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Clinical Supervision for mental health professionals: The evidence base

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Abstract: *This article acknowledges an enduring debate about the nature of evidence and provides a context for the selective review of a literature on the outcomes of Clinical Supervision, a structured arrangement to support staff, which has been widely introduced into health service systems across the world. The literature revealed that many of the claims for the positive effects of CS have remained unsubstantiated. A contemporary pragmatic randomised controlled trial, summarised here, tested the relationships between Clinical Supervision, quality of care and patient outcomes, in mental health settings in Queensland, Australia. It confirmed that beneficial and sustainable CS outcomes accrued for Supervisors and Supervisees, as measured by a suite of research methods and instruments including The Manchester Clinical Supervision Scale©, and for patients in one private sector mental health facility. However, the effect Clinical Supervision had on nominated outcomes still remained difficult to demonstrate across a broad front. Plausible explanations are offered for this and a new framework for future outcomes-related research studies is suggested, in the continuing attempt to strengthen an empirical evidence base for Clinical Supervision.*

Keywords*: clinical supervision; evidence base; RCT; Manchester Clinical Supervision Scale; MCSS-26*

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was as enthusiastic as it was steadfast. Grateful thanks are also due to the participating Supervisees; so, too, to every physician, psychiatrist, psychologist, social worker, clinical mental health nurse and senior nursing manager, for their candid contributions. As important as these respective contributions were to this study, the responsibility for any errors and omissions and all matters of interpretation reported here, rest solely with the authors.

Finally, the overarching motivation to conduct this study was to make an incremental contribution to better understanding ways in which mental health service consumers could be assisted to recover. To each and every one of them and their carers, the authors acknowledge with gratitude their willingness to share the same ambition and their active participation in a novel attempt to do so.

Introduction

Historically, reaching consensus on the constitution of evidence in health care has been elusive, subject to change and frequently accompanied by controversy (Rycroft-Malone et al 2004). For more than thirty years, the various methods by which any such evidence was produced and interpreted have reflected the different positions adopted by individual researchers in relation to their convictions about the nature of knowledge and being; the so-called *paradigm wars* (Oakley 1999). For example, Marsh (1982) believed that positivism -scientific method- had become 'little more than a term of abuse...like sin; everyone was against it'. Later, Clarke (1999) famously complained that quantitative methods 'were being proselytised as a superior approach to research' and that 'a sub-textual propaganda was afoot'. From his initial concern with methodology, he became fascinated by the 'furtive deployment of language against qualitative studies, which were failing in their refusal to genuflect before the high altar of statistics'. White (2003a) observed that Clarke's sharp defence of qualitative methodology, did so at the cost of 'demonizing quantitative method' and that, in his opinion, there were only two sorts of social research. These were not 'quantitative' and 'qualitative'; nor 'hard' and 'soft', nor 'masculine' and 'feminine', which were often their unfortunate value-laden descriptors. Rather, White asserted that there was only 'good research' and 'bad research', although, in a circular fashion, the conventions by which these relative judgments are made, tended to reflect the starting positions of individual researchers.

Clinical supervision

Similarly, definitions of Clinical Supervision (CS) have not been without contest (White *et al* 1994) and many have been reported unsatisfactory when put to close scrutiny (Milne 2007). The following example, however, has been found to have

a practical utility: *the provision of time-out and an opportunity within the context of an ongoing professional relationship with an experienced practitioner to engage in guided reflection on current practice, in ways designed to develop and enhance the practice in the future* (Open University 1998). Furthermore, several different models of CS delivery have also been reported (Winstanley and White 2003), often drawn from a range of human service disciplines with long established CS histories (see for example, Kadushin 1976, in relation to Social Work). Not uncommonly, in practical terms, CS has come to mean small groups of Supervisees (n=~6) or dyads (1:1) attending a pre-arranged meeting with an appropriately trained Clinical Supervisor, for 45-60 minutes per session, at a monthly frequency, for facilitated reflective discussion, in confidence, around matters of professional relevance and importance.

Over the past two decades, CS has become incorporated into the clinical governance agenda of health care service provision and is now increasingly found as a feature of international professional practice. Indeed, it has come to be widely regarded as a *tour de force* for clinical practice development and has also underpinned the growing level of interest by researchers to establish the evidence base for causal relationships with quality of care and patient outcomes (White *et al* 1998). Many of the claims to the benefits of Clinical Supervision remain unsubstantiated and robust research studies remain difficult to design, conduct, interpret and to fund. Setting aside the width of opinion about CS definitions, the multitude of operational models, the differing capabilities of search engines and the likelihood of multiple duplications, the most cursory on-line search for 'Clinical Supervision' will yield about 480,000 hits (http://www.google.com.au/search?source=ig&hl=en&rlz=&q=Clinical+Supervision&aq=f&aqi=g10&aql=&oq). Indeed, *NHS Evidence* at the Health Information Resources (formerly, the National Library for Health), lists some 7362 references to Clinical Supervision; over half of them (53%; n=3888) published within the last 3 years (http://www.evidence.nhs.uk/search.aspx?t=Clinical%20supervision: Accessed 21 April 2011). Some of all these references will contain data, often the product of localised studies that involve small (even tiny) samples. Many will review the attempts of other investigators to produce primary evidential data and identify their methodological shortcomings, often fairly, and then lament the incohate nature of the evidence upon which Clinical Supervision continues to be based.

A systematic review is a high-level overview of primary research on a particular research question that tries to identify, select, synthesize and appraise *all* high quality research evidence relevant to that question in order to answer it (Cochrane 1972). Mindful of findings from research studies that are not statistically significant (negative) tend to be under-reported in the literature (Hopewell *et al* 2009), and findings regarded as exciting or statistically significant (positive) tend to be over-reported (Von Elm *et al* 2004), scholarly reviews of any literature make a contribution in two ways. First, they attempt to anchor the current state of knowledge to a point in time and, to some extent at least, try to obviate the need for other researchers 'to rake over the coals' (unless this be the historical purpose of their enquiry, of course). Second,

they signpost discriminating readers to telling accounts of the methodological and substantive challenges for future empirical studies. Although the Cochrane Library does not presently list a systematic review of Clinical Supervision (http://www.thecochranelibrary.com/view/0/index.html), the work of Freitas (2002) and Wheeler and Richards (2007) is justifiably recognised in both these respects.

Freitas (2002) critically reviewed ten CS studies published between 1981 and 1997, each of which sought to link a set of causal relationships between Clinical Supervision and patient outcomes; no relevant studies were found between 1997 and 2001. *Inter alia*, he acknowledged the monumental contributions of Ellis and Ladany (1997) and Ellis *et al* (1996) who critically reviewed over 100 studies located in the supervision literature. Freitas (2002) concluded there was reason to be hopeful about the current trend in supervision research, because it was burgeoning (witness the *NHS Evidence*, above), that methodological flaws could be easily remedied and that published research may underestimate a good deal of the potential results available by not controlling for Type II error (a so-called false negative; viz, the error of failing to observe a difference when, in truth, there is one). From 8295 references revealed by the keyword search, the later work of Wheeler and Richards (2007) reviewed just 18 CS studies published in English since 1980, which satisfied set inclusion criteria. For this review, Supervisees were counsellors or psychotherapists or other professionals who have had a substantial training as counsellors or psychotherapists and who were specifically engaged in a counselling role with clients; 'hence psychiatrists, psychiatric nurses, occupational therapists and other health professionals having supervision were excluded' (Wheeler and Richards 2007). However, here too, the quality of evidence was again found variable, but supervision was consistently demonstrated to have some positive impacts on the Supervisee.

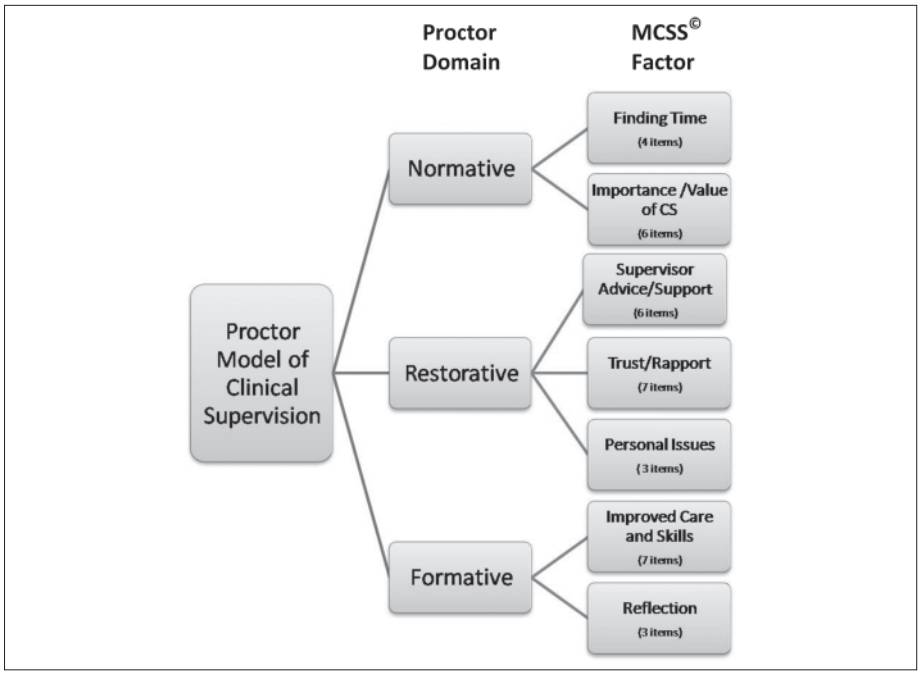
Clinical Supervision 'sits at the crossroads between professional development and professional practice and cries out for study and enhancement' (Milne, 2009). However, as yet another review of the international CS literature (Butterworth *et al,* 2008) also observed, the 'tired' discussions in the literature 'offered no new insights', although the authors were 'encouraged that new ideas related to patient outcome and professional development are emerging'. The efficacy of doing so has rarely been examined; however, Spence et al (2001) made a noteworthy contribution to better understanding the CS literature in relation to mental health professionals (clinical psychology, occupational therapy, speech therapy and social work). She concluded that, as have so many others before and since, that although supervision was generally reported by staff to have been valuable in enhancing skills and competence, there was a lack of empirical evidence to demonstrate that supervision actually produced long-term improvements in clinical practice and better client outcomes (the *acid test of good supervision;* Ellis and Ladany, 1997). Other recent creditable attempts have been made in discrete mental health settings (see, in particular, Bambling *et al,* 2006; Bradshaw *et al,* 2007) to help establish such an empirical evidence base but, for many of these claims, it has remained elusive.

Mental health

Mental health service provision in many developed countries is reportedly sub-optimal. In the United States of America, for example, 'most people with mental disorders remain either untreated or poorly treated' (Wang *et al,* 2005). In the United Kingdom 'acute mental health inpatient units are often, in effect, places of safety, masquerading as a therapeutic response' (Lawton-Smith, 2008). Similarly, in Australia, the treatment of mental illness has been 'vastly inadequate, inappropriate, or simply not available' (Roxon, 2008) and added to stress on staff working in such conditions. This was particularly so for mental health *nurses* (MHN; White, 2003b). Internationally, Edwards and Burnard (2003) reported low overall job satisfaction, dissatisfaction with perceived quality of decision making by managers, and burnout, as the main reasons for mental health nurses leaving the workforce. Moreover, high levels of emotional exhaustion were known to be associated with direct patient care, the work environment and lack of support (Leiter and Harvie, 1996). A fit can be found, therefore, between the issues reported by MHNs and the remedial claims made for Clinical Supervision in many of these respects.

The Clinical Supervision Evaluation Project (CSEP; Butterworth *et al,* 1997) not only provided a unique perspective on stress, coping, burnout and job satisfaction of nurses (Butterworth *et al,* 1999), it also established the essential contours of Clinical Supervision in Britain. The CSEP was not designed to examine the transfer effect (if any) to the quality of service provision and to patient outcomes. However, the findings from this study informed the relative usefulness of existing assessment tools used to measure the impact of CS and also provided an opportunity to develop the first internationally validated, CS-specific, copyright research instrument; The Manchester Clinical Supervision Scale© (MCSS©; Winstanley, 2000). The MCSS© has since been adopted as an outcome measure of the effectiveness of CS in ~85 Clinical Supervision evaluation studies, in 13 countries around the world and has been translated into seven languages other than English; French, Spanish, Portuguese, Danish, Norwegian, Swedish and Finnish (see Hyrkas et al, 2003). Several variant versions of the MCSS© have also been developed, including a Perception of Clinical Supervision version, for use with respondents with no prior CS experience. Other variants have been tailored for school teachers and Allied Health staffs. A large international normative database has grown over time, for benchmarking purposes and secondary analyses. For example, findings from a recent Rasch Analysis of these data, using RUMM 2030 software, have re-confirmed the established psychometric properties of the MCSS© and have justified a re-modelled version, the MCSS-26©, which will become available to CS researchers under licence via *www.osmanconsulting.com* later in 2011 (Winstanley and White, 2011). As the name implies, The MCSS-26© contains ten fewer items than the current MCSS©, without compromise to the robust psychometric integrity of the instrument. To date, no other CS-specific questionnaire has yet withstood such rigorous analytic scrutiny, nor publicly reported such findings, in an attempt

Figure 1
Description of the factor structure of the Manchester Clinical Supervision Scale© in relation to the three domains of the Proctor Model of Clinical Supervision



to make stepwise contributions to the methodological literature and the increase of substantive confidence to end-users; The Manchester Clinical Supervision Scale© remains distinctive in both these respects.

The popularity of the MCSS© arises not only from its established psychometric properties, but also because the seven subscales (recently reduced to six in the MCSS-26©) tapped into the three domains of one of the most influential models of group Clinical Supervision (see Figure 1 above); the so-called Proctor Model (Proctor, 1986; Proctor and Inskipp, 2003).

These are known as the Normative domain (to address the promotion of standards and clinical audit issues), the Restorative domain (to develop the personal wellbeing of the Supervisee), and the Formative domain (development of knowledge and skills). A welcome linkage has been established over time, therefore, between a clinical nursing issue (CS), an operational definition (Open University, 1998), a conceptual model (Proctor, 1986) and a dedicated research instrument (MCSS©).

Clinical supervision evaluation

Set against these multiple backdrops, a novel pragmatic randomised controlled trial (RCT) was conducted by the present authors, to examine the effects of implementing Clinical Supervision into mental health settings. The RCT aimed to test relationships between Clinical Supervision, the quality of nursing care and patient outcomes. It was situated in 17 adult mental health facilities, in 9 participating locations across Queensland Health (the State-wide healthcare provider), Australia, in public and private, and in inpatient and community settings. None of these settings had pre-existing CS arrangements in place. The allocation of clinical facilities to either the Intervention Arm or the Control Arm of the RCT was random, insofar as the Research Team was blind to the characteristics of the facilities that comprised the pool that met the explicit entry criteria. Units assigned to the Intervention Arm of the study had CS implemented into the working practices of MHNs; those that were assigned to the Control Arm of the study did not implement CS. The latter participated in the RCT through the collection and submission of outcomes data only. All necessary ethical approvals were obtained in writing from 10 relevant Human Research Ethics Committees before the RCT began.

After all necessary administrative permissions had been obtained, 24 individual mental health nurses were identified at local level, across the State, to be trained as a CS Supervisor. Each was required by the research protocol to hold the respect and confidence of managers and clinicians alike, in such a role. Mindful of the need for an appropriate educational preparation (the absence of which, in psychology, was once identified as a 'significant gap' and the profession's so-called *dirty little secret:* Hoffman, 1994), they attended an intensive, residential, tailor-made, 4-day, experiential CS course, led by the RCT Research Team (White and Winstanley, 2009a). The course comprised practical CS sessions with direct feedback, each of which followed a linked program of theory-based seminars. The course was well reviewed by Supervisors and was found to be demonstrably efficacious. The Supervisees were prepared locally by the Supervisors who attended the CS training course, during which the importance of information-giving and orientation to CS was stressed.

A year-long Intervention Phase of the RCT immediately followed the end of the CS course, during which the neophyte Supervisors set-up and delivered group Clinical Supervision sessions to Supervisees in their respective Mental Health Service locations. The two furthest RCT locations were 1770kms (1100 miles) apart. Each Supervisor received their own CS from one of three RCT-funded Area Coordinators (themselves, experienced Clinical Supervisors), who visited participating facilities at least once a month over the following year.

Figure 2
Table to show cited examples of quantitative research instruments used in the RCT

Level of data	Research instrument	Reference
Supervisors and Supervisees	General Health Questionnaire 28 item version (GHQ28)	Goldberg D and Williams P (1988) *A Users Guide to the General Health Questionnaire*. Windsor: NFER-Nelson
	Maslach Burnout Inventory (MBI)	Maslach C and Jackson S (1986) T*he Maslach Burnout Inventory.* Palo Alto, CA: Consulting Psychologists Press
	General Health (SF-8)	Ware J, Kosinski M, Dewey J and Gandek B (2001) *A Manual for Users of the SF-8 Health Survey*. Lincoln, RI: Quality Metric Inc.; and Boston, MA: Health Assessment Laboratory
	Manchester Clinical Supervision Scale© (MCSS©)	Winstanley J (2000) Manchester Clinical Supervision Scale. *Nursing Standard* 14:19, 31-32
Patients	Psychiatric Care Satisfaction Questionnaire (PCSQ)	Barker D and Orrell M (1999) The Psychiatric Care Satisfaction Questionnaire: A reliability and validity study. Social *Psychiatry and Psychiatric Epidemiology*, 34, 111-116
Unit	Perception of Unit Quality (PUQ)	Cronenwett L (1997) *A multidisciplinary measure of perceptions of unit quality.* Unpublished PhD thesis, University of North Carolina, USA

Data collection

In keeping with contemporary research practice and the logic that neither quantitative nor qualitative methods, alone, are sufficient to capture the trends and details of the situation (Creswell, Fetters and Ivankova, 2004), supplementary qualitative data collection methods were also employed to illuminate the quantitative data. Diary accounts (n=139) were provided by the neophyte Clinical Supervisors on a monthly basis, for a year after completion of their preparatory CS course (White & Winstanley, 2009a). In addition, semi-structured interviews were conducted with a purposive sample of their senior nursing managers and other clinical staff (n=17) in each of the participating locations (White and Winstanley, 2010a). Quantitative data were collected at three levels; Nurse, Patient and Unit staff. From the plethora of research instruments available, a suite of copyright outcome measures was deemed fit for purpose (see presently cited examples in Figure 2). Each was credentialed by well

established psychometric properties and all necessary permissions for their use were received in writing. Data were collected between July 2007 and January 2009. The collection of specific resource-use information, to enable an economic evaluation, fell outside the scope of this RCT. The methodological design and statistical procedures have been fully reported elsewhere (White & Winstanley, 2009b).

Summary findings from the RCT

Participants

At baseline, participants in the Intervention Arm of the RCT (n=9 sites), in which CS was implemented, comprised Mental Health Nurses (Clinical Supervisors n=24; Supervisees; n=115); Patients (n=82) and Unit staff (n=43). In the Control Arm (n=7 sites), in which CS was not implemented, they comprised Mental Health Nurses (n=71); Patients (n=88); Unit staff (n=11), shown in Table 1 overleaf.

No statistically significant differences were found in the demographic data, nor for any work or health-related outcomes as measured by the SF8, between the Intervention and Control Arm nurse participants at baseline. As was anticipated for MHNs in the Control Arm of the RCT (because nothing was changed from usual), no statistically significant differences were found on any of the research instruments, over the following 12 months of the trial.

Supervisors

In the Intervention Arm, *quantitative* findings revealed that the Supervisor Total MCSS© scores at the end of the CS course were statistically significantly higher compared with their perception of CS at baseline (Table 2). This significant difference was maintained after 12 months supervisory experience as Supervisor (who also received personal CS throughout). Two MCSS© subscales revealed particularly significant differences, over time; viz, Trust and Rapport and Importance/Value. (See Table 2overleaf.)

In general terms, findings from this RCT confirmed that high Manchester Clinical Supervision Scale© scores were systematically associated with low Maslach Burnout Inventory (MBI) scores (see also, for example, Edwards *et al,* 2006); that is, the better the CS, the less burnt out they felt. Supervisors also revealed scores which were indicative of an overall reduction in the level of General Health Questionnaire (GHQ) so-called 'psychiatric caseness' during the course of the study (9/24, 38% ' 5/22, 23%), although this was not statistically significant at the 5% level.

Findings derived from the *qualitative* data collection methods at baseline found

Table 1
Demographic details and baseline health related outcomes of all nurse participants

Demographic details	All nurses (n=186)	Intervention (n=115)	Control (n=71)	χ^2 statistic	P value
Sex:					
Male	127 (68%)	86 (75%)	41 (58%)	6.87	0.009
Female	57 (31%)	27 (24%)	30 (42%)		
Age: Mean (SD)	46.5 (9.8)	46.6 (10.3)	46.3 (8.8)	t=0.21	0.837
Employment Status:					
Full time	124 (67%)	67 (58%)	57 (80%)	9.02	0.011
Part time	48 (26%)	36 (31%)	12 (17%)		
Casual/Agency	12 (6%)	10 (9%)	2 (3%)		
Current position: (n=183)					
Registered nurse	108 (59%)	72 (64%)	36 (51%)		
Clinical nurse specialist	30 (16%)	16 (14%)	14 (20%)	5.00	0.288
Enrolled Nurse	24 (13%)	15 (13%)	9 (13%)		
Clinical nurse	8 (4%)	5 (4%)	3 (4%)		
Others*	13 (7%)	5 (4%)	8 (11%)		
Mental health qualification:					
Yes**	138 (74%)	83 (72%)	55 (78%)	0.64	0.423
No	48 (26%)	32 (28%)	16 (22%)		
Prior CS experience: (n=182)					
Yes	58 (32%)	33 (29%)	25 (36%)	0.77	0.379
No	124 (68%)	79 (71%)	45 (64%)		
GHQ caseness					
'Caseness' (threshold =>4)	48 (31%)	31 (27%)	17 (24%)	0.08	0.648
MBI: median (range)				Z statistic	
Emotional Exhaustion	16 (0-53)	16 (0-52)	16 (1-53)	-0.018	0.986
Depersonalisation	4 (0-27)	4 (0-21)	4 (0-27)	-1.172	0.241
Personal Accomplishment	37 (8-48)	37 (8-48)	36 (23-48)	-0.306	0.760
SF8: median (range)				Z statistic	
Physical Component Summary	52.5 (19-62)	52.6 (19-52)	52.4 (25-59)	-0.665	0.506
Mental Component Summary	51.4 (19-69)	52.3 (19-61)	50.3 (25-69)	-1.133	0.257

* Others (Clinical Nurse, Nursing Unit Manager, Clinical Nurse Consultant, Assistant in Nursing, Nurse Educator)

** MH qualifications (RN Hospital Certificate, Graduate Diploma/Certificate, Post-basic Nursing Certificate, Master of Nursing, Non-Nursing qualification, Enrolled Nurse MH Certificate)

Table 2
Medians (ranges) of MCSS© sub-scale scores obtained from Supervisors and Supervisees who provided complete MCSS© data at both time points

MCSS© scores: Supervisors	Median (range)		N=24	
	Baseline	12 months	Z value	P value
Trust/rapport	25 (17-29)	28 (19-32)	2.403	0.016
Supervisor advice/support	23.5 (18-28)	24 (18-30)	1.557	0.119
Improve care/skills	27.5 (23-35)	30 (23-35)	1.275	0.202
Importance/value of CS	24 (18-29)	27 (22-30)	2.549	0.011
Finding time	10.5 (6-16)	10.5 (5-20)	0.506	0.613
Personal issues	10 (5-13)	10 (6-14)	1.148	0.251
Reflection	12 (11-15)	14 (8-15)	1.327	0.185
Total CS Score	134 (108-155)	147 (5–160)	3.006	0.003
MCSS© scores: Supervisees	Median (range)		N=46	
	Baseline	12 months	Z value	Probability
Trust / Rapport	26 (19-35)	28 (10-35)	3.491	<0.0005
Supervisor advice /support	24 (18-30)	23.5 (12-30)	0.721	0.471
Improve care/skills	27 (14-35)	27 (8-35)	0.640	0.522
Importance /Value of CS	24 (17-30)	24 (13-30)	0.345	0.730
Finding time	14 (6-20)	12 (6-20)	1.898	0.058
Personal issues	10 (5-15)	10 (5-15)	2.183	0.029
Reflection	12 (3-15)	12 (7-15)	1.045	0.296
Total CS evaluation score	133.5 (109-177)	135.5 (71-179)	0.847	0.397

that Supervisors were most daunted by the anticipated lack of support from their managers and peers in their home locations. In the event, they were found to be challenged by their experience; many to a very considerable extent (White and Winstanley 2009a).

Senior Managers reported that they were optimistic and enthusiastic about CS, but were also disappointed and embarrassed when their junior managerial colleagues and other clinical nursing staff, did not hold a similar conviction when tested by the realities of implementation. Almost without exception, Supervisors were most challenged by the practical mechanisms necessary to schedule a staff duty roster to accommodate innovative Clinical Supervision arrangements. Managerial mindsets reportedly ranged from enthusiastic, through unsupportive, to frankly hostile and resistant. When the latter was the case, considerable tensions were created and the setter of the staffing roster became the sole *de facto* arbiter of the entire CS implementation program. Control and management of the roster was found to be the bellwether mechanism by which CS was both facilitated and stymied. It also conveyed how Clinical Supervision was conceptualised at local level as either integral to local practice arrangements, or as extra-curricular.

Supervisees

In two thirds of RCT Intervention Arm locations (6 of 9), Supervisees self-reported their CS experience as having met or exceeded their expectations, between baseline and twelve months. Overall, the MCSS© Total scores for Supervisees did not change systematically in a statistically significant direction. However, over the 12 months of receiving Clinical Supervision, two MCSS© subscales associated with Proctor's (1986) Normative and Restorative domains (Trust/Rapport and Personal Issues) *did* increase significantly, over time (Table 2).

Patients

Psychiatric Care Satisfaction Questionnaires (PCSQ-R) with complete data were received from 159 of the 170 respondents at baseline (94%) and 110 were received at final time point. At baseline and final time points, the overall median score was 65. From samples gathered at the baseline and 12 month time points, there were insignificantly small shifts in either direction, but large variability. For benchmarking purposes, a median score for the total PCSQ-R of 65 (range 19–90) would be indicative of the patients being reasonably satisfied with the level of care and service provided from their mental health service; that is, they tended to agree with most of the positive statements in the questionnaire and tended to disagree with the negative statements.

Unit staff

In this RCT, there was also no overall statistically significant difference, over time, between Perception of Unit Quality (PUQ) surveys received from Unit clinical staff in the Intervention and Control groups ($z=-1.7$, $p=0.088$). The possible PUQ total scores range from 19 to 95. For benchmarking purposes, the overall median PUQ score of 66 found in this RCT (range 30-95) was indicative of the group of clinical staff rating the quality of care as 'fair'. On inspection, these data revealed a positive shift for the Intervention Arm and a negative shift for the Control Arm. However, statistical analysis was limited by small sample sizes and these intuitively encouraging findings should be interpreted in an appropriately parsimonious manner.

Given these findings and their explicit caveats, however, one RCT location was statistically significant standout in an unequivocally positive direction; that is, the PUQ score increased by 11 points. This clinical facility was located in the only *private* sector mental health service to participate in the RCT. It was also characterized by its small size (the smallest in the study), an enthusiastic buy-in from all levels of management (probably the highest), an exceptional commitment from the single Supervisor, who provided regular CS sessions, occasionally in their own time, of a

demonstrably efficacious standard, where Supervisees reported their expectation of CS at baseline was met by their subsequent experience of it, where 100% of the Unit nursing staff participated in the CS sessions (the highest) and where the Supervisee attrition rate was the lowest in the RCT.

Discussion

The presently reported quantitative findings all support the premise that the CS training, and subsequent participation and dedicated CS support in their own workplaces, had sustainable beneficial effects for Supervisors. For Supervisees, statistically significant changes were also found in the MCSS© subscales associated with Proctor's (1986) Restorative and Normative domains. A novel theoretical proposition emerged, therefore, that the Formative domain (concerned with the development knowledge and skills and, therefore, most relevant to an impact on patient outcomes) may only be demonstrable after significant changes to the Restorative (concerned with personal wellbeing) and Normative (concerned with the promotion of standards and clinical audit issues) domains have first become established, caused by sustained efficacious Clinical Supervision. An increase in the frequency and length of CS sessions (White 1999) and a reduction in the number of Supervisees per CS group (Proctor 2010) are also worthy considerations to be tested in future research designs.

This RCT also found that significantly more Supervisees who scored *less* than MCSS© median value of 136 (the hypothesised threshold at which CS efficacy may be achieved) moved into GHQ© 'psychiatric caseness', over time. There was no significant change in the level of 'caseness' for those that scored *more* than 136. This suggested a second proposition; that only demonstrably efficacious CS may make a contribution to the maintenance/improvement of Supervisee's well-being (Proctor's Restorative domain); axiomatically, superficial supervision will not.

Many of the senior officers who managed the mental health nursing services in this RCT declared a preference for their clinical settings to be allocated to the Intervention Arm, rather than the Control Arm. Indeed, such was their optimism about CS as a *tour de force* for change in the organizational culture, which was often described by in deprecating terms, that some were not willing to participate unless this was so. In addition to these declarations of preference, the attrition of data-providing respondents subsequently varied by location and, in some settings, was noteworthy. These features challenged the methodological requirements of this RCT, not only to ensure a balance between Intervention and Control Arm numbers, but also to limit the scope of appropriate analyses that could be performed on the data received. These real-life features of a pragmatic trial are acknowledged here and in the methodological literature (see Oxman *et al,* 2009; White, 2011).

The individual performance of Clinical Supervisors, as reported by Supervisees in this study, and vice versa, was mediated by the organizational culture in which they were expected to be at the vanguard of a nursing practice innovation (see Greenhalgh *et al,* 2004). Good Supervisors were as unlikely to achieve a desired CS effect in unhealthy cultures, as were poor Supervisors in healthy cultures. From a descriptive point of view, across Intervention and Control Arm settings over time, only small changes were seen in either direction. Thus, an *overall* positive systematic relationship between CS, quality of nursing care and patient outcomes could not be statistically established in this RCT. However, absence of evidence, is not evidence of absence (see the earlier related reference to Type II Error). Randomised controlled clinical trials that do not show a significant difference are often called 'negative'. This term wrongly implied that a study had shown that there was no difference, whereas usually all that had been shown was an absence of evidence of a difference (Altman and Bland, 1995). Indeed, in one location, a private sector mental health service provider, all outcome measures *were* found to move in a significantly positive direction and in an intuitively convincing manner. Both the Psychiatric Care Satisfaction Questionnaire and the Perception of Unit Quality instruments, revealed statistically significant improvements over the period of 12 months.

Implications for practice development and future evaluations

A number of factors were identified in this positive location which, given appropriate parsimony and mindful of the relevant literature (see Fixsen *et al,* 2005), appear to be pertinent and indicate the best generic contemporary advice available for practice development and/or a framework for focussed evaluation strategies in the future (White and Winstanley, 2010b), sufficient to be tested in other environments. The culture of such an evaluation environment should be characterised by a prevailing *measure-theorise-modify-retest* approach to practice development. First, select a single, discrete clinical location and agree an explicit, unified, positive position on CS that can be owned by *all* levels of Management. Then, carefully identify Clinical Supervisor candidates and educationally prepare them to the standard demonstrated in this RCT. Recruit *all* staff in the clinical setting to participate in CS, according to standard protocols for size, frequency, length, ground rules and so on. If the model of CS involves groups, ensure that fewer than nine Supervisees are allocated to one Supervisor per session and retain as many of the Supervisees as possible (>90%) over the period of data collection (not less than one year). Deliver sustained, efficacious CS (indicated by a median Supervisee Total MCSS© score of >136) and support Supervisors with their own regular CS sessions.

Conclusions

Located within an emergent literature on the outcomes of Clinical Supervision, novel findings reported here have made incremental headway toward helping to establish an empirical evidence base for some of the claims made about CS. Indeed, the latest scholarly review of the international CS literature (Watkins, 2011) identified this pragmatic RCT as 'one of three studies conducted over the last 30 years, that provide the best and clearest directions for further thought about conducting future successful research in the supervision-patient outcome area'. It confirmed the importance of the prevailing health service management culture in the outcome of implementation attempts and identified factors that appeared to have the capacity to both advantage and thwart positive outcomes for staff and patients. It revealed evidence that Supervisees valued, and gained benefit from, demonstrably efficacious Clinical Supervision. The effect this may have on the quality of care and patient outcomes was able to be demonstrated in a controlled setting within this RCT, but remained elusive to demonstrate across a broad front. Plausible explanations have been have been articulated and a framework for future research has been suggested. Thus, whilst these original substantive insights and theoretical propositions were derived from mental health nursing, in a single geographic location, they may resonate internationally for other mental health professions and offer the opportunity to apply and evaluate these in future attempts to strengthen the evidence base for Clinical Supervision.

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