PHYSICAL FITNESS ASSESSMENTS AND INJURY RISK AMONG U.S. ARMY SOLDIERS

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ABSTRACT

Results from physical fitness assessments and injury data are presented for 10,891 healthy U.S. Army soldiers. A logistic regression model was developed to help identify the risk of injury for soldiers assessed in 2015 (n = 3,438). Risk factors associated with increased injury risk included lower arm circles, lower leg press, higher weight, and lower body fat percentage. The results of this study provide an understanding of injury risk factors and help identify areas for intervention to reduce injury rates among soldiers.

RESULTS

The results are presented in the form of tables and figures. The tables include data on various fitness assessments and injury rates. The figures depict trends and distributions of the data.

Table 1: Factors associated with injury risk for soldiers assessed in 2015 (n = 3,438)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Estimated Risk Ratio (95% CI)</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower arm circles</td>
<td>1.24 (1.10-1.41)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Lower leg press</td>
<td>1.33 (1.16-1.53)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Higher weight</td>
<td>1.06 (1.03-1.09)</td>
<td>&lt;0.01</td>
</tr>
<tr>
<td>Lower body fat</td>
<td>1.03 (1.01-1.04)</td>
<td>&lt;0.01</td>
</tr>
</tbody>
</table>

CONCLUSION

The findings from this study can be used to develop intervention strategies to reduce injury risk among soldiers. Further research is needed to confirm these findings and to identify additional risk factors.

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REFERENCES


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