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Mark A Skandera*, Lehigh University Mathematics Department, Christmas-Saucon Hall, 14 East Packer Avenue, Bethlehem, PA 18015, and **Brittany Shelton** and **Sam Clearman**. *Path tableaux and combinatorial interpretations for S_n -class functions*.

Around 1991, Goulden-Jackson, Greene, Haiman, Stanley, and Stembridge studied the evaluation of S_n class functions on generating functions in $Z[S_n]$ which are products of Kazhdan-Lusztig basis elements. This led Stembridge to prove algebraically that irreducible S_n -characters evaluate nonnegatively on the $Z[S_n]$ generating functions, and to conjecture that related "monomial virtual characters" have the same property. We point out that the analogous result for induced sign characters, which follows from the earlier Littlewood-Merris-Watkins identity, has a nice combinatorial interpretation. Using this interpretation, we combinatorially prove special cases of the Stembridge result and conjecture. We also conjecture a combinatorial interpretation for a known q -analog of the Littlewood-Merris-Watkins identity, and relate this to Haiman's q -analogs of Stembridge's result and conjecture. (Received February 14, 2011)