**1.Modelo RF5\_Indeg Apoio Levantamento diques cintura X All var**.

***Instrucciones modelo***: **test size = 0.2 ; rd\_state = 12**

***Variables indep select to fit***:

variables = ['id', 'Indeg\_IntimAmigos\_'

, 'Indeg\_RedeRisk\_Cen','PC1\_Distance\_Pro',

    'Avg\_Distancia\_Dist\_moranza','Degree\_RedeTotFamil',

   '2\_VarExp\_Atri\_Tabanca', 'OutDeg\_RedeRisk\_Cen', 'OutDeg\_RedeConfianc']

***Model performance (scores):***

Mean Squared Error: 1.2308

R^2 Score: 0.467 (In Excel: R2 = 0.5556 ; y = 0.0.3338 X + 0.538 )

**Model tot:**

Mean Squared Error (MSE): 0.4341

Root Mean Squared Error (RMSE): 0.6585

Mean Absolute Error (MAE): 0.3411

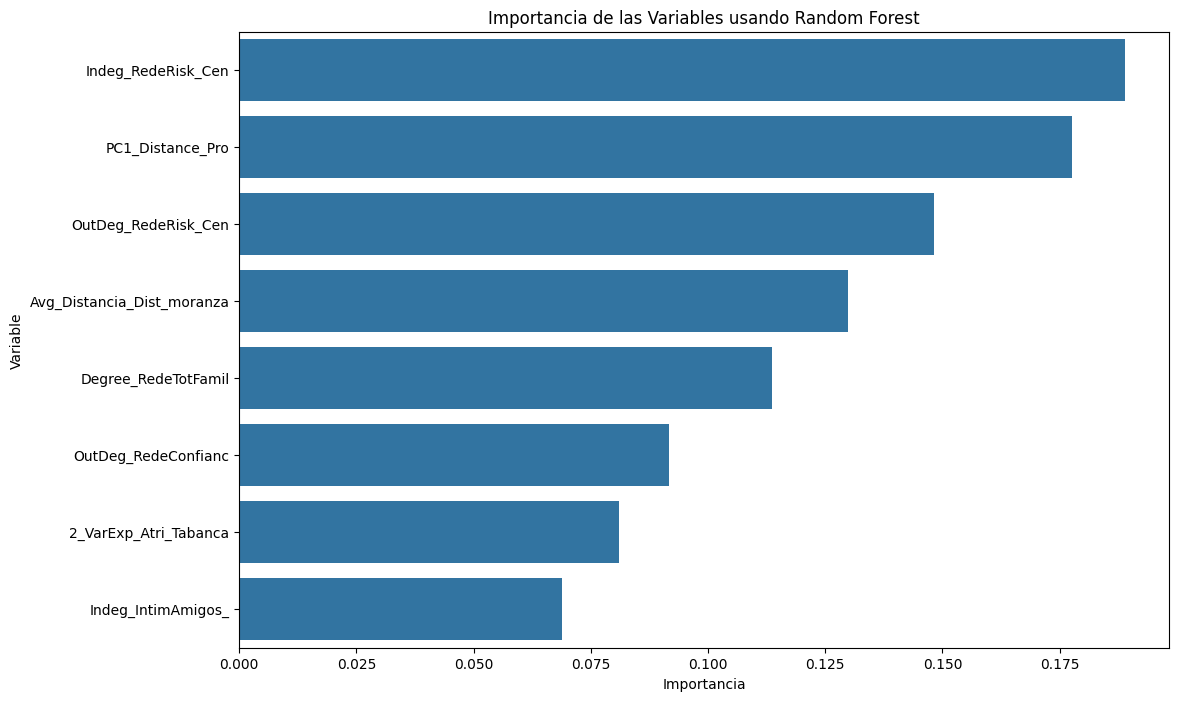
R^2 Score: 0.7217

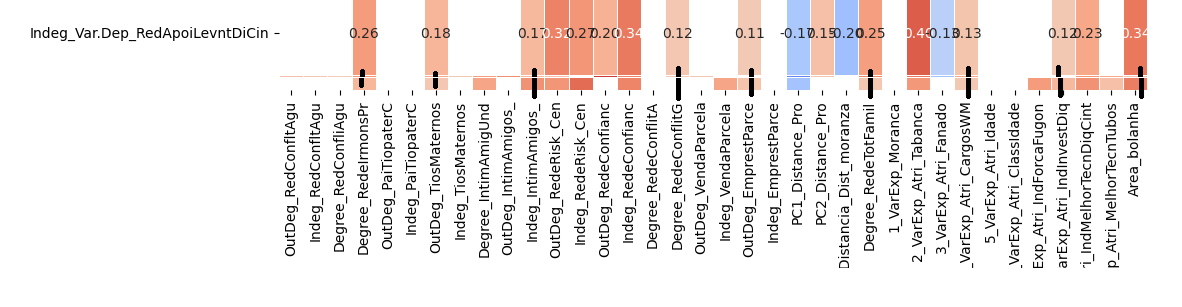
Pearson Correlation: 0.8642

***Interactions***:

| **Interacción** | **Importancia** | **Dirección** |
| --- | --- | --- |
| 0 | (Indeg\_RedeRisk\_Cen, OutDeg\_RedeRisk\_Cen) | 0.372315 | 0.110477 |
| 1 | (Indeg\_RedeRisk\_Cen, 2\_VarExp\_Atri\_Tabanca) | 0.344085 | 0.098818 |
| 2 | (Indeg\_RedeRisk\_Cen, Degree\_RedeTotFamil) | 0.317754 | 0.109752 |
| 3 | (Indeg\_RedeRisk\_Cen, OutDeg\_RedeConfianc) | 0.287079 | 0.098042 |
| 4 | (Indeg\_RedeRisk\_Cen, Avg\_Distancia\_Dist\_moranza) | 0.253625 | 0.105951 |
| 5 | (Indeg\_RedeRisk\_Cen, PC1\_Distance\_Pro) | 0.250794 | 0.103832 |
| 6 | (Indeg\_IntimAmigos\_, Indeg\_RedeRisk\_Cen) | 0.240611 | 0.003426 |
| 7 | (2\_VarExp\_Atri\_Tabanca, OutDeg\_RedeConfianc) | 0.240170 | 0.271643 |
| 8 | (Degree\_RedeTotFamil, OutDeg\_RedeRisk\_Cen) | 0.239381 | 0.033394 |
| 9 | (OutDeg\_RedeRisk\_Cen, OutDeg\_RedeConfianc) | 0.224246 | 0.048019 |

***Key results****:*





**REV 2.Modelo RF5\_Outdeg Apoio Levantamento diques cintura X All var**.

***Instrucciones modelo***: **test size = 0.22 ; rd\_st: 9**

***Variables indep select to fit***:

variables = [ 'id', 'Indeg\_IntimAmigos\_', 'Indeg\_RedeRisk\_Cen',

    'Indeg\_RedeConfianc', 'PC1\_Distance\_Pro','Avg\_Distancia\_Dist\_moranza',

    'Degree\_RedeTotFamil', 2\_VarExp\_Atri\_Tabanca, '2\_VarExp\_Atri\_Tabanca',

4\_VarExp\_Atri\_CargosWM', '7\_VarExp\_Atri\_IndForcaFugon',

'8\_VarExp\_Atri\_IndInvestDiq', '9\_VarExp\_Atri\_IndMelhorTecnDiqCint',

'Area\_bolanha','OutDeg\_RedeRisk\_Cen']

***Model performance (scores):***

Mean Squared Error: 0.5172

R^2 Score: 0.6992 (on excel: **R2= 0.7196 ; Y = 0.6722 X + 0.1328**)

**Model tot:**

Mean Squared Error (MSE):0.2248

Root Mean Squared Error (RMSE):0.4741

Mean Absolute Error (MAE): 0.1938

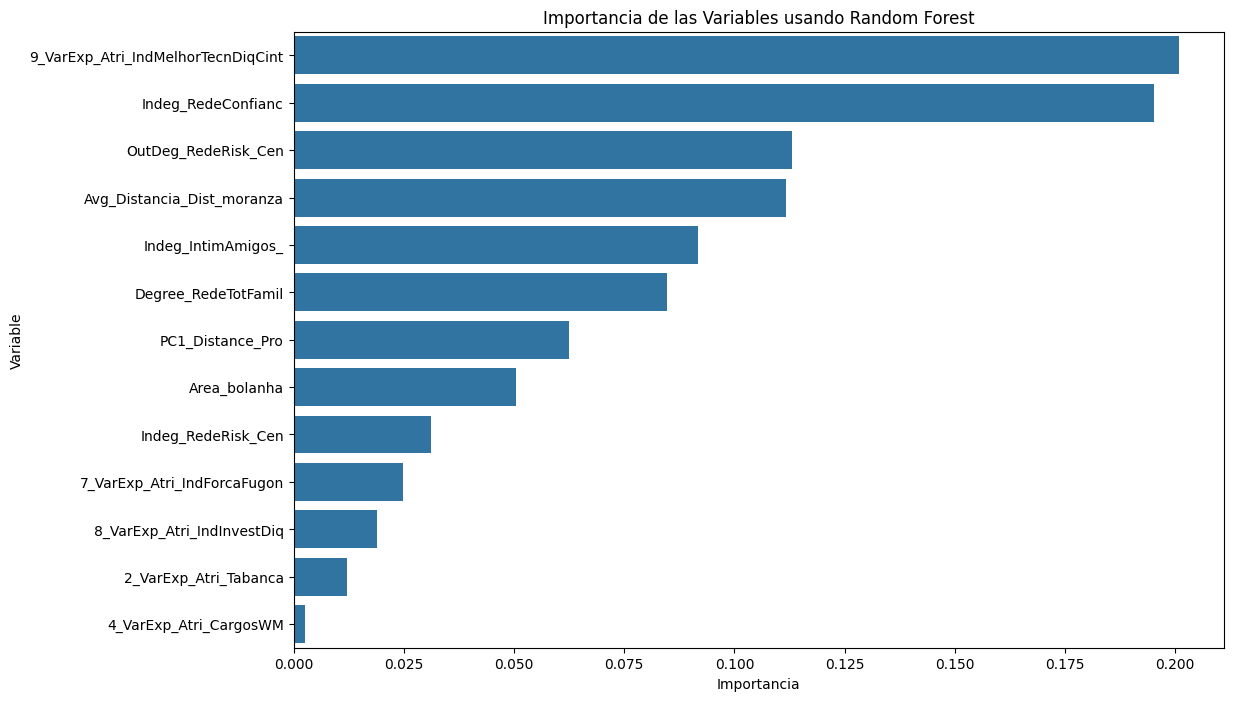
R^2 Score: 0.8326

Pearson Correlation: 0.9209

***Interactions***:

| **Interacción** | **Importancia** | **Dirección** |
| --- | --- | --- |
| 0 | (Indeg\_RedeConfianc, OutDeg\_RedeRisk\_Cen) | 0.421045 | 0.126750 |
| 1 | (Indeg\_IntimAmigos\_, Indeg\_RedeConfianc) | 0.409097 | 0.054311 |
| 2 | (Indeg\_RedeConfianc, 9\_VarExp\_Atri\_IndMelhorTe... | 0.406623 | 0.109603 |
| 3 | (Indeg\_IntimAmigos\_, 9\_VarExp\_Atri\_IndMelhorTe... | 0.399489 | 0.063356 |
| 4 | (Indeg\_RedeConfianc, Degree\_RedeTotFamil) | 0.392155 | 0.131732 |
| 5 | (Indeg\_RedeConfianc, 4\_VarExp\_Atri\_CargosWM) | 0.386622 | 0.128420 |
| 6 | (Indeg\_RedeConfianc, PC1\_Distance\_Pro) | 0.385259 | 0.127450 |
| 7 | (Indeg\_RedeConfianc, 8\_VarExp\_Atri\_IndInvestDiq) | 0.385126 | 0.128024 |
| 8 | (Indeg\_RedeConfianc, 2\_VarExp\_Atri\_Tabanca) | 0.384387 | 0.128030 |
| 9 | (Indeg\_RedeConfianc, Avg\_Distancia\_Dist\_moranza) | 0.382462 | 0.125857 |

***Key results****:*

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