

A randomised controlled trial of evidence based supported employment for people who have recently been homeless and have a mental illness

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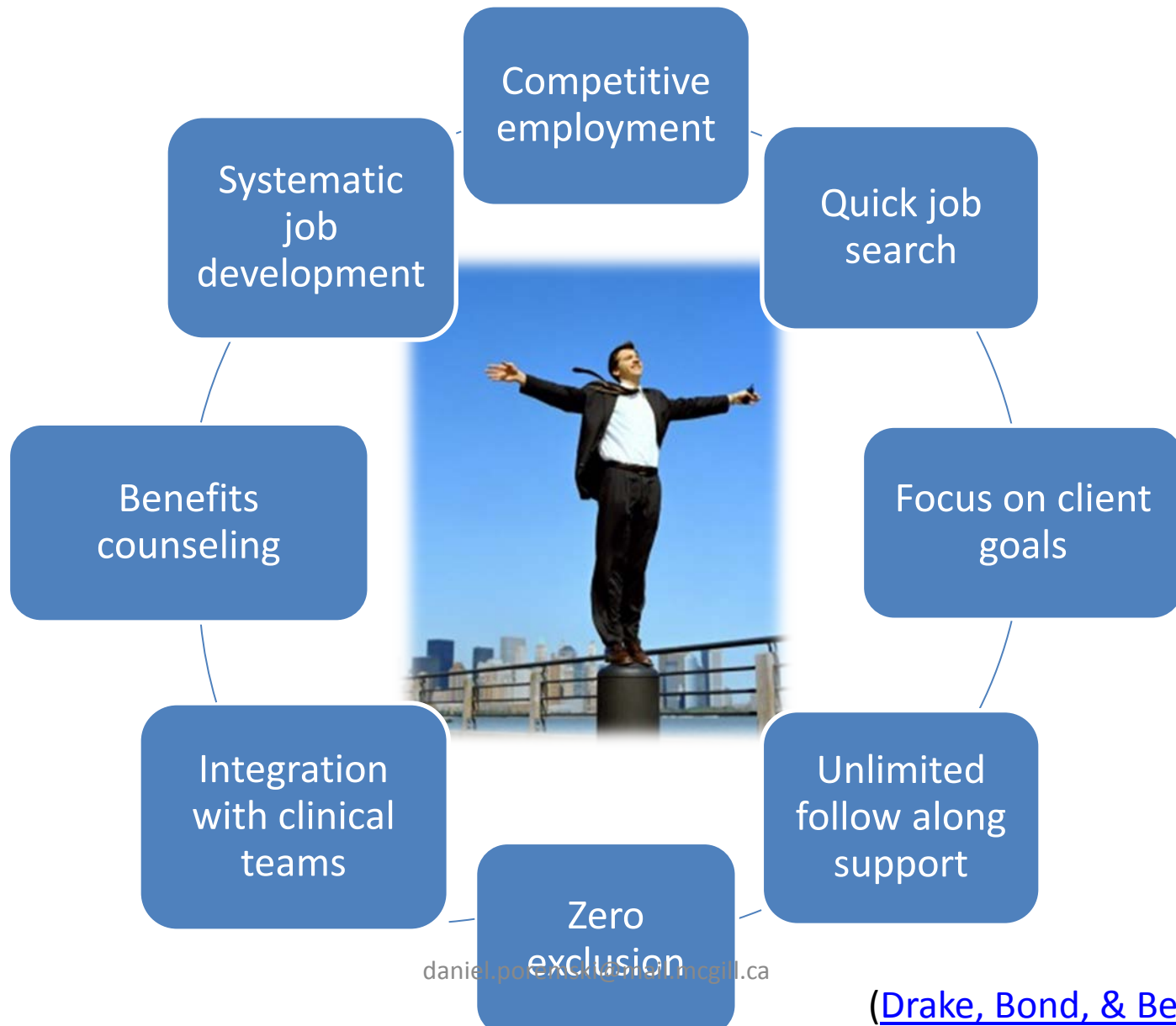
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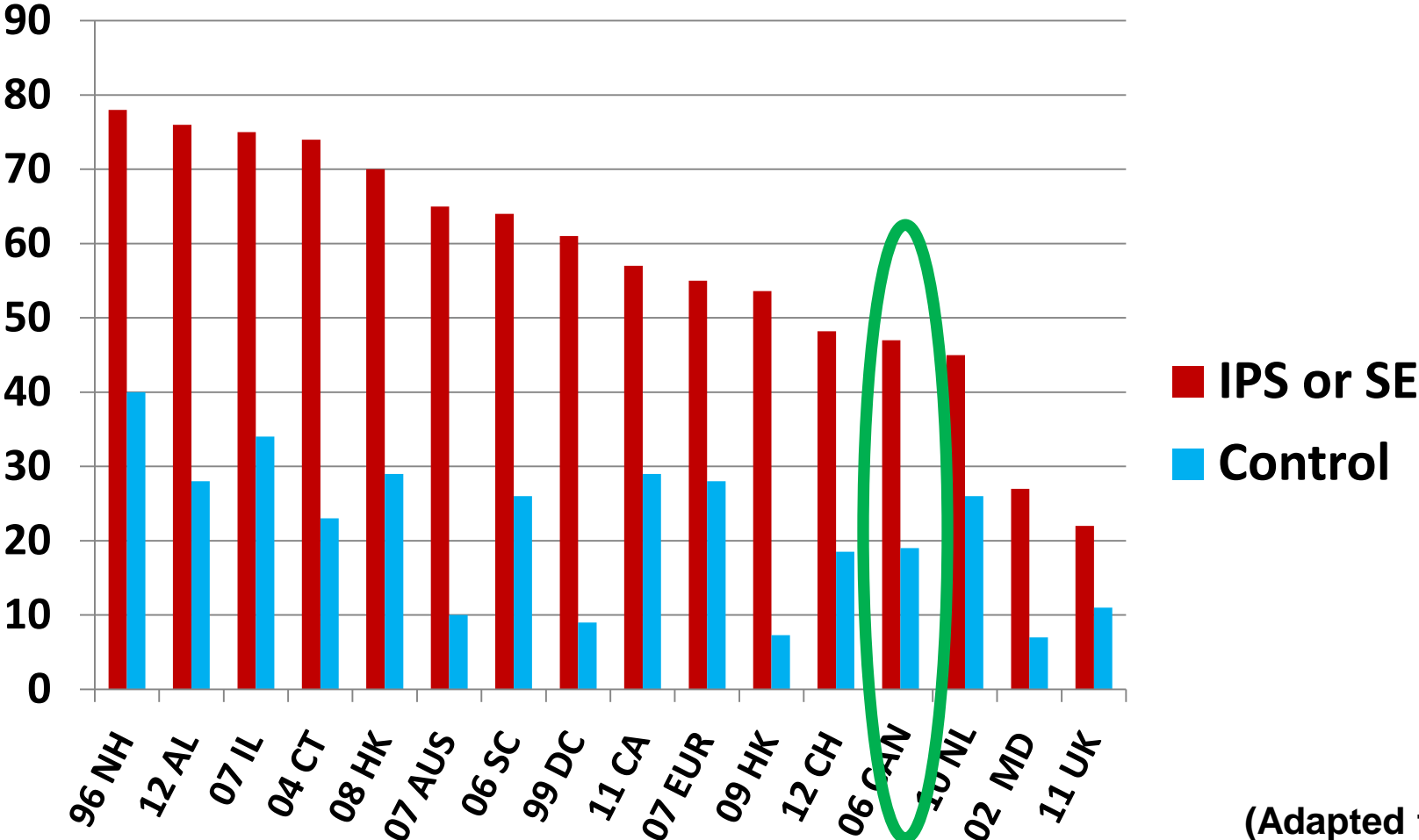
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Individual Placement and Support



Percentage of clients who obtained competitive job, IPS RCTs



(Adapted from Gary Bond)

**IPS for people with
severe mental illness**

**Return to work for
people who have
recently been
homeless**

**Obstacles arising from both
sets of issues**





Meta-Analysis

- Positive results

Primary studies

- Mixed results
positive trend

One meta-analysis of 4 RCT studies

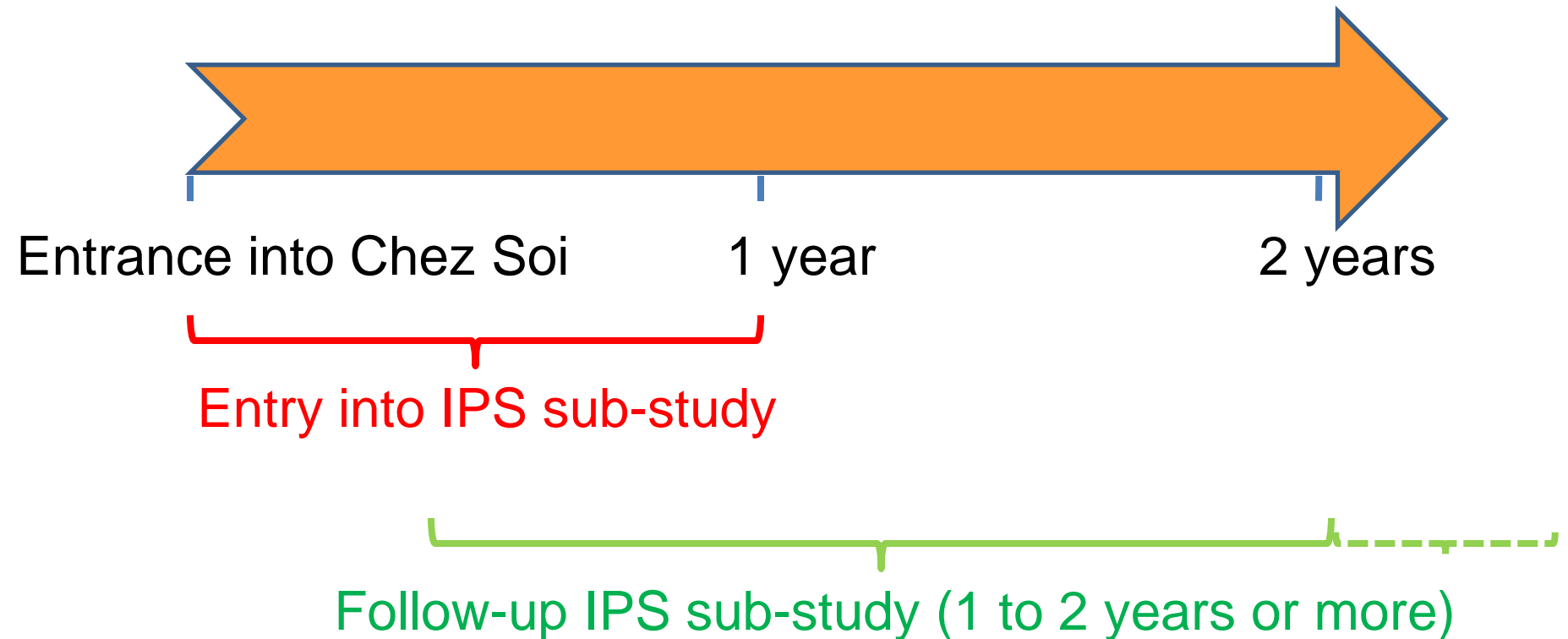
	n	Services	Design	Results
Campbell et al, 2011	46 vs. 57 home-less	Standardized IPS vs TAU	RCT	Large effect size favoring IPS on all outcomes: Job Acquisition, Tenure, and Weeks worked

The 5 primary studies

	n	Services	Design	Results
Burt, 2012	56 vs. 415	Supported housing + SE	C.G.	6X greater chance of competitive employment after 13 months
Ferguson et al, 2011	20 vs. 16	IPS (Fidelity unevaluated)	C.G.	Trend favouring IPS at the end of 10 months
Harrison et al, 2008	76	Residential treatment intervention AT +SE	Pre-post	Increase from 1.3% to 17.1% in employment after 6 months
Rosenheck & Mares, 2007	321 vs. 308	IPS (Modest fidelity)	RCT	8.4 vs. 7.3 days of work per month
Marrone, 2005	791	Transitional housing + quasi-IPS	Pre-post	16.3% worked

C.G.: With comparison group; SE: Supported Employment (non IPS)

At Home / Chez Soi study : 200 recently housed people with mental illness in Montreal



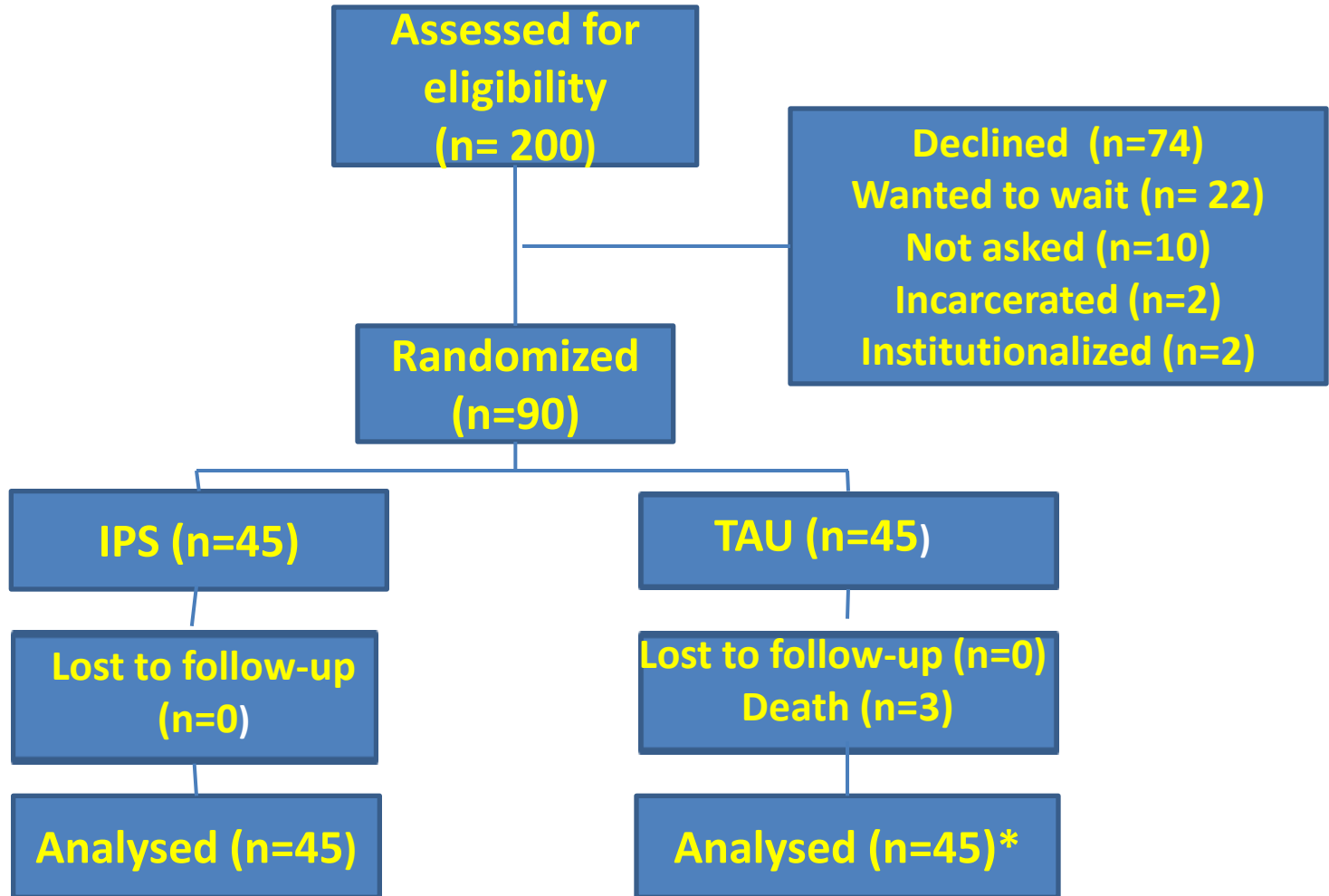
Data collection ended March 31 2013

- Individual placement and support (IPS)
 - Program implemented with good fidelity for 9 months, (fair for first 1 ½ years)
 - Follows the eight IPS principles
- Treatment as usual (TAU)
 - Mixture of services offered in shelters
 - *Emploi Québec* as part of welfare program (PAAS Action)
 - Community jobs reserved for people with MI, job bank
 - Part time worked paid by the day
 - No follow along support (except from HF clinical team) or skills training



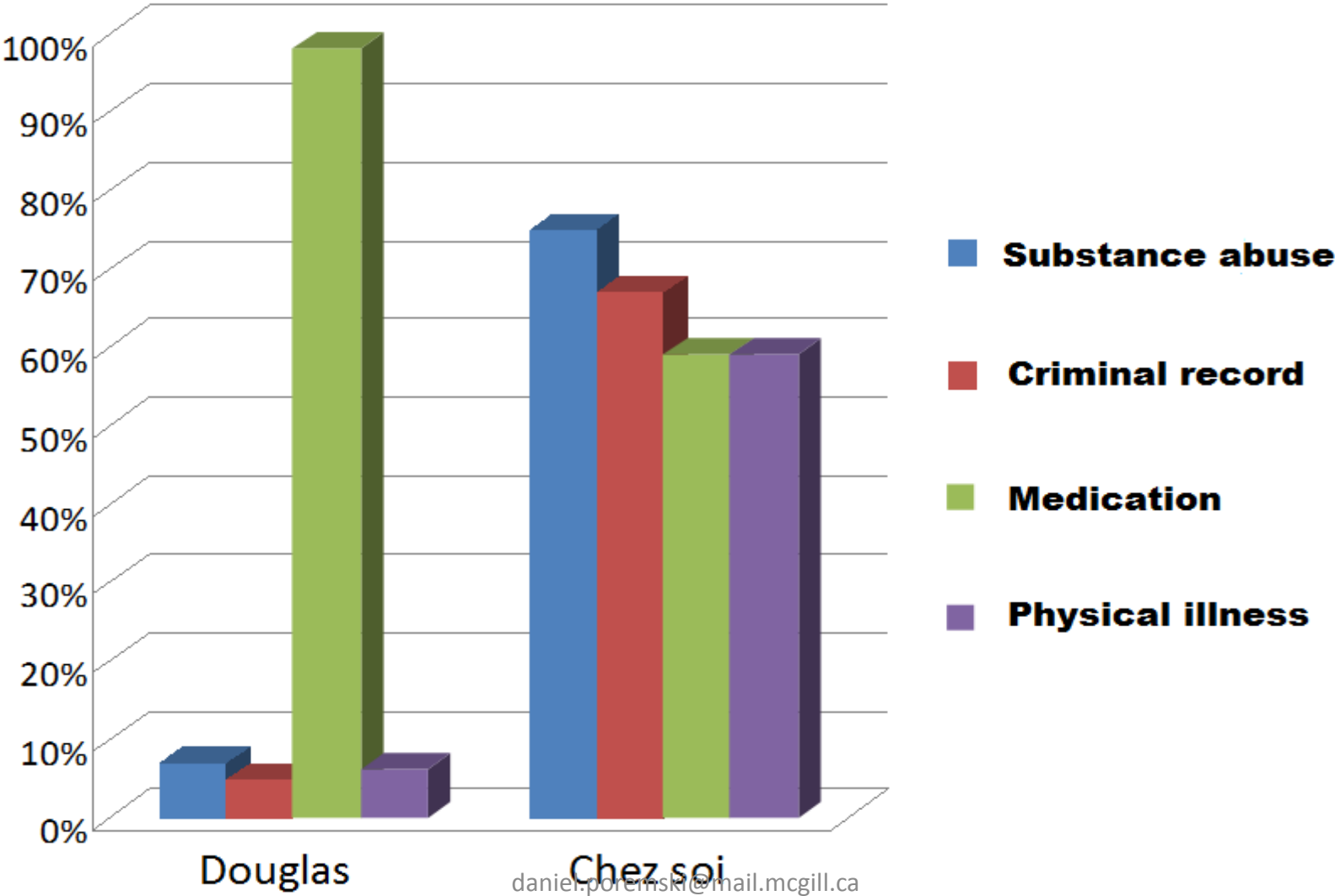
Quantitative results

Sample



* 3 participant deaths, kept in analysis : contributed between 9 and 15 months of data

More challenging clientele than typical supported employment clientele



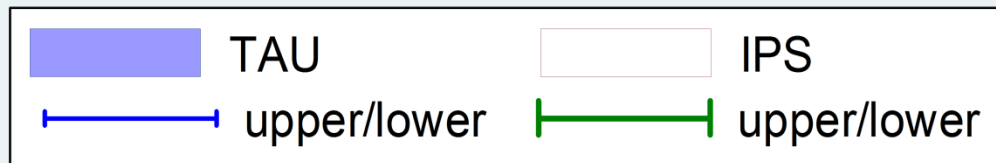
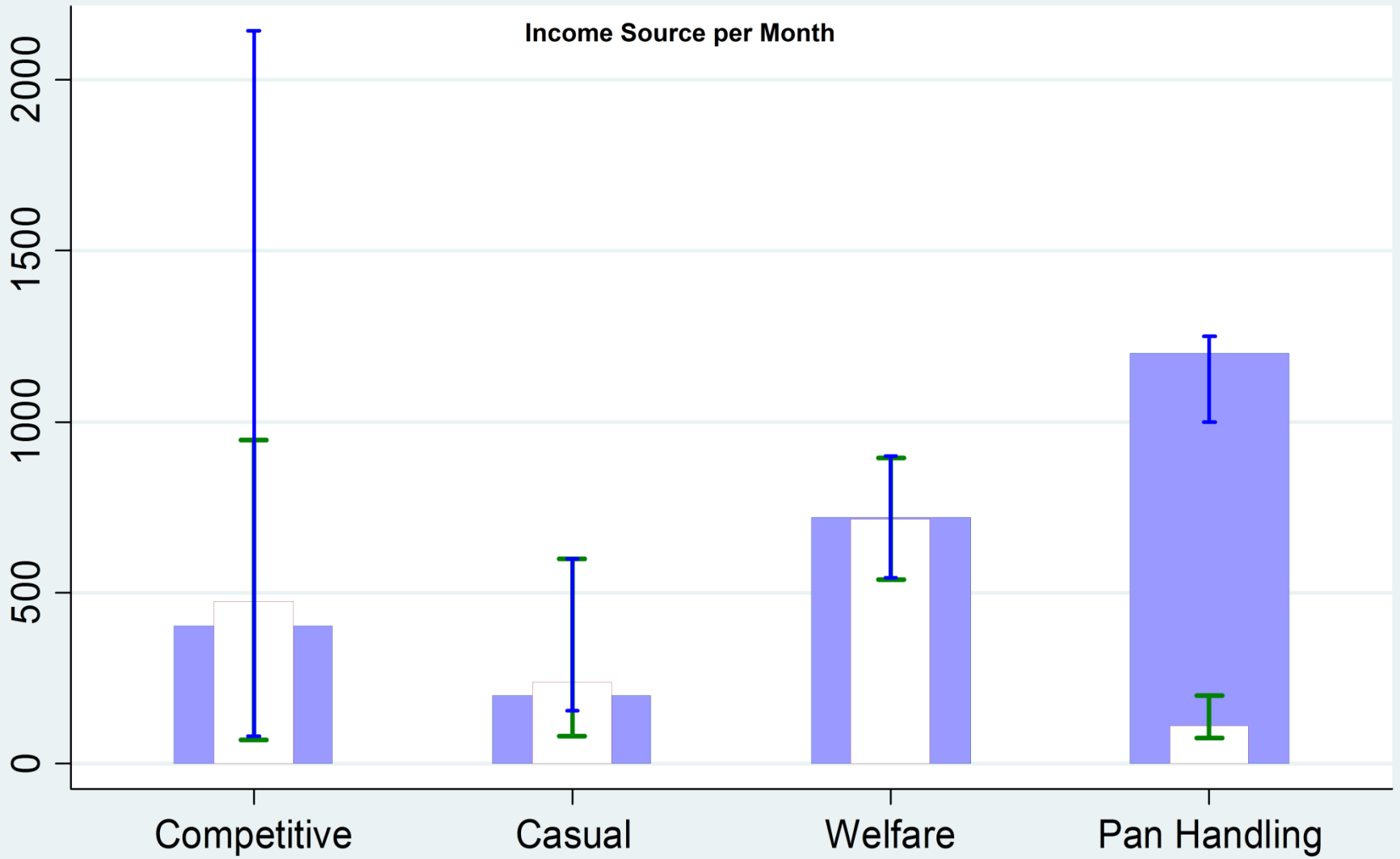
Similar groups at baseline

	IPS	TAU
Male	64%	62%
Age (Mean, SD)	45.2, 9.4	47.1, 10.6
Years of education (Mean, SD)	11.4, 3.0	12.5, 3.4
Work continuously 1y+	82%	87%
Reason for not working MI	42%	44 %
Reason for not working PI	7%	9%
Both	16%	16%
No arrests in past 6m	71%	84%
Penal record	51%	58%
Mental illness diagnoses	No difference	No difference
RAS and CIS	No difference	No difference

MI: Mental illness, PI: Physical illness, RAS: Recovery assessment scale, CIS: Community integration scale

	IPS	TAU	Significance
Average length of follow-up In days, Mean, SD	625, 122	631,141	
Obtained competitive job during study	42%	26%	0.12
Days in competitive employment Median, IQR	n=19 124.5, 57.0-231.0	n= 12 128.5, 47.5-257.5	0.90
Hours per week in competitive Median, IQR	29.5, 10.5-40.0	25.0, 14.0 -40.0	0.78
Wage/hour for competitive work Mean, SD	\$14.17, 8.24	\$13.31, 5.40	0.65
Hours per week in casual work Median, IQR	9.9, 2.7-20.0	12.7, 6.9-14.5	0.31

Income Source per Month



Population average model estimated via GEE

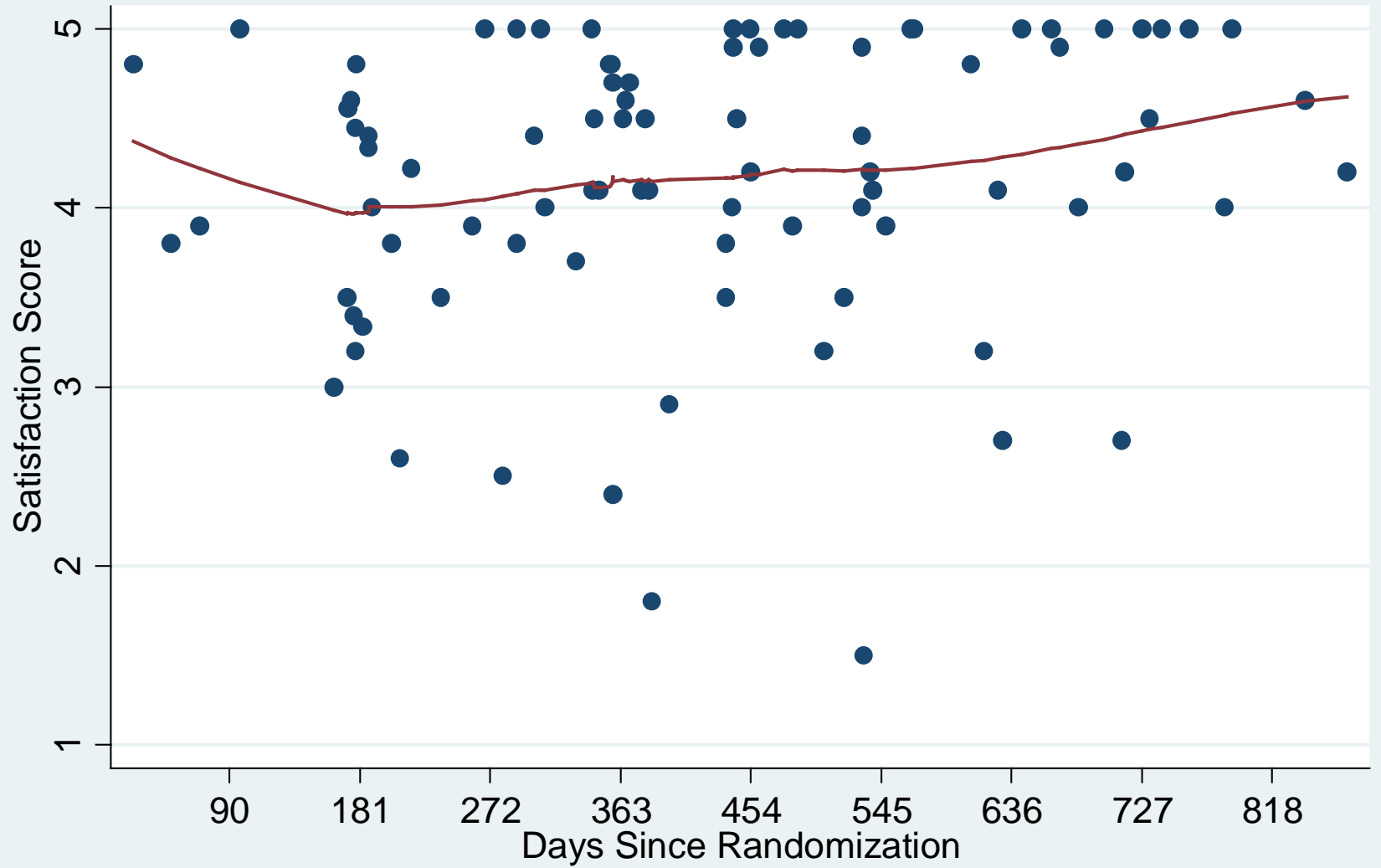
	Odds Ratio	Robust Std. Err.	z	P>z	95% Conf. Interval	
IPS	1.698	0.719	1.25	0.211	0.741	3.895
Age	0.999	0.020	-0.02	0.98	0.961	1.039
Male	5.916	3.819	2.75	0.006	1.670	20.96
Years of education	1.221	0.062	3.95	0.0001	1.106	1.347
Work history	2.217	1.648	1.07	0.284	0.516	9.522
Penal record	0.626	0.253	-1.16	0.246	0.283	1.381
Crisis shelters	1.005	0.006	0.85	0.397	0.993	1.017
Institution	1.004	0.008	0.55	0.582	0.989	1.020
Stable home	1.007	0.002	3.95	0.0001	1.003	1.010
Street prices	0.980	0.030	-0.63	0.529	0.922	1.043
Unstable	1.010	0.007	1.33	0.183	0.995	1.023
Homeless duration						
1 to 3%	1.444	0.647	0.82	0.413	0.600	3.474
3 to 8%	1.319	0.712	0.51	0.609	0.457	3.802
8 to 20%	3.553	2.491	1.81	0.071	0.899	14.041
More than 20%	1.472	1.093	0.52	0.603	0.343	6.309

Satisfaction Scores



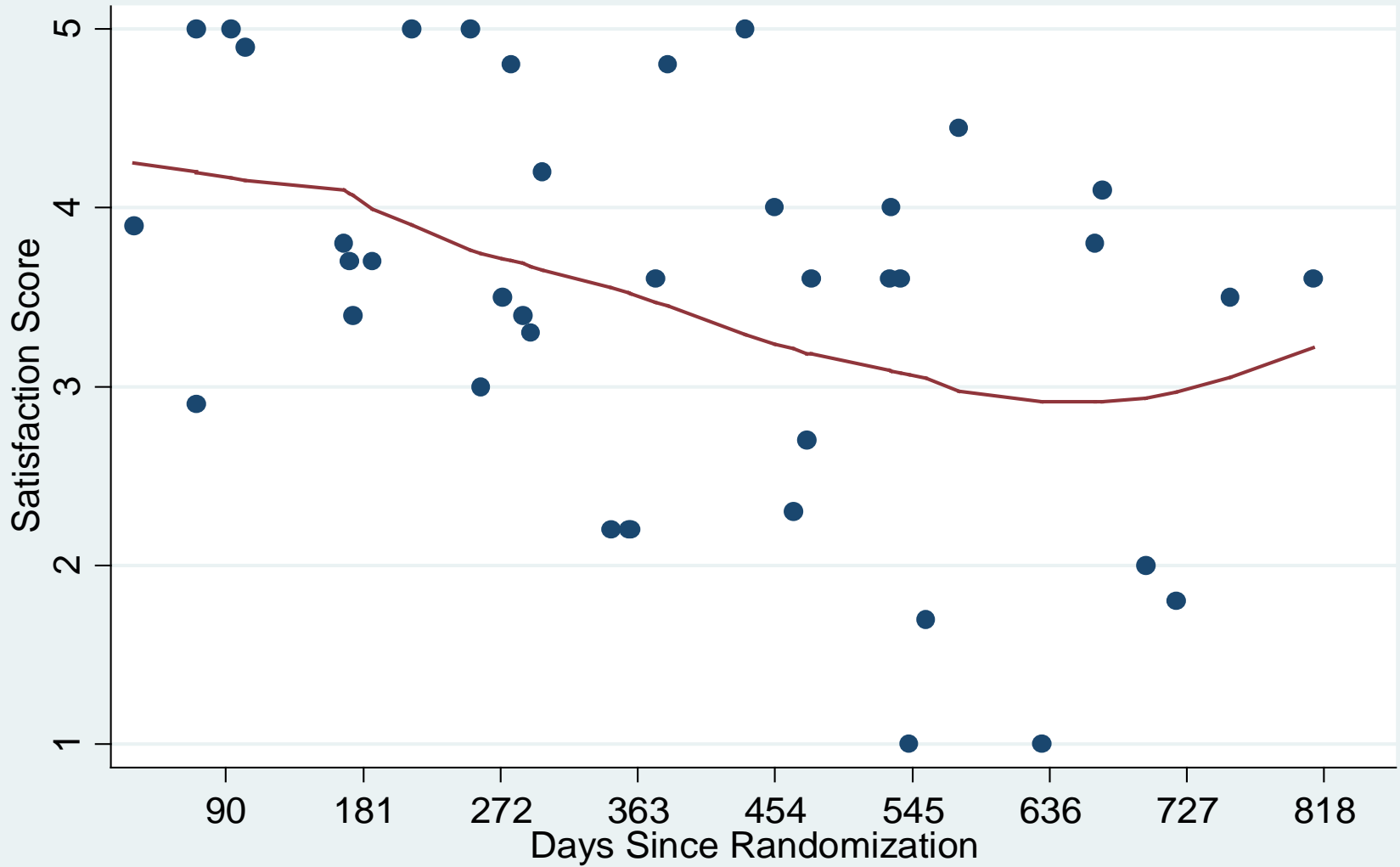
1. Remained high in the IPS group
 2. Steady decrease in the TAU group
- Statistically significant differences between the groups on all items (exp. How well do the services help you with employment? How involved and caring are the staff?)

Satisfaction over time in IPS



bandwidth = .75

Satisfaction over time in TAU



bandwidth = .75



Qualitative findings

Not as colourful

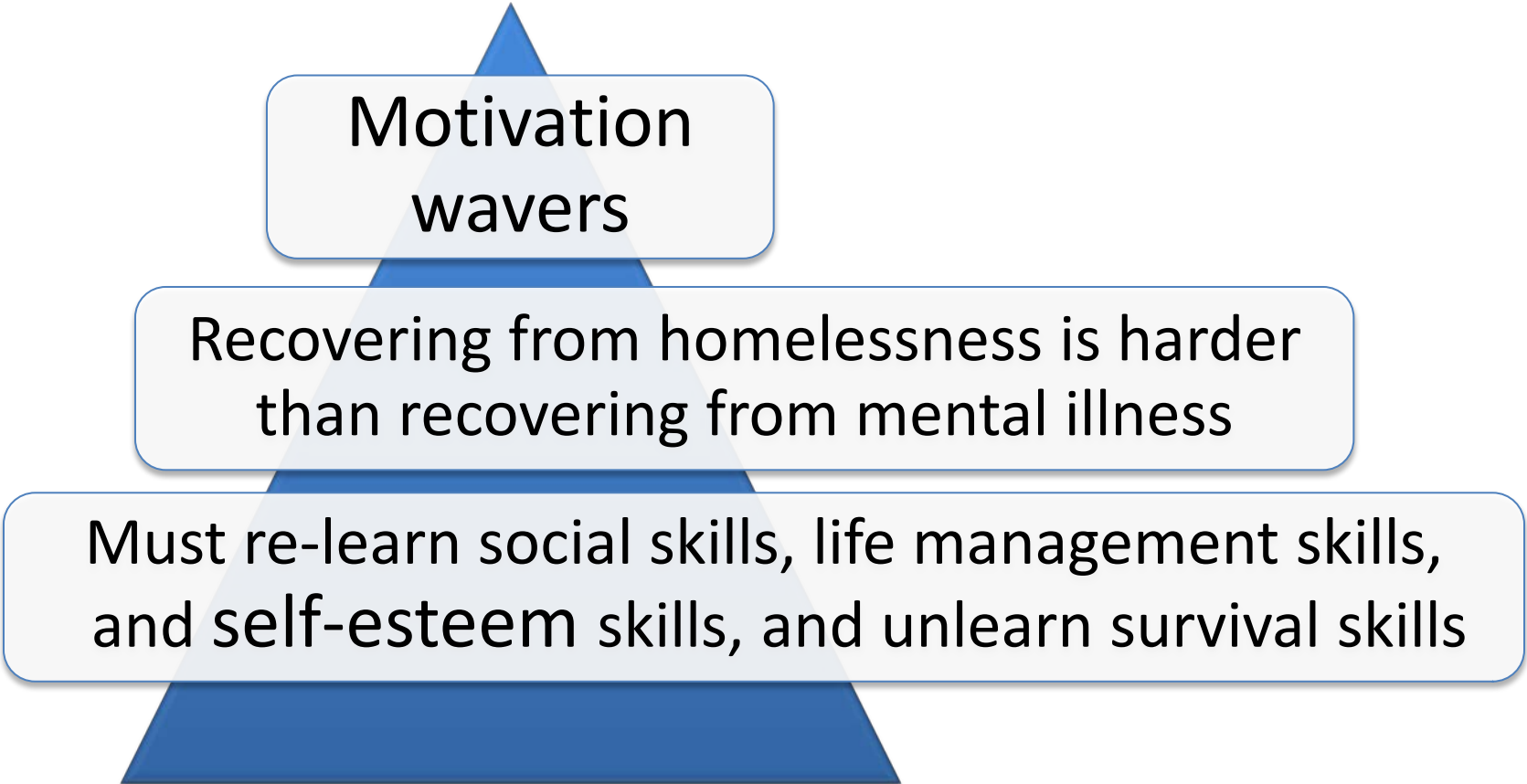
&

More colourful

Process

- Interviewed 14 IPS participants at three points (one refused 2nd and 3rd interview)
- Interviewed 13 TAU participants at the end
- Interviewed both later IPS specialists and their supervisor
- Hour-long interviews:
 - Transcribed and coded in Atlas T.I.
 - Thematic inductive analysis used to generate themes
- Discussed:
 - Employment history
 - Sources of motivation
 - Experiences with IPS and regular services
 - Obstacles which remain once housed
 - Influence of homelessness and mental illness on employment

Why is the intervention not as effective as in a population with only SMI?



Motivation
wavers

Recovering from homelessness is harder
than recovering from mental illness

Must re-learn social skills, life management skills,
and self-esteem skills, and unlearn survival skills

Strengths and Limitations

- Rigorous mixed methods:
 - Randomized controlled trial
 - Parallel qualitative interviews
 - Sample size with low attrition
- However:
 - Initial modest model fidelity – implementation difficulties
 - Single screening interview for inclusion-> varying engagement with services



Conclusions

1. Positive trend in favor of IPS - but non-significant results.
2. Increases in employment levels in both groups may be result of Housing First intervention and/or regression to the mean.
3. Important explanations :
 - a. Increased difficulties working with varying levels of motivation
 - b. More challenging clientele
 - c. Difficulties in implementation/ staffing

Thank you for your attention!

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- Bond, G. R., Drake, R. E., & Becker, D. R. (2012). Generalizability of the Individual Placement and Support (IPS) model of supported employment outside the US. *World Psychiatry, 11*, 32-39.
- Burt, M. R. (2012). Impact of Housing and Work Supports on Outcomes for Chronically Homeless Adults With Mental Illness: LA's HOPE. *Psychiatric Services, 63*(3), 209-215.
- Campbell, K., Bond, G. R., & Drake, R. E. (2011). Who benefits from supported employment: a meta-analytic study. *Schizophrenia bulletin, 37*(2), 370-380.
- Drake, R., Bond, G., & Becker, D. (2012). *Individual Placement and Support: An Evidence-Based Approach to Supported Employment* Oxford: Oxford University Press.
- Ferguson, K. M., Xie, B., & Glynn, S. (2011). Adapting the Individual Placement and Support Model with Homeless Young Adults. *Child & Youth Care Forum, 41*(3), 277-294.
- Goering, P. N., Streiner, D. L., Adair, C., Aubry, T., Barker, J., Distasio, J., . . . Zabkiewicz, D. M. (2011). The At Home/Chez Soi trial protocol: a pragmatic, multi-site, randomised controlled trial of a Housing First intervention for homeless individuals with mental illness in five Canadian cities. *British Medical Journal Open, 1*(2)
- Harrison, M. L., Moore, K. A., Young, M. S., Flink, D., & Ochshorn, E. (2008). Implementing the Comprehensive, Continuous, Integrated System of Care Model for Individuals with Co-Occurring Disorders: Preliminary Findings from a Residential Facility Serving Homeless Individuals. *Journal of Dual Diagnosis, 4*(3), 238-259.
- Latimer, E. A., Lecomte, T., Becker, D. R., Drake, R. E., Duclos, I., Piat, M., . . . Xie, H. (2006). Generalisability of the individual placement and support model of supported employment: results of a Canadian randomised controlled trial. *The British journal of psychiatry, 189*, 65-73.
- Marrone, J. (2005). Creating Hope Through Employment for People Who are Homeless or in Transitional Housing. *American Journal of Psychiatric Rehabilitation, 8*(1), 13-35.
- Min, S. Y., Wong, Y. L., & Rothbard, A. B. (2004). Outcomes of shelter use among homeless persons with serious mental illness. *Psychiatric Services, 55*(3), 284-289.
- Rosenheck, R. A., & Mares, A. S. (2007). Implementation of Supported Employment for Homeless Veterans With Psychiatric or Addiction Disorders: Two-Year Outcomes. *Psychiatric Services, 58*(3), 325-333.
- Shaheen, G., & Rio, J. (2007). Recognizing work as a priority in preventing or ending homelessness. *The journal of primary prevention, 28*(3-4), 341-358