Vocational and Life Skills in Youth Training:
A Randomized Experiment in the Dominican Republic

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IDB

*Preliminary results, please do not cite. Generous funding for this evaluation has been provided by BNPP, GAP and SIEF. Evaluation team members include: WB: Paloma Acevedo, Carlos Asenjo, Juan Martin Moreno, Rodrigo Munoz, Cornelia Tesliuc; Ministry of Labor: Brigida Garcia, Jose Luis Polanco, Douglas Hasbun; Inter-American Development Bank: Pablo Ibarraran, Laura Ripani, Juan Miguel Villa.

Youth Employment Program Dominican Republic

- Target Population:
  - 16-29 years old
  - Not completed secondary school
  - *Unemployed, under-employed or inactive*
  - *From poorest 40% of households (SIUBEN)*
- Objective: improve employment opportunities of at-risk youth by building:
  - technical skills (TS)
  - life-skills (LS)
  - work experience (WE)
- Training provided by private institutes contracted by Ministry of Labor

Program Components

- Technical/vocational skills (VS)
  - 150 hours
  - $160 USD per student
  - Heterogeneous curriculum: Beauty, sales, tourism & hospitality, carpentry, electricity, etc
- Life skills (LS)
  - 75 hours
  - $80 USD per student
  - Standardized curriculum: Self-esteem and self-realization, communication, conflict resolution, life planning, time management, team work, decision making, hygiene and health, etc
- Work Experience (WE)
  - Apprenticeship in private company
  - 240 hours
- Daily stipend of US$2

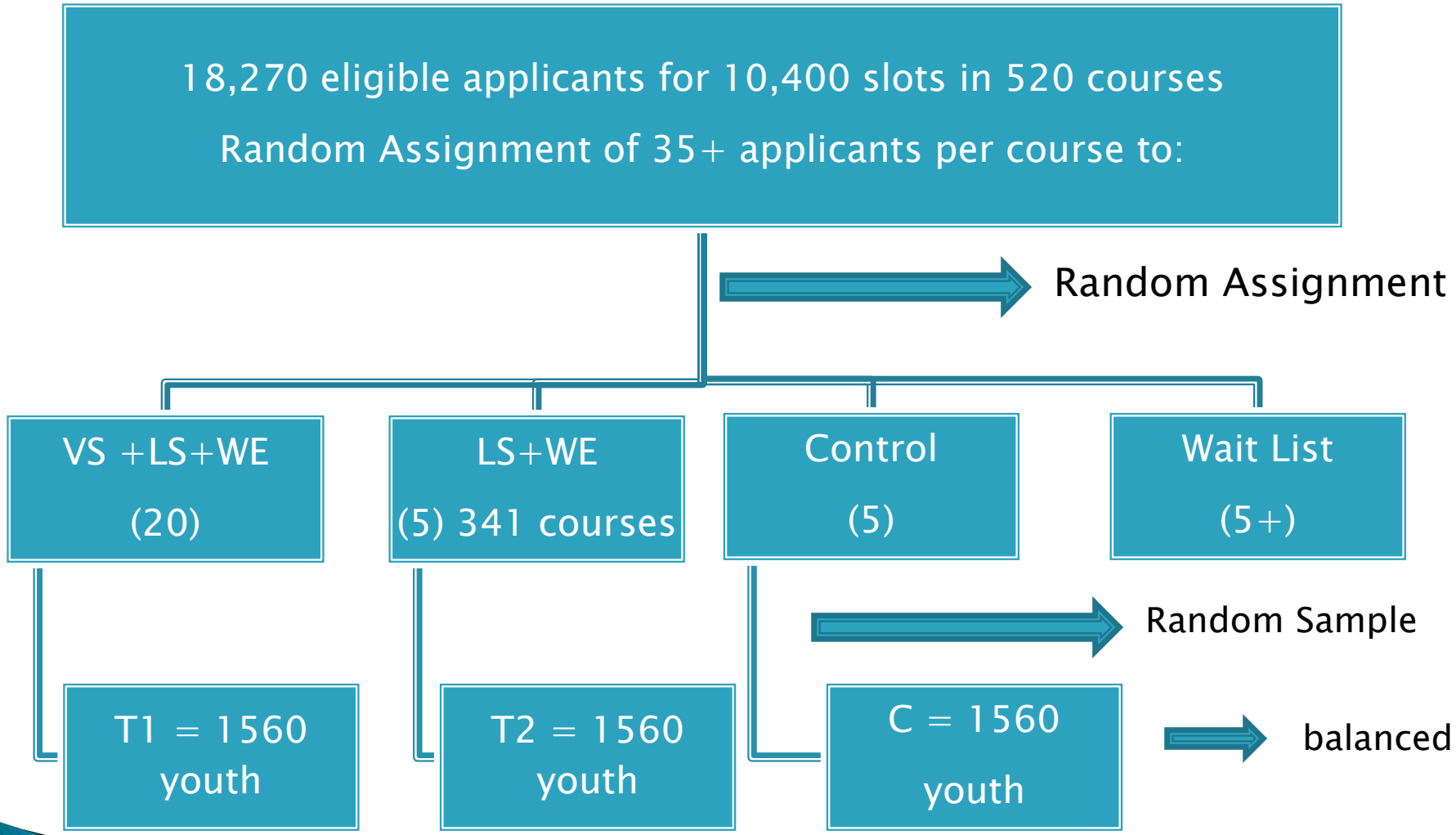
Questions: Opening the "Black Box"

- Should youth employment programs emphasize "hard" skills, "soft" skills or both?

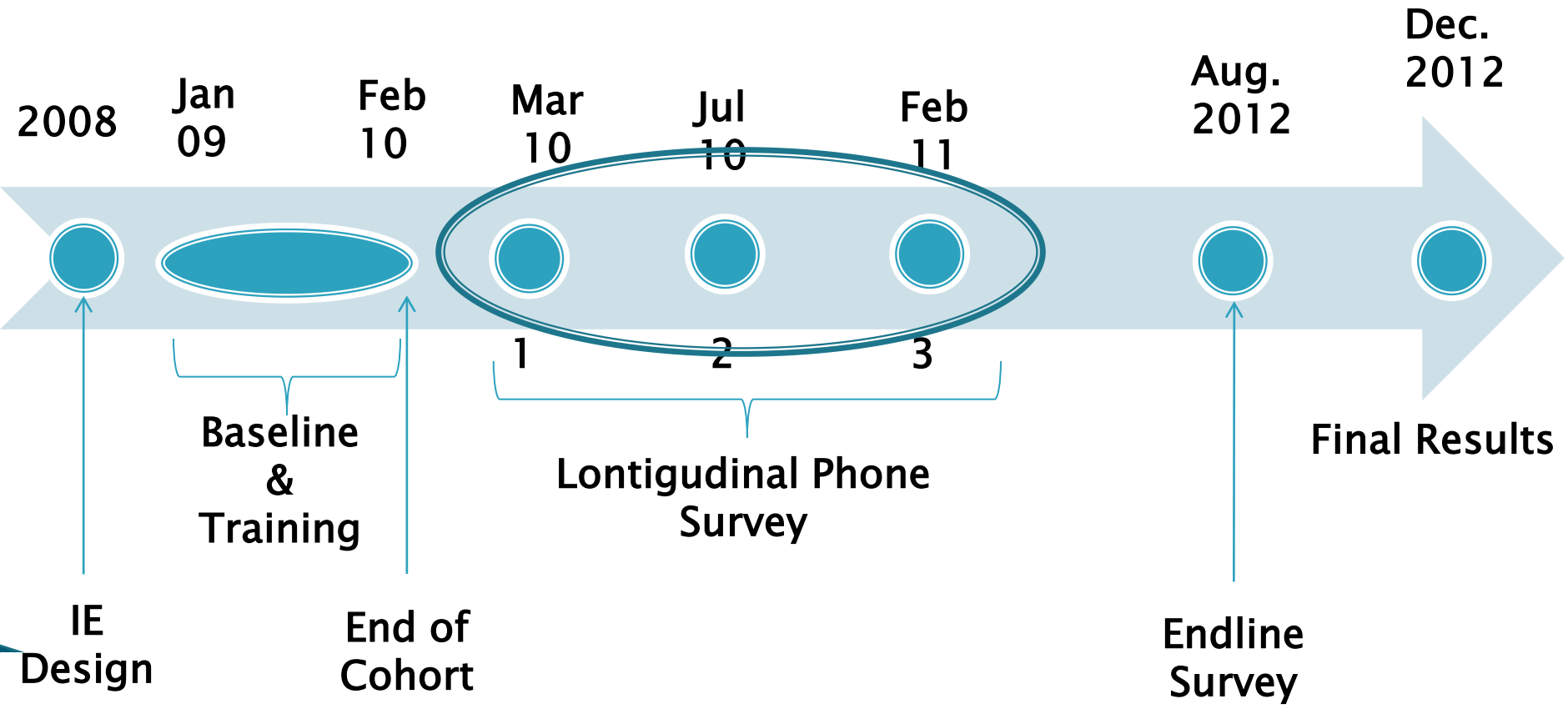
- Does the program affect:
  - labor market outcomes?
  - risk taking behaviors?
  - expectations and future outlook?

- Are there gender differences in program impacts?

Experimental Evaluation



Timeline


2008
Jan 09
Feb 10
Mar 10
Jul 10
Feb 11
Aug. 2012
Dec. 2012
1
2
3
Baseline & Training
Lontigudinal Phone Survey
Final Results
IE Design
End of Cohort
Endline Survey

Longitudinal Phone Survey: 4700 youth; 15min

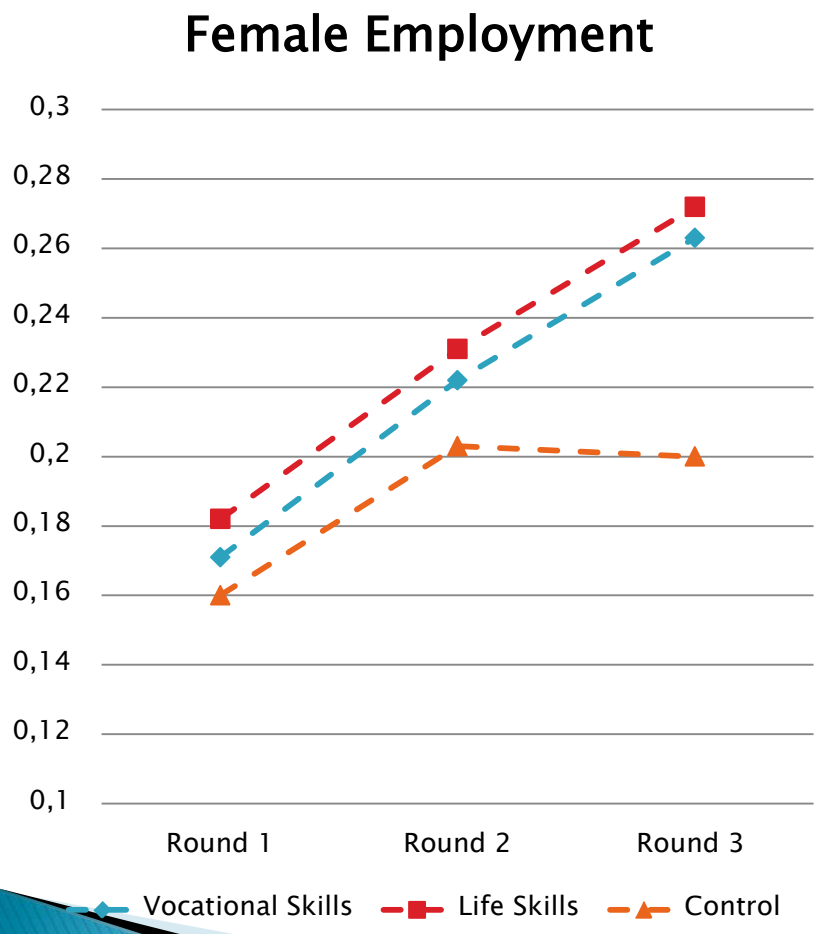
	CATI	Face to Face (470 max)	Total Interviews Completed	Estimated Attrition
Survey 1	3,889	258	4,147	5.7%
Survey 2	3,913	344	4,257	5.5%
Survey 3	3,886	341	4,227	5.7%
TOTAL	11,688	943	12,631	

- CATI: 83% success rate
- F2F: 67% success rate
- Tracking: 94% success rate
- Attrition balanced between treatment and control groups

Identification

- Comparison of outcomes across treatment assignment: Intent to Treat
  - T1-C = Impact of VS+LS+WE
  - T2-C = Impact of LS+WE
  - T1-T2 = Impact of VS
  - Linear probability models
  - Cluster standard errors by course
- Subsample of 341 courses with life-skills
  - Separate regressions for men and women

Worked during last week



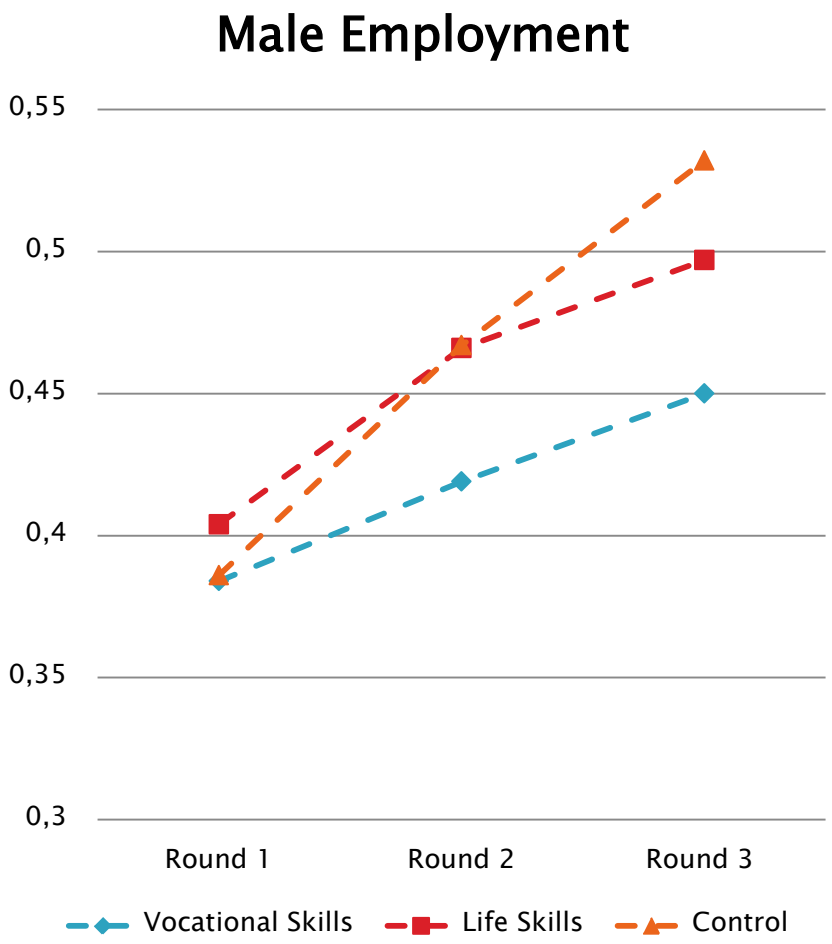


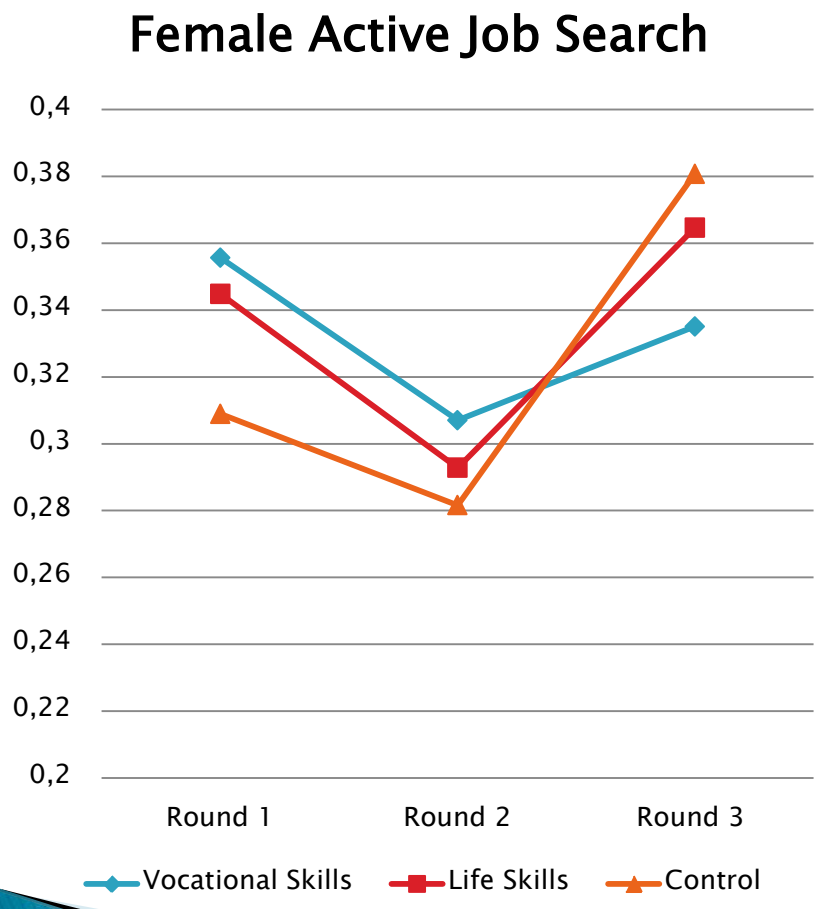
Table 1: Worked during last week = 1

VARIABLES	LS Sample			
	1	2	3	4
	Model 1: Female	Model 2: Female	Model 3: Male	Model 4: Male
Treatment=VS+LS=1	0.031*		-0.045	
	(0.018)		(0.028)	
Treatment=LS=1	0.040**		-0.009	
	(0.017)		(0.025)	
Treatment(VS+LS)*Round 1 =1		0.007		-0.002
		(0.024)		(0.037)
Treatment(LS)*Round 1 =1		0.019		0.016
		(0.022)		(0.034)
Treatment(VS+LS)*Round 2 =1		0.021		-0.048
		(0.025)		(0.037)
Treatment(LS)*Round 2 =1		0.029		-0.003
		(0.024)		(0.035)
Treatment(VS+LS)*Round 3 =1		0.064**		-0.083**
		(0.025)		(0.038)
Treatment(LS)*Round 3 =1		0.072***		-0.038
		(0.023)		(0.038)
Observations	5,768	5,768	3,642	3,642
R-squared	0.008	0.009	0.011	0.012
Control Mean:	0.189	0.189	0.463	0.463

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p

Active Job Search



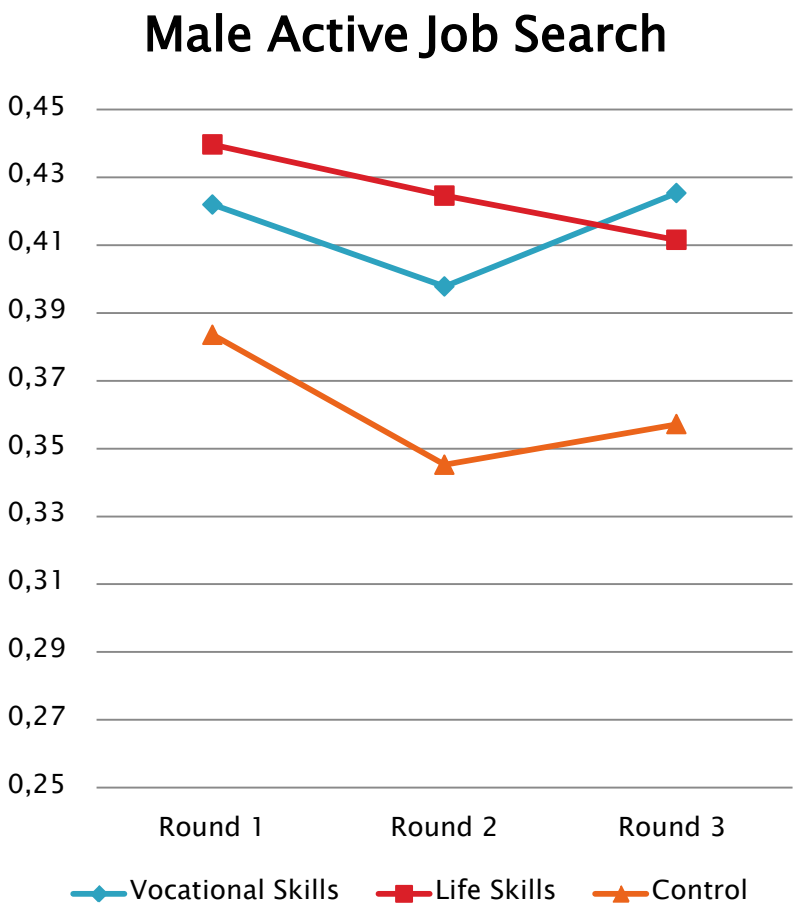


Table 2: Searching for work in last week =1

VARIABLES	LS Sample			
	1 Model 1: Female	2 Model 2: Female	3 Model 3: Male	4 Model 4: Male
Treatment=VS+LS=1	0.009		0.053**	
	(0.020)		(0.026)	
Treatment=LS=1	0.010		0.062***	
	(0.018)		(0.024)	
Treatment(VS+LS)*Round 1 =1		0.047		0.038
		(0.031)		(0.037)
Treatment(LS)*Round 1 =1		0.036		0.055
		(0.026)		(0.036)
Treatment(VS+LS)*Round 2 =1		0.026		0.052
		(0.027)		(0.036)
Treatment(LS)*Round 2 =1		0.011		0.078**
		(0.025)		(0.034)
Treatment(VS+LS)*Round 3 =1		-0.045		0.068*
		(0.030)		(0.038)
Treatment(LS)*Round 3 =1		-0.016		0.053
		(0.027)		(0.034)
Observations	5,765	5,765	3,640	3,640
R-squared	0.004	0.005	0.005	0.005
Control Mean:	0.324	0.324	0.362	0.362

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, [illegible]

Table 5: Wage Income (monthly)

VARIABLES	LS Sample (unconditional)			
	1 Model 1: Female	2 Model 2: Female	3 Model 3: Male	4 Model 4: Male
Treatment=VS+LS=1	245.794*		-29.743	
	(128.089)		(483.217)	
Treatment=LS=1	305.966**		-209.202	
	(119.285)		(324.881)	
Treatment(VS+LS)*Round 1 =1		177.223		-219.986
		(160.864)		(349.868)
Treatment(LS)*Round 1 =1		195.067		82.061
		(154.424)		(350.010)
Treatment(VS+LS)*Round 2 =1		101.194		-543.657
		(155.585)		(592.642)
Treatment(LS)*Round 2 =1		202.112		-282.783
		(149.548)		(598.271)
Treatment(VS+LS)*Round 3 =1		456.160**		675.668
		(219.848)		(1,012.793)
Treatment(LS)*Round 3 =1		517.708**		-414.430
		(203.879)		(375.528)
Observations	5,743	5,743	3,600	3,600
R-squared	0.010	0.011	0.007	0.008
Control Mean	1033	1033	3641	3641

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 7: Work Satisfaction (satisfied with work =1)

VARIABLES	LS Sample			
	1 Model 1: Female	2 Model 2: Female	3 Model 3: Male	4 Model 4: Male
Treatment=VS+LS=1	0.133***		0.073*	
	(0.042)		(0.039)	
Treatment=LS=1	0.107***		0.044	
	(0.037)		(0.033)	
Treatment(VS+LS)*Round 1 =1		0.065		0.088
		(0.068)		(0.056)
Treatment(LS)*Round 1 =1		0.091		0.046
		(0.062)		(0.047)
Treatment(VS+LS)*Round 2 =1		0.092		0.041
		(0.060)		(0.058)
Treatment(LS)*Round 2 =1		0.050		0.059
		(0.054)		(0.049)
Treatment(VS+LS)*Round 3 =1		0.220***		0.094*
		(0.066)		(0.054)
Treatment(LS)*Round 3 =1		0.175***		0.029
		(0.060)		(0.048)
Observations	1,270	1,270	1,647	1,647
R-squared	0.012	0.016	0.005	0.006
Control Mean:	0.502	0.502	0.554	0.554

Robust standard errors in parenth

*** p<0.01, ** p<0.05, * p

Table 8: Future Expectations: Better Employment

(A year from now do you think your employment condition will be better, worse or the same as now)

VARIABLES	LS Sample			
	1 Model 1: Female	2 Model 2: Female	3 Model 3: Male	4 Model 4: Male
Treatment=VS+LS=1	0.047***		0.028**	
	(0.010)		(0.011)	
Treatment=LS=1	0.047***		0.019**	
	(0.009)		(0.010)	
Treatment(VS+LS)*Round 1 =1		0.063***		0.016
		(0.016)		(0.018)
Treatment(LS)*Round 1 =1		0.076***		0.021
		(0.015)		(0.016)
Treatment(VS+LS)*Round 2 =1		0.048***		0.030*
		(0.014)		(0.017)
Treatment(LS)*Round 2 =1		0.032**		0.018
		(0.014)		(0.017)
Treatment(VS+LS)*Round 3 =1		0.029**		0.038**
		(0.015)		(0.017)
Treatment(LS)*Round 3 =1		0.032**		0.019
		(0.014)		(0.016)
Observations	5,764	5,764	3,640	3,640
R-squared	0.012	0.014	0.005	0.005
Control Mean:	0.910	0.910	0.932	0.932

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 9: Future Expectations: Standard of Living

(A year from now do you think your standard of Living will be better, worse or the same as now)

VARIABLES	LS Sample			
	1 Model 1: Female	2 Model 2: Female	3 Model 3: Male	4 Model 4: Male
Treatment=VS+LS=1	0.027***		0.023**	
	(0.009)		(0.010)	
Treatment=LS=1	0.030***		0.020*	
	(0.008)		(0.010)	
Treatment(VS+LS)*Round 1 =1		0.018		0.039**
		(0.014)		(0.018)
Treatment(LS)*Round 1 =1		0.029**		0.041**
		(0.011)		(0.016)
Treatment(VS+LS)*Round 2 =1		0.033**		0.016
		(0.013)		(0.016)
Treatment(LS)*Round 2 =1		0.030**		0.017
		(0.012)		(0.015)
Treatment(VS+LS)*Round 3 =1		0.029**		0.013
		(0.012)		(0.015)
Treatment(LS)*Round 3 =1		0.030***		0.003
		(0.011)		(0.014)
Observations	5,764	5,764	3,640	3,640
R-squared	0.009	0.009	0.003	0.004
Control Mean:	0.940	0.940	0.941	0.941

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 10: Pregnancy (pregnant =1)

VARIABLES	LS Sample		
	1 Model 1: Female	2 Model 2: Female	3 Model 3: Single
Treatment=VS+LS=1	0.001		
	(0.010)		
Treatment=LS=1	-0.017**		
	(0.008)		
Treatment(VS+LS)*Round 1 =1		-0.018	-0.033**
		(0.017)	(0.015)
Treatment(LS)*Round 1 =1		-0.025*	-0.040***
		(0.014)	(0.014)
Treatment(VS+LS)*Round 2 =1		0.013	-0.001
		(0.017)	(0.015)
Treatment(LS)*Round 2 =1		-0.023	-0.011
		(0.015)	(0.014)
Treatment(VS+LS)*Round 3 =1		0.007	0.017
		(0.015)	(0.014)
Treatment(LS)*Round 3 =1		-0.004	-0.009
		(0.013)	(0.009)
Observations	5,764	5,764	3,385
R-squared	0.002	0.003	0.006
Control Mean:	0.0730	0.0730	0.0394

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Table 11: Number of Children

VARIABLES	LS Sample 1 Model 1: Female	LS Sample 2 Model 2: Female
Treatment=VS+LS=1	-0.116*	
	(0.066)	
Treatment=LS=1	-0.111*	
	(0.065)	
Treatment(VS+LS)*Round 1 =1		-0.103
		(0.066)
Treatment(LS)*Round 1 =1		-0.050
		(0.065)
Treatment(VS+LS)*Round 2 =1		-0.120*
		(0.070)
Treatment(LS)*Round 2 =1		-0.137**
		(0.068)
Treatment(VS+LS)*Round 3 =1		-0.126*
		(0.070)
Treatment(LS)*Round 3 =1		-0.145**
		(0.069)
Observations	5,764	5,764
R-squared	0.006	0.007
Control Mean:	1.089	1.089

Robust standard errors in parenth

*** p<0.01, ** p<0.05, * p<0.1

Table 12: T1-T2 =Impact of Vocational skills

Outcome	Women P value T1 different from T2	Men P value T1 different from T2
Worked during last week = 1	0.58	0.13
Searching for work in last week =1	0.92	0.67
Time on the job (months)	0.45	0.81
Work Hours (weekly)	0.45	0.03 (T1 >T2)
Wage Income (monthly)	0.63	0.66
Hourly Wages	0.15	0.63
Work Satisfaction	0.51	0.37
Future Expectations: Better Employment	0.97	0.34
Future Expectations: Standard of Living	0.62	0.79
Pregnancy	0.019 (T2>T1)	NA
Number of Children	0.93	0.21

Impacts after 1.5 years:

	Women	Men
Employment	+	– (VS) 0 (LS)
Active job search	0	+
Work hours	0	0
Wages	+	0
Job Satisfaction	+	+
Future Expectations	+	+
Pregnancy reduction	+	NA

Conclusions

- LS+WE costs 2/3 VT+LS+WE
  - VT does not contribute to outcomes for women
  - Reduces employment (increases reservation wage?) for men
- LS+WE is more cost-effective than "traditional" model
  - Qualitative survey suggests LS are important
  - Can't rule out Work Experience
- Endline survey (August 2012) will shed light on:
  - Reservation wage hypothesis
  - Acquisition of life skills

THANK YOU!