

Effectiveness of Allied Health Clinical Supervision

A Cross-Sectional Survey of Supervisees

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OBJECTIVE: Clinical supervision (CS) is widely used by allied health (AH) professionals, although with limited supporting research evidence. The aim of this study was to evaluate the effectiveness of CS for AH professionals in a regional health setting and to investigate differences in CS perceptions between AH disciplines. **METHODS:** Within a participatory action research project, a quantitative cross-sectional survey was distributed to AH professionals at a regional Australian health service. Data were collected using the Manchester Clinical Supervision Scale (MCSS-26), and differences between disciplines were analysed with independent-samples t-tests and one-way between-groups ANOVA. Of a possible 258 participants, 106 responded to the survey (response rate 41%). The action research group assisted with the interpretation of findings. **RESULTS:** The total mean for MCSS-26 scores across AH was 78.5 ± 13.9 (SD), which is above the recommended threshold score for effective CS (73). There were statistically significant differences in total scores between occupational therapy (82.8 ± 14.4) and physiotherapy (70.9 ± 11.3) and in the formative and restorative domains. **CONCLUSIONS:** While CS was perceived to be effective, there were significant differences between some disciplines. The findings demonstrate that CS is effective when it is practised within a structured framework; however, flexible models of CS across disciplines need to be explored. *J Allied Health* 2018; 47(2):126–132.

CLINICAL SUPERVISION (CS) is a process of providing AH professionals with support to enhance their professional development and ensure safe and quality patient care.¹ CS has been identified as an important component of support for allied health (AH) professionals in rural and regional settings of Australia, often to address issues of geographic and professional isolation.² Whilst there is general agreement relating to the value of CS, recent systematic reviews on CS in AH indicated

relatively few studies, resulting in the conclusion that the evidence is limited,^{1,2} especially considering the impact of CS on improved patient safety outcomes.³ Further evaluation of CS implementation is required to inform education, policy development, and implementation frameworks, particularly for AH professionals in rural and regional settings.^{2,4} While AH is commonly referred to as a comparable entity, it is made up of many professions, each with differing graduate entry education, practice settings, and governance.⁵ Different cultures within AH professions impact the delivery of CS, with varying expectations for access to CS, its processes, and the availability of training and resources to support its implementation.^{1,2}

Various theoretical models have been developed to support CS. Proctor's Interactive Framework of Clinical Supervision has been increasingly cited in research,^{1,6,7} following the development of a validated questionnaire, the Manchester Clinical Supervision Scale (MCSS), based on this model.⁸ Proctor's model describes the functions of CS as being comprised of three domains:

- normative, comprising compliance with policies and procedures and professional issues such as ethics and confidentiality;
- formative, involving the development of clinical skills and embedding evidence-based practice; and
- restorative, whereby the supervisee is supported to manage the emotional demands of practice.^{1,8}

In 2011, the MCSS was modified and validated in an AH context and renamed the MCSS-26.⁹

Some Australian studies have recently used the MCSS-26 to measure the effectiveness of CS for AH professionals.^{6,10–13} No conclusive differences in the effectiveness of CS between discipline groups were reported. In a study involving metropolitan, hospital-based AH professionals, supervision was perceived to be effective for social workers, occupational therapists, and psychologists, but its effectiveness was inconclusive for physiotherapists, dietitians, speech pathologists, and podiatrists.^{12,13} In a study of rural and regional AH professionals, the effectiveness of CS was relatively consistent across disciplines.¹⁰ In another

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study, it was consistent across most disciplines except for social workers and psychologists, who rated the CS that they received as more effective than other disciplines.⁶ In the majority of the studies, AH supervisees identified that finding time to participate in CS was a barrier to effectiveness.^{6,10-13}

The health service in regional Australia employing around 300 AH professionals was seeking to address inconsistencies between disciplines through the implementation of a common AH-wide CS framework, developed using existing Australian CS frameworks for AH.¹⁴⁻¹⁶ Some AH disciplines, such as occupational therapy, had implemented elements of the CS framework previously, such as CS guidelines, agreements, and templates for documentation, while other disciplines, including physiotherapy, had not. To help address inconsistencies in the understanding of the effectiveness of CS for AH professionals, an action research project was designed to evaluate a new CS program at the health service. The framework includes an outline of expectations about roles and responsibilities, documentation, use of CS agreements between supervisors and supervisees, and confidentiality in CS. The health service sought to evaluate the current effectiveness of CS across AH professionals to inform the implementation of the framework. An initial training session to promote the new framework was conducted and attended by 90 AH staff. A further rationale for the study was that a baseline, analysis of attitudes to CS would contribute to the existing empirical literature, particularly with respect to regional geography and discipline differences. The aim of this study was to determine the effectiveness of CS for AH professionals at a regional health service from a supervisee's perspective. A secondary aim was to investigate any differences across AH disciplines in the effectiveness of supervision.

Methods

Design

The design of this study was participatory action research. Action research involves practitioners in cycles of action and change which lead to the creation of knowledge that is practice-based in nature, which makes it highly useful in improving practice and policies.¹⁷ The action research process was guided by a reference group who were purposely selected and consisted of AH managers at the regional health service and who could assist with the interpretation of the findings and with knowledge translation to support proposed changes. The MCSS-26 survey was used to collect the quantitative data. Reported in this paper are the findings of an initial iteration of the MCSS-26 survey. Human research ethics committees from the relevant health service and La Trobe University approved the study (approval no. LNR/15/BHCG/26).

Recruitment

The survey was distributed to AH professionals at a regional Australian health service employing AH staff across hospital, community, and mental health-based settings. Participants were from the disciplines of physiotherapy, occupational therapy, social work, speech pathology, dietetics, psychology, podiatry, exercise physiology, audiology, and AH assistance, and they ranged in experience from early graduates (Grade 1 AH professionals) to senior clinicians (Grade 3 and 4 AH professionals) and discipline managers. A link to the on-line survey was sent to participants by the relevant AH Head of Discipline. Participation in the survey was voluntary and data were non-identifiable. Disciplines for which fewer than 10 responses were received were pooled prior to analysis to reduce the risk of participants being identifiable. To be eligible to complete the survey, AH professionals had to be currently receiving CS (which could be either structured, e.g., reflective-based CS, or informal, e.g., oversight at the point of care, or a combination of both) and have participated in a minimum of six CS sessions.¹⁸ The survey instructions asked participants to reflect on the CS that they were currently receiving.

Outcome Measures

In 2011, the MCSS tool was revised using Rasch analyses using data from nursing and AH cohorts, resulting in a reduction in the number of items contained.^{9,10} The tool was renamed the MCSS-26 and this version has been found to have high test-retest reliability.¹⁰ The MCSS-26 has 26 items relating to Proctor's Interactive Framework of CS. Each of the domains is made up of two subscales. The *normative* domain subscales are the importance/value of CS and finding time; the *restorative* domain subscales are trust/rapport and supervisor advice/support; and the *formative* domain subscales are improved care/skills and reflection. The items are rated on a 5-point scale from "strongly disagree" (0) to "strongly agree" (4). Total MCSS-26 scores can range from 0 to 104, with larger scores reflecting a higher level of perceived CS effectiveness for the supervisee. An overview of the MCSS-26 tool is provided in Table 1. The MCSS-26 tool also includes questions relating to the demographics of the participants (supervisees), their supervisors, and the characteristics of their CS sessions. Participants were also asked whether they had attended CS training provided by the health service.

Data Analysis

All available data were analysed. Descriptive data, including MCSS-26 total scores and summed domain and subscale scores, were reported as mean \pm SD values with 95% confidence intervals (CI). Frequency data

TABLE 1. Overview of the MCSS-26 Survey Tool

MCSS-26 Domains and Subscales	No. of Questions	Possible Range	Domain and Subscale Focus
Normative domain			
Importance/value of CS subscale	5	0–20	Importance of receiving CS and whether the CS process is valued or necessary to improve quality of care.
Finding time subscale	4	0–16	
Normative domain summary score	9	0–36	Time available for the supervisee to attend CS sessions.
Restorative domain			
Trust/support subscale	5	0–20	Level of trust/rapport with supervisor during CS sessions and ability to discuss sensitive or confidential issues.
Supervisor advice/support subscale	5	0–20	
Restorative domain summary score	10	0–40	Extent to which the supervisee feels supported by the supervisor and a measure of the level of advice and guidance received.
Formative domain			
Improved care/skills subscale	4	0–16	Extent to which the supervisee feels that CS has affected their delivery of care and improvement in skills.
Reflection subscale	3	0–12	
Formative domain summary score	7	0–28	How supported the supervisee feels with reflecting on complex clinical experiences.
MCSS-26 summed domain total	26	0–104	

were reported as number (*n*) with percentage (%), representing valid responses. Differences between groups were analysed with independent-samples *t*-test (*t*) and one-way between-groups ANOVA. The analysis of MCSS-26 domain and subscale scores was performed for physiotherapy (PT) and occupational therapy (OT), whose differences were close to statistical significance and which had sample sizes close to the recommended MCSS-26 minimum sample size of 30.¹⁸ All analyses were performed using SPSS version 23 (IBM-SPSS, Armonk, NY, USA).

Results

Responses

Of the 258 AH staff eligible to participate in the survey, there were 106 survey responses, resulting in a response rate of 41.0%. There were missing data for 3 responses for 13 of the 26 MCSS-26 questions, and a further 3 responses missing for the demographic data, resulting in 100 complete responses (*n*=100). The missing data were evenly spread across groups.

Participant Characteristics

The AH professionals were mostly young (mean age 35.1 ± 10.0 yrs) and female (*n*=89; 89%). Forty-six (46%) were employed in community-based settings and 38 (38%) in a hospital setting, with most working within adult specialties (*n*=70, 70%) or in mental health services (*n*=14, 14%). Forty-two supervisees (42%) indicated that they had attended the CS training conducted a month prior to the survey. Over half of the participants were either OTs or PTs. Two other disciplines (social work and dietetics) had >10 participants each. The remaining disciplines that had <10 participants were pooled together for data analysis, resulting in 23 (22%) partici-

pants in the “other” category. The characteristics of the participants are summarised in Table 2.

CS Characteristics

Most supervisors were allocated to supervisees (*n*=83, 83%) by their manager within their clinical speciality or program area. Supervision sessions were commonly conducted monthly, for 46–60 minutes and on a one-to-one basis. The characteristics of supervision sessions are summarised in Table 3.

MCSS-26 Results

Overall, CS was perceived to be effective (Table 4), with the average MCSS-26 score (78.5 ± 13.9, 95% CI=75.7–

TABLE 2. Supervisee Characteristics (*n*=100)

	No. of Participants	%
Sex		
Male	11	11
Female	89	89
Staff grade		
Grade 1	18	18
Grade 2	55	55
Grade 3	19	19
Management	5	5
Other	3	3
Discipline		
OT	30	30
PT	25	25
Social work	11	11
Dietetics	11	11
Speech pathology	9	9
Psychology	4	4
Podiatry	3	3
Exercise physiology	3	3
Other	4	4

TABLE 3. Characteristics of Supervision Sessions (n=100)

	No. of Participants	%
Frequency of supervision sessions		
Weekly	3	3
Fortnightly	15	15
Monthly	61	61
2–3 months	16	16
>3 months	5	5
Location of supervision session		
Within the workplace	89	89
Away from the workplace	4	4
Both	7	7
Type of supervision		
One to one	96	96
Triad	1	1
Group	1	1
Other	2	2
Duration of supervision sessions		
<15 mins	2	2
15–30 mins	8	8
31–45 mins	10	10
46–60 mins	70	70
>60 mins	10	10

81.2) higher than the published efficacy threshold score for effective supervision (mean score 73). The normative MCSS-26 domain was slightly lower than the restorative and formative domains. Of the two subscales that make up the normative domain, the “finding time” subscale was relatively lower than the “importance/value of CS” subscale, indicating that while participants could see the importance and value of CS, they had difficulties finding time for CS. There was no significant difference in total MCSS-26 scores for those who attended prior supervision training (77.4 ± 14.1) and those who did not (79.0 ± 13.7; $t = -0.6$, $p = 0.7$).

The ANOVA analysis relating to the impact of discipline (pooled for disciplines with <10 responses) on MCSS-26 scores had a statistically significant difference

in MCSS-26 scores across three of the five groups ($F = 5.2$, $p = 0.001$). PTs (70.9 ± 11.3) reported significantly lower scores than OTs (82.8 ± 14.4) and the pooled “other” category (83.6 ± 12.2). Dietitians (70.4 ± 12.0) also had significantly lower scores than those in the “other” category and OTs but this did not meet statistical significance. Although social workers (81.3 ± 13.6) reported relatively high scores compared to PTs and dietitians, this did not reach statistical significance.

Comparison of the larger discipline groups of PT and OT resulted in a statistically significant difference for total MCSS-26 scores (Table 5). There were statistically significant differences between these two disciplines in both the restorative and formative domains. Within the restorative domain, OTs scored higher in the subscale of “trust/rapport” and this reached statistical significance. Differences in both of the subscales within the formative domain, “improved care/skills” and “reflection,” were statistically significant between the two disciplines. Both OTs and PTs had difficulty with finding time to participate in CS.

Discussion

Overall, CS was perceived to be effective for participants in this study, with total MCSS-26 scores and 95% CI higher than the published norms for AH professionals (74.7 ± 11.0).⁹ The normative domain and the associated “finding time” subscale scored lower when compared with the other domains and subscales. The mean MCSS-26 score was slightly higher than was found in recent Australian studies involving similar AH disciplines.^{9,10} The study’s findings provide support for previous research evidence indicating that while AH professionals value the importance of CS, including its benefits for supervisee support and development, they find quarantining time to participate in CS challenging.

The mean total MCSS-26 scores were above the recommended efficacy threshold and published norms for participants from OT, social work, and the “other”

TABLE 4. MCSS-26 Total, Domain, and Subscale Scores for all AH Disciplines

MCSS-26 scores	Possible Range	Mean*	95% CI	Mean* (out of 100)	95% CI (out of 100)
Total	0–104	78.5 ± 13.9	75.7 – 81.2	75.4 ± 13.4	72.8 – 78.1
Normative domain					
Importance/value of CS	0–20	16.9 ± 2.4	16.4 – 17.4	84.5 ± 12.0	82.0 – 87.0
Finding time	0–16	9.7 ± 3.2	9.1 – 10.4	60.6 ± 2.0	56.9 – 65.0
Restorative domain					
Trust/support	0–20	15.1 ± 3.6	14.4 – 15.8	75.5 ± 18.0	72.0 – 79.0
Supervisor support/advice	0–20	14.9 ± 4.3	14.1 – 15.8	74.6 ± 21.5	70.6 – 79.0
Formative domain					
Improved care/skills	0–28	21.8 ± 4.6	20.9 – 22.7	77.9 ± 16.4	74.6 – 81.1
Reflection	0–12	12.4 ± 2.8	11.9 – 13.0	77.6 ± 17.6	74.3 – 81.2
	0–12	9.4 ± 2.3	9.0 – 9.9	78.3 ± 19.2	75.0 – 82.5

*Data given as mean ± SD.

TABLE 5. Comparison of MCSS-26 Scores for OT and PT

MCSS-26 scores	PT Mean (n=25)	PT Mean (out of 100)	OT Mean (n=30)	OT Mean (out of 100)	p-Value
Total	70.9 ± 11.3	68.1 ± 10.9	82.8 ± 14.4	79.6 ± 13.9	0.001*
Normative domain	25.1 ± 4.5	69.7 ± 12.6	27.6 ± 4.9	76.7 ± 13.6	0.051
Importance/value of CS	15.6 ± 2.1	78.0 ± 10.6	17.1 ± 2.5	85.6 ± 12.5	0.024*
Finding time	9.4 ± 3.3	58.7 ± 20.6	10.6 ± 3.2	66.2 ± 20.0	0.221
Restorative domain	26.6 ± 6.7	66.5 ± 16.8	31.6 ± 7.7	79.0 ± 19.3	0.014*
Trust/support	13.2 ± 3.4	66.0 ± 17.0	15.8 ± 3.7	79.0 ± 18.5	0.009*
Supervisor support/advice	13.4 ± 4.2	67.0 ± 21.0	15.8 ± 4.3	79.0 ± 21.5	0.046
Formative domain	19.2 ± 4.0	68.6 ± 14.3	23.7 ± 3.8	84.7 ± 13.6	<0.001*
Improved care/skills	11.0 ± 2.9	68.8 ± 18.1	13.4 ± 1.8	83.6 ± 11.3	0.001*
Reflection	8.2 ± 1.8	68.3 ± 15.0	10.2 ± 2.3	85.0 ± 19.2	0.001

Data given as mean ± SD. *Significant difference at $p < 0.05$.

group (which was primarily made up of speech pathologists, psychologists, exercise physiologists, and podiatrists). The results for OT and social work were similar to those reported in the study involving metropolitan AH professionals.¹² Two disciplines, PT and dietetics, had relatively low scores and both were below the efficacy threshold for effective CS. These results align closely with those reported in the study involving the effectiveness of CS for metropolitan AH professionals,^{12,13} whereas they contrast with the study of rural South Australian AH professionals in which it was reported that there was little variability across AH disciplines in MCSS-26 scores.¹⁰ The organisational structure for the current study was more similar to that described in the study of metropolitan AH,^{12,13} which may indicate that organisational size and structure could have contributed to differences in the effectiveness of CS across AH disciplines.

The statistically significant difference in scores between OT and PT builds on the findings of other recent studies' reported variation in the effectiveness of CS across these disciplines.^{12,13,19} This study indicates that, although PTs and OTs both valued and perceived the importance of CS, OTs were more likely to believe that CS improved their skills and the service they provided. OTs perceived that they were supported to reflect on their practice and were able to discuss sensitive or confidential issues with their supervisor. The CS guidelines historically used at this regional health service by OTs were consistent with the new CS framework promoted by the CS training and had been in place for at least 5 years. For PTs, CS occurred on more of an *ad hoc* or informal basis, and it was less common to use structured CS and agreements.

It has been proposed that for CS to be effective, it needs to occur within a structured framework.^{4,11} Saxby et al.¹¹ found that AH professionals who used best practice approaches, such as having CS agreements, providing choice of their supervisor, and attending CS training, rated their CS to be more effective than those who

did not utilise these approaches. Several authors have suggested that disciplines that have a strong emphasis on counselling skills in their undergraduate training, including psychology, social work, and OT, may be more likely to report effective CS,^{6,12,13} perhaps explaining the differences found between OTs and PTs in this study. At this regional health service, the action research reference group is overseeing the implementation of an AH-wide CS framework, supporting training, and promoting a safe, protected, and structured environment. This may assist all disciplines, particularly PTs, to feel supported, allowing the discussion of sensitive or confidential issues and to reflect on complex clinical experiences.

The differences in effectiveness of CS across disciplines may be influenced by whether effectiveness is viewed from the perspective of the supervisee or that of the supervisee's accountability to the health service and patients.⁴ While two recent qualitative studies involving PTs and OTs reported that there were similar themes around what supervisees perceive to influence the effectiveness of CS, there was a lack of consensus relating to the relationship between CS and operational management. In the study involving OTs,²⁰ participants expressed a preference to keep CS separate from line management. The study of PTs contended that CS should not be separated from the performance appraisal process because the needs of supervisee learning and development are not identified.²¹ Leggat and colleagues²² examined the views of clinicians and managers from a range of AH disciplines relating to the content of CS and reported that CS may not be addressing organisational requirements for clinical governance because participants disagreed as to whether unsafe practice should be reported to managers. These previous findings vary from aspects of many CS frameworks that promote supervisee choice of supervisor and provide a separation of CS and line management processes.^{11,23} A systematic review focusing on the impact of CS on patient safety by Snowdon et al.³ reported that there was a lack of empirical evidence for CS influencing patient outcomes for non-med-

ical health professions. While the current study and a number of other recent AH studies using the MCSS-26 relate to perceived effectiveness of CS from a supervisee perspective, these perspectives are not necessarily directly transferrable to improved organisational clinical governance or patient safety and quality of care.^{3,22}

The challenge of finding time for CS for participants in this study is consistent with results of other studies using the MCSS-26.^{6,10,12,13,19} This may be due to the challenges facing health professionals working in public health environments, including managing the needs of clients with complex health needs with limited resources.²⁴ Clinicians and managers need to promote a culture of valuing CS and enable protection of time for CS,^{6,12,13,19} supported by the development of consistent CS policies by health services and professional bodies.^{4,12} Considering alternative CS methods, such as group supervision, may be worthwhile, particularly in rural and regional settings where there may be limited access to supervisors. A study involving peer-group CS for AH professionals in Queensland, Australia, found that this method of CS is effective provided the peer-groups are structured and evaluated, regardless of whether the groups were discipline-specific or multi-disciplinary or in rural and regional or metropolitan settings.²⁵ As an implication for practice, a possible suggestion may be that similar approaches could be considered to enhance access to CS, improve the efficiency of its delivery, and provide a more flexible model for AH professionals.

The characteristics of how CS is provided at this health service are typical of those reported by AH professionals in other settings, with a predominant model of one-to-one supervision,^{1,2,6,10,11} provided for up to an hour on a monthly basis.^{10,12,13} While the response rate was relatively low, it is consistent with the range of response rates reported in other AH survey studies. A limitation of this study was the relatively low number of participants in some AH discipline groups. More detailed bivariate analysis was possible only for the larger discipline groups, including OT and PT, for which the highest number of responses was obtained. Another limitation is that the MCSS-26 tool does not capture the perspective of those who are not accessing CS or the perspectives of supervisors and managers. While the reference group helped to gain the perspective of AH managers in this study, the AH managers may have been biased toward focusing on issues relating to clinical governance. Qualitative approaches to data collection are required to address these limitations and will be considered as a part of this study's ongoing participatory action research design.

Conclusion

Clinical supervision for AH professionals in this regional Australian setting was perceived to be effective

for supervisees. There were significant differences in the effectiveness of CS across disciplines, particularly between OTs and PTs. The findings of this study are consistent with those of other studies in that CS is more effective when it occurs within a structured framework. Future research is needed to evaluate models that allow flexible delivery of CS for AH in rural and regional settings. Longitudinal studies are required to observe the effect of CS implementation frameworks over time.

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