AN EXPLORATORY STUDY OF PERCEPTIONS OF GOAL SETTING SUPPORT AMONG STUDENTS AT A TERTIARY INSTITUTION

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ABSTRACT

The present study explored perceptions of goal setting support among students at a tertiary institution. Seventy four students in the third year Industrial Psychology and Accounting programme participated in the study. The Goal Setting Support Scale was slightly revised to fit an academic setting and was used to measure perceptions of goal setting support among students in both departments. Results indicated that there were no differences between Industrial Psychology and Accounting students regarding their perceptions of goal setting support. Full time employment prior to enrolment in the university had a significant bearing on the perceptions of goal setting support among students.

OPSOMMING

Die teenswoordige studie het die doelstellingsondersteuningspersepsies van studente aan 'n tersiêre instelling ondersoek. Vier-en-sewentig studente in hulle derde jaar in die Bedryfsielkunde en Rekeningkunde programme het aan die studie deelgeneem. Die doelstellingsondersteuningskaal is effens aangepas om die akademiese omgewing te pas en is gebruik om doelstellingsondersteuningspersepsies van studente in beide departemente te meet. Resultate dui aan dat daar geen perseptuele verskille tussen Bedryfsielkunde en Rekeningkunde-studente bestaan ten opsigte van doelstellingsondersteuning nie. Voltydse indiensname voor inskrywing by die instelling het 'n betekenisvolle invloed op die doelstellingsondersteuningspersepsies van studente gehad.

This research reports a case study of goal setting support among students at a tertiary institution and is a variation of a study by Ballantine, Nunn and Brown. (1992) of the University of Witwatersrand in South Africa. Ballantine et al. developed a measure of the amount of supervisory support received by firstline managers in the goal setting process and reported both the construction and construct validation of the Goal Setting Support Scale (GSSS).

The present study made minor modification to the same instrument to measure the amount of social support that students receive from their lecturers in the process of setting and achieving their academic goals in their respective departments. The study was conducted in the departments, Industrial Psychology and Accounting.

The theory of goal setting

The present study was based upon Edwin A. Locke's theory of goal setting (Locke, 1968). Goal setting theory is a cognitive theory of work motivation based on the premise that goals are immediate regulators of human behaviour. It makes the assumption that human behaviour is purposeful and that goals direct and sustain individuals' energies towards performing a particular action (Locke & Latham, 1990). The major consistent finding supporting this theoretical model of goal setting is that setting specific and difficult goals leads to high levels of performance if these goals are accepted by individuals (Locke, 1968). Thus, goal setting can be an effective method of influencing performance by directing attention, mobilizing effort, increasing persistence, and motivating strategy development.

Mechanisms for goal setting effects

Given that goal setting works, it is pertinent to ask how it affects performance. According to Locke, Shaw, Saari and Latham (1981) goal setting is most likely to improve task performance when the goals are specific and sufficiently challenging, the employees

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have sufficient ability, feedback is provided to show progress towards goals, rewards such as money are given for goal attainment, the manager is supportive and assigned goals are accepted by the individuals concerned.

Goal attributes

According to Locke and Latham (1990) goals have two primary attributes: content and intensity. Goal content refers to the features of the goals themselves, such as the difficulty and specificity of the goals. Goal intensity, on the other hand, is the process by which the goal is set and accomplished. It relates to such factors as commitment, and the cognitive process involved in attaining the set goals.

Goal setting as managerial tool

Goal setting is a motivational technique used extensively in organizations. As a method of directing individuals effort at work and providing a standard against which performance can be assessed, it is fundamental to many performance appraisal schemes. It is frequently linked to company reward systems, and found in many training and development programmes such as time management, stress management and supervisory skill training. A survey of 1331 British organizations found that 79% used some form of objective setting (IPM, 1992).

Attributes for effective goal setting

An effective goal setting strategy involves a number of attributes, for example, goal difficulty, goal specificity, participation, peer competition, feedback on goal performance, goal acceptance, goal commitment, and supervisory support (Locke & Henne, 1986).

Goal difficulty and specificity

Goals should be explicit and unclouded-something to aim toward without misinterpretation. Researchers have found that people are more likely to succeed if their goals are specific and difficult. For example, Brown and Latham (2000) indicate that in conditions where individuals set specific, difficult goals, performance is higher that when individuals are just asked to do

their best. Winters and Latham (1996) also showed that tasks that are complex for an individual moderate the motivational effects of goals on performance. They argued that if an individual has the requisite ability to perform a task, setting specific difficult goals cues or directs attention to exert effort and persistence to achieve it. Thus, setting specific hard goals on tasks where the person has yet to acquire the requisite ability to perform well has a negative effect on performance. The relationship between specific difficult goals and performance is therefore sometimes mediated by the type of goal one sets These findings are congruent with Latham, Mitchell and Dosset's (1978) study which showed a linear relationship between goal specificity, difficulty and the performance of engineers and scientists. Thus, specific, difficult goals lead to improved performance by producing higher levels of effort and planning than do unclear or general goals.

Assigned, self-set goals and commitment

Research has indicated that when goals are imposed, they may be perceived as more difficult to attain, thereby resulting in frustration instead of accomplishment (Locke, 1988). Assigned goals can have beneficial outcomes, some of which are: affording a feeling of purpose, guidance and explicitness concerning expectations; broadening an individual's beliefs regarding what they can accomplish and, directing individuals toward developing high quality plans to realise their goals. Although assigned goals can increase commitment, studies suggest that participatory goal setting produces even greater commitment. Wood, Mento and Locke's (1987) research which focused on participation, found that employees set higher goals for themselves in a participatory setting than supervisors alone would dare to impose, since individuals seem to be aware of the factors within their control. Strickland and Galimba (2001) found that the use of self-set goals structured the work pattern of workers; with less switching between tasks relative to work pattern of a group of participants who did not set their own goals. These workers reported less cognitive interference in their efforts to achieve their goals, suggesting that self-set goals are possibly chosen at an easily attainable level, eliciting the required intrinsic motivation, which, in turn, has a positive effect on performance. Thus, although self-set goals may provide a structuring function and a reduction in on taskstressful cognitions, they do not have the same motivational functions associated with assigned goal setting (Latham & Locke, 1990).

Although the exact mechanism between competition and commitment is not clear, studies have also found that individuals set significantly higher goals and perform significantly better in competitive situations than in non competitive situations (Locke & Latham, 1990). Personal goals and self-efficacy judgments therefore have direct effects on performance. Indeed, Mitchell and Silver (1990) concluded that individuals equally accept and get committed to goals they set for themselves than goals that are set in participative fashion. Setting own goals creates a sense of commitment regarding those goals. It helps individuals to become motivated to pursue the goals in the first place and, also helps them to cope with setbacks and frustrations that occur during the process of goal pursuit (Munroe-Chandler, Hall & Weinberg, 2004).

The notion of supervisory support

Supervisory support has been identified by Ballantine et al. (1992) as an important element in the goal attainment process, and it is related to goal commitment, goal acceptance, and goal performance. According to Locke and Latham (1984), supervisory support refers to a positive, constructive and helpful attitude of supervisors or managers to their subordinates. It is identified as an important component of effective supervision in general. Hollenbeck and Klein (1987) contend that difficult goals assigned by supportive supervisors should be perceived as fairer and more realistic by subordinates than those assigned by

non-supportive supervisors and should result in higher levels of goal commitment. Latham and Saari (1982) indicate that effective supervisory support typically results in higher and/or more difficult goals being set. This is because effective supervisory support provides subordinates with sufficient confidence to set more difficult goals which, in turn leads to higher levels of performance.

Nature of supportive behaviour

Beach (1985) defined supervision as the function of leading, coordinating, and directing the work of others to accomplish designated objectives. The supervisor who is supportive displays confidence and trust in his subordinates. He or she shows concern for each employee as a person. He keeps the employees properly informed about events in the department and the organization at large. He or she solicits ideas from the employees and gives help in solving work problems. He also gives credit for good work. The supportive supervisor creates an atmosphere of approval towards people and treats employees fairly and equitably. Supportive supervisory behaviour has quite consistently correlated positively and highly with the satisfaction of subordinates (Beach, 1985). Supportive supervisory behaviour of and by itself, does not consistently generate high performance from a work group, but when combined with supervision that set challenging goals, tends to result in high productivity (Beach, 1985). A front-line supervisor must have very good understanding of the "technology" of his department which includes machines and process technology as well as the technology of "knowledge of workers" or professionals, which includes scientific and technical concepts and skills. The supervisor is not expected to be skilled in performing the various jobs under his or her direction but he or she is expected to understand the jobs in order to diagnose and solve work problems.

Measurement of Supervisory Support

Despite the role of supervisory support in the goal setting process, a psychometrically suitable measure to assess the phenomenon of supervisory support has not been in existence for a long time. The goal setting questionnaire developed by Locke and Latham (1984) was inadequate as it only included aspects of supervisory support such as feedback, performance appraisal interviews and the provision of support elements. Other components of supervisory support such as emotional, instrumental, and informational support identified by House (1981) were not assessed.

In a bid to overcome the deficiencies of earlier measures of supervisory support, Ballantine et al. (1992) developed the Goal Setting Support Scale (GSSS) which demonstrated sound psychometric properties and construct validity.

The Goal Setting Support Scale (GSSS)

The GSSS is a subordinate rated, self report measure of supervisory support received in the goal attainment process. House (1981) defines social support as an interpersonal transaction involving one or more of the following:

- 1. Emotional concern-liking, love, empathy etc.:
- 2. Instrumental aid-goods and services:
- 3. Information about the job and the environment: and
- 4. Appraisal information relevant to self evaluation.

The GSSS incorporates these four aspects of social support and, as noted by Balantine et al. (1992), such a scale represents advancement on previous scales which have assessed only general support or are too short (Locke & Latham, 1984). According to House, the four types of social support constitute the minimum number which adequately reflects the complexity of the phenomena.

House (1981) specifically addresses the issue of supervisory support in his approach. House states that support from the

supervisor involves the provision of the necessary resources (goods and services) and information required for coping with or solving problems which the individual may be facing. Provision of these elements of support by the supervisor would ensure that task requirements are understood, situation constraints identified and adequate tools and resources provided.

The GSSS demonstrates acceptable psychometric properties. It correlated significantly and in a predicted direction with all validation criteria (viz goal emphasis, general supervisory support, satisfaction with supervision, work facilitation, quality of leader-member exchanges, job satisfaction, role ambiguity, and organizational commitment) indicating acceptable evidence of construct validation. In addition, both internal consistence (0,91) and test retest reliability (0,97) are satisfactory.

Aim of the study

The broad aim of the study was to investigate perceptions of goal setting support among students in two different departments of an academic institution using a modified Goal Setting Support Scale of Ballantine et al. (1992).

RESEARCH DESIGN

The study can be seen as exploratory in nature, investigating general and individual related factors that may influence perceptions of goal setting support among tertiary students. The study followed the quantitative research design which provided an objective identification and analysis of the issues under investigation.

Participants

Seventy-four students participated in the study. Thirty seven of them were Part III students in the Industrial Psychology department and thirty seven were Part III students in the Accounting department. The mean age of the Industrial Psychology students was 22 years with a standard deviation of 2,57. The mean age of the Accounting students was 24 years with a standard deviation of 3,04.

Fifty-one percent of the Industrial Psychology students and sixty-five percent of the Accounting students were male. Seventy per cent of students from the Accounting sample had worked during their undergraduate studies. Sixty per cent of the students from the Industrial Psychology sample had benefited from part-time or vocational work.

Prior to enrolling for their degree studies, thirteen per cent of the Accounting sample had held a full-time job compared to eleven per cent of the Industrial Psychology sample. In both samples, 35% of the students had completed a Technikon Diploma in Human Resources Management or Accounting.

Measuring instrument

The GSSS reported by Ballantine et al. (1992) was modified slightly to match the student setting and used to measure perceived social support. The scale contains seventeen items which measure supervisory support of employees in the goal making process. In addition to the GSSS, participants were also requested to complete a brief biographical questionnaire to provide their age, gender and employment history.

Procedure

Both the GSSS and the biographical questionnaire were administered to the participants on a one-to-one basis in a lecture room. Participants were told that their responses would be treated in the strictest confidence by the researcher and questionnaires were anonymous.

RESULTS

TABLE 1 Descriptive statistics for the revised version of the gsss

Item	Mean	SD	Mode	Median	Skewness	Kurtosis
1	2,297	1,060	3	3	-0,219	-0,418
2	3,122	1,282	3	3	-0,193	-0,788
3	2,878	1,097	3	3	-0,072	-0,482
4	2,986	1,287	3	3	-0,093	-0,983
5	3,162	1,073	3	3	-0,401	-0,306
6	2,892	1,320	3	3	-0,127	-0,999
7	2,095	1,049	3	3	-0,267	-0,463
8	3,203	0,860	3	3	-0,142	-0,160
9	3,446	0,967	3	3	-0,450	0,581
10	3,419	1,250	3	3,5	-0,460	-0,619
11	3,297	1,082	4	3	-0,291	-0,597
12	2,986	1,129	4	3	-0,149	-0,853
13	2,959	1,243	3	3	-0,097	-0,803
14	3,230	0,973	3	3	0,069	-0,358
15	3,270	1,102	3	3	-0,119	-0,391
16	3,230	1,067	3	3	-0,269	-0,398
17	3,270	0,997	3	3	-0,147	-0,286

The statistics for the seventeen items in the GSSS confirm that the items are symmetrically distributed and are suitable for further analysis. The measures of central tendency and distribution for all seventeen items are provided in Table 1.

Reliability of the revised scale

The revised scale had a Cronbach alpha coefficient of $\dot{a} = 0,89$ which was satisfactory.

Average scores

Across both departments the mean score on the GSSS was 53,24 with a standard deviation of 11,41.

Inter-departmental comparison of GSSS scores

The mean and standard deviations on the GSSS for the Industrial Psychology and Accounting students were 53,24 and 11,41, respectively. A one-way analysis of variance (ANOVA) indicated that there were no differences between the perceptions of goal setting support received from the lecturing staff in the two departments (F (1,72) = 0,0922, p>0,05).

Biographical factors

Age was negatively correlated with scores on the GSSS (r = -0,124, n = 74, NS) and females (= 54,55) perceive more goals setting support than males (= 52,3). Females students (= 21,94; SD = 1,71) are slightly younger than male students (= 23,74; SD = 3,28) on average.

Of all the three employment and vocational training factors, part-time experience, full-time employment and vocational training, only full time employment produced a significance influence on perceptions of goal setting support (F(1.72) = 6,73, p<0,05). Both part time experience (F(1,72) = 0,502, p>,05) and vocational training (F(1,72) = 0,907, p>0,05) did not have a significant effect on perceptions of goal setting support.

To control for correlations between the biographical factors and for the difference in age and gender dominance between the departments, scores on the GSSS were regressed onto all five biographical factors and departmental affiliation in a stepwise regression. Full-time employment was the only variable that remained in the equation and accounted for 8.5% of the observed variance of the GSSS scale. Thus, full time employment appeared to be the significant factor determining perceptions of goal setting support amongst the students who participated.

DISCUSSION

The revised scale produced satisfactory reliability with an alpha coefficient of $\dot{a} = 0,89$, which is slightly lower than that reported in the original scale at $\dot{a} = 0,97$ (Ballantine et al., 1992). The unifactorial structure of the original scale was duplicated but not as strongly. The first factor in the revised scale accounted for 38% of the observed variance compared with the 60% accounted for by the single factor found in the original scale.

The observed mean (53,24) for the combined samples showed striking similarity to the goal setting support perceived by the South African managers (53,54). The standard deviation in the manager's sample was much larger however, at 18,83 compared to standard deviation in the sample of the university's students (11,41).

Differences between the perceived goal setting support by Industrial Psychology and Accounting students was minimal and insignificant. Of the biological factors, only previous full-time employment affected GSSS scores. Students with previous fulltime employment perceived less support than did their younger, less experienced counterparts.

The above finding supports the notion of Self-Efficacy Theory, a derivative of the Learning Theory by Bandura (1977). Self-efficacy arises form the acquisition of complex cognitive, social, linguistic and physical skills through experience (Bandura, 1982). Individual's perceptions of self-efficacy determine the behavioural alternatives they choose, the amount of effort they expend, and the amount of time they will persist in stressful situations. Gist and Mitchell (1992) state that self-efficacy is an important motivational construct in that it influences the choices, goals, emotional reactions, effort, coping and persistence of an individual.

In the present study therefore, the students who had had fulltime employment previously might have increased in their self-efficacy perceptions. The fulltime employment might have given them the confidence and ability to devise strategies to achieve their goals without the external support of the lectures. This possibility supports Locke, Frederick, Lee and Bobko's (1984) assertion that high efficacious individuals have high internal motivational energy than low-efficacy individuals. The vounger, less experienced students in the present study might have been experiencing low self-efficacy levels and, therefore, low internal motivational energy, which made them perceive lectures' support in setting their academic goals as high. Similar studies have also found some moderating effects of other variables in perceptions of the amount of support one receives in setting or achieving goals. For example, Ballantine and Nunns (1998) found that supervisor support had a moderating effect on the relationship between self-efficacy and supervisorrated performance.

Practical implications of the present study include comprehensive assessment of supervisory support within the goal setting process. The efficacy of the goal setting approach in employee motivation has been clearly demonstrated (Vance & Collela, 1990). Thus it appears worthwhile to invest time and resources to assess supervisory support to attempt to ensure that the goal attainment process is optimised. In an academic setting, such optimisation could include training of administrative and Lecturing staff in providing the appropriate support to students in the process of setting and achieving their academic goals. Such training of the academic staff could well have additional positive spin-offs, over and above goal attainment, in terms of students' satisfaction and effectiveness, as well as the University's overall effectiveness as an academic institution. An important practical implication of this study to students is that they should learn to set concrete, specific, and sufficiently challenging work goals for them to become committed and motivated in their academic endeavours to obtain good class degrees.

The revised scale did not perform well psychometrically as the original. The design of the present study does not allow us to determine why the reliability and unifactorial structure is weaker. Later studies might wish to include more items and fine tune the scale before proceeding to inter-group comparisons.

An interesting extension of this study would be to disentangle the effects of age and full time employment by monitoring GSSS across all three years of study. It would also be interesting to correlate perceptions of goal setting support with academic performance to see whether students who perceive more support from the lecturing staff actually perform better than those who perceive low levels of support.

The similarity of the average scores for the academis students to the original sample of South African managers also begs explanation. In the absence of other reports of the performance of this scale, it is not clear whether the scale elicits the same responses from all samples, or whether the position of students is similar to their older South African (managers) working counterparts. Future research efforts might want to explore this.

In conclusion, the GSSS scale adapted slightly for students performed well and produced average scores for students that are similar to those of South African managers. There were no differences in perceived goal setting support between the two departments, Industrial Psychology and Accounting, but students who had held full-time employment prior to enrolling for undergraduate studies perceived less support.

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