
TRADITIONAL MOTIVATION THEORIES AND OLDER ENGINEERS

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Abstract

There is a growing need to retain engineers in the workforce beyond traditional retirement age. However, little research has been conducted in the area of the motivation—and therefore retention and productivity—for these valuable employees. This article examines the responses from 29 engineers over the age of 55 regarding factors in the workplace and their effects on the retention and productivity of older engineers. These responses will be compared to traditional motivation theories.

Introduction

During much of the twentieth century, a traditional career pattern included mandatory retirement no later than age 65. In many cases, workers were “encouraged” to retire as early as age 55. The factors that motivated “older workers” appeared to be unimportant to management, and the retention of older workers beyond retirement age ran counter to normal industry practice. Therefore, little effort was made to understand the factors that motivated this segment of the workforce.

According to the U.S. Bureau of Census Current Population Reports, Series P25-1130, there are currently 82 million workers in the 35 to 54 age group—the Baby Boom generation. This is the age group from which middle- to upper-level engineers are currently drawn. The next generation, age 15 to 34, has a population of only 75 million. These are the people who will replace the Baby Boomers as they retire over the next 20 years. This shortfall of seven million workers added to the significant increase in jobs projected during this period creates a large workforce deficit that can only be filled by selective immigration policies or by retention in the workforce of significant numbers of the Baby Boom generation. A large number of these jobs will be knowledge-based.

In order to meet these demands, companies must retain a cadre of productive engineers beyond the age of 55. As they reach retirement, the Baby Boom generation will be the most highly educated and the healthiest generation in the history of the United States. They will have the training, experience, and health to continue playing a valuable role in the workforce.

Considering the reality and the urgency of the need for motivation and retention of the older engineer in the workforce, the amount of research, studies, and publications on the subject is inadequate (Forte and Hansvick, 1999). This article reviews some of the more significant work in the area of worker motivation, specifically that of Herzberg, Mausner, and Snyderman (1959) and Maslow (1943). The work of Utley (1995) is also reviewed, as it represents current research into the motivation of engineers. The results of the survey of older engineers are then compared to these research findings.

Traditional Motivation Theories

It is a widely accepted premise that retention and productivity of workers is a function of how well the individual is motivated. The research and findings of Herzberg and Maslow are the cornerstone of much of the work in the field of human motivation. Their work was among the first to catalog the factors leading to job satisfaction.

Herzberg contends that “a demonstration of the relationship between measures of attitudes and resulting behaviors is of the first importance” (Herzberg et al., 1959). Based on his research with engineers and accountants, Herzberg concluded that the existence of specific job factors relating to job attitudes was “fairly well accepted.” The literature suggested to Herzberg that some of the factors were *satisfiers* or *motivators* while others were *dissatisfiers* or *hygienes* (Herzberg, Mausner, Peterson, and Capwell, 1957).

Maslow developed his theories of human motivation primarily from clinical observation. The basic premise of his theory is that human behavior is determined by biological, cultural, and situational conditions (Maslow, 1943). The state of these conditions creates needs that shape the motivation for the individual to act. Maslow contends that there exists a hierarchical relationship among these needs, such that basic levels of needs must be at least partially met to the satisfaction of the individual before the higher levels of need can act as behavioral motivators. From lowest to highest, these needs are physiological, security, social, self-esteem, and self-actualization (Maslow, 1943).

Utley (1995) developed data to determine the correlation of the application of these theories to the successful management of quality in technical organizations. She also focused on workers in engineering-type positions. Her analysis shows sufficient evidence to suggest that there is a positive correlation between the application of the behavioral theories of Maslow and Herzberg and the successful implementation of quality

About the Author

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