



NAVAL
POSTGRADUATE
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Measuring Acquisition Workforce Quality Through Dynamic Knowledge and Performance

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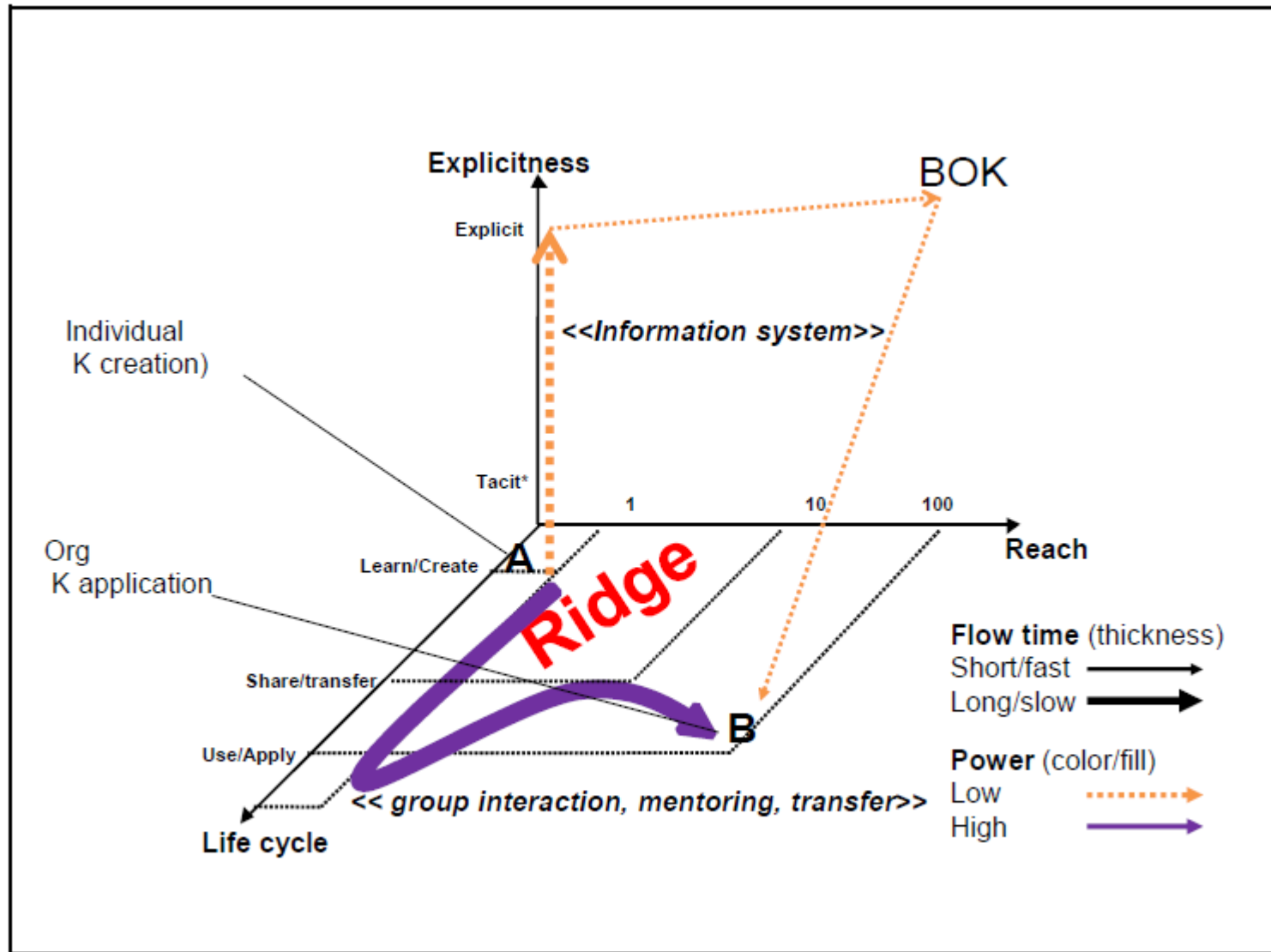




- Knowledge (TK/EK) central to AWF quality
- Dynamic, individual to org, hard to measure
- KFT & CMMM: are innovative approaches
- We integrate & explore AWF measurement



Knowledge Flow Theory





- Like SECMM: 5 capability levels
- + capability & predictability, - risk
- Process focus: efficacy proxy, AWF measure
- KFT links & measures: procurement



- Extend prior qualitative & quantitative studies
 - 2 commands: Org T – H/W, Org R – R&D
 - 12 procurement orgs, n = 228, CMMM L2 - 4
 - 6 processes: procurement planning – closeout
- Regression:
 - 3 TK/EK measures (IV): PCOd, DAWIA, AXP
 - 7 CMMM measures (DV): 6 processes + mean



Summary Statistical Results

Model	Org T	Org R
PCOd → CMMM	$R^2 = 0.36, p = 0.15$	$R^2 = 0.41, p = 0.25$
DAWIA → CMMM	$R^2 = 0.64, p = 0.03$	$R^2 = 0.44, p = 0.22$
AXP → CMMM	$R^2 = 0.59, p = 0.07$	$R^2 = 0.27, p = 0.37$
All → CMMM	$R^2 = 0.71, p = 0.24$	$R^2 = 0.72, p = 0.64$

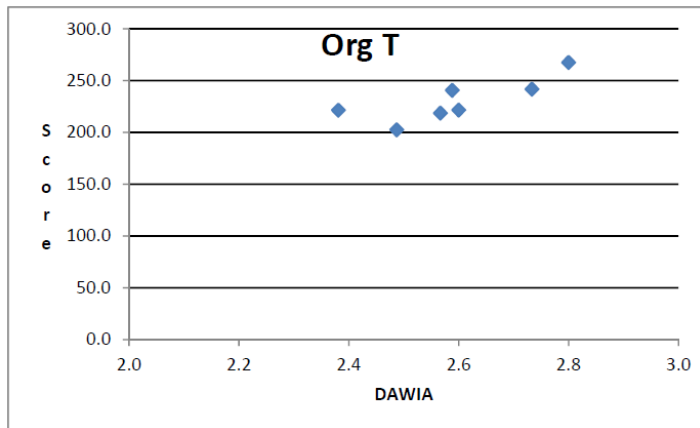


Figure 8. Organization T Score-DAWIA Relationship

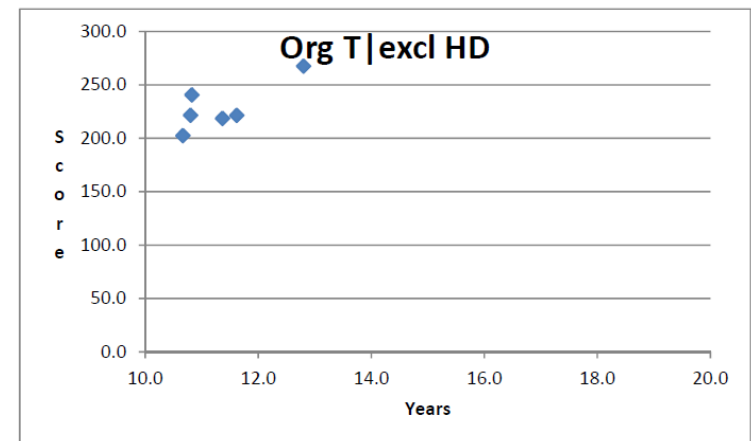


Figure 11. Organization T Score-Years Relationship (sans outlier)



- ID 3 TK/EK proxies: PCOd, DAWIA, AXP
- Measure CMMM levels: 12 orgs
- Link KFT-CMMM causally
- Explore AWF quality measure
- Potential to predict org performance
- ID promising future research ideas
 - Other orgs, other IVs, PALT & other DVs
 - Dynamics + statics



- Thank you for your interest
- Please see article for details
- Questions & comments welcome
 - Now
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CONTRACT MANAGEMENT MATURITY MODEL©

MATURITY LEVEL	PROCUREMENT PLANNING	SOLICITATION PLANNING	SOLICITATION	SOURCE SELECTION	CONTRACT ADMIN	CONTRACT CLOSEOUT
5 OPTIMIZED						
4 INTEGRATED		S	I	I S X	I	I
3 STRUCTURED	B I T D S X	B I T D X	B T D S X	D T	S X	
2 BASIC	H	H	H	H B	B T D H	B S H X
1 AD HOC						D T

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MATURITY LEVEL	PROCUREMENT PLANNING	SOLICITATION PLANNING	SOLICITATION	SOURCE SELECTION	CONTRACT ADMIN	CONTRACT CLOSEOUT
5 OPTIMIZED						
4 INTEGRATED						
3 STRUCTURED	A D	A D	A	A D		A
2 BASIC	I P T	I P T	I P D	I P T	A D I P T	I P D
1 AD HOC			T			T



Table 1. Organization T Knowledge Summary

Org	PCO	DAWIA	Years
AB	0.4	2.6	10.8
AD	0.2	2.6	11.4
AH	0.2	2.5	10.7
AI	0.6	2.8	12.8
AS	0.2	2.6	10.8
AT	0.3	2.4	11.6
HD	0.2	2.7	16.8
All	0.3	2.6	12.1

n = 132



Table 2. Organization R Knowledge Summary

Org	PCO	DAWIA	Years
AD	0.5	2.5	14.9
AI	0.5	2.5	12.3
AP	0.5	2.8	13.1
ED	0.6	2.7	15.0
RT	0.4	3.0	14.1
All	0.5	2.7	13.9

$n = 96$



Table 3. Organization T Maturity Summary

Org	PCO	DAWIA	Years	Score	Maturity
AB	0.4	2.6	10.8	221.6	2
AD	0.2	2.6	11.4	218.5	2
AH	0.2	2.5	10.7	202.5	2
AI	0.6	2.8	12.8	267.5	4
AS	0.2	2.6	10.8	240.6	3
AT	0.3	2.4	11.6	221.4	2
HD	0.2	2.7	16.8	241.7	3
All	0.3	2.6	12.1	230.6	2



Table 4. Organization R Maturity Summary

Org	PCO	DAWIA	Years	Score	Maturity
AD	0.5	2.5	14.9	236.2	3
AI	0.5	2.5	12.3	189.6	2
AP	0.5	2.8	13.1	206.5	2
ED	0.6	2.7	15.0	222.2	2
RT	0.4	3.0	14.1	167.8	2
All	0.5	2.7	13.9	204.5	2

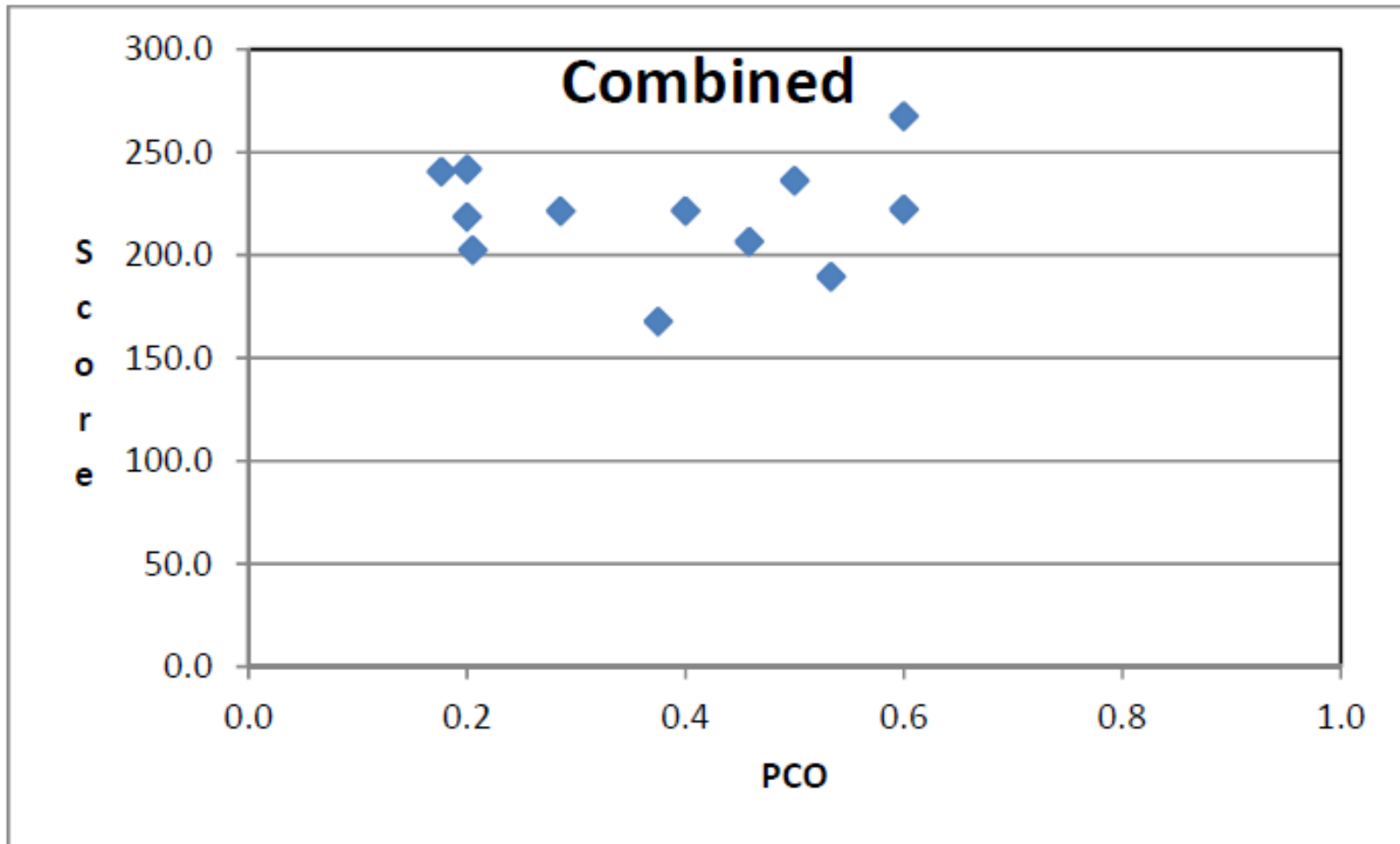


Figure 5. Combined Score-PCO Relationship

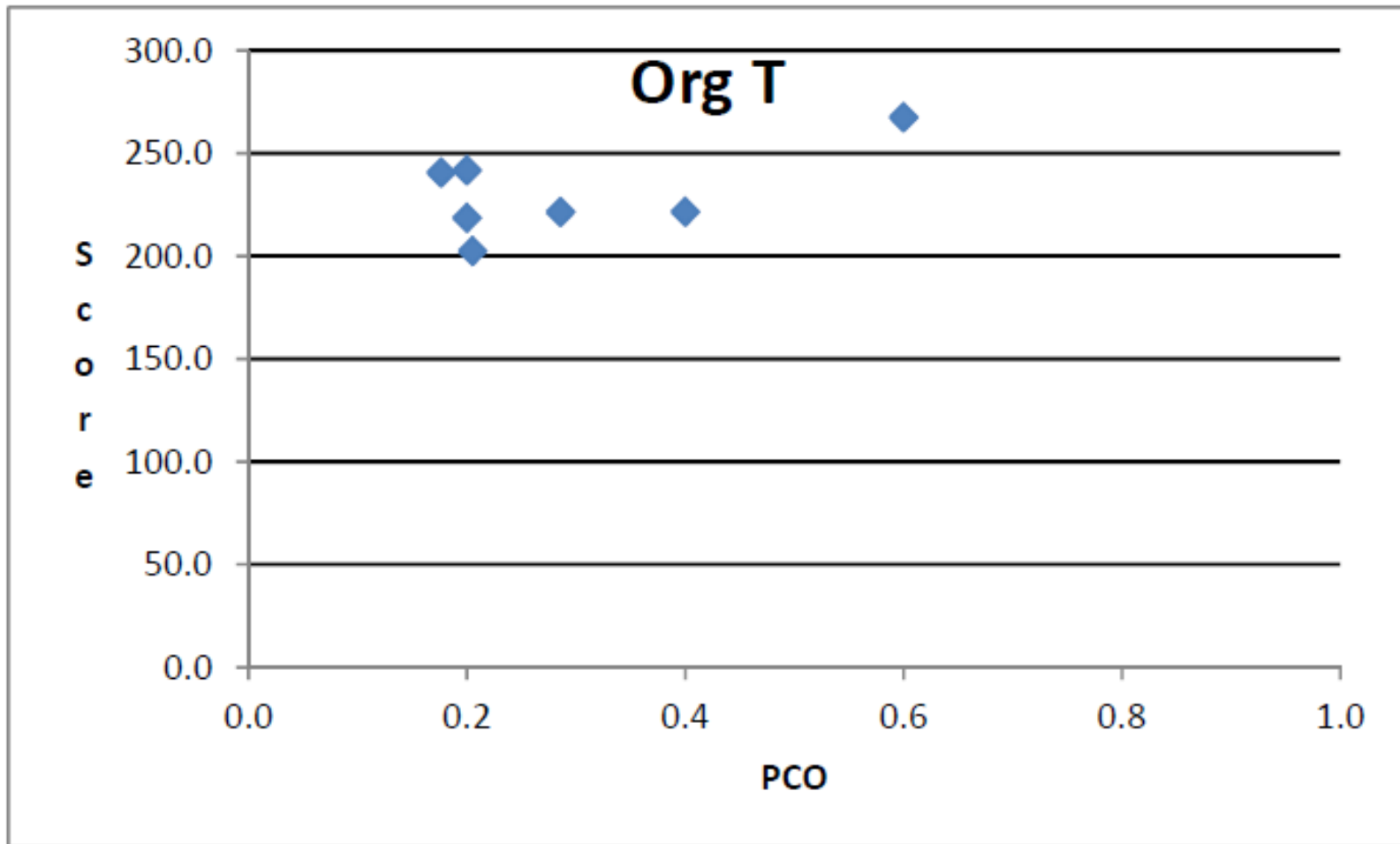


Figure 6. Organization T Score-PCO Relationship

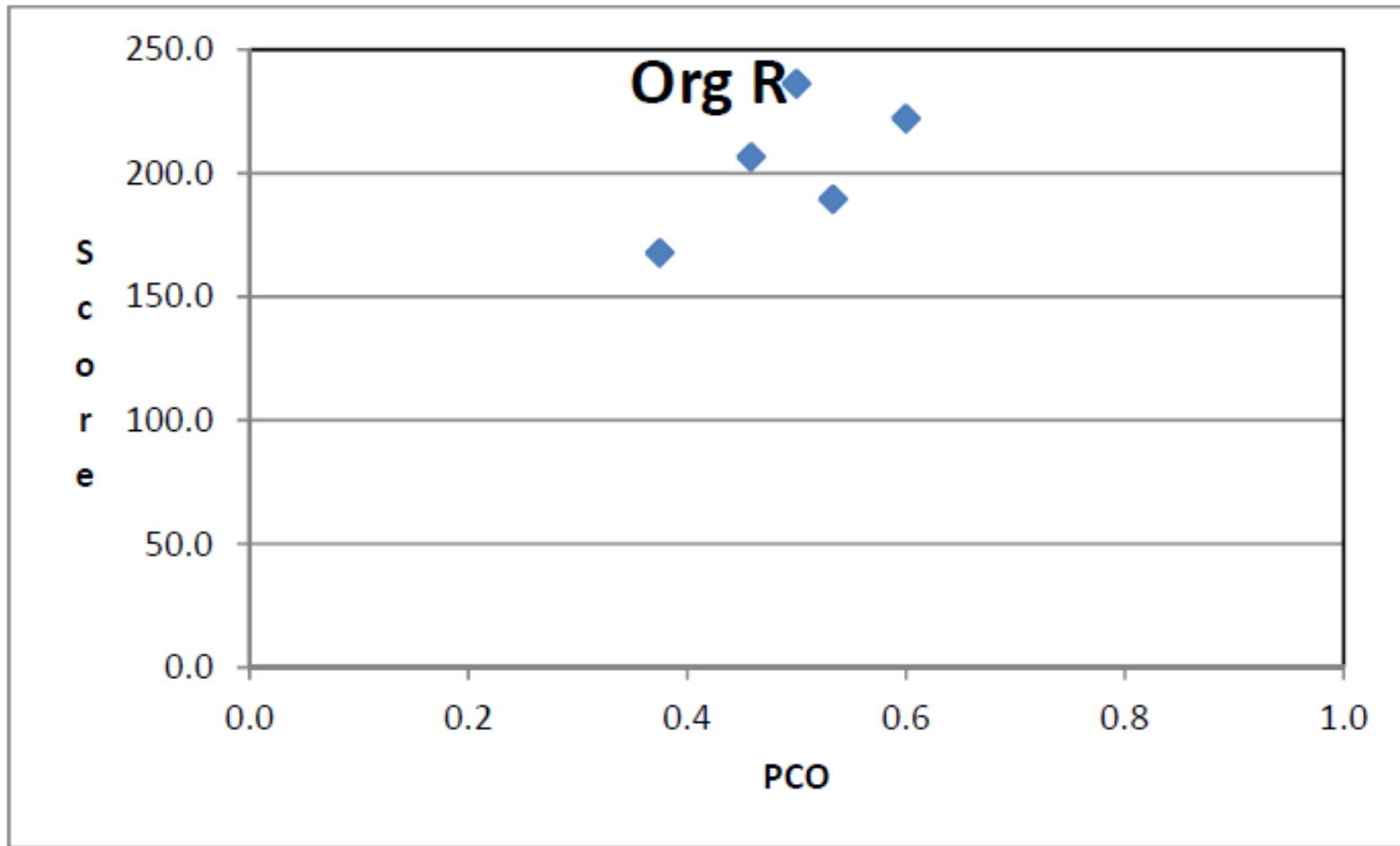


Figure 7. Organization R Score-PCO Relationship

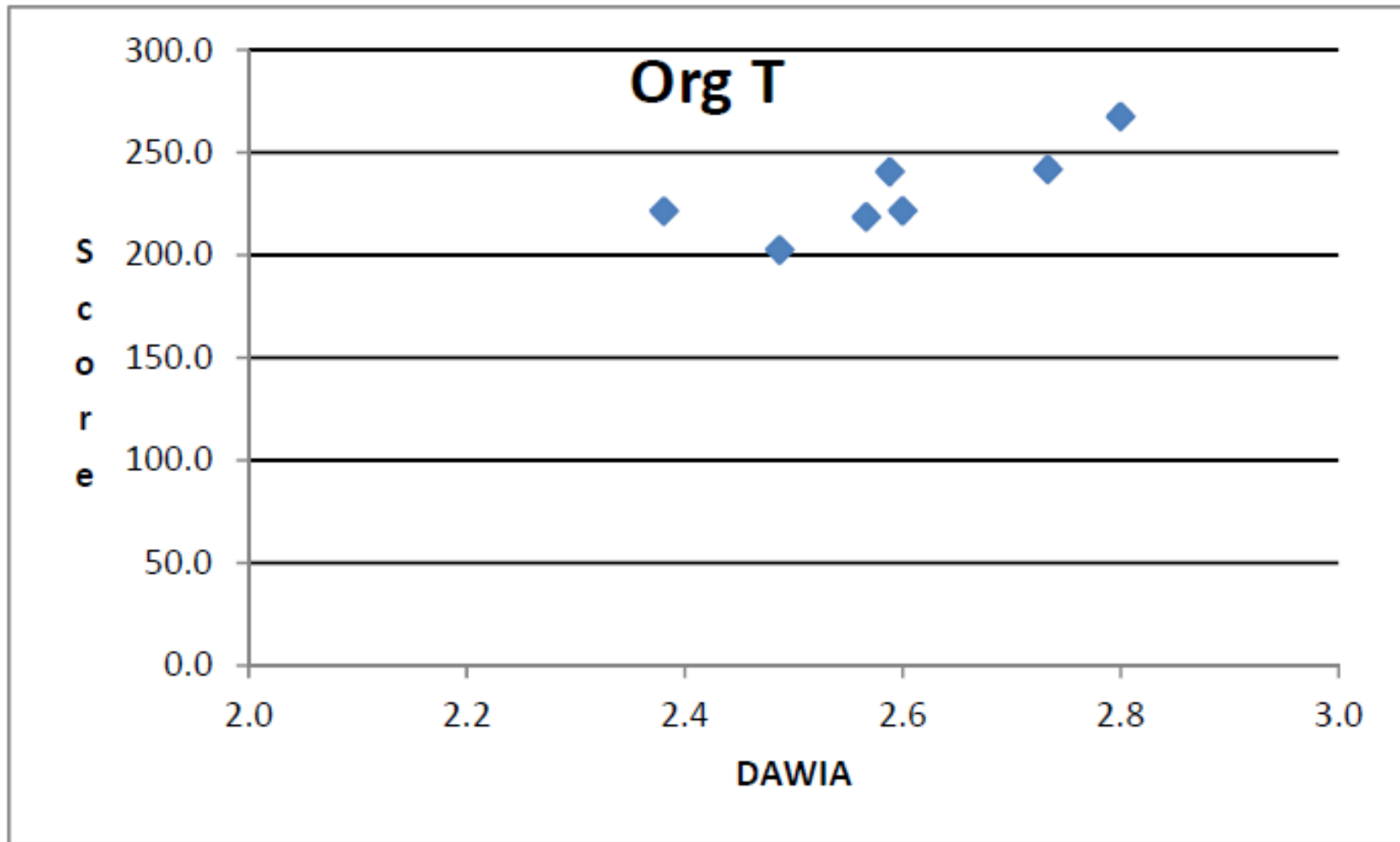


Figure 8. Organization T Score-DAWIA Relationship

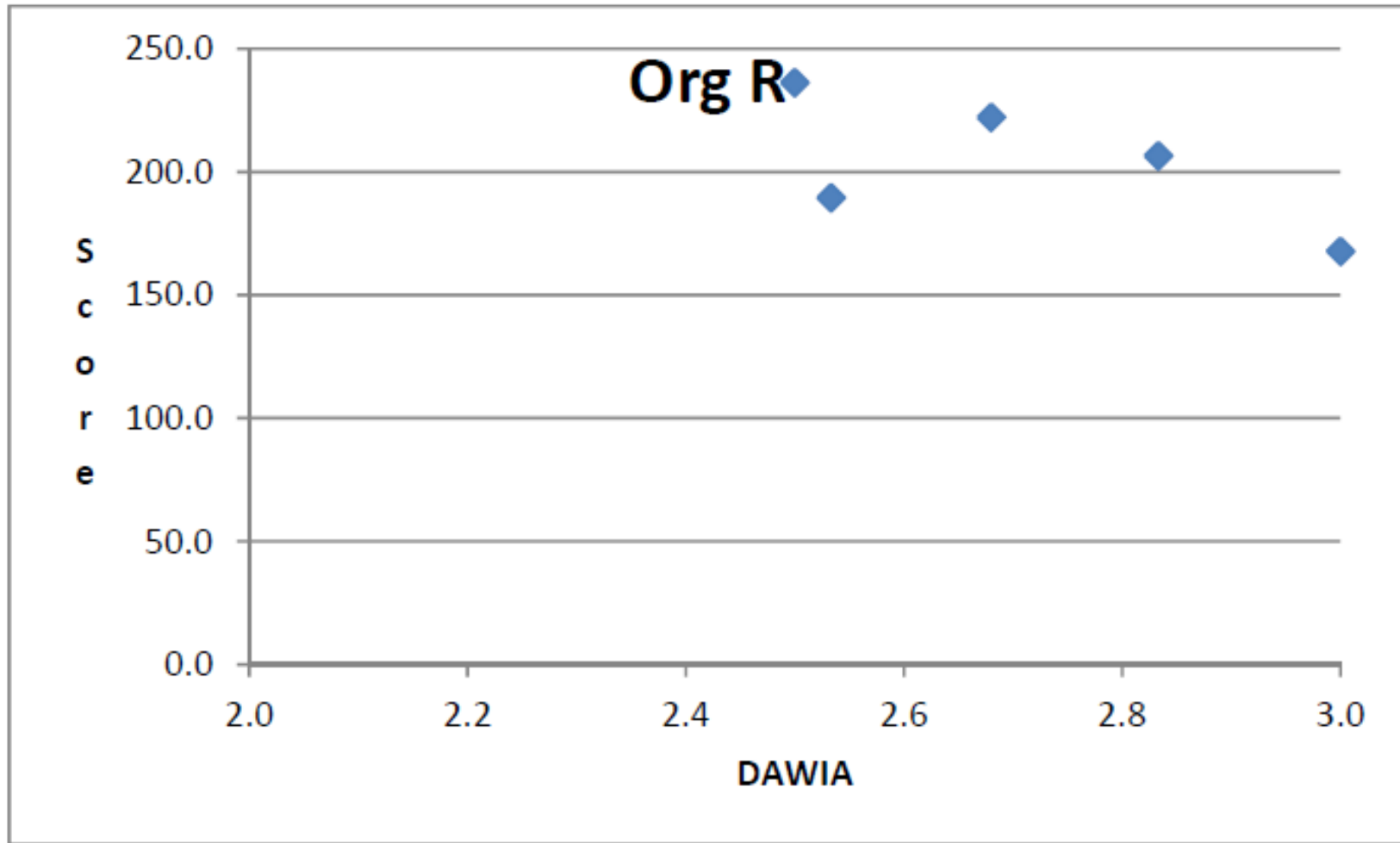


Figure 9. Organization R Score-DAWIA Relationship

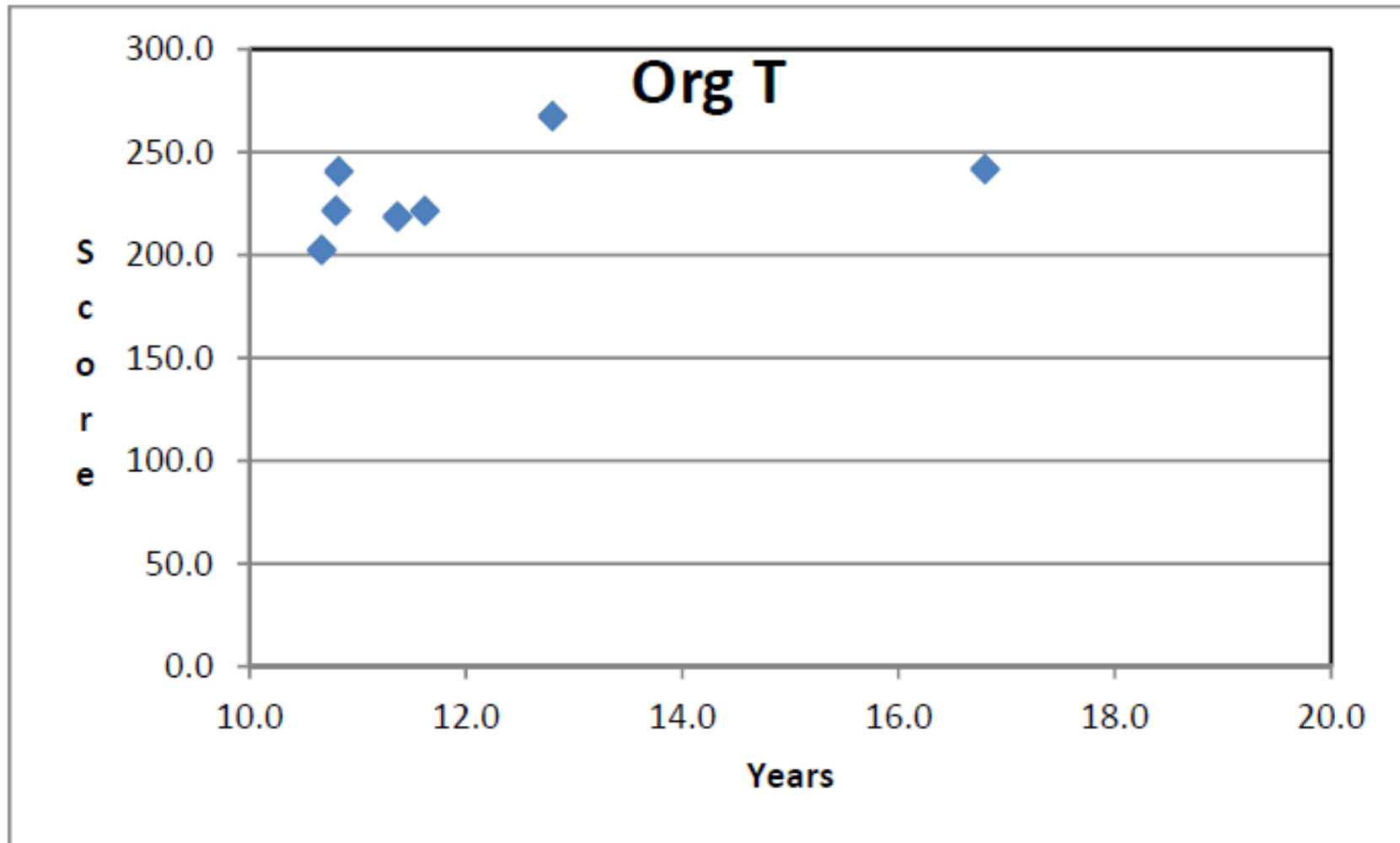


Figure 10. Organization T Score-Years Relationship

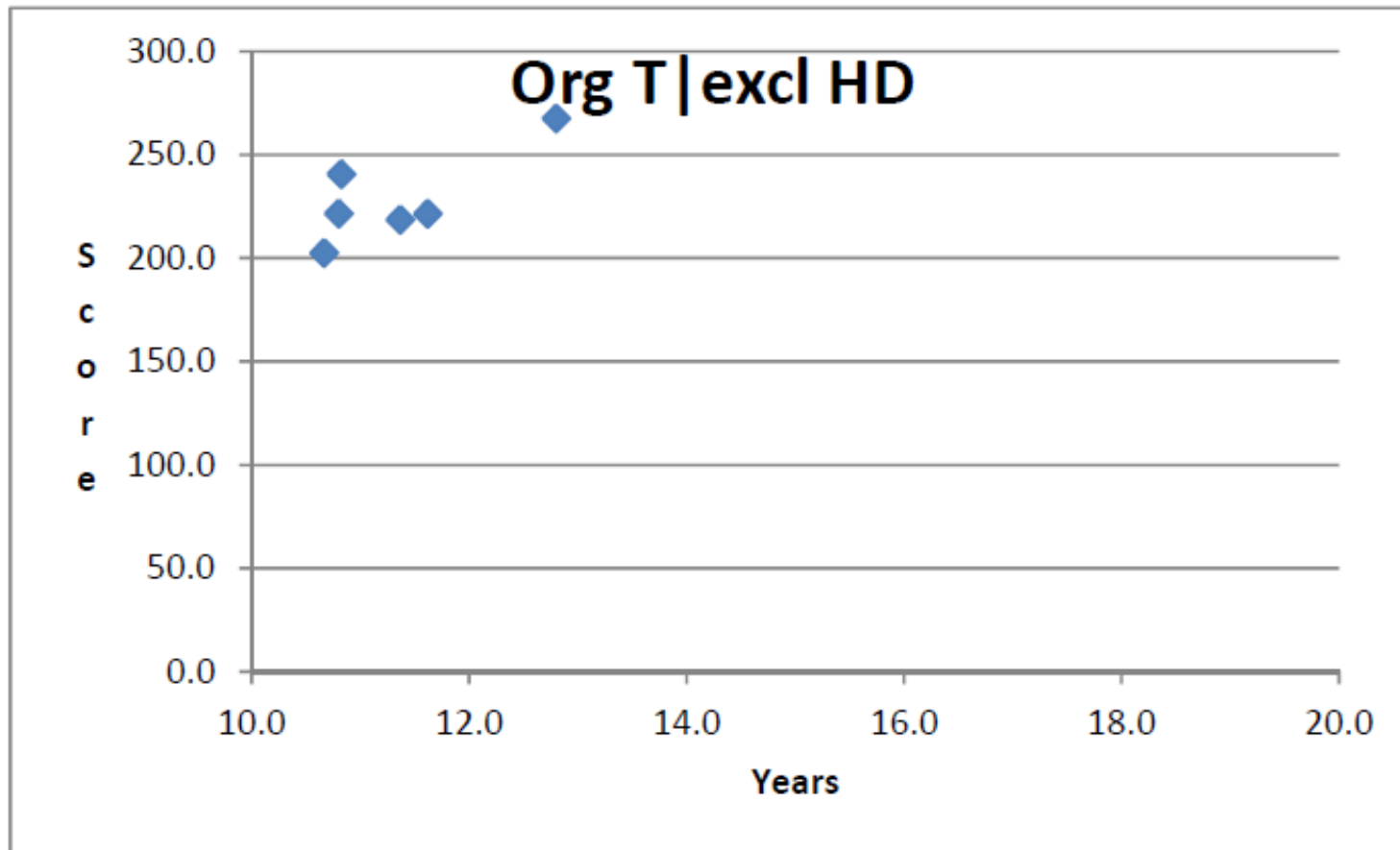


Figure 11. Organization T Score-Years Relationship (sans outlier)

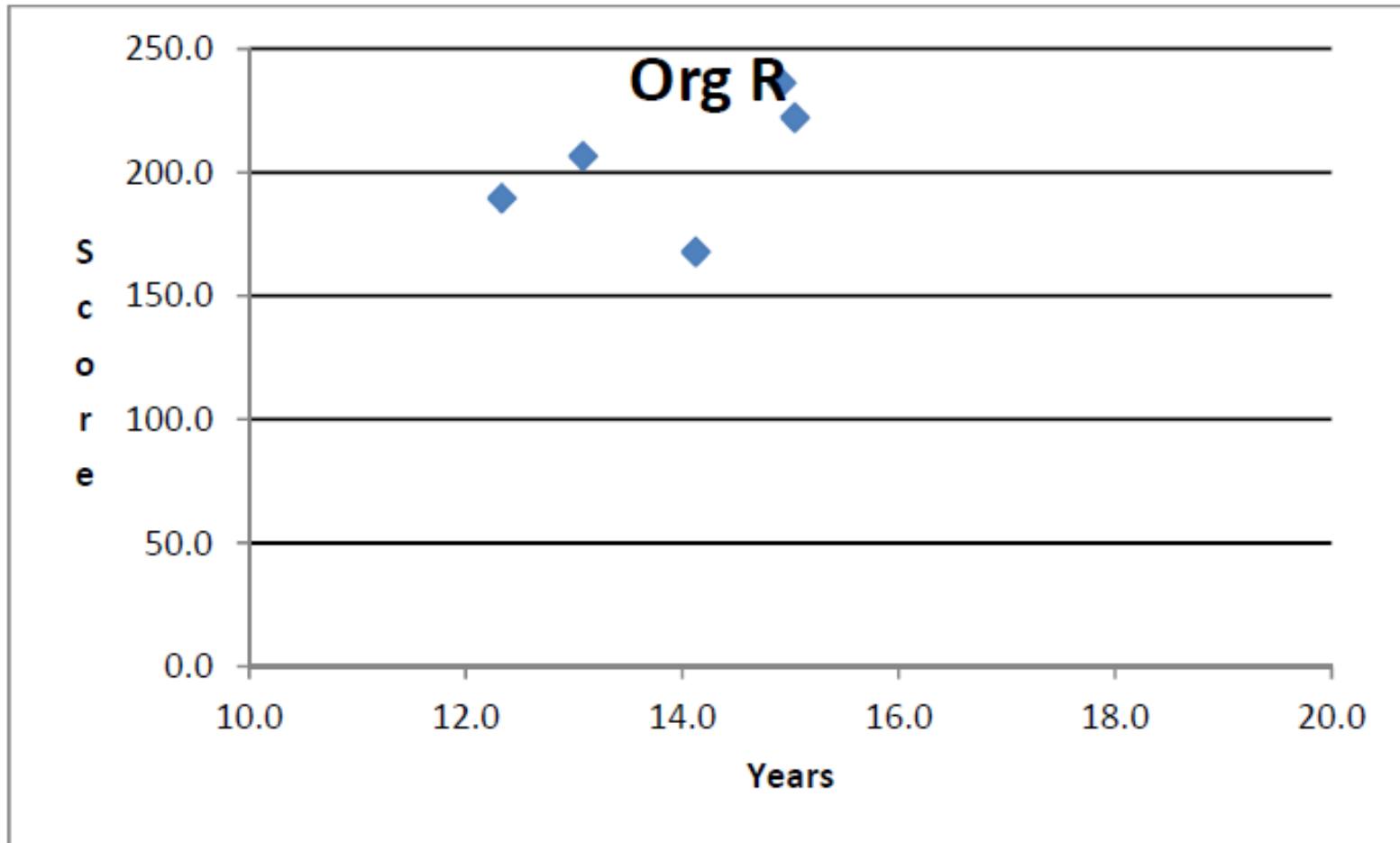


Figure 12. Organization R Score-Years Relationship