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Relationship between quantitative measures of temperament and other observed behaviors in growing cattle

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Highlights

- Objective chute score was positively related to ADG and exit velocity was negatively related to ADG
- Chute score and exit velocity interacted in their relationship to dominance ranking
- Dominance ranking was not linearly related to ADG in cattle penned in small groups
- Electronically monitored activity counts were negatively related to ADG
- Grouping strategies for cattle may modify the influence of temperament on ADG

Abstract

Measures of temperament have been previously related to gain and intake in beef cattle. Intake effects may be partially mediated through social interactions in that some temperament measures may directly relate to social dominance behavior. To examine the relationships between temperament, growth, and social dominance behavior, thirty-two crossbred steers were used in a 56-d randomized complete block design experiment with a 2 x 2 factorial treatment structure. Temperament treatments (assigned on d -7) were chute exit velocity (EV; slow vs. fast) and objective chute score (OCS; low vs. high), a novel temperament measure, defined as the coefficient of variation of recorded weight values collected at five Hz for 10 s while an animal's head was restrained in a chute. Electronic ear tags with accelerometers were used to continuously measure

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