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(p < 0.01)

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$x_1$  (m= )

$b_1$   $x_2$   
 $b_3$   $b_2$

$e_{ijklm}$

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( $p < 0.01$ )

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GLM

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$$y_{ijklm} = \mu + Y_i + S_j + L_k + H_l + SE_m + b_1x_1 + b_2x_2 + b_3x_2^2 + e_{ijklm}$$
  
$$y_{ijklm}$$

$i$   $Y_i$   $\mu$   
 $j$   $S_j$  ( $i = \dots$ )

(.)

$H_l$  ( $k = \dots$ )  $k$   $L_k$  ( $j = \dots$ )  
 $m$   $SE_m$  ( $l = \dots$ )  $l$

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| NS  | NS  | NS  | **  | × |
| *   | *** | *** | *** | × |
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| NS  | NS  | NS  | NS  | × |
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| NS  | NS  | NS  | NS  | × |
| *** | *** | *** | *** | × |
| *   | *   | *   | *** | × |

N.S. (p<0.001) (p<0.01) (p<0.05)

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(p<0.05)



(P < / )

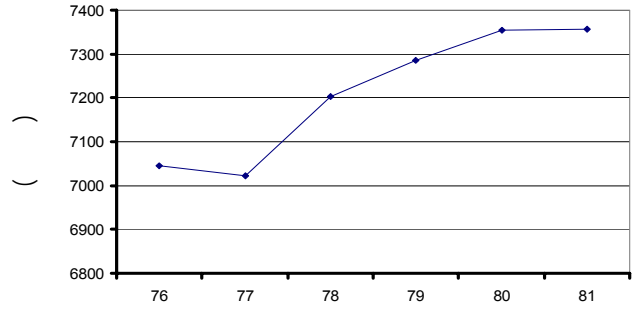
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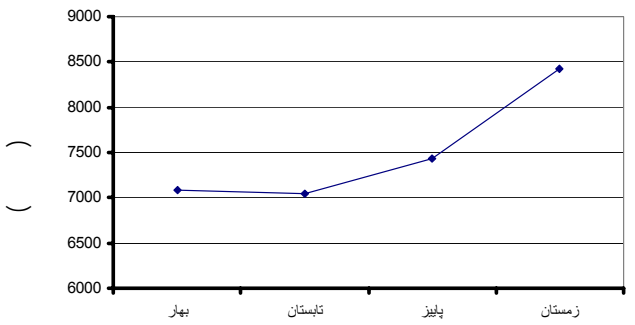
(P < / )



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