There is a lack of information regarding job satisfaction among high school principals in the state of Missouri. This study is based on a previous study of middle school principals in Virginia completed by Newby and then replicated on high school principals in Virginia by Stemple. For this study, 108 high school principals in the state of Missouri responded to an internet survey using the Minnesota Satisfaction Questionnaire (MSQ) to explore the specific variables of age, gender, salary level, number of assistant principals, school size, AYP status, education level, and years as a principal to determine which variables may or may not contribute to job status. A discriminant functional analysis (DFA) was conducted to determine the extent the variables play a role in explaining the level of satisfaction of principals in the study. The findings of this study indicate that high school principals in Missouri are generally satisfied with their jobs. Respondents were most satisfied with social service, achievement, and activity and were least satisfied with advancement, compensation, and security. The DFA indicated that that principals felt less satisfaction with the ability to implement new ideas when their salary was >$100000 and were at schools with >2000 students. Principals felt the most satisfaction with the ability to implement new ideas when their salary was $75000-$100000 and were at a school with 1001-1400 students. DFA also indicated that principals felt less satisfaction with external working rewards if they had zero or one assistant principals and made less than $75000.