

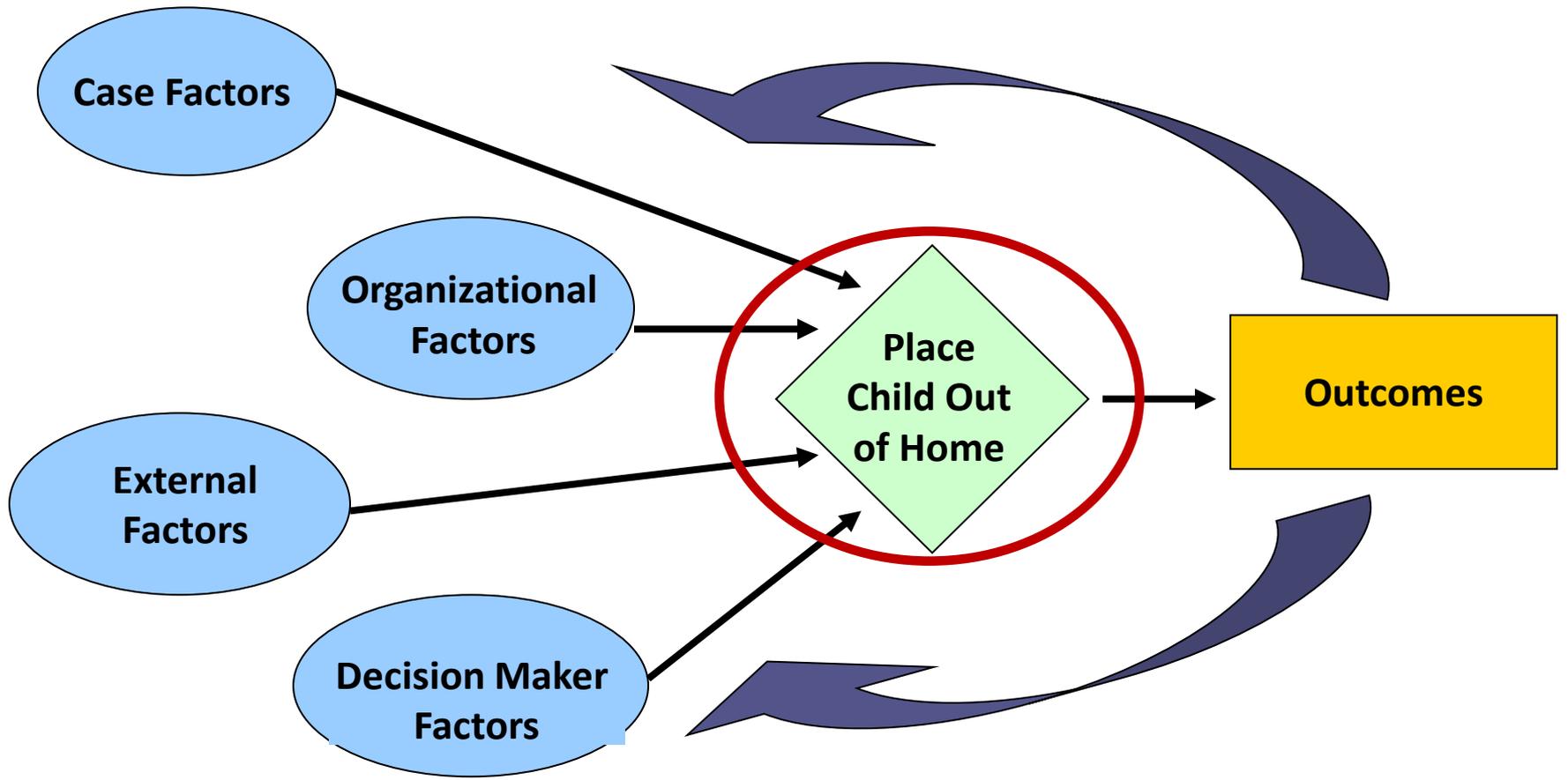
Decision Making Ecology: Analysis with the Canadian Incidence Study of Reported Child Abuse and Neglect (CIS)

Child Welfare Evaluation Summit:
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Canadian Incidence Study of Reported Child Abuse & Neglect (CIS)

- 1998, 2003, and 2008 cycles
- Primary objective: to produce a national estimate of the incidence of child maltreatment in Canada in the study year
- Multi-stage sampling design:
 - child welfare sites selected
 - data collected from child protection workers
 - three-month case selection period
 - three page data collection instrument

Key Concepts of Decision Making Ecology



Overrepresentation

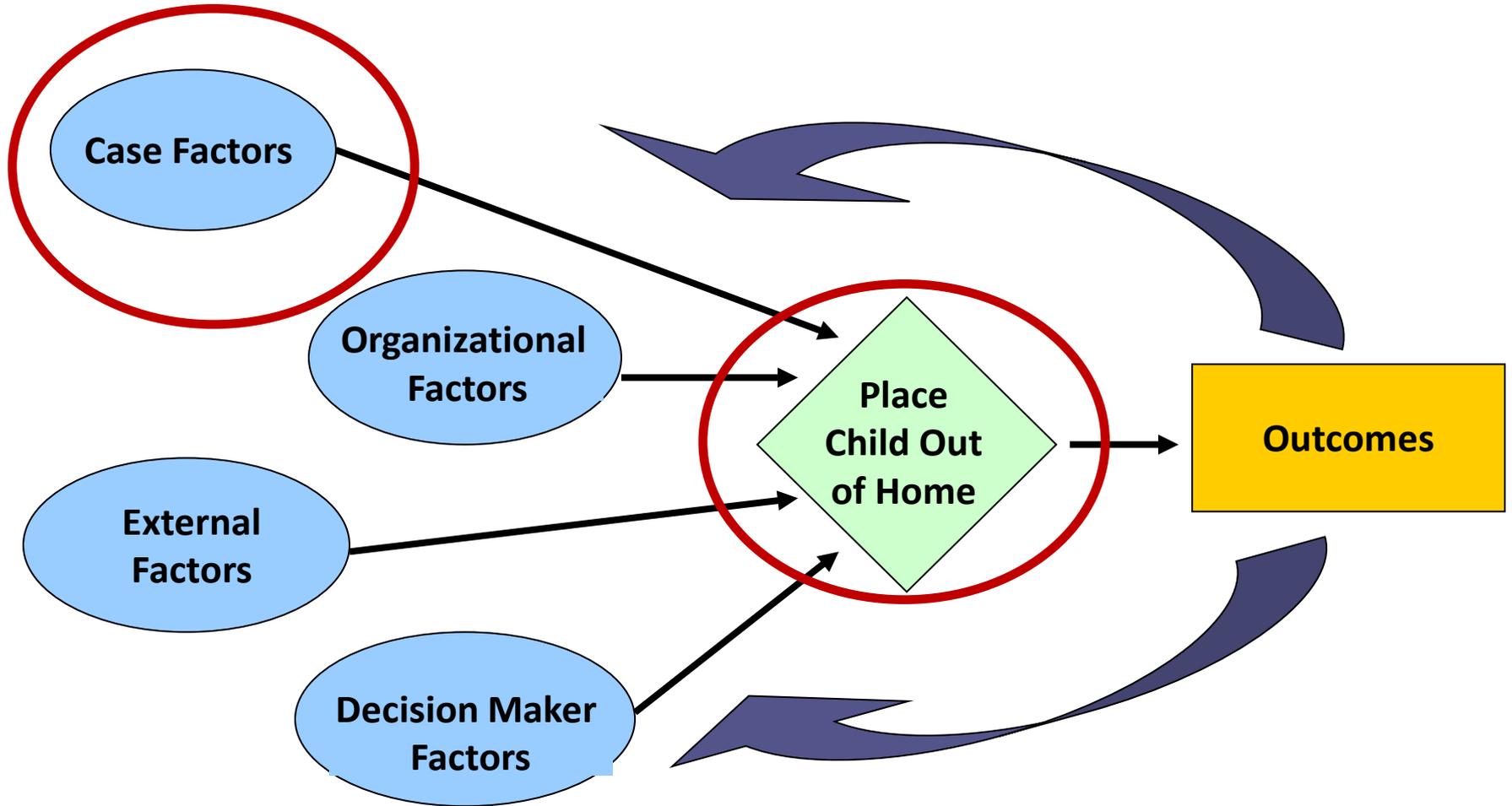
- Overrepresentation of Aboriginal children in Canadian child welfare care has been well documented
- Significant disproportionate representation of African American and Native American children in child welfare systems in U.S.
- Disparities found by race in placement may result from non-case related components

Placement decisions and disparities among Aboriginal groups: An application of the decision making ecology through multi-level analysis

(Fluke, Chabot, Fallon, MacLaurin, & Blackstock, 2010)

- examined the effect of child welfare agency characteristics on the decision to place Aboriginal and non-Aboriginal children in out-of-home care
- Multi-level logistic regression equation
- Outcome variable: formal placement
- Variables included in model reflected an ecological model of child maltreatment

Key Concepts of Decision Making Ecology



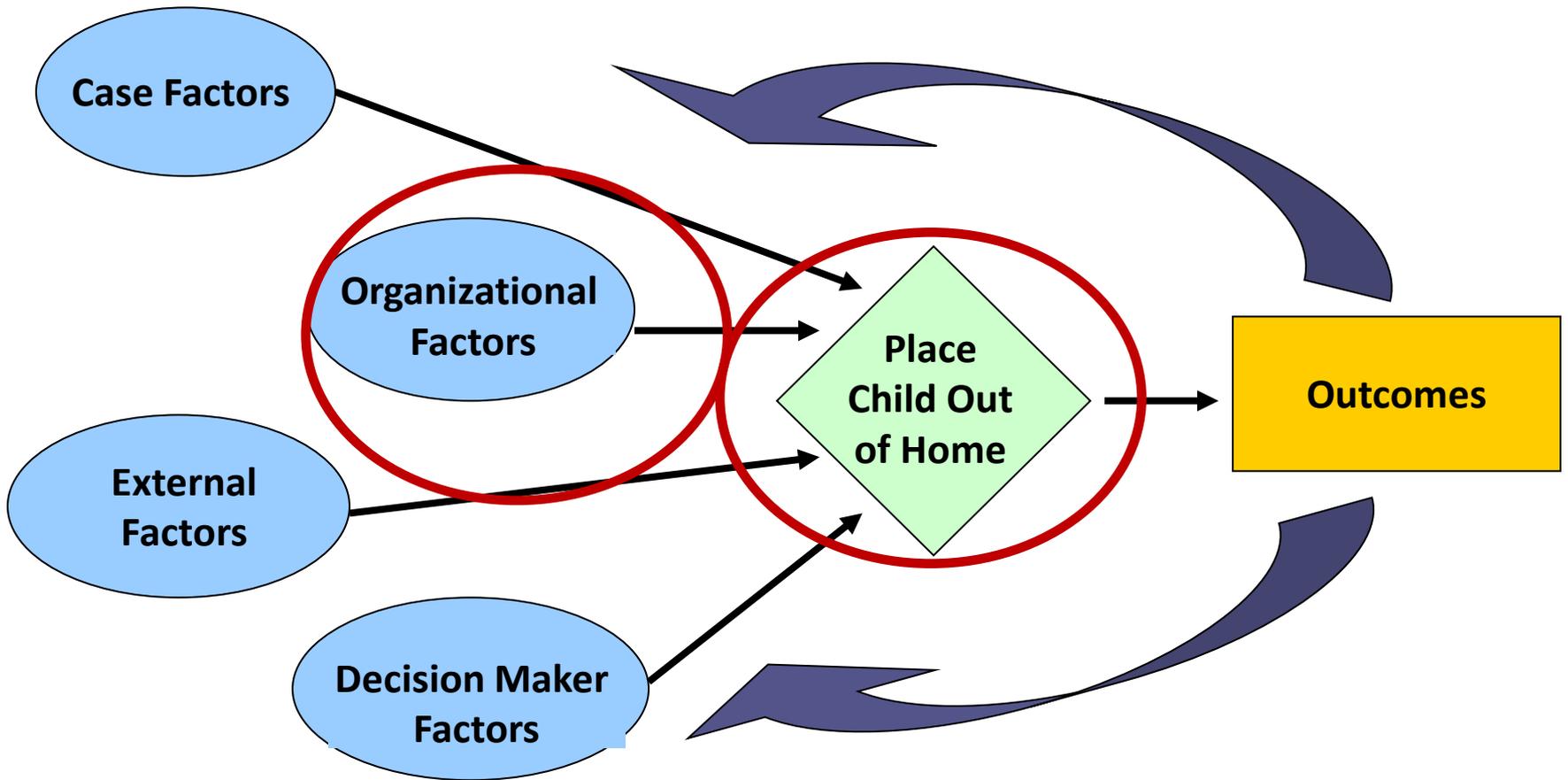
Level One Variables

- Case and Clinical Characteristics
 - Child Age
 - Type of Maltreatment
 - Physical Harm
 - Mental/ Emotional Harm
 - Child Functioning
 - Caregiver Functioning
 - Income Source
 - Number of Moves
 - Cooperation Level
- Extraneous Case Characteristics
 - Household ethnicity
 - White household
 - Aboriginal or visible minority household

Multilevel Logistic Regression - Full Model (case factors)

Variables	Estimate	S.E.	Est./S.E.	P-Value	Odds ratio	95 % C.I.	
Child and Family Characteristics - Level One (report child pair)							
Child Age (6 or over)	0.132	0.190	0.694	0.488	1.141	0.786	1.656
Type of Maltreatment (presence of type)							
Physical abuse	0.029	0.335	0.087	0.930	1.029	0.534	1.985
Sexual abuse							
Neglect	0.535	0.325	1.643	0.100	1.707	0.903	3.228
Emotional maltreatment	-0.781	0.375	-2.081	0.037	0.458	0.220	0.955
Physical Harm (present)	0.558	0.212	2.626	0.009	1.747	1.153	2.647
Mental or Emotional Harm (present)	0.843	0.189	4.465	0.000	2.323	1.604	3.365
Child Functioning							
Presence of One Concern	-0.080	0.232	-0.346	0.730	0.923	0.586	1.455
Presence of Two or more Concerns	0.308	0.203	1.516	0.130	1.361	0.914	2.026
Previous Case Opening (present)	0.231	0.171	1.352	0.176	1.260	0.901	1.761
Caregiver Functioning							
Presence of One Concern	-0.270	0.314	-0.859	0.390	0.763	0.413	1.413
Presence of Two Concerns	0.035	0.311	0.112	0.911	1.036	0.563	1.905
Presence of Three or more Concerns	0.691	0.278	2.482	0.013	1.996	1.157	3.441
Income Source							
Part time employment only	-0.063	0.283	-0.223	0.823	0.939	0.539	1.635
Social assistance only	0.217	0.204	1.066	0.286	1.242	0.833	1.853
Number of Moves							
One move	0.069	0.204	0.341	0.733	1.071	0.718	1.598
Two or more moves	1.120	0.246	4.544	0.000	3.065	1.892	4.964
Cooperation (present)	-0.700	0.215	-3.249	0.001	0.497	0.326	0.757
Child Ethnicity (Aboriginal)	0.248	0.190	1.303	0.193	1.281	0.883	1.860
R-squared	0.244	0.032	7.643	0.000			

Key Concepts of Decision Making Ecology



Level Two Variables

Worker Position

1, the majority of the workers from an agency were intake workers

0, the majority of workers from an agency were classified as something other than intake workers

Location of Organization

1, a metropolitan site

0, other than a metropolitan site

Staffing Vacancies

1, yes

0, no

Proportion of Aboriginal Reports

1, agencies with twenty percent or more investigations involving Aboriginal caregivers

0, agencies with less than twenty percent of investigations involving Aboriginal caregivers

Parsimonious case factors and Parsimonious organizational factors

	Estimate	S.E.	Est./S.E.	P-Value	Odds ratio	95 % C.I.	
Variables							
Child and Family Characteristics - Level One (report child pair)							
Type of Maltreatment (presence of type)							
Emotional maltreatment	-1.035	0.255	-4.067	0.000	0.355	0.215	0.586
Mental or Emotional Harm (present)	1.021	0.174	5.881	0.000	2.776	1.974	3.904
Number of Moves							
Two or more moves	1.067	0.246	4.329	0.000	2.907	1.795	4.708
Caregiver Functioning							
Presence of Three or more Concerns	0.900	0.174	5.174	0.000	2.460	1.749	3.459
Cooperation (present)	-0.580	0.232	-2.499	0.012	0.560	0.355	0.882
R-squared	0.195	0.033	5.975	0.000			
Organizational Characteristics – Level Two (Local CPS Agency)							
Aboriginal Investigations (20% investigations are aboriginal caregivers)	1.124	0.328	3.425	0.001	3.077	1.618	5.853
R-squared	0.327	0.131	2.492	0.013			
Direct explained variation	19.76%	m.a.e.	0.25324				

Application of the Decision Making Ecology to the CIS-1998

- Key case factors that increase likelihood of placement: emotional harm, two or more moves, caregiver functioning
- No direct contribution of Aboriginal status of child
- Single agency-level factor that increases the likelihood of placement: proportion of Aboriginal children in the caseload
- Suggests disparities occurring at agency level

Comparison of the 1998 and 2003 surveys: Part A

(Blackstock, Chabot , Fallon, Fluke , MacLaurin & Tonmyr,)

- Builds on work of Fluke et al. (2010)
- Analysis examines if the findings from the CIS-1998 remain consistent with the CIS-2003
- Comparability of 1998 and 2003 data assessed
- Exposure to domestic violence removed from 2003 data
- Previous 1998 models re-estimated with exposure to domestic violence removed

Comparison of the 1998 and 2003 surveys: Part A

- Descriptive for 2003:
 - 22% of investigations opened for ongoing child welfare services resulted in a placement in out-of-home care
 - 26% of investigations involved a caregiver or child with Aboriginal heritage
- Final retained first level predictors for 2003: emotional maltreatment, emotional harm, caregiver cooperation, **Aboriginal status of child**
- Proportion of Aboriginal Reports at the agency level remains a significant factor; similar to 1998, but slightly attenuated
- Similarities and differences between 1998 and 2003:
 - Emotional and physical harm significantly associated with placement in 1998 and 2003
 - Child's Aboriginal ethnicity significantly related to placement in 2003 but not in 1998

Exploring Alternate Specifications to Explain Second-Level Effects: Part B

(Blackstock, Chabot , Fallon, Fluke , MacLaurin & Tonmyr,)

- Builds on work of Fluke et al. (2010) and Part A
- Uses data from the 2003 Organizational questionnaire completed by 58 agencies and offering a large set of contextual factors
- Analysis addresses four related sets of issues
 - Explores re-specifications to understand link between Proportion of Aboriginal Reports and formal placement
 - Addresses over-specification of models in the present context of a stratified sampling scheme
 - Highlights aspects of the models which benefit from descriptive analysis

Exploring Alternate Specifications to Explain Second-Level Effects: Part B

New agency-level variables added to the model:

- stress
- specialization
- centralization
- supervisor ratio
- education
- deaths
- inquests, high profile cases

Final Full Model Parsimonious level One & Interactions

Variable	Estimate	S.E.	Est./S.E	P- Value	Odds ratio	95 % C.I.	
First Level							
Physical Harm	0.657	0.169	3.895	0.000	1.93	1.39	2.69
Emotional Harm	0.382	0.131	2.927	0.003	1.47	1.13	1.89
Caregiver cooperation	-0.978	0.152	-6.422	0.000	0.38	0.28	0.51
Aboriginal Status	0.645	0.161	3.996	0.000	1.91	1.39	2.61
Second Level							
Proportion of Aboriginal reports	-0.530	0.494	-1.072	0.284	0.59	0.22	1.55
Education	0.258	0.421	0.614	0.539	1.29	0.57	2.95
Centralization	-0.163	0.33	-0.494	0.621	0.85	0.44	1.62
Aboriginal Reports*Education	1.611	0.651	2.474	0.013	5.01	1.40	17.94
Aboriginal* Centralization	1.455	0.686	2.12	0.034	4.28	1.12	16.44
Aboriginal Reports* Education*Centralization	-1.142	0.842	-1.356	0.175	0.32	0.06	1.66

Exploring Alternate Specifications to Explain Second-Level Effects: Part B

- Centralization and Education reaches significance when controlled for Proportion of Aboriginal Reports
- The effect of Proportion of Aboriginal Reports is mediated by lack of resources, both among workers (lower proportion of SW degrees) and institutionally (higher proportion of centralized offices)

Further Information

- barbara.fallon@utoronto.ca
- johnf@americanhumane.org
- Canadian Child Welfare Research Portal:
<http://www.cwrp.ca/>
- Published Paper: Fluke, J., Chabot, M., Fallon, B., MacLaurin. B., Blackstock, C. (2010). Placement decisions and disparities among aboriginal groups: An application of the decision making ecology through multi-level analysis. *Child Abuse & Neglect*, 34. 57-69

Take Away Messages

- Evidence that overrepresentation is partly explained by organizational characteristics
- Disparity may be remedied by agency resources
- Tentative evidence of the importance of social work education / organization of work mediating disparities