DOCUMENT RESUME

ED 308 145 SP 031 208

AUTHOR Ayalon, Aram
TITLE Predictors of Beginning Teacher Burnout.
PUB DATE Mar 89
NOTE 13p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, March 27-31, 1989).
PUB TYPE Speeches/Conference Papers (150) -- Reports - Research/Technical (143)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Beginning Teachers; Class Size; *Educational Environment; Elementary Secondary Education; Interpersonal Relationship; Organizational Climate; *Professional Recognition; Stress Variables; Teacher Administrator Relationship; *Teacher Burnout; *Teaching Conditions; Teaching Load

ABSTRACT

This study explored the elements in the school environment which predict beginning teachers' burnout at the end of the first year of teaching. Two surveys were administered to 45 first-year teachers, one in the fall semester and the other several weeks before the end of the school year. The surveys queried the teachers about their current working environment and their feelings associated with burnout. Factors measured were: (1) role overload; (2) instructional rewards; (3) job design; (4) role ambiguity; (5) classroom environment; (6) goal clarity; and (7) frequency of interaction with other teachers and administrators. Findings indicated that rewards obtained from student progress, and teacher and administrator recognition were the only factors determined to have a significant influence as predictors of end-of-the-year burnout. It was also found that high levels of skill variety in the job did not contribute to less teacher burnout in this sample. It is concluded that providing positive recognition and adequate time for planning and instruction, as well as reducing class size, may reduce beginning teachers' burnout and attrition. (JD)

Predictors of Beginning Teacher Burnout

Aram Avalon

Aram Ayalon, Ph. D.
Division of Teaching and Teacher Education
University of Arizona

Predictors of Beginning Teachers' Burnout (AERA Paper, 1989)

In her book about burnout among professionals Maslach (1982) suggests that professionals who are constantly involved with people may lose the care and commitment that was once characteristic of their original attitudes. Although stress and burnout may occur at any stage of a professional career, the initial stages are usually the time of greatest change in attitudes and behavior (Cherniss, 1980a).

Although numerous studies of teacher stress and burnout have appeared in the past, few have been serious empirical studies, and most fail to relate various school organizational factors to teachers' burnout (Bacharach, et al. 1986a). The purpose of this study is to explore the elements in the school environment which predict beginning teachers' burnout at the end of their first year of teaching.

Burnout Definition

Burnout is variously defined in the literature. For example, Maslach and Jackson (1981) conceptualized burnout as composed of three distinct factors: emotional exhaustion, depersonalization, and loss of feeling of accomplishment. Others have construed burnout as a three stage process: stress, strain, and defense coping (Cherniss, 1980a). In this study, the definition set by Pines et al. (1981) was adopted after some modifications. The Pines' study focused on the link between the work environment and self-reported burnout of professionals (including teachers) who work with people. The Pines' study surveyed samples of various social service professionals across several countries Burnout (or tedium as it was called by the Pine's study) was defined as the experience of physical, emotional, and mental exhaustion resulting from constant or repeated emotional pressure associated with an intense involvement with people over long periods of time. In order to compare the results of this study to other teacher burnout studies, the first two factors, physical and emotional exhaustion, were selected because they were common to most definitions of burnout

Measurement of Burnout

Beginning teachers' burnout was assessed using five items employed from Pines et al. (1981). The scale used 4 points (1 almost always; 2-frequently; 3-occasionally; and 4-seldom or never) to assess how often beginning teachers experienced being physically exhausted and run down; emotionally exhausted; depressed, and "burned out". Low scores on the burnout scale meant high level of burnout, and high score indicated low level of burnout. The test-retest reliability of the 21-item original measure was reported to be .89 for a one month interval, .76 for a two-month interval and .66 for a four-month interval. Internal consistency values for most samples (Pines et al., 1981) ranged between .91 and .93.

Hypothesized predictors of burnout

Research on causes of professionals burnout tends to focus on personal (individual expectations, personality, etc.) and organizational variables (role overload, level of autonomy, etc.). This study will focus on the latter category i.e.

organizational factors. It is these factors which are most likely to be manipulated by school administrators and policy makers.

Pines et al. (1981) indicated that bureaucratic organizations, in general, share three antecedents of burnout: (1) overload, (2) lack of autonomy, and (3) lack of rewards. Similar variables were identified by Maslach and Jackson (1981) and Cherniss (1980b) to have significant relationship with burnout; however, they added more variables using Hackman and Oldham's (1980) work motivational model. Hackman and Oldham's (1980) "job design factors" specified factors such as, task identity; skill variety; task significance; feedback from the job itself and from others; experienced meaningfulness of the work; and experienced responsibility for work outcomes; as having significant correlation with burnout among professionals.

Another important organizational variable associated with teacher stress is role ambiguity. Bacharach et al. (1986a) and Schwab and Iwanicki (1982) found role ambiguity to be one of the most important predictors of teacher burnout.

The work environment inside the classroom is another important potential source of problems and possible burnout among beginning teachers(Coates and Thoresen, 1976 ; Evans and Tribble, 1986). Beginning teachers' lack of interaction as well as the nature of the relationship they have with other teachers and administrators can be another important source of beginning teacher burnout. Veenman (1984) and Galloway et al. (1982) found relations with colleagues and administrators to be among the top ranked problems of new teachers. To combat this problem, and to help the induction of new teachers into the job, many school districts recently started teacher mentor programs.

Finally, the clarity of the goals of the school seem to be an important predictor of first year teacher burnout. Rosenholtz (1985, 1987) indicated that clear guidance about instructional goals may reduce the feeling of uncertainty beginners typically possess, and therefore reduce their feeling of burnout.

Hypothesis

Work environment conditions experienced by teachers at the first few months of work will account for (predict) substantial burnout variation at the end of the first year of teaching.

Method

Sample

Five districts in a southwest city of the of the United States were contacted and asked to identify beginning teachers in their districts who had never taught before. Eighty-five first year teachers were identified and mailed a survey (time 1 survey) during the fall semester. Sixty-eight (80%) returned the time 1 survey. In addition, a random sample of 10% of teachers in each district was interviewed to obtain more insight into the working environment of beginning teachers. The teachers who returned the time 1 survey were mailed a second survey (time 2 survey) in the spring semester several weeks before the end of the school year. Forty-five beginning teachers (53%) of the original population (66% of the time 1 respondents) returned the time 2 survey. The final sample included only those forty-five first year teachers. Twenty-six were elementary teachers, seven were junior high/middle school teachers, and eleven were secondary teachers.[1] Seven (16%) were male, and thirty-eight (84%) were female. Nineteen (42%) were in the ages 20-24, thirteen

[1] One teacher did not report his/her teaching level.

teachers (29%) were in the ages 25-29; six (13%) were in the ages 30-34; five (11%) were in the ages 35-44; and two teachers were over forty-four years old. Finally, twenty-six respondents (58%) had mentor teachers, and nineteen (42%) did not.

Study Design

Time 1 and time 2 surveys queried beginning teachers about their current working environment. In addition, the time 2 survey asked teachers about their feelings associated with burnout. Other work environment and outcome variables were included in the survey, but were not be addressed in this study.

Measures

Most scales utilized a 4-point rating scale that ranged from 1 ("definitely inaccurate") to 4 ("definitely accurate").

Role overload (feeling of being rushed and amount of free time available) was assessed using a two-item scale adapted from Lit and Turk (1986) (alpha reliability= .71) and utilizing a 4-point rating scale that ranged from 1 ("definitely inaccurate") to 4 ("definitely accurate").

Instructional Rewards (the degree of recognition and feedback teachers obtain) was assessed using a three-item scale (alpha reliability= .68) obtained from Rosenholtz (1989) and utilizing a 5-point scale ranged from 1 ("definitely inaccurate") to 5 ("definitely accurate").

Job Design Factors consisted of Hackman and Oldham's (1980) Job Diagnostic Survey including: autonomy; task identity; skill variety; task significance; feedback from job itself; experienced meaningfulness of the work; experienced responsibility for work outcomes; and knowledge of the results of one's work. Alpha reliabilities are reported by Hackman and Oldham (1975), and the scales utilized a 4-point rating scale that ranged from 1 ("definitely inaccurate") to 4 ("definitely accurate").

Role ambiguity (feeling certain about expectations and authority amount) was assessed using Rizzo and House (1970) (alpha reliability= .73) utilizing a 4-point rating scale that ranged from 1 ("definitely inaccurate") to 4 ("definitely accurate").

The **Classroom environment** scale was created from three variables (Class size, student behavior and student learning) reported by Bacharach et al. (1986a). All scales utilized a 4-point rating scale that ranged from 1 ("definitely inaccurate") to 4 ("definitely accurate"). Class size was assessed based on teachers' response to a statement about classes as being too large. In the second variable, one item was picked out of a four item scale regarding perception of students as being abnormally unruly. The third scale contained three items which were picked out of a six- item scale with alpha reliability of .66.

Goal clarity was assessed using a 3-item scale taken from an Organizational Climate survey (Bacharach et al. 1986b) with alpha reliability of .90. The scale utilized a 4-point rating scale that ranged from 1 ("definitely inaccurate") to 4 ("definitely accurate").

Frequency of interaction with teachers and administrators was assessed by two items asking how frequently the teachers talk with the school principal and other teachers and using a four-point rating scale that ranged from 1 ("several times a day") to 4 ("monthly or less often").

Finally, having a **mentor teacher** was determined by a single item asking whether the teacher had a mentor.

Results and Discussion

The intercorrelations among the independent variables and the dependent variable, reliabilities, means, and standard deviations were reported in Table 1. It is important to emphasize here that a higher score on the burnout scale means less burnout, and a lower score on the burnout scale means more burnout.

In order to test the hypothesis a stepwise multiple regression analysis was conducted and the results are reported in Table 2. Instructional rewards (i.e. rewards obtained from student progress, and teacher and administrators' recognition) was the only factor determined to have a significant influence ($F=4.5$, $p<.05$) as a predictor of end of year beginning teacher burnout. This variable accounted for 10% of the variance in beginning teacher burnout. Since the most important and critical source of stress and burnout for the professional novice is the problem of competence (Cherniss, 1980a), it seems that positive experiences in the classroom and recognition by other teachers and administrators is crucial to reduce physical and emotional exhaustion during the first year of teaching.

No other variable emerged as a significant predictor of end of year teacher burnout. However, since this study is exploratory in nature, other variables were included in order to assess their contribution to burnout. Another multiple regression was conducted later modifying the entry criterion to $F \geq 1.00$. Results are given in Table 3.

Several interesting results were obtained. Job variety (i.e. the degree to which a job requires variety of different skills) was hypothesized by Hackman and Oldham (1980) to provide more job motivation and to contribute to less teacher burnout (Cherniss, 1980a). Yet, in this sample, higher level of skill variety of beginning teachers was correlated with high burnout (lower burnout score). Further support for the importance of job variety was indicated in Table 3. Job variety, when the effect of instructional reward was controlled, provided an additional 3% to the explanation of the variation of teacher burnout. Additional, although moderate, inverse relations were obtained for job significance and experienced responsibility items. These factors, were hypothesized to contribute to work motivation and reduced level of burnout. However, the correlations indicated that a higher score on job significance and experienced responsibility correlated with lower score on the burnout scale (more burnout). Other inverse relations obtained were perhaps misleading because of the coding system.[2]

Table 3 also indicates that the integrated model, which included instructional reward together with another five variables, accounted for almost one third of the measured variation in the beginning teacher burnout.

The **feedback from agents** scale (i.e. the amount of feedback administrators and teachers provide) had a very small correlation with burnout (see Table 1); however, when instructional reward was partialled out, the former emerged as an important predictor of burnout. **Feedback from agents**, although not significantly related to stress, accounted for 6% of the measured variation of burnout. The negative beta ($\beta=-.28$) indicated an inverse relation between amount of feedback and teacher burnout. It appears as if the type of feedback the principal and other teachers provide may contribute to increased feeling of burnout among novice teachers.

---

[2] The class size correlation with burnout means the larger the class size the lower the burnout score (higher level of burnout). The correlation between the frequency of interaction of teachers with the principal and teacher burnout means the higher the interaction score (less frequent interaction) the lower the burnout score (higher level of burnout).

The data in Table 3 identify several important factors in the school environment which contributed to burnout among new teachers. A major factor is the nature of interaction between the novice and other people in the school; a negative experience may lead to high level of emotional and physical exhaustion.

Second, the nature of the job, that is the opportunity the teacher has to begin and finish his/her teaching task (task identity), was found to impact teacher burnout. Teachers who feel rushed in their job, and do not have enough time and opportunities to complete their tasks may indicate high levels of burnout.

Finally, high level of exhaustion may be experienced by beginning teachers due to task and skill overload as well as having too many students in the classroom.

Several other important results of this study should be noted. The role ambiguity variable, which is indicated in literature as an important source of burnout (Schwab and Iwanicki, 1982), highly correlated with teacher burnout (.30). However, when the effect of the instructional reward scale was partialled out, role ambiguity did not seem to have an impact on teacher burnout. It may be that in the case of beginning teachers the importance of initial positive experience is more crucial than the certainty about what is expected of the novice.

Another variable which did not significantly account for variation in burnout was having a mentor teacher. Recently, many school districts have utilized the mentor system in order to help beginning teachers in the process of transition. However, in our sample, having a mentor explained very little of the variation in burnout.

Implications

Since this study is exploratory in nature and has utilized a small sample (N=45), any conclusions should be viewed as tentative only. However, findings about the importance of instructional rewards in predicting teachers' burnout should be tested with larger samples of beginning teachers taking into account variables such as school size, and location of school (urban, suburban, and rural). Identification of crucial factors which contribute to beginning teacher stress may help school districts in developing interventions which may reduce the amount of stress and burnout teachers experience during their first year of teaching. In addition, the effectiveness of teacher mentoring programs in helping the transition of beginning teachers (at least with regard to burnout) was called into question in this study. Further studies should explore the impact of various mentoring programs on beginning teachers' burnout.

The findings of this study underscore the importance of planning for a successful first year experience for teachers. Providing for a positive recognition and adequate time for planning and instruction, as well as reducing class size may reduce beginning teachers' burnout and consequently reduce teachers' attrition. It is important to note that forty-two percent of the beginning teacher sample reported "frequently" or "almost always" experiencing emotional and physical exhaustion. Beginning teacher burnout is a serious problem in the schools and may affect the ability to perform effectively and ultimately impact student learning and motivation.

References

Bacharach, S.B.; Bauer,S.C.; and Conley, S. (1986a) Organizational Analysis of Stress: The Case of Elementary and Secondary Schools. Work and Occupations, 13,1.

Bacharach, S. et al. (1986b). The Workplace: The conditions and Resources of Teaching, Ithaca, NY: Organizational Analysis and Practice, Inc.

Cherniss, C. (1980a). Professional Burnout in Human Service Organizations. New York: Praeger.

Cherniss, C. (1980b). Staff Burnout Job Stress in the Human Services. Beverly Hills: Sage Publications.

Coates, T.S. and Thoresen, C.E. (1976). Teacher Anxiety: A review with recommendations. Review of Educational Research, 46, 2, pp. 159-184.

Evans, E.D. and Tribble M. (1986). Perceived teaching problems, self efficacy, and Commitment to Teaching among preservice teachers. Journal of Educational Research, 80, 2, pp.81-85.

Galloway, D. (1982). Teachers and Stress, Final Report, January 1987- May 1987. Eric Document Reproduction Service No. ED 231 055.

Hackman, J.R. and Oldham G.R. (1975). Development of the Job Diagnostic Survey. Journal of Applied Psychology, 60, pp.159-170.

Hackman, J.R. and Oldham, G.R. (1980). Work Design. Massachusetts: Addison-Wesley Publishing Co.

Lit M.D. and Turk D.C. (1985). Sources of Stress and Dissatisfaction in Experienced High School Teachers. Journal of Educational Research,78,3, pp.178-185.

Maslach, C. and Jackson, S.E (1981). The measurement of Experienced burnout. Journal of Occupational Psychology. 2, pp. 99-113.

Maslach, C. (1982). Burnout the Cost of Caring. New Jersey: Parentice Hall.

Pines A.M. and Elliot A. with Kafry D.(1981). Burnout: From Tedium to Personal Growth. New York: The Free Press.

Rizzo, S. and House, R. (1970). Role conflict and ambiguity in complex organizations. Administration Science Q,15, pp.150-163.

Rosenholtz, S. (1985). Effective schools: Interpreting the evidence. American Journal of Education, 93, 3, pp. 352-389.

Rosenholtz, S. (1987). Workplace conditions of teaches' quality and commitment: Implications for the design of teacher induction programs; in The First Years of Teaching Background Papers and Proposals, Grifin, G. and Millies, S. (Eds.). Springfield, Illinois: Illinois State Board of Education.

Rosenholtz, S. (1989). Teachers' Workplace: A Study of Social Organizations. New York: Longman.

Schwab, R. L. and Iwanicki E.F. (1982). Perceived role conflict, role ambiguity and teacher burnout. Educational Administration Quarterly, 18,1, pp.60-74.

Veenman, S. (1984). Perceived problems of beginning teachers. Review of Educational Research, 54, 2, pp. 143-178.

Table 1

Correlations, Reliabilities, Number of items in Scales, Means, and Standard Deviations for work environment factors and burnout scales (N=45)

Scale	Correlation with burnout	Reliability alpha	N items in scale	mean	SD
1. Role overload 1 (having free time)	.08	--	1	1.30	.64
2. Role overload 2 (rushed in job)	.23	--	1	2.37	.87
3. Instructional Reward	.34	.60	3	3.33	.80
4. Task Identity	.28	.52	2	2.41	.70
5. Variety	-.15	--	1	3.67	.60
6. Significant job	-.08	--	1	3.80	.41
7. Feedback job itself	.13	--	1	3.19	.76
8. Job provides few clues	.13	--	1	3.16	.75
8. Most things trivial	.11	--	1	4.51	.76
9. Work is meaningful	.12	--	1	4.69	.60
10. Working closely with others	.12	--	1	3.58	.66
11 Experienced responsibility	-.08	--	1	4.96	21
12. Responsibility doing job right	.16	--	1	4.24	.88
13. Knowledge	.23	.63	2	3.44	.81
14. Feedback Agents	.02	.84	2	2.93	.82
15. Role Ambiguity	.30	.78	2	2.80	.70

Table 1 (Cont.)

Scale	Correlation with burnout	Reliability alpha	N items in scale	mean	SD
16. Class size	-.11	--	1	2 70	.96
17. Student Problem	.14	62	5	2.55	.59
18. Frequency interaction w/principal	-.16	--	1	2.70	.80
19. Frequency interaction w/teachers	-.12	--	1	1.52	.66
20. Having a mentor*	.05	-	1	1.42	.50
21. Goal clarity	.15	.87	3	2.76	.79
22. Burnout	1.00	.81	5	2.56	.62

* Response was made using a yes (1) or no (2) format

Table 2

Regression Results Showing relations of End-of-Year burnout scores to Beginning-of-Year Work Environment factors

Variable in regression equation	Beta	R	R^2	F
Instructional reward	.32	.32	.10	4.51*

* note ($p<.05$) dfs= 1, 44

Table 3

Regression Results Showing Relationship Between End-of-Year Burnout Scores and Beginning-of-Year Work environment Factors (F=1.0, p<,5)

Variable in regression equation	Beta	R	R^2	F
Instructional reward	.32	.32	.10	4.51*
Feedback from agents	-.28	.39	.16	3.48
Task Identity	.26	.47	.22	3.42
Class size	-.17	.49	.24	2.89
Variety	-.17	.52	.27	2.60
Rushed in job	.21	.55	.31	2.52

* note (p<.05) dfs= 1, 44