



National Centre for Education and Training on Addiction

NCETA Discussion Paper No. 1

**Goal Setting with Individuals and Teams: Implications for Transfer
of Training and Evidence-Based Practice in the AOD Field**

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March, 2003

The NCETA Discussion Papers

The NCETA discussion paper series contain reviews, critical discussions, and research reports focused primarily on key workforce development¹ issues for the Alcohol and Other Drugs (AOD), public health and related fields such as law enforcement. Discussion papers relating to other topical issues in the alcohol and other drugs field may be produced on occasion.

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¹ The central aim of workforce development is to facilitate and sustain systems, organisational, and individual factors that contribute to effective responses to AOD issues.

Abstract

Workforce development is a relatively new notion to the AOD field. As such, it is crucial that models and theories are developed to guide and structure our understanding of this multi-faceted area. Within Organisational Psychology goal setting represents one of the most widely researched and empirically supported approaches to managing work practice. Team-based approaches to work practice are common in many frontline AOD professions (e.g., nursing and policing). Therefore this paper will focus on the potential benefits of goal setting for two key work practice issues in the AOD field: (a) enhancing the effective transfer of training into workplace practice and (b) facilitating the use of an evidence-based approach to work practice.

A case study illustration is provided to highlight the application of key principles of goal setting in a clinical situation.

Since the notion of workforce development is relatively new to the AOD field it is crucial that models and theories are developed to guide and structure our understanding of this multi-faceted area. Roche (2001) has provided a broad 3-level model of workforce development incorporating systems, current workers and the future workforce. Clearly each level does not exist as an independent “silo”, rather they exist in relationships of mutual influence and interaction – the influential power of systems (e.g., policy) on current and future workforce perhaps being the most obvious. We also need to develop an understanding of how workforce development best operates within each of these levels. This paper focuses on workforce development for current AOD workers.

As Roche’s model highlights, workforce development takes a systems approach to improving the functioning of professionals in the AOD field. Systems in which current workers operate can be understood in terms of both the policies and regulations that influence their work, the work environment and culture. Just like any human behaviour, the factors that influence work practice are complex and varied. Workforce development in the AOD field can gain much by looking to theory and research in the field of Organisational Psychology which is focused predominantly on this very issue.

Within Organisational Psychology goal setting represents one of the most widely researched and empirically supported approaches to managing work practice. Goal setting theory is a particularly useful model for understanding workforce development for current workers as it:

- (1) is a technique familiar to many AOD workers in the context of psychological treatments of individuals with AOD dependence
- (2) considers behaviour as a function of individual (ability, skills and attitudes) and environmental (workplace systems of performance feedback and rewards) factors
- (3) has been successfully applied to the operation of groups and teams.

Team-based approaches to work practice are common in many frontline AOD professions (e.g., nursing and policing). Therefore this paper will focus on goal setting with teams as a model for understanding workforce development in the AOD field. The applicability of team goal setting to workforce development will be demonstrated in relation to two key issues for the AOD field:

- (a) enhancing the effective transfer of training into workplace practice
- (b) facilitating the use of an evidence-based approach to work practice.

Theory and research on training transfer and evidence-based practice focus to a large extent on the individual employee. The dominant model of evidence-based practice in the current medical literature presents a view of the individual practitioner engaging in a complex decision making task of balancing their clinical expertise with actively seeking the best available empirical evidence. This view is reflected in Sackett et al.'s (1996) definition of evidence-based medicine as: "*[the process of] integrating individual clinical expertise with the best available external clinical evidence from systematic research*". In contrast, the transfer of training literature has increasingly focused on organizational climate and support issues (Goldstein & Ford, 2002), although these issues are generally approached from the perspective of placing the individual employee in the context of a broader system. The group goal setting literature offers one model of how transfer of training and evidence-based practice techniques could be effectively developed for teams and work groups in the AOD field.

Goal Setting: an Overview of the Theory

Goal setting theory is founded on the principle that performance increases with greater goal difficulty given adequate levels of goal commitment and ability (Latham & Locke, 1991; Locke & Latham, 1990). This effect is particularly evident with specific difficult goals rather than general "do your best" goals (Latham & Locke, 1991). Specific and difficult goals

influence three key aspects of successful performance (Latham & Locke, 1991; Locke & Latham, 1990):

- direction of attention/effort towards task-relevant behaviours and actions
- investment of effort and energy in goal-relevant behaviours
- persistence in goal-related striving in the face of difficulties or obstacles.

Three additional considerations have been identified as crucial for successful goal setting: goal commitment, performance feedback and task complexity.

Goal commitment

A number of meta-analyses and reviews have supported an expectancy-value model of goal commitment (Klein, 1991; Locke, Shaw, Sarri & Latham, 1981; Wofford, Goodwin, & Premack, 1992). Specifically, goal commitment is a function of the expectancy that a goal can be achieved and the attractiveness (value) of goal attainment. In the goal-setting literature expectancy of goal attainment is commonly operationalized in terms of self efficacy (Klein, 1991). Key determinants of goal attainment attractiveness include participation in goal-setting, provision of performance feedback (see following section), self-confidence, group norms, and the provision of incentives (see Skinner 2002 for a more detailed explanation).

Performance feedback

Goal setting and performance feedback go hand in hand. Without feedback, goal setting is not effective (Latham & Locke, 1991; Locke & Latham, 1990; see Neubert, 1998 for a meta-analysis). Performance feedback can be provided on both the outcome of goal-related striving (i.e., successful attainment or failure to obtain a desired level of performance), and the process of striving to achieve a goal. Process related feedback can address (a) the

effectiveness of performance strategies or plans put into place to achieve a goal, and (b) the achievement of short term goals representing incremental progress towards the final goal.

Task complexity

Process feedback is particularly important for complex or difficult tasks. Setting specific and difficult goals for complex tasks may interfere with performance by encouraging a focus on the desired outcome rather than the most effective strategies to reach that point (Locke & Latham, 1990). Providing feedback on task strategies and their effectiveness can overcome this effect.

The combination of a complex task and setting difficult goals may also have a significant negative impact on self confidence (i.e., perceived capacity for goal attainment) and hence reduce goal commitment (Locke & Latham, 1990). Providing feedback matched to short-term (incremental) goals is a useful strategy to increase confidence and commitment. Stock and Cervone (1990) identify three mechanisms through which short term goals may assist in achieving desired levels of performance:

- assigning, and subsequently attaining, a short-term goal enhances self-efficacy in relation to obtaining the longer-term goal
- attaining a short-term goal enhances feelings of satisfaction in relation to one's progress on the task
- short term goals facilitate persistence.

Goal Setting With Teams

Goal setting theory was largely developed with a focus on the performance of individuals. More recent work has increasingly focused on goal setting for teams and groups reflecting a growing trend to focus on work groups and teams in organizations across a variety of fields. This is particularly relevant for workforce development in the AOD field in which team-based approaches to work practice are common in many frontline AOD professions (e.g., nursing and policing). The basic principles of goal setting for individuals and teams are very similar. For example, the foundation of successful team goal setting remains in setting specific team performance goals of sufficient difficulty rather than easy or vague “do your best” goals (Weldon & Weingart, 1993). It is beyond the scope of the current paper to present an in depth analysis of team goal setting. Rather, the potential benefits of team goal setting for transfer of training and evidence-based practice will be discussed, followed by an overview of the key considerations to ensure effective goal setting with teams.

Team goals vs individual goals – which has the greatest impact on motivation and performance?

Balancing individual and team goals is particularly challenging. A simple additive relationship does not exist between individual and team goals. For instance, when team performance requires cooperation between group members, assigning a team performance goal and separate individual performance goals is likely to result in team members focusing predominantly on their individual goals to the detriment of the overall team’s performance (Crown & Rosse, 1995; Mitchell & Silver, 1990). In other words, actions of greatest benefit to an individual’s performance may not be the most effective or efficient strategies to achieve the broader team goal. When teams are performing tasks that require significant cooperation and interdependence a more effective approach is likely to be setting individual goals focused on maximising each member’s contribution to the team’s capacity to perform

effectively in addition to an overall team goal (Crown & Rosse, 1995). In this way, the team's performance is made the priority, rather than each team member focusing exclusively on his or her particular input and performance.

The previous analysis suggests that the first step in an effective goal-setting program is to decide the nature of the task. This decision is crucial to the effectiveness of a goal setting program as it indicates the most effective approach to providing feedback and incentives (i.e., group, individual or at both levels). If a task requires a great deal of cooperation and interdependence between team members, then the most effective approach to goal setting would be an overall group goal plus individual member goals that focus on maximising each individual's contribution to the team's effectiveness. Feedback and incentives then need to be provided at both the team and individual level. The importance of a two-pronged approach is supported by Crown and Rosse's (1995) finding that team performance was highest when team members reported a high commitment to both individual and team performance.

Why Team Goal Setting – What are the Potential Benefits?

Increased Effort Directed Towards Goal-Relevant Activities

As with individual goals, team goals are suggested to motivate team members to direct more energy and attention towards achieving the desired team outcome (Weldon & Weingart, 1993). There is evidence that when working on tasks requiring coordination and cooperation between team members, setting team goals results in higher performance compared to a team operating without any goals or performance goals for individual members (Crown & Rosse, 1995; Mitchell & Silver, 1990; Weldon & Weingart, 1993). The relationship between increased effort and improved performance is quite straightforward for easy or simple tasks. As outlined above, with complex tasks effective planning and coordination become

increasingly important for effective performance. For example, the performance of complex tasks is likely to be facilitated by the development of task performance strategies (e.g., prioritization of tasks), clear delineation of roles and tasks amongst team members, careful time management, and the use of short-term goals and performance feedback strategies as discussed previously.

Cooperation, helping behaviours and morale building communication

Team goals provided in combination with group-level feedback and incentives are likely to encourage team members to develop a sense of shared purpose and mutual gain. Therefore, team goal setting is also likely to lead to increased cooperation between team members, an increased frequency in helping behaviours, and a greater use of morale building communication (e.g., pep talks to encourage and motivate) between team members (Crown & Rosse, 1995; Mitchell & Silver, 1990; Weldon & Weingart, 1993; Wright, George, Farnsworth, & McMahan, 1993).

Implications for transfer of training and evidence-based practice

The transfer of training literature emphasises the importance of organisational support (often referred to as the transfer climate). This concept is most often operationalized in terms of the support and reinforcement provided by managers and supervisors training transfer (cf. Goldstein & Ford, 2002). There is also evidence, however, that support provided by work colleagues exerts a significant impact on transfer of training (Goldstein & Ford, 2002). Goal setting research suggests that team goal setting is likely to be an effective method of building organisational support for training transfer. Lack of organisational support has also been identified as a barrier in the implementation of evidence-based practice. A range of difficulties and barriers to implementing evidence-based practice have been identified (cf. Colyer & Kamath, 1999; Kitson et al, 1996; Rosenberg & Donald, 1995) which include a lack

of support from colleagues and supervisors. As with training transfer, team goal setting has the potential to play an important supportive role in changes and improvements to work practice.

Planning and Coordination

There is some evidence to suggest that a difficult, compared to easy, team goal encourages team members to engage in more communication, coordination and planning which leads to higher levels of performance (Weldon, Jehn, & Pradhan, 1991). There is also evidence demonstrating that team goals encourage individuals to revise or adapt their task-performance strategies, these changes in turn are associated with higher levels of performance (Weldon et al., 1991; Weldon & Weingart, 1993). It must be acknowledged, however that these effects have been demonstrated in laboratory experiments using tasks such as brainstorming. The degree to which such relationships transfer to the workplace where there are greater demands on employees' time and resources is not known.

Implications for transfer of training

It has been well established that self-management training involving goal setting and the development of strategies to overcome potential obstacles or difficulties for goal attainment is an effective method of increasing training transfer (cf., Gist, Bavetta, Stevens, 1990). The research of Weldon and colleagues reminds us that *self*-management training may need to be supplemented by *team*-management training to enhance a team's transfer of knowledge, skills and abilities from training into work practice. The emphasis here must be on the capacity of the team members working together as a team to set appropriate goals (short or long term), identify effective strategies for planning and coordinating training transfer, and ensure access to feedback on training transfer at the overall team and individual team member levels. Particularly in the case of complex work practices that require significant

coordination or cooperation between team members, Weldon and colleagues' research suggests significant transfer benefits may be gained from team-management training focusing on the development of team plans and strategies, and procedures to evaluate, change and adapt plans to improve performance.

Implications for evidence-based practice

One approach to evidence-based practice is the adoption of evidence-based clinical guidelines into work practice. Weldon and colleagues' research suggests that translating clinical guidelines into team goals is likely to stimulate the development of team strategies to achieve such goals, which in turn should result in a change to work practice in the required (evidence-based) direction.

What are the Key Considerations for Setting Effective Goals with Teams?

Participation in goal setting

As with goal setting with individuals, the benefits of team member participation in goal setting, compared to receiving an assigned goal from a supervisor or manager, is a matter of some debate. From their review, Weldon and Weingart (1993) conclude that for both assigned and participatory goal setting commitment and acceptance are more likely when the process of setting the goal is perceived to be fair and legitimate. In a more recent review Wegge (2000a) argues that when a high degree of interdependence between team members is required, participation in goal setting does provide significant performance and motivational benefits (e.g., higher team cohesion, commitment and strategy development). In Wegge's model, participation in goal setting facilitates identification with the team (and its goal), team cohesion, commitment to the team and the development of strategies for

individual and team performance. It is factors such as strategy development, team commitment and cohesion etc that directly contribute to successful team performance.

Commitment to the team goal

As with goal setting for individuals, commitment to a team goal is generally understood in an expectancy-value framework. Specifically, commitment is a function of the expectancy that goal attainment is possible, and the attractiveness or value placed on reaching the team goal (Weldon & Weingart, 1993). The attractiveness of the team goal is influenced by the value of team membership for the individual (reinforcement of positive social identity by being a member of a successful or highly regarded group), and the sense of achievement and success experienced by individual team members when the team as a whole achieves its goal. High levels of team cohesion are suggested to enhance both the value of team membership and the rewards individual team members gain from team success (Weldon & Weingart, 1993). The antecedents of team cohesion and the dynamics of group identity and membership are beyond the scope of the current paper. Nevertheless, as the case study described below shows, participating in goal-setting (regardless of team cohesion etc) is likely to exert a significant influence on team member commitment to a goal.

Feedback

Just like individual goal setting, team goal setting without performance feedback is likely to be ineffective. As Weldon and Weingart (1993, p. 329) explain, feedback allows teams to “monitor their progress towards goals increase their effort, improve the quality of the plans, offer additional help to weak group members, divert additional resources from competing demands, and/or engage in additional morale building communication in order to increase the likelihood of success”. As discussed earlier, additional feedback to each team

member on their contribution to overall team performance is also likely to significantly improve team performance.

Openness to change

A potential disadvantage of group goal-setting is that teams may become “locked in” to focusing on particular goals and may be slow to change in response to changing situational demands or feedback indicating that successful performance is no longer being achieved (Weldon & Weingart, 1993). This effect is not new. Resistance to change is a well documented phenomenon and has generated a whole research literature and professional practice focused on developing effective strategies for organizational change (cf. Piderit, 2000 for a review). The impact of changing a goal within the context of a comprehensive goal setting program has not been studied. Changing a goal whilst operating within a goal setting program that builds in supports such as clear performance criteria, regular feedback and reinforcement may significantly reduce ambiguity and uncertainty accompanying a change to work practice. On the other hand, individuals and teams may be reluctant to change an established goal setting system if it currently provides them with experiences of progress, success and achievement – rewards that may disappear when a new goal is introduced. In these times of increasingly rapid change and innovation in the workplace, these are clearly important issues for goal setting theory if it is to remain at the forefront of Organisational Psychology’s approach to behaviour management.

Case study: Team based approach to evidence-based practice

In order to demonstrate how goal setting theory can be applied in the work place a case study of a team approach to evidence-based practice is presented. No case studies of team based approaches to evidence-based practice could be identified from the AOD field in particular. Therefore, this case study describes the development of clinical care guidelines

for nurses in the acute neurological unit at Radcliffe Infirmary Hospital, Oxford (Kirrane, 2000). Although goal-setting theory was not explicitly used as the guiding model, the approach taken by the nursing team is consistent with the core principles of effective goal setting. A major weakness of the study is the failure to include an objective evaluation of the effectiveness of a team-based approach (i.e., monitoring change in work practice). Nevertheless, it provides a useful insight into the practicalities of conducting evidence-based practice with teams.

The stimulus for exploring evidence-based practice was the observation that nurses were frequently requesting advice on the best approach to various clinical practices. Concern was expressed that clinical practice on the ward may not be based on best practice. The nursing unit then decided to pursue a team-based approach to researching best practice. Consistent with the recommendations of goal setting theory, the nursing team invested significant time and effort into planning and strategy development. As described below, strategies focused on both coordinating the input of individuals to the team (setting individual team members a task to perform) and the process of working in a team (structuring of team meetings and discussion).

In the first team meeting the broad aims were set (to promote the use of evidence-based practice using a team approach), and the team strategy was discussed. Key strategies included:

- compiling a list of the strengths and interests of each team member
- deciding where and when regular meetings would occur
- organising a chair for each meeting with responsibility for setting the agenda
- documenting meetings; developing norms and rules for the structure and content of meetings (e.g., open discussions that valued all individual's views)

- identifying three key individuals who were senior nurses with an interest in evidence-based practice. These three individuals were responsible for maintaining the momentum of the team by regular attendance at meetings, setting agendas, ensuring that goals set in action plans were achieved on schedule, and acting as meeting facilitators (i.e., ensuring team discussions were open, supportive etc).

Goal setting formed an integral part of the team's strategy. Individual team members were set specific goals (e.g., identify whether national guidelines exist for a particular clinical practice) with a specific deadline for task completion (e.g., reporting back to the team at the next team meeting). Through group discussion a number of questions were raised concerning the appropriateness of specific work practices (e.g., how often do specific types of tracheostomy tubes need changing?). Small teams were then assigned the goal of collecting and critically appraising information relevant to each specific question. The three senior nurses provided task-specific support (e.g., assisting in information search) and organisational support by negotiating time off from work and time in lieu arrangements if team members attended a meeting on their day off. In order to ensure team members possessed the skills, knowledge and ability to perform the task, a series of workshops were conducted in which training was provided on the principles of evidence-based practice, identification and evaluation of evidence and critical appraisal skills.

The team decided on the best approach for translating the evidence they had collected into practice. A standardised care plan was developed which included guidelines for nursing practice. A formal and objective evaluation of actual work practices was not part of this case study, although anecdotal reports from team members indicated a "sense of responsibility" towards the development of the guidelines. In addition, the team-based approach to evidence-based practice continued with the development of care plans for two additional nursing practices, one of which was evaluated and adopted by other specialist care units in the hospital.

Conclusion

Goal setting to facilitate motivation and performance is supported by a strong evidence-base in the Organisational Psychology literature. The key benefits of goal setting for evidence-based practice and transfer of training include:

- increased effort directed towards goal relevant activities (e.g., implementing a change to work practice)
- facilitation of organisational support for training transfer and the implementation of evidence-based changes to work practice
- increased communication, coordination and planning amongst team members.

As the case study above demonstrated, goal setting with teams requires careful thought and planning in order to ensure appropriate and effective goal are set. The key principles of team goal setting can be summarised as follows:

- (a) ensure team member **participation in goal setting** and strategy development
- (b) develop **strategies to coordinate team members'** contribution to team performance
- (c) ensure team members possess the relevant **skills and knowledge** through education and training (this approach is likely to increase team members' **self confidence** in achieving their set goals)
- (d) set **specific goals** for the group and individual team members
- (e) provide **organisational support** to facilitate team members in obtaining their goals.

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