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

***Instrucciones modelo***: **test size = 0.31 ; rd\_state = 9**

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

variables = ['id', 'Indeg\_RedeRisk\_Cen','PC1\_Distance\_Pro',

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

    '1\_VarExp\_Moranca','2\_VarExp\_Atri\_Tabanca','OutDeg\_IntimAmigos\_', 'OutDeg\_RedeRisk\_Cen']

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

Mean Squared Error: 0.9750

R^2 Score: 0.5062 (In Excel: R2 = 0.5538 ; y = 0.3963 X + 0.3928 )

**Model tot:**

Mean Squared Error (MSE): 0.4419

Root Mean Squared Error (RMSE): 0.6647

Mean Absolute Error (MAE): 0.3333

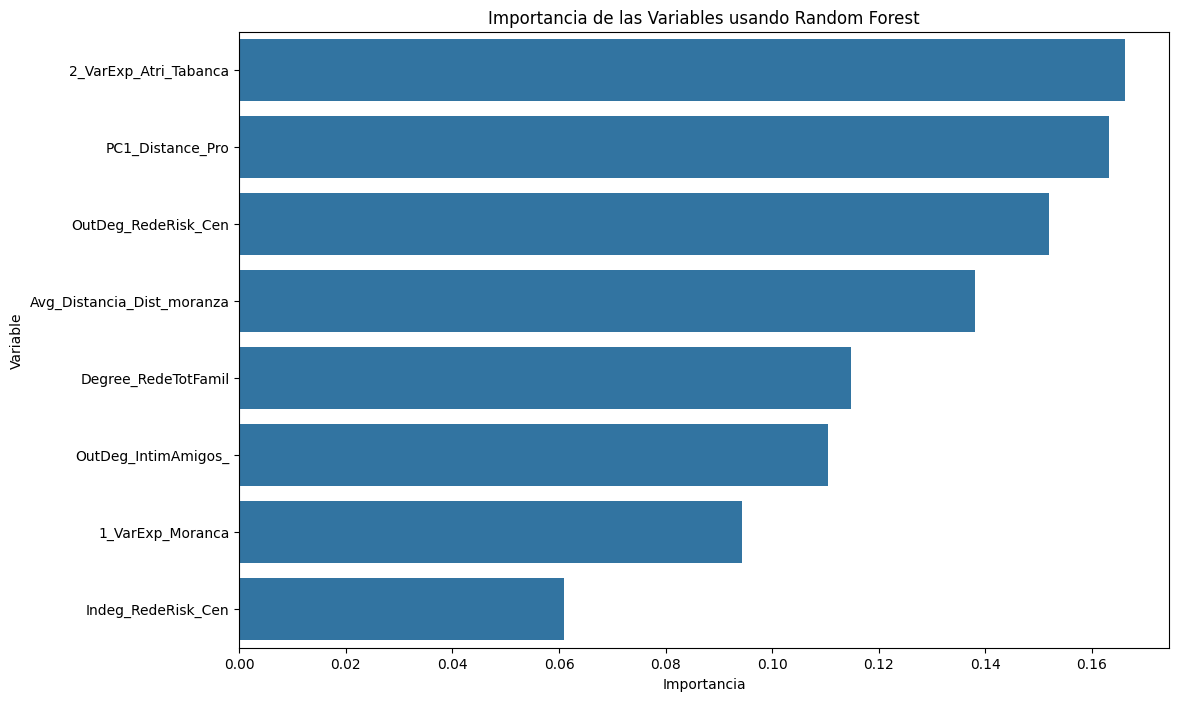
R^2 Score: 0.7167

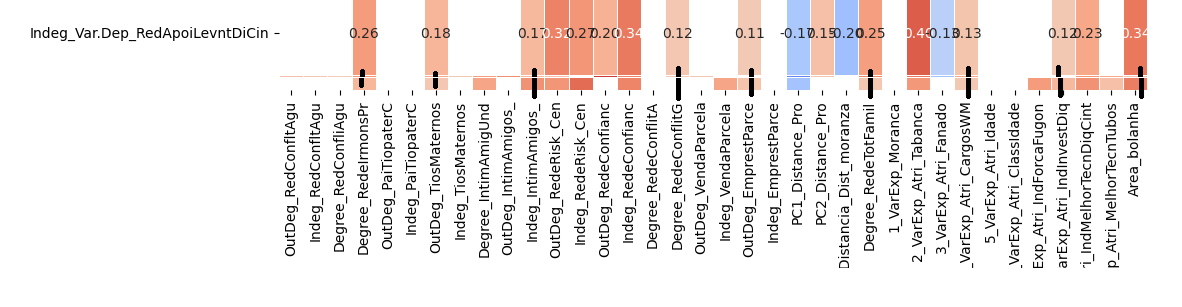
Pearson Correlation: 0.8593

***Interactions***:

| **Interacción** | **Importancia** | **Dirección** |
| --- | --- | --- |
| 0 | (2\_VarExp\_Atri\_Tabanca, OutDeg\_IntimAmigos\_) | 0.427430 | 0.480859 |
| 1 | (2\_VarExp\_Atri\_Tabanca, OutDeg\_RedeRisk\_Cen) | 0.415562 | 0.467507 |
| 2 | (Avg\_Distancia\_Dist\_moranza, 2\_VarExp\_Atri\_Tab... | 0.407650 | 0.001155 |
| 3 | (Indeg\_RedeRisk\_Cen, 2\_VarExp\_Atri\_Tabanca) | 0.405009 | 0.022230 |
| 4 | (Degree\_RedeTotFamil, 2\_VarExp\_Atri\_Tabanca) | 0.396763 | 0.017887 |
| 5 | (1\_VarExp\_Moranca, 2\_VarExp\_Atri\_Tabanca) | 0.386942 | 0.002525 |
| 6 | (PC1\_Distance\_Pro, 2\_VarExp\_Atri\_Tabanca) | 0.382284 | -0.001183 |
| 7 | (Degree\_RedeTotFamil, OutDeg\_RedeRisk\_Cen) | 0.294841 | 0.030610 |
| 8 | (OutDeg\_IntimAmigos\_, OutDeg\_RedeRisk\_Cen) | 0.263086 | -0.023937 |
| 9 | (PC1\_Distance\_Pro, OutDeg\_RedeRisk\_Cen) | 0.258145 | -0.002266 |

***Key results****:*





**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', 'Avg\_Distancia\_Dist\_moranza',

    'Degree\_RedeTotFamil', '1\_VarExp\_Moranca', '2\_VarExp\_Atri\_Tabanca',

'5\_VarExp\_Atri\_Idade', '7\_VarExp\_Atri\_IndForcaFugon',

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

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

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

Mean Squared Error: 0.4828

R^2 Score: 0.7192 (on excel: **R2= 0.7355 ; Y = 0.6736 X + 0.166** )

**Model tot:**

Mean Squared Error (MSE):0.2248

Root Mean Squared Error (RMSE):0.4741

Mean Absolute Error (MAE): 0.1938

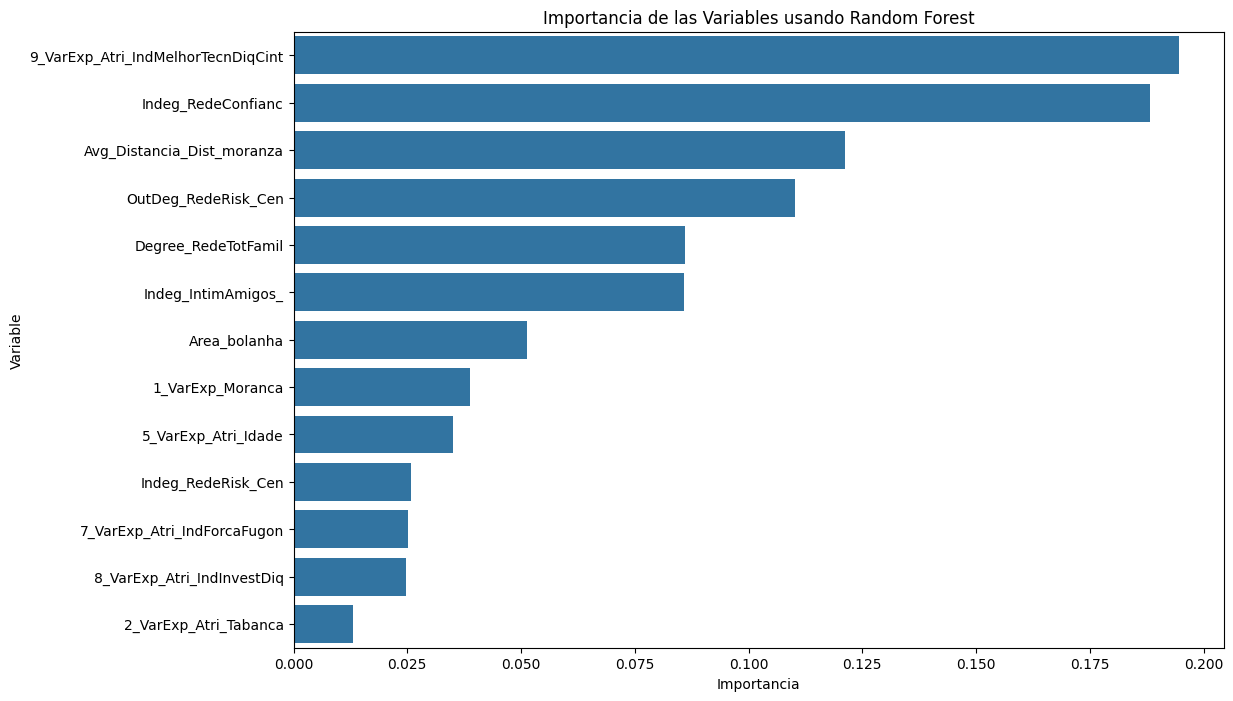
R^2 Score: 0.8326

Pearson Correlation: 0.9209

***Interactions***:

| **Interacción** | **Importancia** | **Dirección** |
| --- | --- | --- |
| 0 | (Indeg\_RedeConfianc, OutDeg\_RedeRisk\_Cen) | 0.421375 | 0.131552 |
| 1 | (Indeg\_RedeConfianc, 9\_VarExp\_Atri\_IndMelhorTe... | 0.408920 | 0.117128 |
| 2 | (Indeg\_IntimAmigos\_, Indeg\_RedeConfianc) | 0.406459 | 0.051086 |
| 3 | (Indeg\_IntimAmigos\_, 9\_VarExp\_Atri\_IndMelhorTe... | 0.393938 | 0.058158 |
| 4 | (Indeg\_RedeConfianc, Degree\_RedeTotFamil) | 0.393206 | 0.135547 |
| 5 | (Indeg\_RedeConfianc, 5\_VarExp\_Atri\_Idade) | 0.390944 | 0.132798 |
| 6 | (8\_VarExp\_Atri\_IndInvestDiq, 9\_VarExp\_Atri\_Ind... | 0.390466 | -0.028168 |
| 7 | (Indeg\_RedeConfianc, 8\_VarExp\_Atri\_IndInvestDiq) | 0.388226 | 0.132082 |
| 8 | (Indeg\_RedeConfianc, Avg\_Distancia\_Dist\_moranza) | 0.387991 | 0.130206 |
| 9 | (Indeg\_RedeConfianc, 2\_VarExp\_Atri\_Tabanca) | 0.386023 | 0.131223 |

***Key results****:*

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