional development. This could include ongoing courses offered by tertiary institutions at different levels for workers with different degrees of experience.

Regular supervision and consultation sessions to promote integration of the teaching material with day-to-day work experience could be incorporated into the training. This would also promote networking opportunities.

It became clear from the development of this program that coordination by the rural site coordinator was pivotal in the success of the program.

Five

That all collaborative projects involving tele-education ensure that the role of the site coordinator is established. The work of the site coordinator in facilitating the operation of the rural site, linking to the metropolitan site and ensuring the ongoing momentum of the project significantly enhances successful outcomes.

The project highlights the importance of child and adolescent mental health services developing and strengthening linkages with child and family agencies through professional development programs.

Six

That rural mental health services undertake education and training programs targeted at agencies they receive referrals from to strengthen collaborative work and enhance service delivery.

This project has highlighted the role that allied health workers play in isolated rural areas.

Seven

That further research take place into resourcing allied health workers more effectively so that they can continue their important role in a rural environment that is often under-resourced in specialist services for children and families.

This project provided targeted and effective education in child mental health. Significant management resources were required to achieve this goal, including planning, coordination and developing linkages between services.

Eight

That in developing future tele-education programs, sufficient management resources are allocated to ensure the delivery of targeted high-quality education programs.

This project has contributed to knowledge and understanding of best practice in the delivery of specialist tele-education programs to health professionals. Access to this knowledge and expertise would save considerable time and resources in the development of future projects.

Nine

That strategies be explored for providing agencies interested in utilising tele-education with access to the findings of this and other similar projects. These strategies could include the development of manuals and/or a website.

Introduction

An understanding of child mental health is a major dimension in working with families and children. It is critical in terms of providing continuity of care for families who have multiple needs and who require long-term intervention. Access to professional development in child mental health is difficult for rural workers as the major teaching and training centres in this field are located in metropolitan areas.

This report describes the development, implementation and delivery of a mental health education project designed to address recruitment and retention of rural allied health workers through high-quality specialist education in child mental health via tele-education.

Project rationale

Promoting access and equity in the provision of health services is a major challenge for Australian rural communities. The problems of access and equity are linked to a sense of isolation, as well as to lack of professional support and training for many rural workers. This has considerable impact on workers' willingness and ability to remain in rural areas.

In rural areas there is often an absence of referral networks, resulting in agencies needing to provide both primary and secondary services, thereby blurring worker boundaries. It also means that workers are required to develop skills in a range of areas not required of their counterparts in metropolitan areas. These workers are often expected to be both 'generalist and specialist in their fields and communities'.[1] Child mental health is one example of a specialist skills area that rural allied health workers are often required to work in.

This feature of the rural environment adds considerable pressures to allied health workers: it promotes and perpetuates a sense of isolation in their work and that has a negative effect on retention rates.

Project significance

This project was significant for a number of reasons. First, by facilitating access to a professional development program in a rural area without the need to travel long distances, access to specialist education was improved. This strengthened and supported the role of allied health workers in the region. The program was group-based, which assisted in the development of networks with other professionals in the LSMR. This reduced the impact of isolation and lack of peer support, which many rural allied health workers experience.

Second, the project is one of the few tele-education projects in the world that has focused on professional development in the area of child mental health, demonstrating that video technology has the potential to increase access to education in such sensitive areas.

Third, this program provides a model of collaboration between rural and metropolitan services to improve the access of rural allied health workers to specialist education using videoconference technology. This model can be replicated nationally across the broad health arena.

Fourth, tele-education is cost-effective. In this context, cost-effectiveness refers not only to savings in travel and lost work time for workers needing access to professional development, but also to the enormous costs to a community, both socially and economically, of poor retention rates and continuous recruitment of rural health workers.

Finally, the project's focus on viewing childhood disorders within a developmental framework has the potential to facilitate early intervention for children. This may be achieved through workers gaining increased understanding, and enhanced skills and confidence in working with children with these disorders.

Literature review

Policy context

The *Mental Health Promotion and Prevention National Action Plan: 1998–2003* identifies the issues people living in rural areas face in regard to mental health.

> *People living in rural and remote communities have particular mental health needs due to isolation, the impact of economic restructuring and exposure to environmental hazards such as drought, flood and fire. Lack of appropriate services and service providers, distance from services and transport problems are frequently part of rural and remote life. The pressures on young people are reflected in the extremely high suicide rate among rural youth (twice that of their city counterparts).*[2]

The report goes on to identify the needs of children with mental and emotional issues.

> *The Western Australia Child Health Survey has also highlighted the high incidence of mental health problems among children in some rural areas. There is now ample evidence that mental health problems in childhood and adolescence are associated with greater risk of mental disorder in adult life, as well as other risk factors and vulnerabilities in the developmental years.* [3]

Given the mental health issues that have been described in the above policy document, it is important that service systems identify new and innovative strategies to enhance delivery of care to vulnerable children and adolescents living in rural areas. One important strategy in achieving this goal is quality professional development in child mental health for allied health professionals in rural areas. This is affirmed in *Victoria's Mental Health Service: The Framework for Service Delivery: Child and Adolescent Services*.

> *All Child and Adolescent Mental Health Services (CAMHS) clients are concurrently involved with other service systems and it is essential these systems work collaboratively. This places an obligation on this area mental health service to provide support to these workers. This not only means liaison and collaborative work but also resourcing these workers through quality education programs.*
>
> *Community Education activities are an appropriate activity for CAMHS. Information about the mental health of children and adolescents, and the services available, may be provided to other health welfare and education professional staff through workshops, seminars and written material'*.[4]

Recruitment and retention issues—the rural context

The recruitment and retention of health professionals in rural Australia is an area of major concern. 'Studies have consistently highlighted the economic, professional,

education and family/social/cultural difficulties of attracting and retaining health personnel in rural areas.'[5]

Rural workers face difficulties due to geographical isolation, isolation from their peers, the need to offer services across a range of specialties, burnout and low retention rates. As a consequence, attracting staff to rural locations is difficult.

Professional isolation was clearly identified as a major problem for rural and remote allied health professionals by the Project for Rural Health Communications and Information Technologies which found that 70 per cent of respondents considered they were professionally isolated.[6] Humphreys and Matthew-Cowey (1999) found this was particularly the case for sole allied health professionals.[7]

Mitchell (1999), in his evaluation report on the first year of the South Australian project Bringing Child and Adolescent Mental Health Services to Rural Communities, described the effect of this isolation on access to professional development opportunities for rural mental health workers.

> *Isolation restricts professional development, whereby a health professional engages in a process of continually updating themselves regarding the latest practices, techniques, models and technologies. Secondly remote mental health providers have limited access to peer support.*

Mitchell goes on to say that this second problem implies mental health providers 'may also have difficulty accessing specialist expertise unavailable locally'. These statements are equally pertinent to the situation of rural allied health workers.[8]

Access to professional development gains particular significance when it is considered that

> *Undergraduate training only provides professionals with the foundations for their disciplinary knowledge and skills. Postgraduate training and continuing education are necessary to keep up with change and to build on foundations.*[9]

As Weber and Lawlor (1998) point out, professionals need to keep up to date with the latest developments in their field which requires them to participate in ongoing education.[10]

The situation of workers with limited access to professional development is compounded by the diverse demands made on rural workers. In their study of models

of health service delivery to small rural communities, Humphreys and Matthews-Cowey (1999) identified that 'Health workers need to be generalist and specialist in their fields and across their fields in order to provide effective services for rural communities.'[11]

Kamien (1998) found that

> *Burnout and major disillusion from the downgrading of hospital facilities resulting in an inability to fully utilise the skills for which they had been trained, was one of the three main reasons for general practitioners leaving rural practice.*[12]

It is reasonable to surmise that rural allied health professionals experience similar concerns in regard to deskilling in their specialty, as well as to burnout. Burnout leads to resignations, further worsening the shortages of allied health staff in rural areas. This in turn reinforces the link between staff shortages and the lack of a critical mass in terms of professional peers; it also perpetuates ongoing recruitment difficulties.

Tele-education as a strategy to address barriers to professional training and education for rural health workers

Mitchell (1999) points out that tele-education has the potential 'to deliver the promise of reducing the extent to which remote health providers are isolated, thus enabling them to achieve an adequate level of professional development'.[13]

At this point, it is important to note that the literature demonstrates that face-to-face teaching is the preferred mode for professional education. Studies looked at for this literature review found that

> *students do prefer where possible, the option of face to face interaction. In particular, one to one interaction is appreciated for its personal approach and because it enables communication in a different manner and depth.*[14]

Additionally, the literature identifies advantages in travelling to attend professional education. 'Such travel allows for face to face contact that enhances the development of supportive networks with both rural and remote providers and metropolitan colleagues.'[15]

Even so, tele-education can effectively address barriers that rural workers face in accessing professional development.

The literature identifies the following factors as barriers to professional development for rural workers:

- cost
- distance
- time away from practice
- scarcity of locums.[16]

In their study, Sheppard and MacIntosh provide a definition of videoconferencing as enabling people at two or more sites to 'interact in real time, using the video medium. It is an electronic medium where groups of participants interact via an audio and visual link for simultaneous communication'. [17] It is these features that give the technology the potential to address the above barriers to professional development in rural areas.

The literature also demonstrates that while face-to-face education is the preferred mode, videoconferencing can be an acceptable alternative—if it is carefully planned. Crump, Caskey and Ferell (1998) found that student evaluations of videoconferencing were positive but they did note this could have been due to the novelty of the technology.[18]

In evaluating the use of videoconferencing, Sheppard and Mackintosh (1998) found participants' acceptance of the technology improved over the course of the study.

> *The students especially liked the opportunity to interact, the meeting of rural and city physiotherapists and access to further study. It provided a collaborative learning experience.*[19]

However, the literature shows that the technology does require careful thought and considerable planning for effective education to take place. 'It is more challenging to create the learning environment where students actively participate in the development and interpretation of meaning, using this technology.'[20] Active participation in learning and the individual's understanding of key concepts are fundamental to effective learning.

While most of the techniques and strategies used to provide good quality education are effective in tele-education, some rethinking is required, particularly in regard to basic communication strategies. The use of non-verbal communication is an example of the kind of rethinking of traditional techniques that needs to be done.

> *Feedback and checking are normal processes to check that information has been received and understood. Much of this communication relies on non verbal communication in order to adjust the messages.*[21]

Weber and Lawlor (1998) addressed the effects of the medium on the interpretation of non-verbal communication with a number of strategies. They asked presenters to present their content as they would in a traditional classroom,

> *with attention to the differences in preparing ready to camera visuals to augment audio content, positioning oneself relative to the camera, slowing and limiting body movement for effective interactive delivery.*[22]

Sheppard and Macintosh (1998) discussed the importance of providing a variety of approaches to teaching or learning to accommodate different learning 'styles' so that these goals of a program are achieved.[23]

Weber and Lawlor used a site coordinator to overcome some of the communication challenges presented by the medium and to manage the distant classroom. The role of the site coordinator included:

- recruitment and retention of students in distance education programs
- group coordination and motivation
- provision of logistical support to participants by establishing activities at the rural site
- management of the rural site
- encouragement of a positive attitude to the technology.[24] [25]

Essentially, the site coordinator's role is to fill the gaps created by the presenter being physically located at a distant site. The site coordinator provides the 'human' element which would be otherwise missing if transmission of an image were the only method being relied upon for education to occur.

In conclusion, the literature reviewed for this project demonstrates that tele-education has the potential to increase the opportunities for rural health workers to access professional training. Tele-education has the advantage of 'allowing workers to continue learning without taking them away from where they are needed most'. [26] However, it is an effective education tool only if adequate planning takes place and if there are enough resources to support programs using this delivery mode.

Project Development and Implementation

Child mental health: training needs analysis

Pilot tele-education projects

In 1996 and 1997, Bendigo Health Care Group Psychiatric Services and MHSKY ran two short pilot tele-education programs for workers in child and family agencies in the Loddon Southern Mallee Region (LSMR). An important finding of these projects was that training in child mental health in the LSMR was an area of unmet need, and that a more comprehensive needs survey was required as a basis for a more extensive project.

The experience gained from these earlier programs directly informed the development of the Training Needs Survey in Children's Mental Health (see 'Training Needs Survey' in Appendix 3).

Methodology

The Training Needs Survey in Children's Mental Health was designed to collect data on the following variables.

- Access to training and information in child mental health
- Knowledge of child mental health disorders
- Confidence in working with children with mental health disorders
- Difficulties in accessing professional development
- Days of the week and times that best suited workers for training
- Program format
- Preferred program location
- Interest in preliminary reading and the time participants were prepared to devote to reading
- Program topics

The survey was piloted in child and family agencies in the northern sector of the LSMR. It was modified as a result and then distributed to child and family agencies across the region. A total of 97 agencies and individuals working in child and family services received the survey. Of these, 76 surveys were returned. The surveys were anonymous and confidential; participation was voluntary.

Along with the training needs analysis, respondents were sent promotional material, which aimed to

- increase understanding of tele-education
- inform respondents about the level of expertise being offered through this professional development program.

The circulation of this material acted as reassurance to the participants that the time and energy they were putting into responding to the survey was likely to have a positive outcome (see Appendix 4, 'Promotional Material').

Additionally, the rural project coordinator promoted the Children's Mental Health Tele-education Program project at health and welfare network meetings. The project was directly promoted to regional Child and Adolescent Mental Health Service (CAMHS) staff who were asked to pass on information about the Children's Mental Health Tele-education Program to health and welfare workers they had contact with.

Training Needs Survey results

The most significant findings of the needs analysis were related to

- difficulties attending training
- access to training and information in child mental health
- knowledge in child mental health.

Figure 2 (see Appendix 1), 'Difficulties in attending training in child mental health', demonstrates that time was the most significant barrier for these workers. Cost, travel and knowledge of training opportunities were also barriers. The lower rating given to arranging backfill may reflect the difficulties in rural areas of attracting locums.

Figure 3, 'Access to training and information in child mental health', shows that over 60 per cent of respondents rated their access to training and information in child

mental health as ‘poor’. Approximately 5 per cent rated their access as ‘very good’; no respondent rated their access as ‘excellent’ (see Appendix 1).

The majority of respondents rated their current knowledge of children’s mental health as ‘poor’ or ‘satisfactory’; no respondent ticked excellent. As can be seen in Figure 4, ‘Current knowledge of child mental health disorders’ (see Appendix 1), over 80 per cent of respondents rated their current knowledge of child mental health disorders as ‘poor’ or ‘satisfactory’; no respondent rated their current knowledge as excellent. The findings in regard to barriers to attending professional training were consistent with those outlined in the literature review. The results of the training needs analysis confirmed unmet need in the LSMR for professional development for allied health workers in child mental health.

Results from the training needs analysis regarding program design and content influenced the design of Children’s Mental Health Tele-education Program.

Interest in the program

The Children’s Mental Health Tele-education Program was a new and original program in a highly specialised area. It involved the innovative use of video technology and demanded a large commitment of time from agencies and staff. For these reasons, the program brochure included clear information on the use of the technology, the program content, time commitment, and the required discipline background for participants (see Appendix 4, ‘Promotional Material’).

In total, fifty applications were received from across the region and they were representative of a range of children’s service providers.

The program was funded to offer twenty places. Requests for a place in the program were received from the following agencies.

Table 1 Requests for program places by agency and location

Agency	Location
St Luke's Anglicare	Bendigo, Castlemaine, Echuca
Cobaw Community Health Centre	Kyneton
City of Greater Bendigo	Bendigo
Shire of Gannawarra	Cohuna
Bendigo Community Health	Bendigo
Specialist Children's Service Team	Regional service
Centre Against Sexual Assault	Regional service
Child and maternal nurses	Kyneton, Castlemaine
Bendigo Health Care Group	Bendigo
Kerang Early Intervention	Kerang
Ascension College	Bendigo
School support services, Dept of Education	Regional
Centacare	Regional
Shire of Campaspe	Echuca
Catholic College Bendigo	Bendigo
Mallee Family Care	Swan Hill
Northern Districts Community Health	Kerang, Boort, Cohuna, Quambatook

A decision was made to offer thirty places in the program. In making this decision a balance had to be struck between the needs of workers for this type of professional development and maintaining the educational effectiveness of the program. A group of thirty was not considered ideal for a tele-education program yet at the same time it was difficult to turn workers away in the knowledge that they would be unlikely to access this training elsewhere in the region.

In allocating places, every effort was made to ensure equitable representation of professionals from a range of children's services across the region. Those who did not gain a place were put on a waiting list.

The level of response to the Training Needs Survey and the Children's Mental Health Tele-education Program validated the assumptions underpinning the project, that is,

- rural health workers did not have good access to professional development in child mental health
- there was a need for this training
- videoconferencing was an acceptable delivery mode for this education.

A collaborative project

A Memorandum of Understanding outlining the responsibilities of each service in the implementation of the project was exchanged between the two services.

The following table indicates the distribution of responsibilities across the two services.

Table 2 Distribution of responsibilities

Royal Children's Hospital Mental Health Service (MHSKY)	Bendigo Health Care Group Psychiatric Services
Clinical teaching staff	Administrative support
Preparation of resource materials	Site coordinator
Preparation of teaching materials	Needs analysis
Technical support	Program infrastructure at the rural site

MHSKY provided program coordination and a consultant was engaged to provide independent advice in the development of an evaluation model.

A key feature in the development of this project has been the strong collaborative relationship between Royal Children's Hospital Mental Health Service (MHSKY) and Bendigo Health Care Group Psychiatric Services. The relationship grew out of pilot projects that both services were involved in and which have been previously discussed.[27] Throughout the period of development of innovative work using videoconferencing technology, a strong sense of trust developed between project managers in both organisations.

Adam and Walker (2000)[28] have studied the role of trust as a key issue in collaborative relationships between individuals and organisations. Trust has been identified as a key element in successful interorganisational relationships and in facilitating joint action

between organisations. Trust, it has been argued, is indispensable for any collaborative alliance to be formed and to function.[29]

An important assumption underpinning the project was that this relationship was developed enough to successfully facilitate a sophisticated project such as this, involving as it did, the diverse elements of technology, distance, specialist clinical input and education.

Project aims and objectives

The Children's Mental Health Tele-education Program aimed to deliver a high-quality, needs-based group professional development program in order to

- promote increased knowledge and skills in child mental health
- impact positively on clinical practice
- disseminate information from the program to the agencies involved
- facilitate peer support and linkages between participants
- develop and document a model of professional development that promotes and strengthens integrated relationships.

Target audience

This project was targeted at allied health workers employed in child and family agencies in the LSMR. Participants were from a range of disciplines, including occupational therapy, psychology, nursing, social work and welfare work. The majority of participants were direct service providers.

Program development

The Children's Mental Health Tele-education Program was developed with input from a number of levels, including allied health workers in rural agencies (through the training needs survey) and consultation with clinical staff at Bendigo Health Care Group CAMHS and Royal Children's Hospital Mental Health Service.

The training needs analysis identified that the following topics were of most interest to allied health workers.

- Encopresis and enuresis.
- Post-traumatic stress disorder.
- Working with parents in understanding and managing children's behaviour.
- Understanding anxiety and aggression in children and implications for treatment.
- Attachment disorder in children and adolescents.

Topics were presented in a developmental framework on the advice of child mental health clinicians. This approach ensured that participants were sensitised to early warning signs of these emotional disorders in children and to the importance of using developmentally appropriate interventions.

Developmental framework topics included

- Child Psychological Development 0–12 years
- Early Warning Signs of deviation from the developmental framework
- How the child learns to relate: a developmental model.

As well, a session on Attention Deficit and Hyperactivity Disorder was included to cover problems that appear to have a more organic base. The resulting program covered the following topics.

- Normal development 0–12
- Early warning signs of mental or emotional issues
- Working with parents and carers in understanding and managing children's behaviour
- Managing the anxious child and the acting out and difficult-to-engage child
- Understanding and managing trauma
- Working with ADHD
- Family change and loss—addressing the grieving process
- How the child learns to relate: a developmental model.

The Children's Mental Health Tele-education Program comprised eight sessions, consisting of four half-day sessions and four full-day sessions. All sessions were presented using interactive videoconferencing.

Presenters

In planning the program, it was recognised that this was a large commitment for agencies to make. As well, because the technology was a relatively new teaching medium, it was potentially a barrier to participation.

To attract participants to the program it was important to offer a level of expertise that rural health professionals could not easily access. If the program was to retain participants, teaching quality was critical. Presenters were therefore selected not only on the basis of their clinical expertise but also on their ability to teach using the medium.

Clinical staff from Royal Children's Hospital Mental Health Service (MHSKY)made up the four presenters.

Program format

Presenters were based in Melbourne and the sessions were transmitted from there to the audience in Bendigo. The transmission was split by linking a data projector to the video equipment. The audience watched a presenter on the monitor and the PowerPoint presentation on a separate screen. This replicated the usual experience of a presenter, physically located in the room, speaking to a PowerPoint presentation.

A number of challenges presented themselves. The large size of the group imposed limitations on the amount of interaction that occurred between the audience and presenters. There were some practical limitations, too, such as a particularly sensitive microphone having to be passed to participants who wanted to have input into the presentation. Also, many people find it difficult to be vocal in a large group and probably even more challenging to interact with a presenter via the medium of tele-education.

Several strategies were adopted to address these difficulties. A traditional U-shape seating plan was adopted as it has the advantage of allowing all participants to see the monitor and data screen and it encourages dialogue with the presenter.[30] A mud map (a seating plan for use by presenters in videoconferencing) was used to encourage interaction with the presenters. However, this seating plan was abandoned once it became obvious that it made no difference to the level of interaction.

Program structure

A formal structure was best suited to the technology and the size of the group. All sessions followed a similar format.

- Didactic presentation
- Case discussion
- Feedback and comments from the presenter.

Case material was designed to ground the program in rural allied health workers' experience. Discussion and group work encouraged networking among participants and over time helped build a sense of group. Consistent attendance helped achieve this goal so that, partly as a result, participants' interaction with presenters improved in the second part of the program.

As the program progressed and presenters' confidence with the technology increased, they moved away from the traditional lecture format and introduced more innovative strategies designed to maintain audience interest, such as the use of toys when counselling children affected by grief. As well, children's art, diagrams, photos and video footage were used as teaching aids.

Information packages

Information packages were developed and forwarded to participants prior to the commencement of the program, and consisted of

- schedule of topics to be covered
- notes
- PowerPoint summaries.

The summaries proved to be an invaluable aid to participants in using the technology for learning; a detailed outline of the program actually appeared to assist participants in focusing on the information being presented. This acted as a safeguard for the program as it provided material to enable the session to continue if the equipment failed.

Site coordination

Site coordination involved the following tasks.

- The site coordinator was present at each session.
- Testing all the equipment prior to transmission. Equipment was checked several days prior to transmission and immediately before transmission. Transmission commenced at least half-an-hour before the session to allow time to rectify any last minute technical problems.
- Overseeing details such as registrations, room set-up and distribution of program materials.

Also, using the following strategies, the site coordinator acted as a link between the presenter and the audience.

1 Presenters were given direct feedback on audience reaction to the information being presented by use of a mobile phone which was used to contact them during breaks, giving presenters the opportunity to clarify points and pick up on areas of interest to the audience.

2 Discussions were held with presenters between sessions to get their feedback for evaluation purposes and to fine-tune the next session.

3 The site coordinator consulted with presenters if and when a participant appeared distressed by the sensitive nature of the material being presented.

4 Between sessions, participants were contacted for their feedback. This was a component of the evaluation that was directly fed into the development of the program.

Project technology

Yellowlees and Kennedy (1997)[31] provide a very clear definition of telemedecine equipment which applies equally to tele-education.

Telemedicine equipment

Tele-education equipment comprises three main components:

- the monitor
- the camera
- the codec.

Depending on the type of system, other main components are the remote controls with the group system, and the keyboard and speakerphone with the desktop system.

- The **monitor** displays the picture of the people at the other site(s) and a picture of the local site.
- The **camera** captures images at the local site to send to other sites.
- The **codec** converts the image captured by the camera into a form that it be transmitted using digital telephone lines.
- The **group system** comprises a television monitor, a camera, and a codec, as well as a keypad which operates the equipment and a microphone, as shown below.[32]

Technical overview

Technical support was provided by Global Videoconferencing Technologies (GVT).

Project aim

To enable a lecturer in Melbourne to deliver a live presentation incorporating PowerPoint slides to and chair an interactive discussion with a tutorial group located in Bendigo.

Technical aim

To simultaneously deliver live video, audio and data streams.

Table 3 Children's Mental Health Tele-education Program: The technical challenges

BENDIGO	Site description	Large multipurpose room with expansive windows and no curtains.
	Challenge	Natural light streaming through the windows cast the audience into silhouette.
	Solution	Windows tinted.
	Site equipment	PictureTel Concorde 4500ZX videoconferencing system with · 68cm PAL TV monitor · PictureTel Omni-directional PowerMic (microphone) · camera · VCR · World Cart with a built-in BOSE speaker.
	Challenge	Audience numbered approximately 30, so the display for the PowerPoint slides had to be large enough to be clearly seen at a distance.
	Solution	A data projector and mobile projector screen, which were set-up next to the videoconferencing TV monitor were the key technical tools used. The PictureTel Concorde 4500ZX was set to a dual-monitor mode. Mode A became the TV monitor, showing the lecturer live. Mode B became the data projector, showing the PowerPoint slides live.
MELBOURNE	Site description	Boardroom equipped for videoconferencing.
	Site equipment	PictureTel Concorde 4500ZX videoconferencing system with · 2 x 68cm PAL TV monitors · PictureTel Omni-directional PowerMic (microphone) · camera · VCR · scan converter · video mixer · 2 x World Carts with built-in BOSE speakers.

	Challenge	To simultaneously deliver live video, audio and data streams to the Bendigo audience. To make the operational experience as uncomplicated for the lecturers as possible.
	Solution	Lecturer arrives with PowerPoint presentation on laptop. Laptop is plugged into the scan converter, which converts the VGA images from the laptop to PAL images suitable for videoconferencing. Scan converter is plugged into the Concorde. A videoconferencing call is made to connect Melbourne to Bendigo. Lecturer begins the presentation. Each time a new slide was selected it was sent in snapshot form to maximise clarity. VCR was plugged into the Concordes at both sites. Videotaping the remote training sessions was as simple as pressing 'Record' on the respective VCRs.

Technology as a tool—challenges and strategic responses

Although many successful examples of medical education programs using interactive video technology have been documented, [33] integrating videoconferencing technology in the delivery of child mental health professional development programs poses a number of challenges to providers and receivers of the service. Before outlining the challenges, it is important to understand the clinical context that has informed the practice of child mental health and the environment within which the health system has operated.

Child psychiatry is an area of health care delivery, the foundation and success of which is characterised, strengthened and informed by the traditional therapeutic face-to-face relationship between therapist and client, that is, by the human interface. This is usually developed in the office of the therapist, where the therapist can easily pick up on both the verbal and non-verbal responses of the client. The challenge in using technology as an education tool in child mental health is centred on developing strategies to maintain the beneficial effects of the human interface.

The following table details the main challenges and strategies used to maintain the human interface.

Table 4 Interactive videoconferencing as an educational tool

Challenges	Strategies
Promoting participants' acceptance of interactive video technology as a teaching tool	· Site coordinator to mediate between participants and the technology. This included tasks such as orientating participants to the technology. · Integrating transmission with more traditional methods of learning such as group work. · PowerPoint summaries.
Encouraging participant interaction with the presenter	· Teaching strategies that encourage participants to talk to the presenters, for example, case discussion.
Training mental health clinicians to teach using interactive video technology	· Familiarising clinicians with the technology. · Providing opportunities to practise using the technology. · Direct support to clinicians from the program coordinator in the preparation of materials for transmission. · Support to presenters during transmission.
Transmission of sensitive material	· Preliminary reading outlining content. · Informing the group that the material is sensitive and discussing strategies to manage any reactions to this material, for example, withdrawing from the session. · Liaison between the site coordinator and presenter to manage any distress as a result of the session.
Concerns about the technology becoming a stand-alone teaching tool	· A site coordinator to manage the distant classroom. · A site coordinator to liaise with presenters. · Integrating the transmission with group work, case studies.

Project findings

Methodology: qualitative data

The data contained in this section were collected primarily through interviews conducted by the rural site coordinator. Interviews were conducted with

16 participants (during the program and after program completion)

9 agency managers and or supervisors

4 presenters.

Additionally, two focus groups were conducted after program completion to gather data on the value of program. The focus groups included managers and staff. Interviews and focus groups were designed to collect data on the following areas:

attractiveness of the program

increased knowledge in child mental health

increased confidence in working with children affected by mental health problems

changes to practice

response to video technology

strategies to support the technology

networking opportunities

dissemination of material from the program

access to training.

Presenter interviews were primarily designed to capture the experience of using this medium as a teaching tool.

The possibility of collecting independent quantitative data through referral patterns was explored but data from this source were not specific enough to assist in the evaluation of the program.

Attendance

Reasons for attending

The major reasons given by both participants and agencies were

to increase knowledge in child mental health
expertise of presenters
range of topics included in the program
poor access to training in child mental health
presenter expertise.

> *I have done workshops previously, but not any covering emotional problems and I didn't know where to steer families. I wanted a better knowledge base.*
>
> *We could not have sustained a 12-session program if there hadn't been excellence of presentation.*
>
> *Variety of topics directly related to clients.*
>
> *Good comprehensive list of topics that you don't normally get. Nothing up here—very rarely anything offered here.*
>
> *Working with children was not included in social work training to the extent I would have liked. It was not enough training for the job I currently do.*

These findings are consistent with the participant ratings, which can be found in the section 'Content of Workshop, Evaluation Report'.

The program required a large time commitment from agencies and workers. Workers and supervisors reported that it would have been difficult to attend this program if it had been offered in a metropolitan centre.

> *. . . made it possible to attend. Much easier to duck out for a couple of hours than to re-arrange a whole day.*
>
> *In Bendigo accessibility was terrific.*

The majority of workers attended the majority of sessions (see *Independent Evaluation Report Attendance*, Tables 1, 2, and 3). The most frequently cited reasons for non-attendance related to a lack of backfill. Other significant reasons for non-attendance included emergencies or other unplanned events requiring workers to miss a session. The program was offered over several months and in that time some workers took annual leave, others missed sessions due to illness and one went on a honeymoon (see *Independent Evaluation Report Attendance,* Table 4).

> *Things have come up on the day itself—unplanned and come up suddenly. Lack of coverage . . . not much alternative but to stay. Back fill issues. There is nobody to cover rural areas.*

When interviewed, participants described some of the personal decisions they had made in order to attend.

> *Difficult the amount of time it takes so I am doing it in my own time.*

> *Getting relieving staff was a problem. Often the sessions clashed with other workers' holidays . . . This is a two-person agency. It was easier to get to the half-day session—I only had to close the agency for half a day. If a full-day session was on when the other worker was away it was a choice of closing the agency or missing the session.*

Dissemination of program information

The extent to which the education/information was taken back to agencies was also an indicator of the success of the program. From the responses to this question it would appear that informal dissemination of the information was good. In making the following comments, supervisors were reflecting on the impact that the program had on their teams.

> *Because it was local I was able to send more than one person. I couldn't have done that if it had been offered in Melbourne.*

> *Thinking as a team in working with young people at risk is very important.*

> *We share what we have done with other workers and share notes from the whole program.*

Supervisors mentioned

- discussion of material at case conferences
- personal discussions between staff
- formal presentations.

Respondents mentioned

- sharing notes

- lending readings to colleagues
- inclusion of appropriate material in worker orientation manuals
- discussion of sessions with colleagues
- supervision.

Participants indicated that they made material available from the program available to other workers at their agencies.

> *I have lent the reading to colleagues. Part of the program will be included in next week's orientation course for new workers.*
>
> *Discussed sessions with colleagues and they can look at the folder.*
>
> *I have distributed information from the program to staff.*
>
> *I was able to go back to staff and suggest they try strategies from this session (Attention Deficit and Hyperactivity Disorder).*

Effects on participants

Program informative

Eleven of sixteen respondents reported gains in knowledge. Of the eleven workers who reported knowledge gains, six specifically mentioned the significance of working with children within the context of a developmental framework. One worker described her frustration in counselling a child whom she believed to be 'stuck'. In applying a developmental framework to the problem she and the child were working on, she realised that the interventions she was using were not developmentally appropriate.

> *Most useful session was on ADHD—augmented knowledge of ADHD.*
>
> *I found the developmental framework very useful particularly the developmental impact of different events on children and families.*
>
> *Lots of strategies for working with families when working with children. Framework for assessment—questions to ask and working out a plan from there. Improved history taking skills.*

> *Provided new information and methods of application. Working through disorders was exceptionally helpful.*

There was some feedback that the program content did not always meet the needs of the very experienced worker or the inexperienced worker. One very experienced respondent reported that she would have liked more indepth training.

> *There are issues around getting training for more experienced people.*

Another respondent, who could be described as new to the field, found the case examples difficult and did not have the range of cases to apply content to.

> *I have kept all the handouts and will use them if I come across similar cases in my work.*

These data are validated by the finding in the Evaluation Report that, overall, the sessions addressed participants' areas of interest (see *Independent Evaluation Report Content of Workshop*, Figures Tele-education 6, 7, 8, 9,10 and 11).

Confidence in working with children with emotional disorders

Participants commented on the value of the program in validating their practice.

> *Highlighted the importance of 0–2 years old and reinforced what I had heard at other conferences.*

> *Good reinforcement of knowledge about development—you know more than you think you know.*

The focus groups identified that workers, because they were now better informed, were more confident in working with children with these problems.

> *The readings were excellent and the workers are definitely more confident.*

> *They are more confident in noticing signs.*

> *The trauma session gave them greater confidence with their referrals and their referrals are more likely to be taken up.*

Changes to practice

Eleven participants reported a change in their perspective and practice in working with children as a result of attending the program.

> *When doing a physical exam on a three year-old I now tune into some of the things the kid says.*
>
> *I am working with a client with anxiety and have started to think about applying some of the information from the sessions.*
>
> *I have already used it to trigger things I should be looking for in the adolescents I am working with linked back to childhood.*
>
> *Sometimes you don't take the time you need to do the assessment. I am now taking more time to do assessments and placing more importance on taking a history.*
>
> *It was useful to compare normal child development to development after trauma and grief.*
>
> *I am now thinking about things more widely and looking for more possible causes for a child's problem. I am sitting back more and thinking about the way I am going to work with a particular child and family. Taking more time to develop a plan.*

Some comments by supervisors.

> *They have greater knowledge of developmental steps, normal and abnormal behaviours, more sophisticated in their ability to identify potential issues.*
>
> *Better understanding of attachment and better strategies for working in residential care.*
>
> *At a case conference the case was reviewed in the light of new information. The worker had attended a morning session and information was used in case conference the following afternoon.*

These comments support the finding in the *Evaluation Report* of a high level of anticipated changes to practice as a result of attending the sessions (see *Independent Evaluation Report, Changes to Practice*, Figures 14 and 15)

Response to video technology

Several respondents made the point that 'Nothing replaces the person in the room'. Despite this, the response to the technology was positive and improved as the program progressed.

> *I had difficulty adjusting to the technology but I am starting to feel relaxed with it now.*
>
> *Took a little while to feel comfortable with interactive technology.*

This corresponds with the findings from most respondents, who reported increased comfort with the technology as the program progressed. (see *Independent Evaluation Report, How Comfortable was R with Tele-education,* figures 17, 18 and 19).

However, presenters' perspective about the levels of interactivity not being as high as they could have been were matched by comments made by participants in the individual interviews and focus groups.

> *Interaction was not the same as in a face to face workshop.*

Transmission problems also affected acceptance of the technology as a teaching tool.

> *Glitches with the teleconferencing were frustrating. Made it hard to concentrate.*
>
> *Good when it's going properly.*

The quantitative data show that levels of comfort with the technology were high, but of those participants who were uncomfortable with the technology at first, few remained so for all sessions.

Strategies to support the technology

Video technology is a tool. To be an effective education tool it must be supported by other strategies. The strategies used in the program were group work, discussion of cases based on rural practice and resource material.

Group work

> *Opportunities to break up into small groups between talks was really valuable.*
>
> *Enjoying the group discussion. It can be challenging to perceive things differently.*

Eight respondents mentioned the resource material.

> *I found the reading really interesting. A session is much better with reading.*
>
> *The handout sheets were fantastic. Slide notes were particularly important. I find it difficult to get all the points when taking notes. I am free to concentrate on the speaker.*
>
> *Felt like you were part of it. Felt like they were in the room with us. They could actually project the notes as they spoke, had notes to read and talked to it at the same time.*

Networking opportunities

From the response of participants it is clear that enhanced networking was an outcome of the program and strategies such as group work may have assisted in this.

> *Networking with other people is great.*
>
> *Excellent working with other people with different points of view—very useful.*
>
> *Networking is important. I am working with difficult cases with other workers who were there. The program provided a common understanding and starting point. It can take so many meetings just to get that sorted out.*
>
> *There was a wide range of people and the opportunity to meet others in the field.*

Supervisors endorsed this point of view.

> *Networking that they do locally is more valuable than that done in Melbourne.*
>
> *Workers could develop local networks.*

Presenter's perspective

Relevance was a major issue for presenters. Presenters aimed to make the Children's Mental Health Tele-education Program 'useful and practical'. This involved two significant challenges. The first was that the program had to be sensitive to the issues faced by rural workers in child and family services: 'Translating mental health issues

into rural areas', as one presenter put it. The second challenge was to 'Think about the work that we do and make it specific to the situation of these workers'.

Understanding the education exchange as mediated by the technology and the implications of this was as important to presenters as it was for participants. Key components of this exchange—the presenter's engagement with the audience, the audience's sense of their part in the exchange—changed because of the medium. One presenter commented that she could see that the audience was 'highly interactive at the other end and that lots of communication was happening'. However, this level of interaction did not flow through to the presenter on the monitor.

The sensitive nature of some of the material used in the program was a significant issue for presenters in regard to the possible impact of such material on participants.

> *When dealing with sensitive material I would normally follow up and watch for any distress in the group. You are not able to do this with video link.*

This placed greater emphasis on the partnership between site coordinator and presenters. It then became part of the site coordinator's role to follow up if any participant appeared to be distressed by session content. As one presenter said, concerns about resonance were partly resolved having the site coordinator 'watching the audience and able to follow up on my behalf'.

An issue mentioned by all presenters and related to the above, was the difficulty of gaining a sense of the audience. In order to improve this situation, constant contact between presenters and site coordinator was maintained. While this did not completely address presenters' problems in gaining a sense of the audience, it did prove useful in ensuring that the content and delivery remained on target with audience needs.

The tables demonstrate that tele-education is cost-effective for agencies and workers. When costs of technical support, site coordination, etc., are also considered, the savings for presenters are not significant. While the basic costing does not suggest significant savings in using tele-education, when access and availability are also considered in this instance tele-education proved to be a cost effective strategy.

Costs

Table 5 Estimate of worker costs

Costs	Swan Hill—Melbourne (336km x 2)	Swan Hill—Bendigo (240km x 2)
Worker time *	$302	$210
Travel **	$392	$280
Accommodation	$98	Nil
TOTAL	**$792**	**$490**

Table 6 Estimate of presenter costs

Presenter costs *	Melbourne—Bendigo **** (150km x 2)	Video link from Melbourne
Worker time ***	$340	$204
Travel **	$175	
Technology		$180
TOTAL	**$515**	**$384**

* Worker and presenter costs are based on an average public sector rate.
** Travel costs are calculated using the public sector rate.
*** Worker costs include travel time to Melbourne/Bendigo.
**** Presenter costs include travel time to Bendigo.

The presenters involved could not have offered such an extensive program if travel had been required. From the evaluation it appears unlikely that participants would have been able to attend if travel to a metropolitan centre had been required.

When access and availability are taken into consideration, in this instance tele-education proved to be a cost-effective strategy.

Conclusion

A model for tele-education

The Children's Mental Health Tele-education Program has achieved a number of significant outcomes.

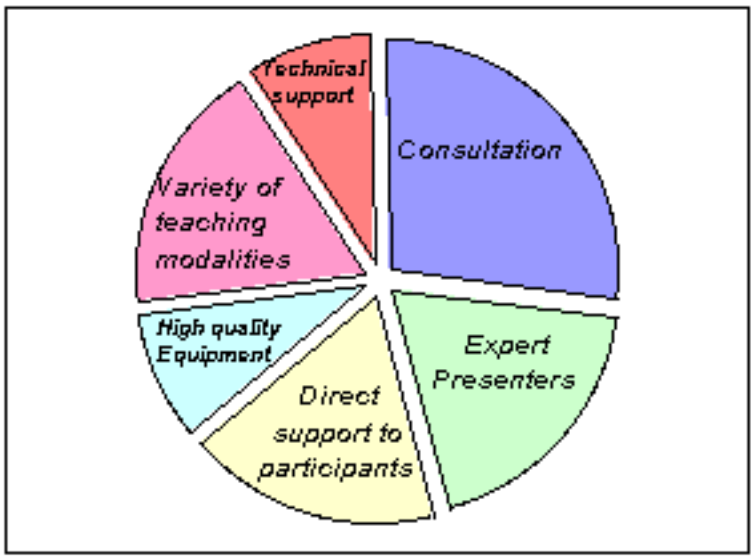
- The further development of a partnership between a metropolitan service provider and rural service providers.
- Identification of needs of rural allied health workers for training in child mental health.
- Development and implementation of an education program in child mental health targeted at the needs of rural allied health workers.
- The further development of interactive video technology as an educational tool.
- Increased user acceptance of this technology as an educational tool.
- Participants reported increased knowledge and skills in working with children with mental health disorders.
- Participants identified changes to practice as a result of attending the program.
- The program provided the opportunity to strengthen networks between agencies participating in the program.

The success of this program was based on the development of a model that can be replicated in other rural areas.

In discussing telemedicine Watters says, 'It cannot be overemphasised that simply buying the box won't enable you to practise successful telemedicine.' Based on the experience of this project, successful tele-education requires devising strategies that connect the audience to the presenters. These stratagies should aim to replicate, as closely as possible, the human interction that is an intrinsic part of good education.

Maintenance of this human interface in tele-education is the goal that informed the model described below.

Figure 1 The Tele-education Model



Consultation

The success of this program depended on consultation with the rural allied workers the program was targeted toward.

Communication

This occurs between all parties involved in the program.

- Between project coordinator and rural site coordinator to facilitate the collaborative relationship.
- Site coordinator and audience to resolve any audience difficulties with program delivery.
- Site coordinator and presenters to fine tune presentation and delivery of sessions.
- Most of this communication occurred using teleconferencing, email, telephone and fax.

Direct support to participants

The site coordinator provides support by managing a wide variety of practical issues in the distant classroom as well as mentoring the audience in using the technology.

High-quality equipment

High-quality equipment is essential in tele-education programs to achieve user acceptance of the technology as an educational tool.

Future directions

Response to the program exceeded all expectations, indicating that there is a significant gap in training provided to rural allied health workers in child mental health. Data collected from the program indicate that rural allied health workers play a significant role in pathways to care and ongoing support of children with mental health disorders and their families. This is an area that requires further exploration. Finally, sustainable training and education strategies need to be developed to support rural allied health workers in the critical work they do with children and families.

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Appendix 1 — Figures

Figure 1 Difficulties attending training in child mental health

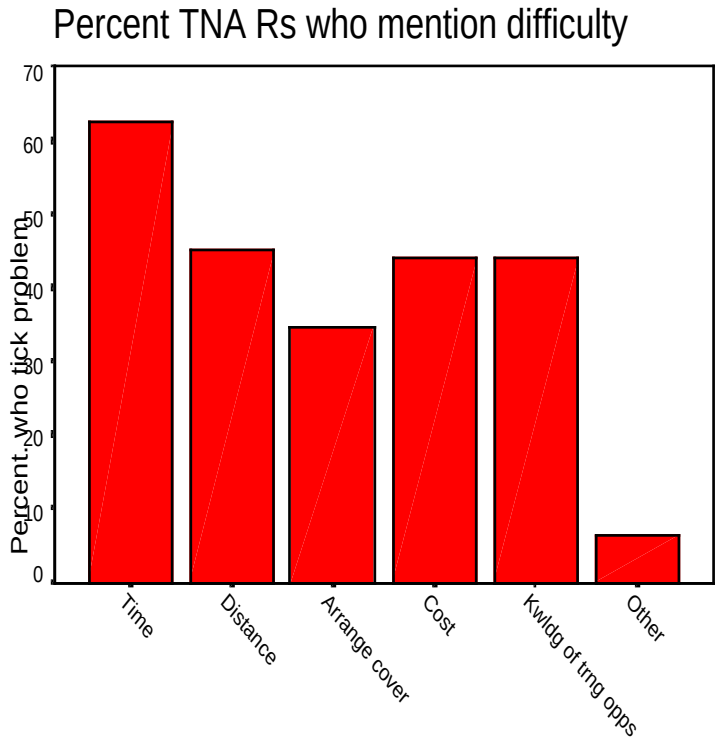
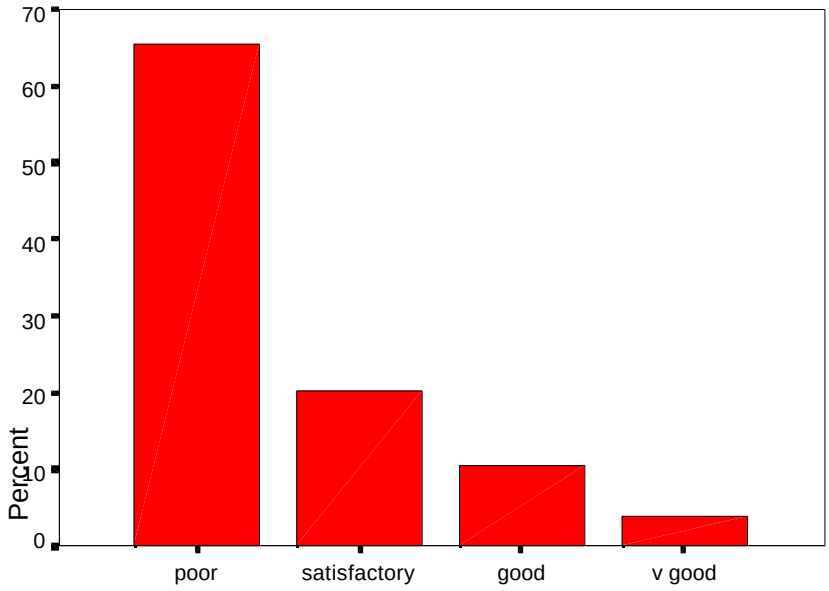
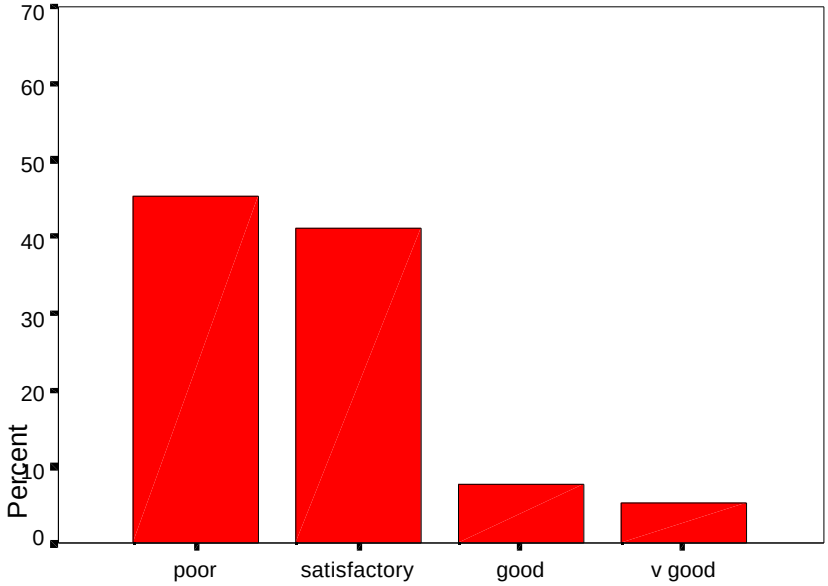


Figure 2 Access to training and information in child mental health



Note: No Respondent ticked "excellent"

Figure 3 Current knowledge of child mental health disorders



Note: No Respondent ticked "excellent"

Appendix 2: Loddon Southern Mallee Region

Appendix 3 Training Need Survey Children's Mental Health Program

This series of lectures via teleconferencing is a joint project of MHSKY Royal Women's and Children's Healthcare Network and the Bendigo Health Care Group, Division of Psychiatry. We invite you to fill in this survey to help us identify the specific needs of professionals working with children in the Loddon Southern Mallee Region.

Please tick the box/boxes.

1 How would you rate your current access to training and information in Children's Mental Health?

1 [ ]	2 [ ]	3 [ ]	4 [ ]	5 [ ]
Poor	**Satisfactory**	**Good**	**Very good**	**Excellent**

2 How would you rate your knowledge of children's mental health disorders?

1 [ ]	2 [ ]	3 [ ]	4 [ ]	5 [ ]
Poor	**Satisfactory**	**Good**	**Very good**	**Excellent**

3 How confident do you feel in working with children with mental health disorders?

1 [ ]	2 [ ]	3 [ ]	4 [ ]	5 [ ]
Very unconfident	**Not much confidence**	**Some confidence**	**Confident**	**Very confident**

4 Do you have any difficulties in attending training offered in children's mental health?

YES [ ] NO [ ]

If yes, what are these difficulties? (Tick all that apply)

[ ] Time
[ ] Distance
[ ] Arranging for cover while you attend training
[ ] Cost
[ ] Knowledge of training opportunities
[ ] Other: please specify

_____

_____

5 Which day/days would suit you best for lecture/discussion sessions? (Tick all that apply)

[ ] Monday [ ] Tuesday [ ] Wednesday [ ] Thursday [ ] Friday

6 What times would suit you best for the lecture/discussion program? (3hrs per session) (Tick all that apply)

[ ] 10.00–1.00 [ ] 1.00–4.00 [ ] 3.00–6.00

7 What would be an ideal gap between the 3-hour sessions?

a) [ ] Weekly [ ] Fortnightly

or

b) Would you prefer 6 x 1 day sessions spread
[ ] Weekly [ ] Fortnightly [ ] Monthly?

8 What format would suit you best?

[ ] Teleconferencing from Melbourne
[ ] Teleconferencing from Melbourne, local facilitators
[ ] Teleconferencing from Melbourne, local facilitators and copies of overheads in advance
[ ] Any other suggestions? Please specify

_____

---

9 If a similar program were offered again, what location would you prefer for the teleconferencing session?

[ ] Bendigo
[ ] Other: please specify

---

10 Would you be prepared to do reading prior to the session if materials were supplied?

YES [ ] NO [ ]

[ ] 30 mins [ ] 1 hour [ ] 1.5 hours [ ] 2 hours [ ] 2.5 hours

11 What areas would you like the program to cover? (Tick all that apply)

[ ] Encopresis and enuresis

[ ] Grief and loss issues in childhood

[ ] Disability and chronic illnesses — impact on children and families

[ ] Post traumatic stress disorder

[ ] Developmental challenges facing preschool and primary school-aged children
[ ] Working with parents in understanding and managing children's behaviour
[ ] Understanding the mental status of children – assessment, treatment and management implications
[ ] Assessing and understanding the distressed child

[ ] Understanding anxiety and aggression in children and implications for treatment

[ ] Working with Children who have experienced multiple placements

[ ] Attachment disorder in children and adolescents

[ ] Any other suggestions?

_____

_____

12 Would you please list the three topics, in order of preference, you would be most interested in seeing offered as part of this program.

1 _____

2 _____

3 _____

13 Any other comments/suggestions about the lecture discussion program?

_____

_____

THANK YOU FOR COMPLETING THIS QUESTIONNAIRE

Questionnaires are to be returned by
Tuesday, 31 August 1999

to

Anne Fahey
Mental Health Education Service
Division of Psychiatry

Appendix 4: Promotional Materials

Promotional Material

PRELIMINARY INFORMATION CHILDREN'S MENTAL HEALTH

A TELE EDUCATION PROGRAM

What are the Mental Health Disorders of Childhood and what are the Implications for the Work that you do?

- What is the relationship between mental health disorders in children and the onset of conditions such as depression in adolescence and adulthood?
- Have you ever wondered why all your usual strategies don't work with some children?
- Have you ever wondered why some children and families go from crisis to crisis?

The Aims of the Project:
An understanding of children's mental health is a major dimension in working with families. It is critical in terms of providing continuity of care for families that have multiple needs and who require long term intervention. This project aims to provide workers in this region with access to specialist high quality training from experts in the field of children's mental health.

The Presenters:
All presenters will be selected from the staff of MH SKY, Women's and Children's Health Care Network on the basis on their expertise in particular areas of children's mental health and their ability to use the medium of tele education effectively.

Content:
This series of seminars will give an overview and provide an understanding of the theory of mental health disorders of childhood. Each of the presentations will incorporate a focus on case material and practical strategies for working with children and families affected by these disorders. The sessions are all interrelated and participants are encouraged to attend all sessions to obtain maxim benefit from this program.

Program Dates:
The program will consist of 12 three-hour sessions. The timeframes for the program will be decided by the needs of agencies. It is proposed to commence the project in October 1999 and conclude by March 2000.

Venue:
John Bamford Centre, Division of Psychiatry, Corner of Camden and Crook Streets, Strathdale.

Cost:
The program is offered free of charge to workers and agencies in the Loddon Southern Mallee Region.

A Joint Project of
Bendigo Health Care Group Division of Psychiatry
and MH SKY Women's and Children's Health Care Network

Funding provided by the Department of Health and Aged Care through the RHSET Program.

Teleconferencing is an interactive medium, which allows participants to take an active role in the lectures by making comments, asking questions etc.

REGISTRATION

CHILDREN'S MENTAL HEALTH
TELE EDUCATION
PROGRAM

NAME: _____

ADDRESS: _____

_____

_____

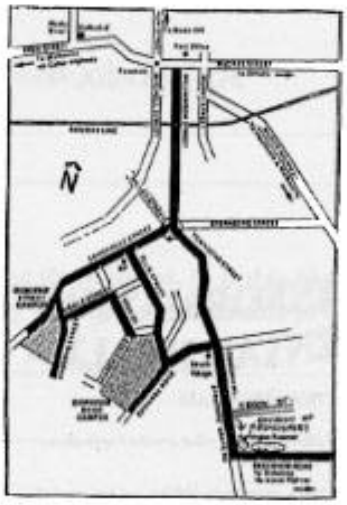
TELEPHONE: _____

Please register by telephoning Janette or Cindy on 5440 6555 or by fax on 5440 6502.

There are only 20 places available in this program. If the program is oversubscribed every effort will be made to allocate places so that all agencies are represented. A waiting list will be established if necessary.

Closing date for registrations – Friday 15th October 1999

Funded by the Department of Health and Aged Care through the RHSET Program



John Bonsford Centre
Bendigo Health Care Group
Division of Psychiatry

A Joint Project
Mental Health Service for Kids & Youth
(Women & Children's Health Care Network)
and
Bendigo Health Care Group
Division of Psychiatry

A unique opportunity to participate in a children's mental health program offered by some of the leading practitioners in the field.

Children's Mental Health Tele Education Program

KY

Bendigo Health Care Group

THE PRESENTERS

Presenters from the Women and Children's Health Care Network are:

- Morell Lynch
- Dr Deb Marks
- Toni Heran
- Eve Newman
- Ruth Wraith

All presenters have an interest in and/or experience in child psychiatry in rural and regional areas. The presenters have experience in collaborative work with child and family agencies. Areas of special interest of presenters are Post Traumatic Stress Disorder, Attachment Disorder, Difficult Behaviour and Grief and Loss Issues in children.

All sessions will be co-facilitated by staff from the Division of Psychiatry, Child & Adolescent Mental Health Service (CAMHS).

THE MEDIUM

Presentations will be delivered through the use of Video Conferencing technology. The use of Video Conferencing technology has proven to be a useful and effective medium to deliver consultation and educational services to workers in rural Victoria without the need to travel long distances.

Who Should Attend

This series of seminars will be of interest to workers who

a) works in the field of early intervention
b) works in residential care settings
c) works in community based health settings

Dates: Part 1

Tuesday 09/11/1999 – 10.00 am - 3.30 pm
Tuesday 23/11/1999 – 1.00 pm - 3.30 pm
Tuesday 30/11/1999 – 1.00 pm - 3.30 pm
Tuesday 14/12/1999 – 10.00 am - 3.30 pm

Dates: Part 2

Tuesday 08/02/2000 – 10.00 am - 3.30 pm
Tuesday 22/02/2000 – 1.00 pm - 3.30 pm
Tuesday 07/03/2000 – 1.00 pm - 3.30 pm
Tuesday 21/03/2000 – 10.00 am - 3.30 pm

Venue: John Bradford Centre
Division of Psychiatry
cnr of Gordon & Green Streets
STRATHDALE 3550

What does this Program Offer?

This is a program in Children's Mental Health for non psychiatrically trained workers. Several major themes run across the entire program. These are: Working with Parents, Managing Difficult Behaviours and the Affects of Trauma.

Specifically the Program will Cover:

- Post Traumatic Stress Disorder
- Attachment Disorder
- Grief and Loss in Children
- Abuse Issues
- The Anxious and Aggressive Child

This will be an interactive program built around case studies which participants will work through. The course includes notes.

This is a sequential program that relies on participants attending the full course. A certificate will be given to participants who attend the full course.

Appendix 5:

Independent Evaluation Report – Tele-education Evaluation

Neil Atherton Day
Centre for Program Evaluation
University of Melbourne

Summary

The quantitative data available from attendance records and self-completion pro formas administered after each workshop show that the tele-education sessions

maintained high levels of attendance throughout the program

provided information that was informative and useful in participants' work

met participants' goals and led to intentions to change practice

used a method of tele-education that was initially well accepted and increasingly more so after the first few sessions.

The objectives of the program to provide information and stimulate change in practice have been well met. There are some indications that, for small minorities of participants, content of particular sessions may have been less useful. There appears to be a small minority who continued to feel uncomfortable with the tele-education method throughout the eight sessions.

These issues suggest that greater emphasis on targeting specific participants for particular sessions might be attempted in future applications of tele-education.

However, when compared with the significance of the overall success of the program in achieving its objectives, these are very minor issues.

Methods

The evaluation of the tele-education program was undertaken by Anne Fahey with advice from an independent evaluation consultant, Neil Day. The consultant worked extensively on the evaluation design, reviewed all evaluation materials and conducted the analysis and reporting of quantitative outcome data. This section of the report is based on these quantitative data.

Two data sources are reported here: attendance records, and surveys self-completed after each day's sessions. These data were supplied in EXCEL spreadsheets. After some initial problems with formatting had been resolved, these were read into SPSS which was used for analysis and charting.

Note that in the figures and tables, N = number of days attended, R = Respondents.

Attendance

Information was available about the attendance of 45 participants in the tele-education training seminars, including a detailed roll of sessions attended, and organisation represented.

Organisation type

Table Tele-education 1—Organisation type represented by participants

Type of orgn R is from

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	CAMHS	7	15.6	15.6	15.6
	CHC	8	17.8	17.8	33.3
	Counselling	3	6.7	6.7	40.0
	Education	4	8.9	8.9	48.9
	Family Support Services	12	26.7	26.7	75.6
	Maternal & Child Health	1	2.2	2.2	77.8
	Child Protn	3	6.7	6.7	84.4
	Special childrns services	7	15.6	15.6	100.0
	Total	45	100.0	100.0	

The seven participants from Child and Adolescent Mental Health Services (CAMHS) were not in the target audience and were auditing the sessions only. They are excluded from most of the following analysis.

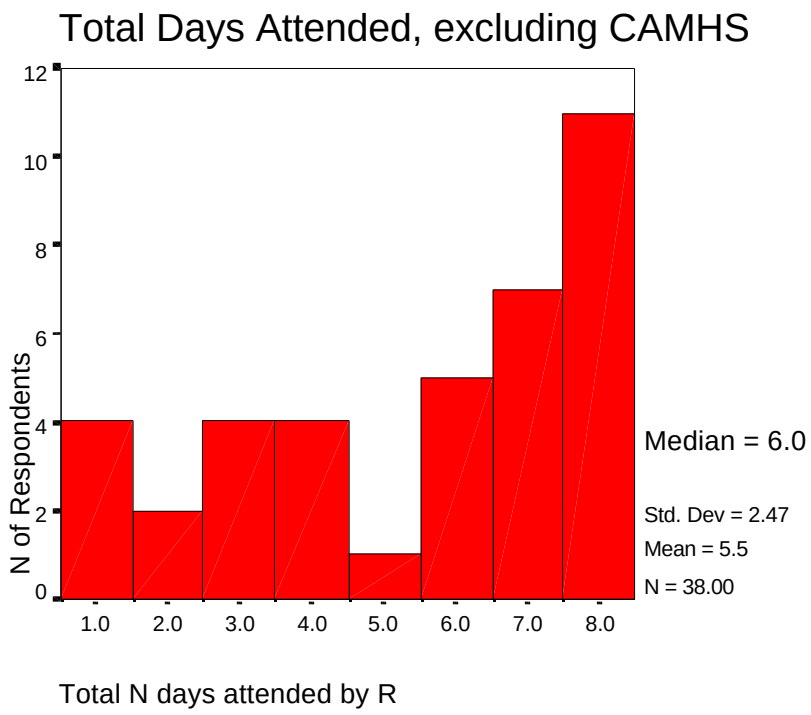
Table Tele-education 2—Number of days attended by each participant

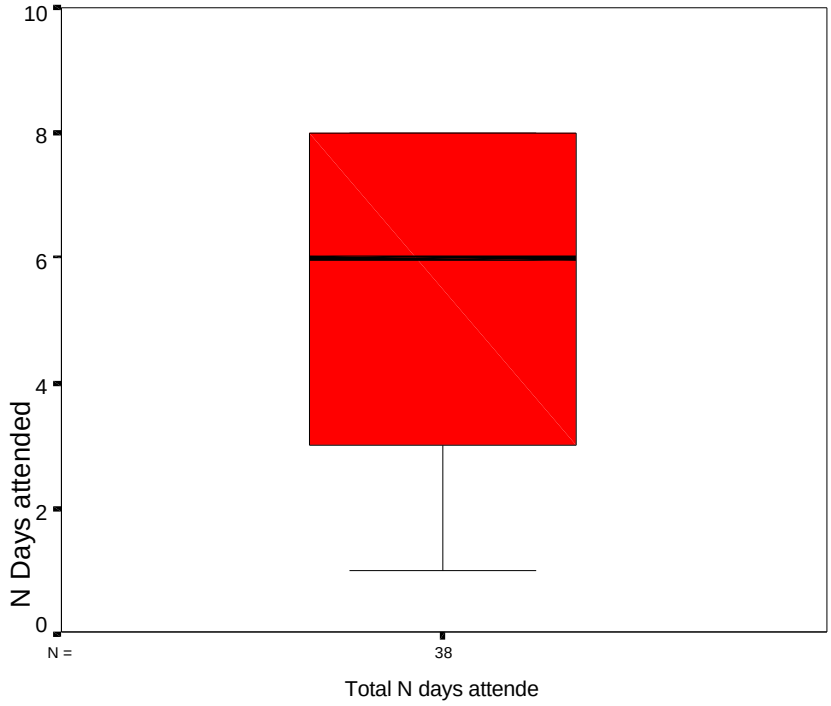
Total N days attended by R

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	10.5	10.5	10.5
	2.00	2	5.3	5.3	15.8
	3.00	4	10.5	10.5	26.3
	4.00	4	10.5	10.5	36.8
	5.00	1	2.6	2.6	39.5
	6.00	5	13.2	13.2	52.6
	7.00	7	18.4	18.4	71.1
	8.00	11	28.9	28.9	100.0
	Total	38	100.0	100.0	

Nearly half the participants (46 per cent) attended all, or all but one, of the days, and 63 per cent attended more than half the days on which sessions were offered. These data are in Table Tele-education 2—'Number of days attended by each participant', and displayed in Figure Tele-education 1—'Total days attended by participants', as a histogram.

Figure Tele-education 1—Total days attended by participants





The data can be more parsimoniously displayed using a boxplot as shown below in Figure Tele-education 2—'Total N days attended by each participant: boxplot'.

Figure Tele-education 2—Total N days attended by each participant: boxplot

The boxplot in Figure Tele-education 2 shows, in summary form, the information from the distribution. The median (black horizontal line) is 6.0 days. The dark box shows the spread in attendance of the 'middle half' of the 38 informants: 25 per cent of informants above and 25 per cent below the median value of 6.0. The 'whisker' shows the range of values of all informants excluding extreme or outlier cases. Usually, there is a whisker above as well as below the box. In this case there is no upper whisker and the top of the box extends to limit of the scale. This indicates a skewed distribution with many participants attending all, or very nearly all, sessions.

Attendance by type of organisation

Seven CAMHS workers are included in this analysis. Means and standard deviations for the total days attended for each participant are shown below in Table Tele-education 3—'Total days attended, by organisation type'.

Table Tele-education 3—Total days attended by respondents, by organisation type

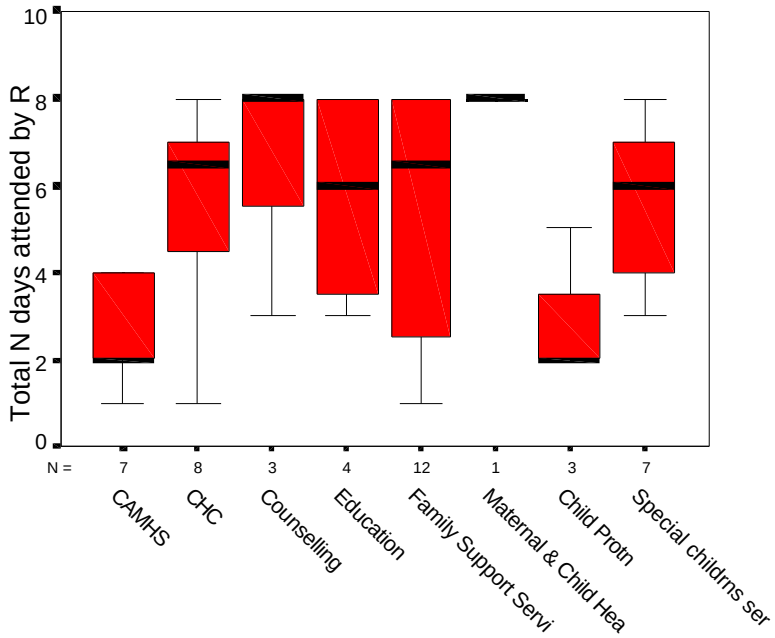
Total N days attended by R

Type of orgn R is from	Mean	N	Std. Deviation
Counselling	6.3333	3	2.8868
Education	5.7500	4	2.6300
Family Support Services	5.4167	12	2.9064
Maternal & Child Health	8.0000	1	.
Child Protn	3.0000	3	1.7321
Special childrns services	5.5714	7	1.9024
CAMHS	2.7143	7	1.2536
CHC	5.6250	8	2.3867
Total	5.0444	45	2.5222

Boxplots are most useful for comparing details of distributions between groups as in Figure Tele-education 3—'Boxplot of days attended, by participants' organisations'. Comparing the length of the boxes we note that attendance from Family Support Services and Education participants was variable, especially in comparison with CAMHS or Child Protection workers.

The black lines within boxes suggest that attendance from CAMHS and Child Protection participants was lower than for the other groups, although the small number of workers from Maternal and Child Health, Counselling and Child Protection make these comparisons risky.

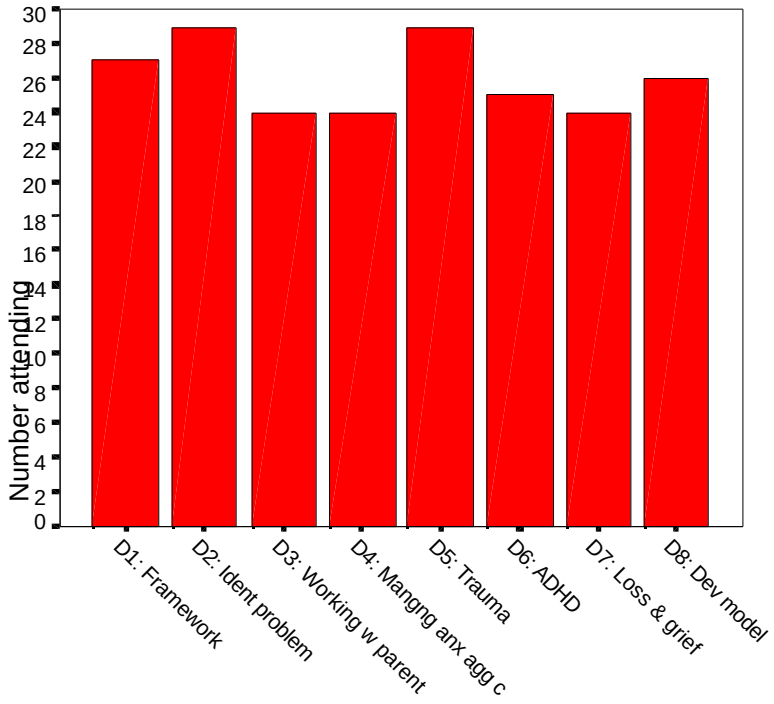
Figure Tele-education 3—Boxplot of days attended, by respondents, by organisations



Attendance on particular days

The numbers attending on each day of the training are shown below in the histogram Figure Tele-education 4—'Number attending each day, excluding CAMHS'. These data show some differences in the numbers attending, but there is no evidence of the type of systematic decline in attendance through time that might be expected as a result of extensive withdrawal from the program.

Figure Tele-education 4—Number attending each day, excluding CAMHS



Nature of non-attendance: 'dropout' or 'intermittent'

The nature of non-attendance can provide an indication of satisfaction with the training. Withdrawal or dropout is defined as cessation of attendance. This may indicate that the training was not meeting the withdrawn participant's needs. Intermittent non-attendance, on the other hand, may indicate selective attendance: with respondents picking session of particular interest. It may also indicate that other commitments kept informants away on days they might otherwise have attended. Evidently, the categories are not watertight, but they may inform consideration of satisfaction with the training course.

CAMHS informants are excluded from this analysis, on the grounds they were auditing particular sessions, rather than attending the full training course.

For the purposes of the analysis we define types of attendance as

full: Respondent attended all sessions

withdrawn: Respondent ceased attending before Day 7 and did not resume

intermittent: all other cases.

Well over a quarter of participants were present for all eight days, as may be seen in Table Tele-education 4—'Type of non-attendance'. A further 50 per cent attended intermittently, but with a median attendance of 6 days, thus it can be concluded that most of these attended frequently, if intermittently.

Table Tele-education 4—Type of non-attendance

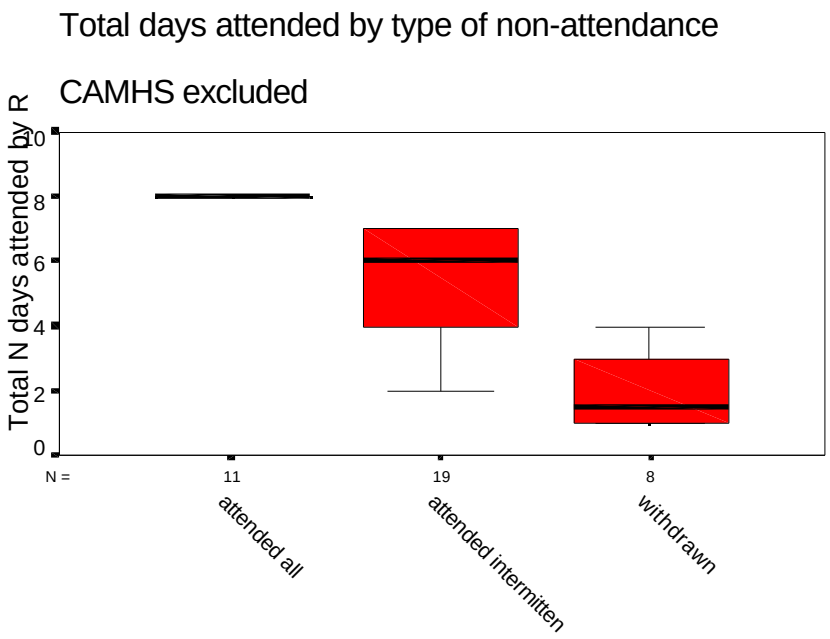
A little over one-fifth of informants withdrew; the median days of attendance for this group being 1.5 days. The boxplot in the table below suggests there is relatively little

ATT_TYP Type of non-attendance

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00 attended all	11	28.9	28.9	28.9
	2.00 attended intermittently	19	50.0	50.0	78.9
	3.00 withdrawn	8	21.1	21.1	100.0
	Total	38	100.0	100.0	

variation among this group in the days attended: the small number who withdrew ceased attending only a handful of sessions. Those who attended intermittently tended to skip only a few of the sessions.

Figure Tele-education 5—Days attended by attendance type



We conclude that 80 per cent of participants voted with their feet in favour of continued attendance at the teletraining sessions.

The eight who withdrew include three from family support services organisations and two from educational organisations. Before concluding that the sessions did not meet the needs of participants from these backgrounds, it is worth noting that other individuals from these organisations attended all eight days (two from education and four from family support services). Furthermore, five participants from family support services were intermittent attendees. On average, these attended six of the eight days of teletraining.

On the basis of the limited information available, attendance levels appear to be very high and there does not appear to be any particular characteristic of the few who did drop out that might explain their withdrawal.

Conclusion

Analysis of the attendance records suggests that the tele-education program has been successful in retaining the attendance at all or nearly all sessions for the large majority of participants. There are no obvious characteristics of the few who withdrew, nor for those who attended intermittently rather than fully.

Participant evaluations of the workshop

At the conclusion of each training session, participants were requested to fill out an evaluation pro forma.

The numbers attending each session and the number of pro formas available for analysis are shown in Table Tele-education 5—'Rate of return of evaluation pro forma by session'. This table shows an overall response rate of 77 per cent, but there are some individual sessions where the rate is less satisfactory: for example Sessions 2 and 7.

Table Tele-education 5—Rate of return of evaluation pro forma by session

Session		N attending	N pro formas	Response rate %
1	Normal development 0–12	32	26	81.2
2	Early warning signs of mental or emotional issues	33	23	69.7
3	Working with parents and carers in understanding and managing children's behaviour	25	19	76.0
4	Managing the anxious child and the acting out and difficult-to-engage child	25	19	76.0
5	Understanding and managing trauma	32	24	75.0
6	Working with ADHD	28	22	78.6
7	Family change and loss — addressing the grieving process	25	17	68.0
8	How the child learns to relate: a developmental model	27	25	92.6
Total		**227**	**175**	**77.1**

The pro forma was slightly different for the various sessions, and specific questions were used to inform the delivery of following sessions. However, eight of the questions (Q4–Q11) are constant across all eight days on which session were held, and these items are used in this section of the evaluation.

Content of workshop

Q4–Q6 deal with the content of the workshop and consisted of like-type items.

Q4 'Today's workshop presentation was informative for me.'

Responses

- 5 highly informative
- 4 very informative
- 3 informative
- 2 a little informative
- 1 not informative

Q5 'The information presented today was useful to me in my job.'

Responses

- 1 not useful
- 2 some use
- 3 satisfactory
- 4 very useful
- 5 completely useful

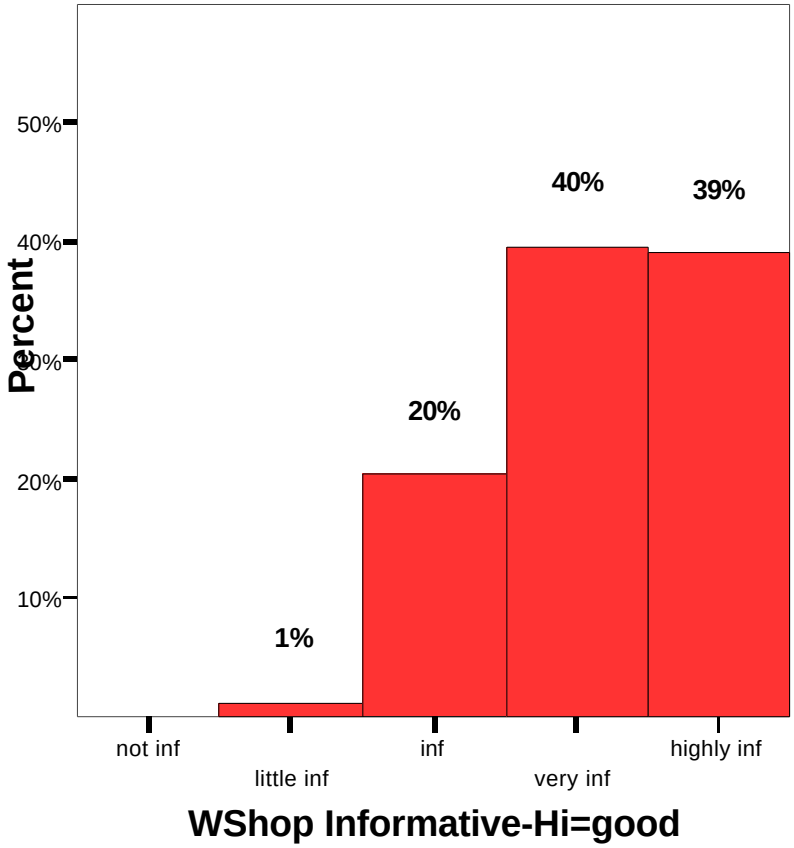
Q6 'The material covered was already familiar to me.'

Responses

- 1 very familiar
- 2 familiar
- 3 some familiarity
- 4 mostly unfamiliar
- 5 all unfamiliar

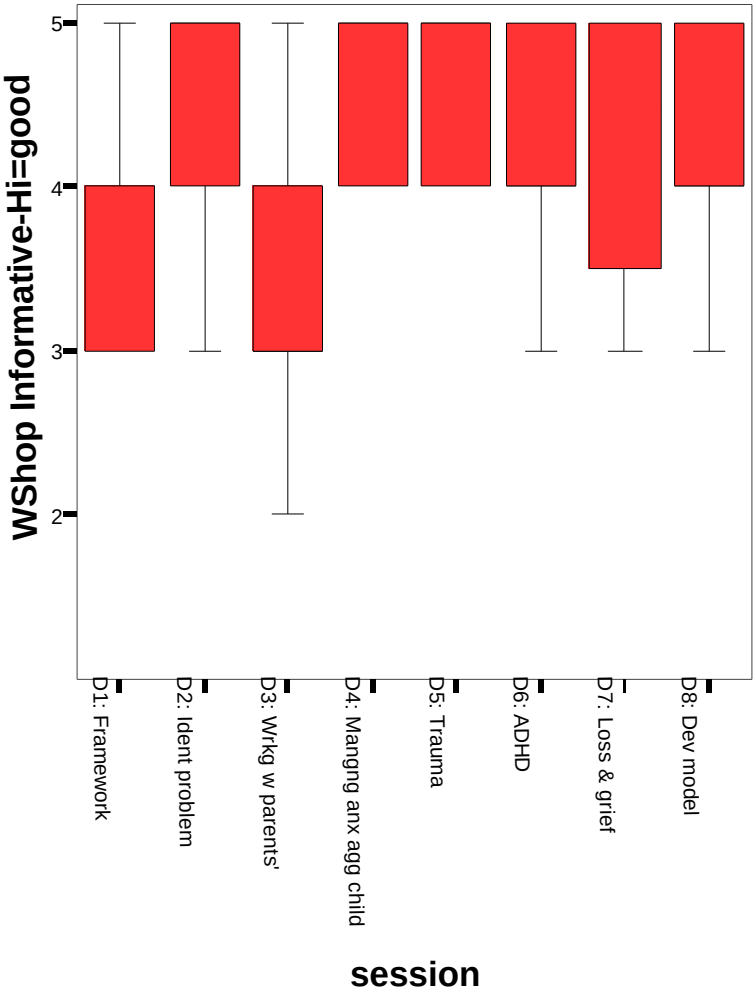
The scoring for Q4 has been reflected from that in the questionnaire, so that a high score value shows a positive outcome in the case of all three questions. It might be argued that a middling, rather than a high score on Q6 would be preferable. Material that was too unfamiliar might not be accessible. Material that was too familiar might be of little value.

Figure Tele-education 6—Q4 Workshop informative: histogram



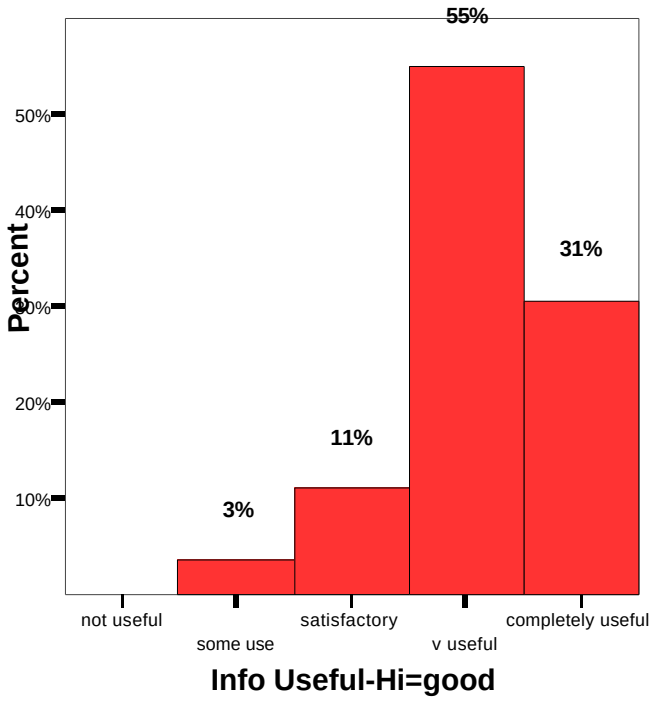
The figure shows the distribution of responses to Q4 aggregated across all eight sessions. With just under 80 per cent of informants reporting that the workshop was ‘very’ or ‘highly’ informative, and only 1 per cent gaining little information, it is evident that overall the sessions addressed areas of interest for the participants. If the response categories are coded from 1 to 5, with ‘5’ representing ‘highly informative’; the overall mean for the question is 4.2.

Figure Tele-education 7—Q4 Workshop informative: boxplot by session



In Figure Tele-education 7—'Q4 Workshop informative: boxplot by session', the responses to this question are shown separately for each of the eight sessions. Only two sessions show any major difference from the generally extremely high level of response. The first introductory session and the third session on working with parents report the session content as 'very' rather than 'extremely' informative. With this minor exception, it appears all sessions in the series were regarded by participants as 'informative'.

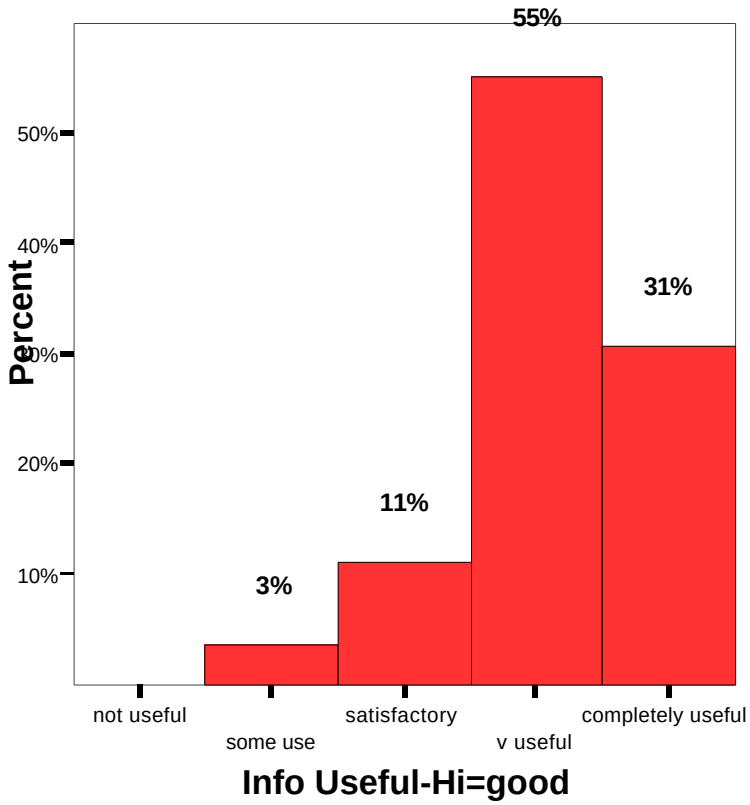
Figure Tele-education 8—Q5 Information useful in job: histogram



Having sessions that are ‘informative’ does not necessarily indicate that the material covered is of direct relevance to participants’ work roles. Q6 specifically asks whether or not the ‘information presented today’ was of use in the respondent’s job. With 86 per cent of informants (across all eight sessions) finding the information either ‘very’ or ‘completely’ useful, it is evident that the sessions were well targeted at the professional needs of participants.

Using the same procedure to scale the responses as was described above for Q4, the mean value for Q5 is 4.1.

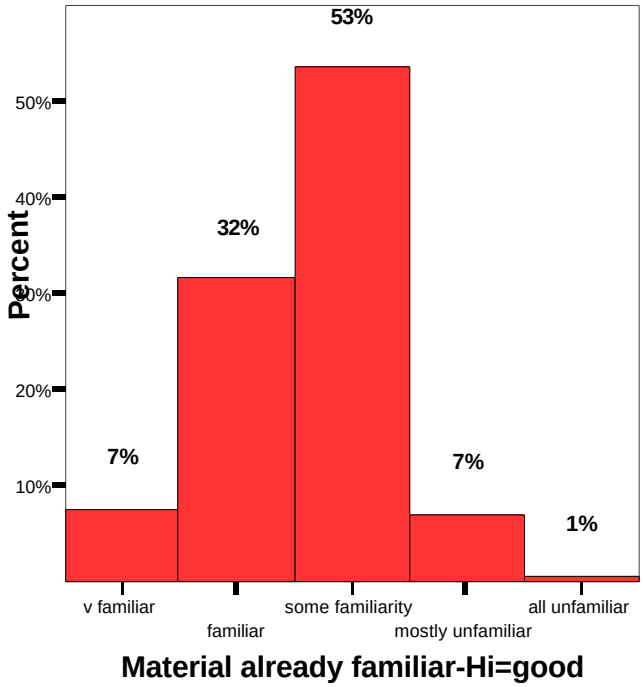
Figure Tele-education 9—Q5 Information useful in job: boxplot by session



In Figure Tele-education 9—‘Q5, ‘Information useful in job: boxplot by session’, a similar pattern emerges as in the previous comparative box plot: Sessions 1 and 3 have slightly lower levels of direct work-related usefulness.

It is also worth remarking that for a small number of informants some sessions were less useful. This may be seen from the long lower whiskers on Session 7 (‘Family Change and Loss: Addressing the Grieving Process’). A check back to the questionnaires showed that two informants reported this session as ‘some use’ and two as ‘satisfactory’. The small circles in the figure show outliers. Again a check of the questionnaires show these are, in each case, a single informant reporting the session to be of ‘some use’ only.

Figure Tele-education 10—Q6 Material already familiar: histogram



Although the number of informants who find the information of less professional benefit is tiny, it might suggest some attention to targeting of future sessions, with, possibly, more detail provided to participants about content of specific sessions.

The distribution of responses to Q6 is markedly different to the other questions in this category. Again responses are aggregated across all eight sessions. With the modal category in the centre of the scale, more than half report ‘some familiarity’ with the material presented. Effective presentation of new professional information should build on existing knowledge, so some prior knowledge may be of value. On the other hand, if the information presented is already very familiar, the value of the session in expanding participant knowledge may be questioned.

Only 1 per cent (one informant for one session) found the information unfamiliar. Of the 7 per cent (N=13) of respondents who found some information ‘very familiar’, three were referring to the introductory session, and three were referring to the third session ‘working with parents’.

Figure Tele-education 11—Q6 Material already familiar: boxplot by session

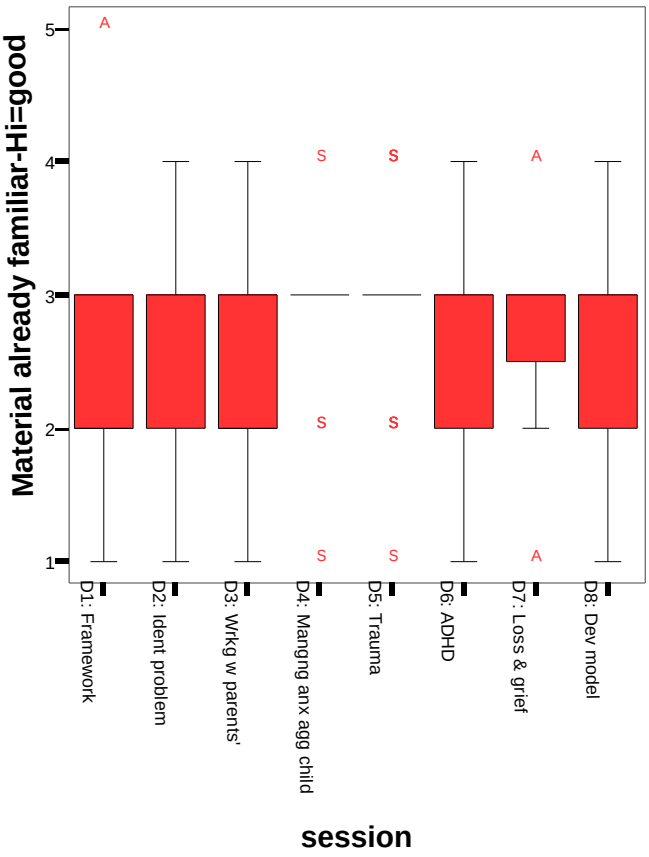


Figure Tele-education 11—'Q6 Material already familiar: boxplot by session', shows that the pattern described for the histogram holds generally across all sessions. The single horizontal line in Sessions 4 and 5 are due to the fact that nearly all informants choose the middle response: fifteen out of nineteen for Session 4, 'Managing the Anxious Child and the Acting Out and Difficult-to-Engage Child', fifteen out of twenty-four for Session 5 on 'Understanding and Managing Trauma'. The box plots suggest some variability among participants in levels of prior knowledge as there are whiskers present for all but two sessions.

Conclusion: Workshop content

Responses to the first three questions common across all sessions suggest that the tele-education was well-targeted in terms of the prior knowledge of participants and in terms of their need for professional information.

Effect of workshop on participants

Survey Questions 8 and 9 were about the effects of the workshop in meeting participants' goals, and in resulting in changes in participants' professional practice.

Q7 'Today's session met my goals.'

Responses

- 1 not at all
- 3 satisfactory
- 4 mostly met
- 5 completely

Q8 'I will make changes to my practice as a result of today's session.'

Responses

- 1 yes
- 2 no

Q9 'If yes (to Q 8), what changes?' (two lines to write in answer)

It should be noted that the information on change in practice is self-reported, and prospective in that it concerns the effects anticipated by the participants themselves at the conclusion of the workshop. A true 'level 3' training evaluation would involve a follow-up study using observation of the participants' subsequent professional activity, or reports from supervisors and managers. There is some qualitative data reported elsewhere in this document that may partially fulfil this requirement.

The sessions appear to have been highly effective in meeting participants' goals. Nearly three-quarters of responses (aggregated across all sessions) indicate that goals were 'mostly met' or 'completely met'.

Figure Tele-education 12—Q7 Session met respondent's goals: histogram

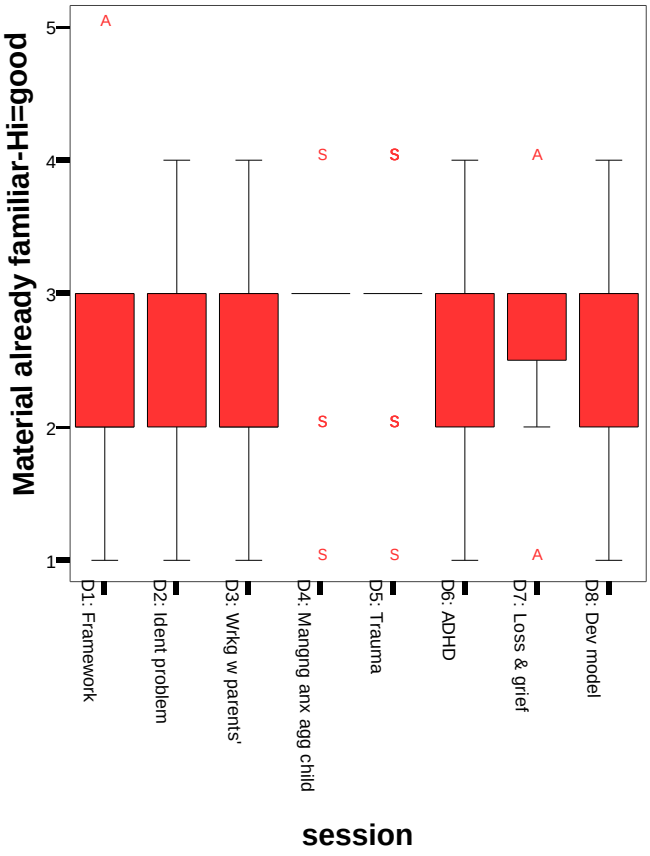
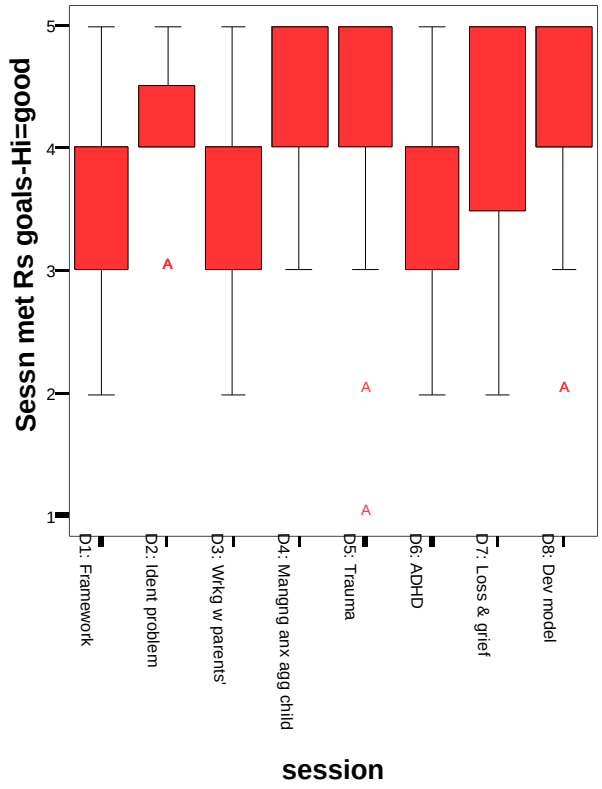


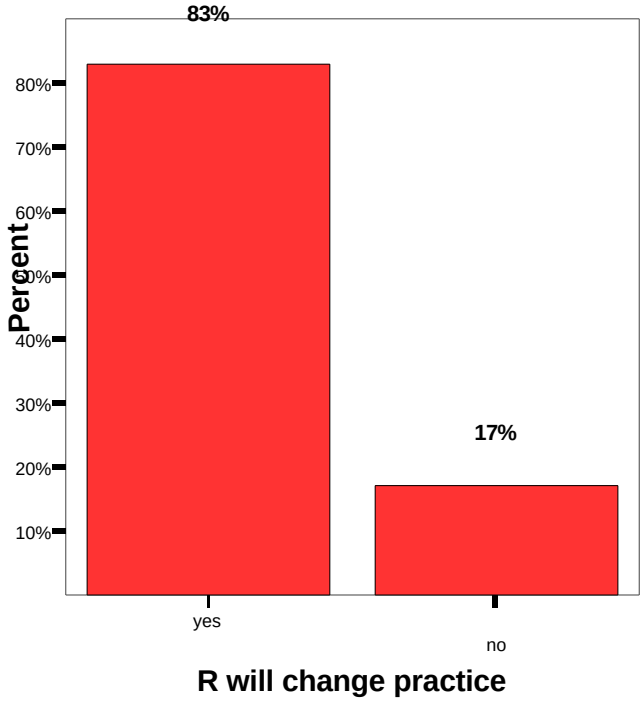
Figure Tele-education 13—Q7 Session met respondents' goals: boxplot by session



From Figure Tele-education 13 it is evident that some differences are apparent to the extent to which sessions met goals. Session 4, 'Managing the Anxious Child and the Acting Out and Difficult-to-Engage Child', Session 5, 'Understanding and Managing Trauma', and Session 7 'Family Change and Loss—Addressing the Grieving Process', all had more than half respondents marking the top category of 'goals completely met'. Interestingly, there are, for all these sessions, some informants who were less satisfied.

One participant was 'not at all' satisfied with the 'Trauma' session; this person was the only participant to tick this category across all questionnaires. Session 1, 'Introduction', Session 3 'Working with Parents and Carers in Understanding and Managing Children's Behaviour', and Session 6, 'Working with ADHD', were generally reported to be slightly less effective in achieving participant goals, but even in these instances the modal category is the second top response in each case.

Figure Tele-education 14—Q8 Respondent will make change to practice: histogram



Q8, which, after the statement 'I will make changes to my practice as a result of today's sessions', gave the choice of responding 'yes' or 'no', shows that, aggregated across sessions, more than 80 per cent of responses indicate that there will be a change to practice resulting from the session.

The introductory session did not directly address practice issues and, as will be seen in the next section, was far less likely than any other session to lead to changes in practice. If data from this first session are excluded, the proportion claiming they will change practice rises to 89 per cent.

Figure Tele-education 15—Q8 Mean percentage of respondents who will make change to practice: by session

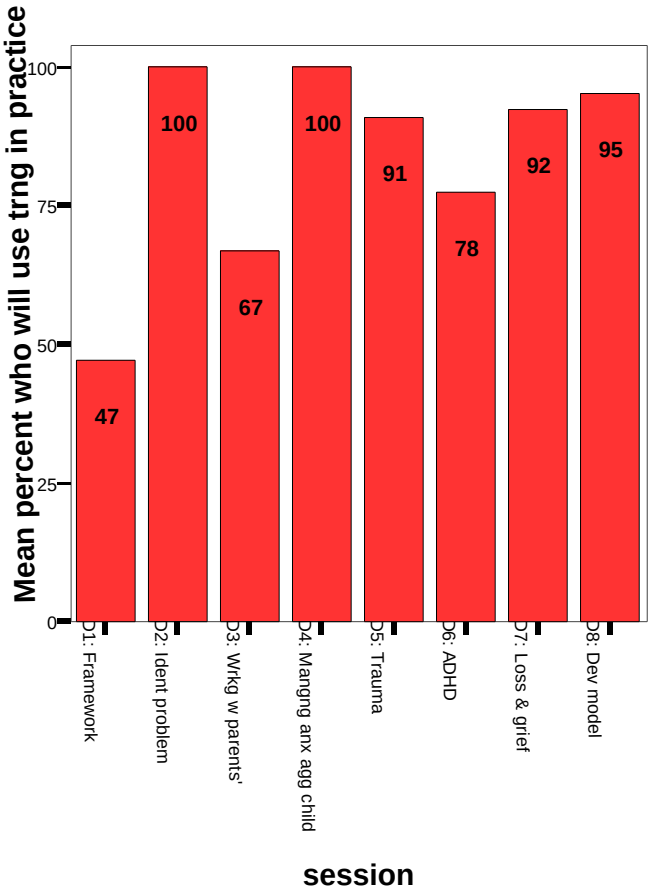


Figure Tele-education 15—'Q8 Mean PCT of respondents who will make change to practice: by session', indicates that there is some variability between sessions in terms of their impact on anticipated change in informant's professional practice. As would be anticipated, the introductory first session was unlikely to lead to change; it may be disregarded for the purposes of the present discussion.

With the exception of Sessions 3 and 6 all—or very nearly all—participants anticipate changing their practice as a result of attending particular tele-eduction workshops. In comparison, 67 per cent of those reporting on Session 3, 'Working with Parents and

Carers in Understanding and Managing Children's Behaviour', anticipate they will make changes in their practice as a result of the session.

After Q8 asked whether or not change was anticipated, Q9 asked 'If Yes, what changes?'. There is evidence in the written comments in reply to Q9 that some participants already had experience in working with families. Comments refer to 'reinforcement' of existing practices, or 'better' practice, for example, more formal assessments. It appears from these comments that many participants were already aware of practice with families, and this may account for the relatively lower proportion who anticipate change in practice as a result of attending the session. On the other hand, there may be some practitioners from organisations where parental contacts are less important.

The other session with relatively lower impact on practice was the workshop on ADHD. At 78 per cent the proportion likely to change is high, but lower than the near unanimity of intention to change practice that characterises most sessions.

Conclusion: Effect on workshop participants

The quantitative data indicate that the tele-education sessions had remarkably high apparent impact on participants, both in meeting their goals and in developing in them the intention to change their practice. Information about intention to change is most persuasive when validated by independent reports of subsequent actual sustained changes in work practices. However, the scale of the program required a limited evaluation budget and efficient low-cost data collection of quantitative information. Nevertheless, these results are consistent with results from interviews reported elsewhere in this document. Overall it would be difficult to image a more positive indication of successful program outcomes from evaluation data of the type reported here.

Response to tele-education methods

The last two questions asked in the self-completion surveys following each workshop dealt with participants' reactions to the tele-education method of presentation.

Q10 'I was very comfortable with the tele-education presentation.'

Responses

1 very uncomfortable
2 some discomfort
3 no discomfort
4 comfortable
5 very comfortable

Q11 'Tele-education worked very well for me as a medium for professional education today's session.'

Responses

1 excellent
2 very good
3 satisfactory
4 unsatisfactory
5 poor

Figure Tele-education 16—Q10 How comfortable was respondent with tele-education?: histogram

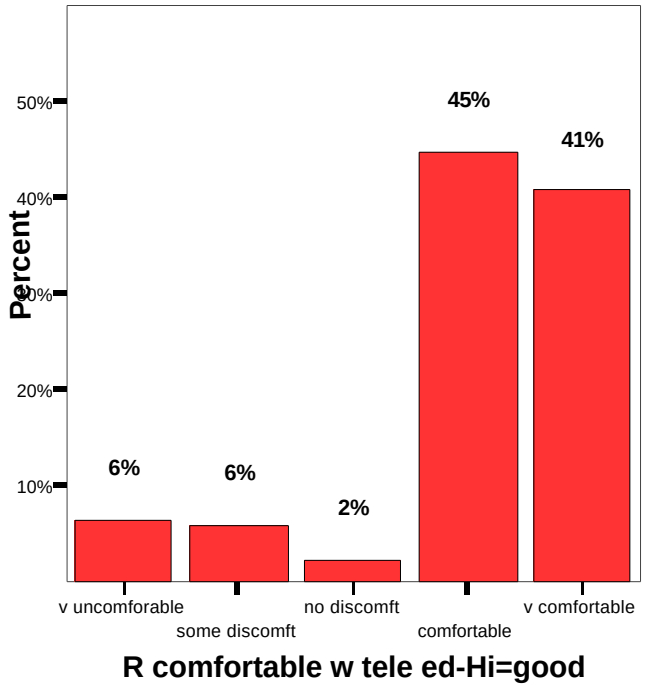


Figure Tele-education 16—'Q10 How comfortable was R with tele-education?: histogram', shows that there is strong endorsement of the method. Over 86 per cent are either 'comfortable' or 'very comfortable' with the method. The distribution is, however, slightly U-shaped. Only 2 per cent choose the mid point of the scale; a larger minority (12 per cent) express some level of discomfort with using tele-education. One comment, 'Filming was a bit intimidating to start with', indicates a widespread concern, although for most participants, this issue diminished with increasing experience.

Figure Tele-education 17—Q10 How comfortable was R with tele-education?: boxplot by session

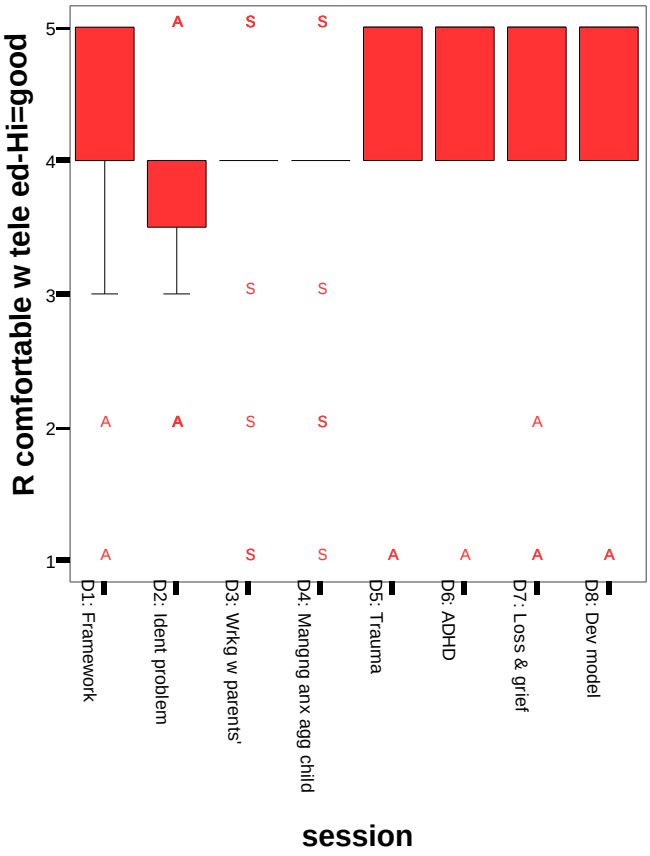


Figure Tele-education 17—'Q10 How comfortable was R with tele-education?: boxplot by session', suggests that the concern about the method diminished through time. The first two sessions have whiskers descending below the box; the remaining six have none. This suggests an increasing concentration of informants at the top 'unconcerned' end of the scale. However, it should be noted that extremes and outliers persist throughout all sessions. This indicates that there is a small minority for whom the method continues to be a continuing problem. Because of confidentiality guarantees, it is not possible to match individual responses across sessions, although some anecdotal and contextual information suggests that the outliers represent a handful of participants who continued to be concerned throughout all the sessions.

Figure Tele-education 18—Q11 Today's tele-education as medium for professional education: histogram

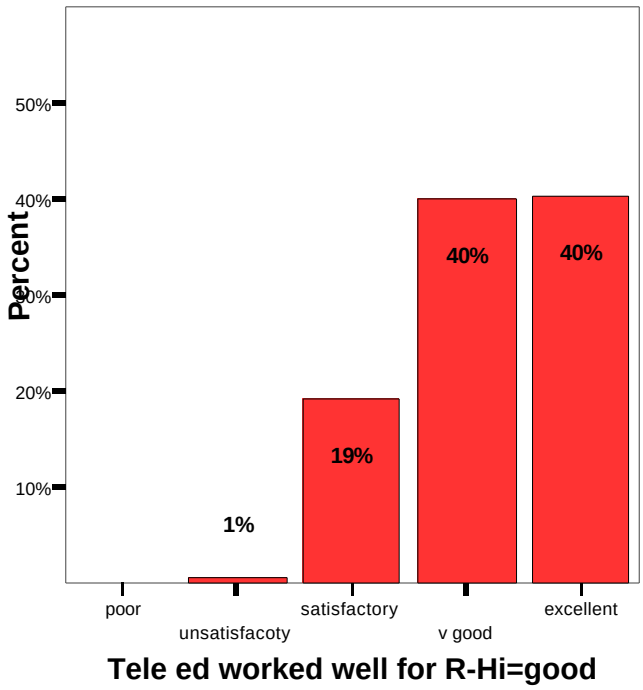


Figure Tele-education18, 'Q11 Today's tele-education as medium for professional education: histogram', shows that 80 per cent of responses, aggregated across sessions, report that the method was 'excellent' or 'very good'. Only 1 per cent report that the medium was 'unsatisfactory' or 'poor'. A review of questionnaires shows that this was a single informant responding 'unsatisfactory' to the session on 'Managing the anxious and aggressive child'.

Figure Tele-education 19—Q11 Today's tele-education as medium for professional education: boxplot by session

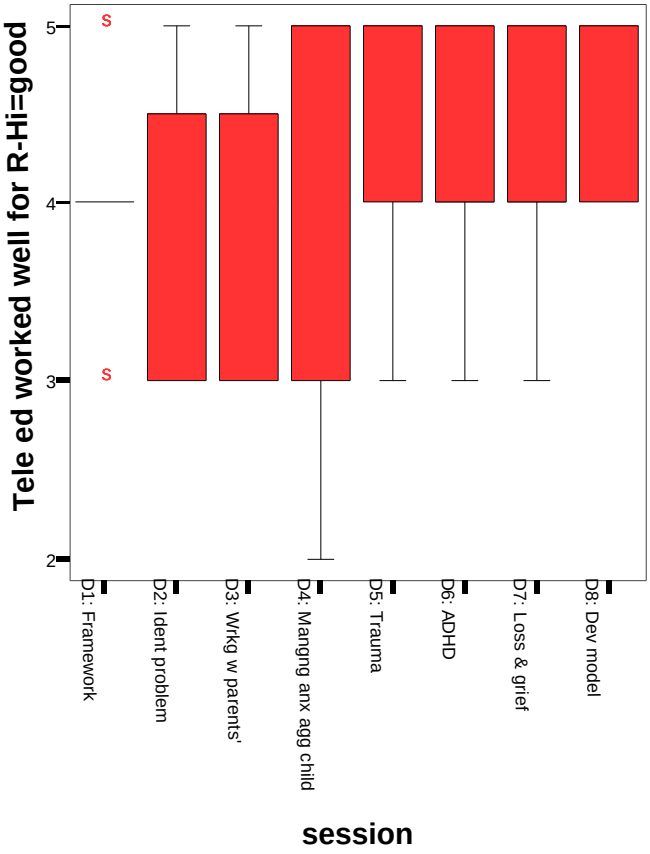


Figure Tele-education19—"'Q11 Today's tele-education as medium for professional education: boxplot by session', suggests an increased acceptance of the medium after the first four sessions. A 'novelty' factor may explain the high level of consensus for the first session, with sixteen out of twenty-five respondents describing it as 'very good'. The next three sessions show some spread of responses, whereas from Session 5 onwards there is remarkable consistency of acceptance (smaller boxes and shrinking lower-bound whisker).