

Future Research on Self-Managed Teams for India

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Abstract

Purpose: The overall purpose of this paper is to explain with literature study on variables influencing teams working within the Self-Managed teams' context and scope for future research. **Design/methodology/approach:** Literature study was done and collection of important independent variables and dependent variables. **Findings:** Literature review has helped to get the variables and independent variable influencing the Self-Managed Team (SMT). The Practical successes stories has been compiled. All the research gaps have been captured, for future research. **Originality/value:** The contents are original and due credit has been given to authors and publishing house. If missed its non-intentional.

Keywords: Autonomy, Team performance and Challenges with Self-Managed teams.

Paper type: Research paper

JEL Classification:

D21: Firm Behaviour: Theory

Introduction

Self-managed teams have competitive edge to improve productivity and reduce cost, this also enhances the self-esteem and builds the social capital. The application of the same can be seen in all areas such as manufacturing, services, Musical Orchestra, Defence, IT Project teams, Airlines and Hospitals

Definition: "They can be defined as groups of interdependent individuals that are able to self-regulate their behaviour and complete tasks" (Spreitzer et al. 1999). "Self-management refers to a 'reduced need for hierarchical command and control leadership' (Morgeson. 2005) SMTs are adopted in many organizations in order to improve performance and the wellbeing of employees" (Hackman 1990; Manz and Sims 1993; Cascio 1995; Cohen, Ledford and Spreitzer 1996; Spreitzer et al. 1999). [Ben and Janka, \(2009\)](#)

This got popular in US in early 70s captured by Boyer and Pond (1987). "Self-managed work teams are unique in the team members do more than simply perform technical or service responsibilities while being supervised. In a SMT, the supervisor is moved, and the team members share the supervisory responsibilities scheduling, monitoring performance". [Dale et al. \(2019\)](#). "Self-managed teams provide a mechanism for changing the vertical division of labour into a more horizontal one". [Rosemary. \(2000\)](#).

Some successful endeavours, "cited by Osburn, Moran, Musselwhite, and Zenger (1990) in Self-Directed Work Teams: The New American Challenge. At Xerox, the authors report, Plants using work teams are 30 percent more productive than conventionally organized plants. Procter & Gamble gets 30 to 40 percent higher productivity at its 18 team-based plants. . . . Tektronix Inc. reports that one self-directed work team now turns out as many products in 3 days as it once took an entire assembly line to produce in 14 days. . . . Federal Express cut service glitches such as incorrect bills and lost packages by 13 percent. . . . Shenandoah Life processes 50 percent more applications and customer service requests using work teams, with 10 percent fewer people. (pp. 5-6)" [J. Richard Hackman, \(2020\)](#)

To have a successful SMT, employees must be willing to do two things: work collaboratively and interdependently with others, and take on the authority and responsibility that has tradition

been reserved for management. In the case of SMTs, the authority and responsibility is shared among team members. ([Bradley Kirkman and Debra Shapro, 2001](#))

History of SMT developments

Year	Study revealed	References
1982-94	Higher performance at lower cost	Passmore, Francis and Haldeman, 1982. Lawler 1986, Cotton et.al.1988. Macy, Peterson, and Norton 1989., Wellins, Bryham and Dixon 1994, Yeatts and Hyten1998
1987-95	Decision making by this team is effective, there knowledge aids in Decision making	Bucchholz, Roth and Hess 1987, Ray and Bronstein 1995
1990	Team understand the strength and fills the gap during deadline or absentisum etc	Harper and Harper 1990
1989	Corporations reported increased use of SMT	Lawler, Ledford and Mohram,1989, Buzaglo & Wheelan, 1999; Kirkman & Shapiro, 1997; Manz & Sims, 1993; Nicholls, Lane, & Brechu, 1999; Salem & Banner,1992).
1988-94	Higher levels of productivity	(Cohen & Ledford, 1994; Goodman, Devadas, & Griffith-Hughson, 1988; Pearson, 1992; Trist, Susman, & Brown, 1977; Wellins et al., 1990), quality (Cohen & Ledford, 1994; Wellins et al., 1990)
1977-94	Customer Service	(Wellins et al., 1990), safety (Cohen & Ledford, 1994; Goodman et al., 1988; Pearson, 1992; Trist et al., 1977),
1991-92	Job Satisfaction	Cordery, Mueller, & Smith,1991; Pearson, 1992; Wall, Kemp, Jackson, & Clegg, 1986),
1991	Organisational commitment	(Cordery et al., 1991).
1990-96	SMT produces more than traditional groups at right conditions	Hacman 1990, Orsburn et.al.1994, Wellins et.al 1994, Hitchcock and Willard 1995, Yeatts et.al 1996
1992-94	Large portion of Management responsibilities are handled by team hence Supervisor need reduced	Shonk 1992, Becker, Reems 1994
1995	SMT are creative and innovative in work process	Hitchcock and Willard 1995

Dale et al. (2019)

Methodology

Application of SMT and Study so far is tabulated below, there are many team studies done between 1990-2000, and the studied identify different gaps and culture issues, environmental factor was a moderator.

Year	Sample company	Sample Size	Significant variables
1990	Texas Advanced Research program, Boeing, AT&T, Valenite, USA	617 members ,40 team	Work process: Openness to change, Availability of resources and Motivation. Input for Work process -environment, team design, team interactions. Other factors: - Goal clarity, Level of SMT, Cohesion and Commitment
	Belgium, Finland Philippines, US, Pharma and Electronic component Manfg.(Fortune 100)	81 teams	
2009	Volvo Sweden	150 operators	
2014	Defence and South Korea Manfg.	110 teams	

Meta-analysis: Was done by [Sushan G Cohen, \(1993\)](#), there is linkage to productivity and satisfaction and motivation are significant, the reduction in Absenteeism

Quasi Experiments	Performance	Attitudes	Withdrawal
Watt, Kemp, Jackson & Clegg (1986)	Productivity (n) Cost Savings (-)	Satisfaction (+) Commitment (+) Mental Health (+) Internal Motivation (+)	Labour Turnover (+)
Corderey, Mueller & Smith (1991)		Satisfaction (+) Commitment (+)	Labour Turnover (+) Absenteeism (n)
Cohen & Ledford	Manager rating (+) Self-Report (+) Supervisor (n)	Satisfaction (+) Commitment (+)	Absenteeism (n)
Meta-Analysis			
Guzzo, Jette and Katzeli (1985)	Productivity (+)		Absenteeism (n)
Macy Bliese and Norton (1991)	Financial (+)	Attitudes(n)	
Bekun (1989)	Productivity (+)		Labour Turnover (-) Absenteeism (-)
(+ Positive relationship (-) Negative relationship (n) No relationship			

Sushan G Cohen, (1993), Designing Effective Self Managing teams, *Centre for Effective Organisations*

Measures:

1.0 Team Performance (V): There are many practical examples and successes stories, showing improvement of more than 30-40% on team performance and team satisfaction levels, but the academic has different version. [Cohen, \(s1993\)](#) in his meta-analysis states “The findings from the meta-analysis are not consistent with one another nor with the quasi experiments, however with a exceptions Beekuns,(1989) have improvements in Productivity, withdrawal and attitudinal indicators”. “Existing measures of task performance and contextual performance (Borman & Motowidlo,1993) were not suitable for the current study. Because the problem-based learning teams were self-directed and therefore set their own goals, gathering data using existing measures of task performance based on supervisor assessment (Goodman & Svyantek, 1998) would have been difficult as the teams had no supervisor.” [Peter, \(2000\)](#). There is further researched by [Erick.et.al, \(2014\)](#) with feedback as a moderator the team performance enhances.

2.0 Work Process and Autonomous work teams (V) : As per Hackman(1988) and Yeatts and Hyten (1998) “work process is classified into three parts 1- The level of team members apply on the work 2.Skill and knowledge used by the team members 3.work strategies or procedures used .Streufert and Nogami (1992) added information and motives while Janis (1982) empathized procedure and information.” [Dale et al. \(2019\)](#). “Total Productive Maintenance (TPM) and manufacturing performance (MP) through Structural Equation Modelling (SEM). We find that TPM has a positive and significant relationship with low cost (as measured by higher inventory turns), high levels of quality (as measured by higher levels of conformance to specifications),” [Kathleen. et.al.\(1999\)](#)

and strong delivery performance (as measured by higher percentage of on-time deliveries and by faster speeds of delivery).

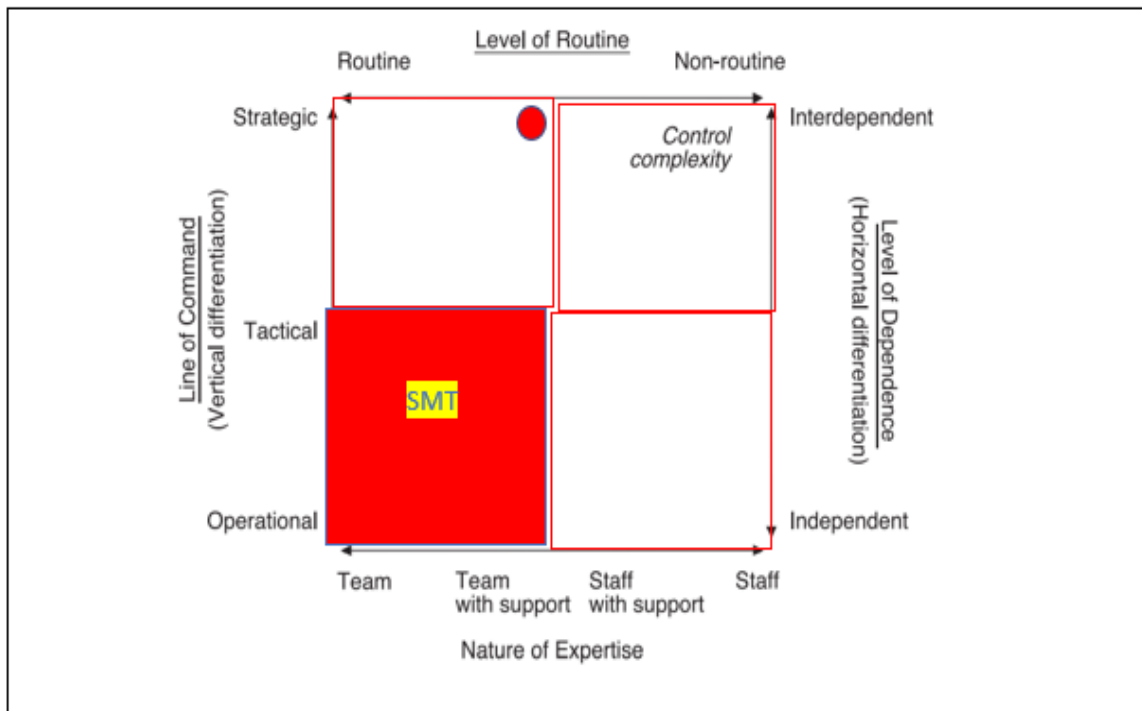
We also find that the relationship between TPM and MP can be explained by both direct and indirect relationships. In particular, there is a significant and positive indirect relationship between TPM and MP through Just-In-Time (JIT) practices

3.0 Team environment (M)

[Steven et al. \(1999\)](#) states “The team members should have good listening skills listening to other ideas and considering the same, this forms an effective team (DeMent, 1996; Kasl et al., 1997). The environment should be such that team members find opportunity to give their input and form teams to achieve the Goals, this is a ongoing process. This in turn will help a positive and nurturing environment (Kasl et al., 1997). The appreciation of team members at work and the importance individuals attach to team shows better team environment (Kasl et al., 1997). The team environment enhances with coordination, communication and trust that exists between team members and outside the team interactions (DeMent, 1996; Yeatts et al., 1996).” Studies also show that commitment to a team has direct correlation to team performance. similarly, low levels of commitment to both the organization and the team have been linked to absenteeism, turnover and intention to quit” ([Becker and Billings, 1993](#)).

3.1 Positive Environmental Factors: “within the organisations are information system, reward and recognitions, performance management, management support and feedback. Factors outside the organisations are Government relations, Customer relations and state of economy”, [Dale et al. \(2019\)](#)

3.2 Team Complexity: “The four dimensions of complexity is researched by [Ben and Marco, \(2005\)](#), Empowerment, in the model is a combination of responsibility and ability (knowledge, attitude and experience)” [Ben and Marco, \(2005\)](#).



Ben and Marco, (2005), The control Structure of team-based organizations: A diagnostic model for empowerment. SAGE Vol 26(4),621: -643

Complexity quadrant should be analysed, each quadrant will have different requirements and conditions to be fulfilled for SMT to succeed.

Team Feedback process (M): “Autonomous teams gain greater clarity of the organization’s goals, organizations must engage with teams in a process of information exchange (Daft & Lengel, 1986). A specific and critically important aspect of this information exchange is performance feedback (Katz & Kahn, 1966). *Performance feedback* is defined as “information about the actual performance or actions of a system used to control the future actions of a system” (Nadler, 1979, p. 310).” Erik et al. (2014). “The study concludes First, moderating effect of performance feedback on the relationship between team autonomy and organizational goal clarity, and ultimately team performance. Second, we found support for the notion that the interaction between autonomy and feedback is mediated by organizational goal clarity.”

Second, we found support for the notion that the interaction between autonomy and feedback is mediated by organizational goal clarity” Erik et al. (2014).

Value Congruence (IV) : Edwards and Daniel,(2009) , State value congruence “ when employees hold values that match the values of their employing organization, they are satisfied with their jobs, identify with the organization, and seek to maintain the employment relationship. value congruence relates to job satisfaction, organizational identification, and intent to stay in the organization. Value congruence also implies that people have similar approaches to cognitive processing, such as how verbal and nonverbal signals are encoded and decoded. Value congruence should increase predictability this in psychological terms as the confidence people have in their beliefs about how others will act and how events will unfold” Miller. (1981). “The other definition is person–organization fit ‘as the compatibility between individuals and organizations”. Cheri.e.tl (2005)

Team design (IV): Steven et al. (1999) states, the team design includes procedures knowledge and skill of the team this impacts the team’s performance used to get the work accomplished (DeMent, 1996; Yeatts et al., 1996). “Study also shows work group performance individuals with high emotional intelligence would contribute to better working relationships in the team, team members are able to deal with their own emotions and control their emotions”. Peter, (2000). “Factors effecting Job design is identified the same need analysis towards empowerment”. Jay and Rabindra (1988)

Leadership (M): Over six decades and more Responsible power is proven for higher motivation, higher responsibility predicts successes the same has been voice by many scholars (Barnard, 1938; Bass, 1990; Hermann, 1986; Hollander, 1985; Levinson & Rosenthal, 1984; and Winter, 1978). “Successful leaders and managers must use power-to influence others, to monitor results, and to sanction performance; but this power must be exercised in “responsible” ways that involve ethical standards, accountability for consequences, and a concern for effects on subordinates and peers”. David Winter. (1991) The responsible way is now shifting from Supervisors to SMT, this comes in light with Practice of Situational Leadership style’s

V- Variable
 IV – independent variable
 M- Moderator

		Independent variables																		Variable												
Year	References	Size	Available resources	Openness to change	Motivation	Cohesion	Commitment	Communication	Trust	Information system	Age	Self-Managed level (Autonomy)	Goal clarity	collectivism	Power distance	Resilience to teams	Resilience to Self Management	Productivity	Empowerment	Involvement	Supervisor Behaviour	Group Design	Characteristics	Team Membership	Learning	Work Process	Performance	Motivation	Demographic Characteristics(US,Finland ,Belgium (all countries details)	Effectiveness	QWL Quality of work life	
2001/2019	Dale, Vijayan and Leslie (2001),		$\beta=0.41$ 0.33	$\beta=0.42$ 0.01	$\beta=0.13$ 0.002	$\beta=0.02$ ns	$\beta=0.19$ ns	$\beta=0.18$ ns	$\beta=0.02$ ns			$\beta=0.49$ 0.002	$\beta=-0.04$ 0.037	$\beta=0.32$ 0.013	$\beta=0.26$ 0.013																	
2001	Bradely L Kirkman and Debra Shapiro				$\beta=0.22$ 0.028	$\beta=0.31$ 0.028	$\beta=0.41$ 0.001		$\beta=0.10$ ns					$\alpha=0.75$	$\alpha=0.85$	$\alpha=0.79$	$\alpha=0.68$	$\alpha=0.91$	$\alpha=0.95$													
1993	Susan G.Cohen																			*	*	*	*									
2009	B.S. Knipens and J.I. Stoker																															
2000	Rosemary Bhatt				$p<.01$															$p<.01$												
2014	Erick et al.(2014)		$p<.01$									$p<.01$	$p<.01$																			

Study on variables and Independent variables shows, work process (Autonomy) and Performance are influenced by Characteristics, Cohesion, Trust, Commitment, Goal and Group design are significant. There are other variables such as learning, team size, Motivation and information which are equally important.

Managerial implications:

Self-managed teams has impacted on US growth during 90s , it has potential for reduction in cost, improved productivity and achieve high quality standards, besides it also reduces absenteeism and Employee turnover. The job Satisfaction is high and best of the team resources are effectively utilized. The members are innovative and has high problem-solving abilities. The same needs be put to use after a good research because its connected to Culture and attitude which cannot be generalized it would be country, state and organisation specific .

Limitations

Research paper for complexity of Self-Management Teams is not found. SMT is normally well researched and practiced in Automobile and Auto Ancillary plants. While the same is practised and explored in other sectors such as ICU in Hospitals, Malls etc. The second limitation is the culture present in that organisation or country, which varies drastically. The third limitation is most of the survey are done in academic area (using Students) , actual environment is important will give new gaps for improvements .

Suggestions for further research

1. There has been benefit clear economic benefit by SMT however “the economic pay-off to teams in an occupation that is economically important but that has received little attention”. Rosemary. (2000).
2. The SMT are also “imaginative and the human aspiration has to be nurtured, these influence each other and reshape one another continually, both directly and by economic these economic are often leads to treacherous , thereby losing sight of the Goal, in this causal approach will not work and may be affectual” will , the same needs to be studied in detail in relation to SMT,pp20. Saras. (2001).
3. Both scholars and practitioners compromise their own espoused objectives when they hold constant conditions that may be among the most substantial influences on their phenomena of interest. Yet we regularly do this: Researchers do it to achieve experimental control, and practitioners do it to preserve established organizational structures and systems. Until both scholars and practitioners accept the risks of revolution and break out of traditional ways of construing and leading social systems, chapters such as this one will continue to be about why teams don’t work rather than why they do. J. Richard Hackman, (2002)
4. J.R Hackman, (1978), “Organisations have steadily increased the use of technology and automation in attaining organisation objectives. Organisation has become bigger with more managerial and statistical activities.pp2.The opportunities we have are 1. Many individuals are presently underutilized and under challenged at work, pp5 and 2. People are more adaptable than we often assume pp6.We adapt to work environment and hence it important to have right environment at workplace. In 1980 there were two

choices **Route 1** Fitting jobs to people Route :- The idea is to build into work increased challenge and autonomy for people who perform by designing jobs so that they create conditions under which employees can develop internal motivation which in turn gains in productivity and job satisfaction pp 10 **Route 2** Fitting People to Jobs work is designed and managed in a way that clearly subordinates the needs of the goals of people to the demand and requirements of fixed jobs. External controls are employed to ensure that individuals do in fact behave appropriately in the job. pp17

Hackman concludes I am very favourably disposed to the idea and aspiration of route 1- I may be apparent that it would be too late to change the directions and my descriptions of Route 2 to be a good characterization for future.”

The author feels that Route 1 are time consuming , need more efforts but once done has everlasting benefits from the internal motivation generated, While Route 2 may be for the new companies and industry 4.0 plants , there the internal motivation is difficult to find. Research needs to be done to find the sufficient conditions in both the routes.

5. “Cultural values are presumed to form in Childhood and relatively stable over period of time.” Adler, (1997); Scarborough, (1998). “Therefore, the strong theoretical base for forming many of the hypotheses supports the causal direction from cultural values to resistance. However, this rationale may not hold for the resistance-team effectiveness outcome relationships: thus, future research should attempt to examine this issue

longitudinally. Because the cultural values people bring with them to the workplace (cf. Hofstede, 1980a) are not likely to be forgotten when one’s work assignment is team based, and team-based assignments are increasingly the nature of “work” (cf. Kirkman & Shapiro, in press), more research needs to be conducted on the impact of cultural values on team processes and outcomes ‘.Bradely L Kirkman and Debra Shapiro, (2001)

6. “To make a more general application of the model possible, further research is needed that includes additional objective QWL (Quality of work life) and BP (Business performance) performance indicators. Organizations are also interested in reducing costs, improving productivity and delivery precision and it is important for them to know if, and how, internal relations, task management and external relations effect such other team performances. B.S. Kuipers and J.I. Stoker, (2009)

7. “In a qualitative review of the self-leadership literature, Stewart, Courtright, and Manz (2011) found that whereas high autonomy enhanced team performance in some studies, other studies found that autonomy had no relationship, and sometimes even a negative relationship, with team performance. These mixed results beg the question: Under what conditions is autonomy beneficial for teams?” Eric.et al. (2014), pp4

8. “Future research could delineate how teams react to different forms and sources of feedback., Investigating potential cultural differences in reactions to feedback, Organizational goal clarity should align team goals with organizational goals. We did not, however, measure information regarding the actual content or congruence of team or organization goals” Eric.et al. (2014), pp 15

9. “Future research should address these and other processes by which individual and organizational values combine to influence outcomes, thereby shedding further light on the value of value congruence” Edwards and Daniel,(2009), Also find a solution related to the notion that subcultures often exist in organizations among different divisions, functional areas, and/or workgroups (e.g., Hofstede, 1998; Trice & Beyer, 1993) and fit can vary across subcultures. Similarly, different cultures are likely to exist within an organization based on differing hierarchical levels among employees such that employees in workgroups may form one subculture and managers may form another” Cheri.e.tl (2005)

10. “Studies on the effects of the emotional intelligence of team leaders may also be of interest”. Peter, (2000)

Conclusion:

Self-Managed Teams needs to be explored; the need is more now than ever. Research has proven that Self-managed teams has proven that Self-esteem and Employee satisfaction are enhanced and long lasting compared to traditional teams .There are two needs , due to crash in Global economy , cost reduction and productivity is need of the hour . The second need which is different wherein industry 4.0 and AI will command the decision making which will have impact on Self-esteem, the team should be cohesive and work as team and wok on ways in Job satisfaction.

Research should be done on complexity, the environmental factors in consideration, Other independent variable which are essential and proven by research should be considered. There could be no Generic answer and each SMT would be different based on the moderating conditions.

References

- [1]. Ben. S. Kuipersa and Janka . Stoker, (2009), Development and performance of self- managing work teams, *The International Journal of Human Resource Management*, Vol. 20, No. 2, February 2009, 399–419
- [2]. David G Winter, A Motivational Model of Leadership: predicting long term management success from TAT measures of power motivation and responsibilities, *Leadership Quarterly*, 2(2), 67-80, JAI press
- [3]. Dale, Vijayan and Leslie (2001), Factors affecting self-managed work team performance an empirical assessment, *Journal of Applied Sociology*. Published by: Sage Publications, Inc.2019
- [4]. Erik, Stephen, David, Jee-Young and Doo-Seung Hong,(2014), Channelled Autonomy: The Joint Effects of Autonomy and Feedback on Team Performance Through Organizational Goal Clarity, *Journal of Management* ., DOI: 10.1177/0149206314535443
- [5] Edwards and Daniel, (2009), The Value of Value Congruence, *Journal of Applied Psychology*, American Psychological Association 2009, Vol. 94, No. 3, 654–677
- [6] Kathleen, McKone , Roger, Schroeder and Kristy ,(1999), The impact of total productive maintenance practices on manufacturing performance, *Journal of Operations Management* 19 (2001) 39–58

- [7]. Rosemary, (2000), The Economic of team among technicians, *British Journal of Industrial Relations*, 39(1):1-25.
- [8] Jay & Rabindra, (1988), The Empowerment Process: Integrating Theory and Practice, *The Academy of Management Review*, Vol. 13, No. 3 (Jul., 1988), pp. 471-482
- [9] J. Richard Hackman, (1978), The design of work in the 1980s, *School of Organisation Management, Yale University*.
- [10] J. Richard Hackman, (2002), Why Team fails. *Theory and Research on Small Groups*, Vol 4, Kluwer Academic Publishers
- [11] Steven, Mary, and Rhonda, (1999), Downsizing and emergence of Self -Managed teams, *Participation and empowerment an international Journal*. Vol 7 No 5
- [12] Sushan G Cohen, (1993), Designing Effective Self Managing teams, *Centre for Effective Organisations, Marshal school of business California* .G93-9(229)

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Notes

{1} Self-managed work teams are unique in the team members do more than simply perform technical or service responsibilities while being supervised. In a SMWT, the supervisor moved, and the team members share the supervisory responsibilities scheduling, monitoring performance, pp2