

# Chapter 5

E:> DD#! ! \$ DR^ a|Z\_X5VdZ\_

Pierre Foy and MarcJoncas

## 5.1 Overview

EYZITRaeVc UVITcSVdeYVE:> DD#! ! \$ Z\_eVc\_ReZ\_Rj dR^ a|VUVdZ\_ R\_UeYV



**5.2.1 Sampling from the Target Populations**

E: > DDVi aVTeURj| aReZaReZ XT f\_æZde` Uj\_ VeYVZ national desired populations è T ccVda`\_URdTj` dMj Rda` dSjVe` ZedUj\_`Z`\_` VeYVZ\_æc\_ReZ\_Rj UVdZMU a` af jReZ\_d

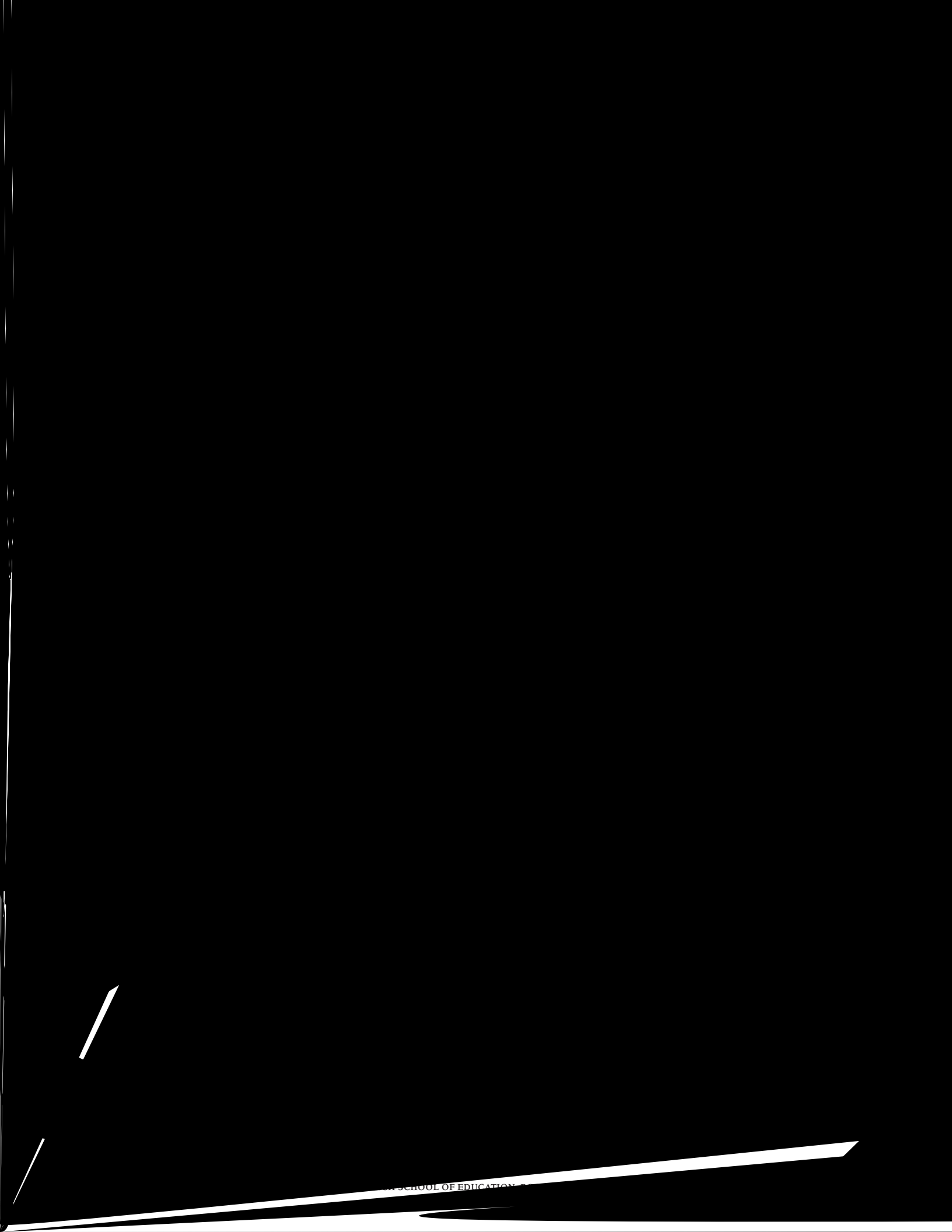
7` c Mi R^ a|MLZWMf ceY XcRUVh RdeYVf aaVc` VeYVch` RUjRIV\_eXcRUVc T\_æZ\_Z`XeYVXcVReVcbac` a`æZ`\_` Wlj VRd` jUdZ\_ RaRceZf jRcT f\_æj LeYV\_Rj| Wf ceY XcRUVdf UV\_ædZ\_ eYVT f\_æj dY` f jUT` dZf eVeYV\_ReZ\_Rj UVdZMU a` af jReZ\_ Wc eYReT f\_æj;

2|eY` f XY T f\_æZdh VcVVi aVTeUe` Z`Tjf UVRj| df UV\_ædZ\_ eYVæcXVe

† EYVj `WwUR Tf ccZf Jf ^ `cRdIY` `] dcf Tef cVeYReh RdUzWwV\_eW^ eYV  
^ RZ dcvR^ VUf TRz \_ gj dV^ 1d'  
† EYVj ac`gZMU Z dcf TeZ \_ ` \_lj e` dcf UV\_edZ\_eYV TRvX cZ/dUj \_VURc  
vh ZYZ IdIY` `| Vi Tf dZ d%

H ZYZ IdIY` `| Vi Tf dZ \_dh VcV jZ ZMU e` dcf UV\_ed h Y` LSVIRf dV  
`Wd ^ VUZRSZj Lh VcVf \_RSjVe eR\VaRceZ\_eYVE:> DD RctVdt^ V\_eZEYV  
XV\_VcRj E:> DD cf jVdWc Uj \_Z Xh ZYZ IdIY` `| Vi Tf dZ \_dZ Tf UMU eYVWj  
j` h Z XeycWxc` f ad

† **Intellectually disabled students.**



df S[VTeLf df R]j Sj eYVdR^ VeVRTYVcZDR^ a|Z\_XZ\_eRTeT]Rdtb` ` ^ dZldeRZYe  
Wch RcULeYVcWcVLRe Wf ceY XcRUVZ2e VZYeY XcRUMLY` h VgVdL]Rdtb` ` ^ c  
RcVf df R]j `cXR\_ZkU Sj df S[VTe € ^ ReYV^ ReZTdL]R\_Xf RXVLdIZV\_TVLeIZ€





\_f ^ SVc` Wf UV\_ edh Rd JVd eYR\_ %L!! LaReZTaReZ XT f \_ecZdh VcVRd VU  
 e` dVJTe^ `cV dIY` `jdL` c^ `cVTJRctt` `^ daVc dIY` `JZEYVdR^ aJVUVdX  
 eRSJvdT f JURjd` SVf dMUe` UVc^ Z\_ V dR^ aJV dZkVd Wc^ `cVT ^ aJV  
 UVdX\_dZ7` c Vi R^ aJLXV XcRaYZIRJ cVXZ \_dT f JUSVUJ} \_VU Rd decReRf  
 h YVcVsj Vbf Rj \_f ^ SVcd` WfIY` `jd h` f JUSVdR^ aJVUZ\_ VRIY dcaRef ^ Z\_  
 `dUc e` ac` U1 dMMMMMMMMW` jd de ! jd d e

**TIMSS Sample Design Table**

		Intradass Correlation				
Q2	Q3	Q4	Q7	Q8	Q9	a
	276			a	3	

**5.3.4 Stratification**

DecReZ TREZ\_ ZleYVXc` f aZ\_X` VdR^ a|Z\_Xf`\_Zd1VZXdIY` `jd` Z\_ eYVdR^ a|Z\_X  
 VR^ VRTT dUZ\_Xe` d` ^ VReeZsf eV` c gRcZS|VacZ ce` Udrh Z\_XeYVdR^ a|VZ:e  
 ZlXV\_VcR|jj` f dUWc eYVW|j` h Z\_XcVRd`\_d

† E` Z` ac` gVeYVW|TZ/\_Tj` `WeYVdR^ a|VUVdX`\_LeYVcVsj` ^ R`Z`Xdf` cgVj`  
 VdZ` ReVd`^ `cVcVIZSIV.

† E` Raalj` UZVV\_e dR^ a|VUVdX`\_d` c UZhc` a` ceZ`\_ReV dR^ a|McdZVR|j` TR`  
 eZ`\_de` daVIZ` TXc` f ad` W|IY` `jd1df` TY RdeY` dVh` ZYZ` TVceRZ` dReVd` c  
 ac` gZ` TVd`.

† E` V`\_df` cVRUMbf` ReV`cVacVd`\_eReZ`\_ Z\_ eYVdR^ a|V`\_W|aVIZ` TXc` f adW` ^  
 eYVdRcXVe` af` |ReZ`\_;

Gi R^ a|Vd`\_W|aReZ` TREZ`\_ gRcZS|VdWc dIY` `j` dR^ a|VdRcV+XV` XcPaYj`  
 idf` TY Rd dReVd` c ac` gZ` TVd`\_LdIY` `j` ej` aV1df` TY Rdaf` S|Z`R`\_ UacZ`ReV`LR`\_U  
 |VgV` `W`cSR`\_Z`ReZ`\_ idf` TY Rdaf` dR|`R`\_ Uf` cSR`\_/Z`DecReZ` TREZ`\_ gRcZS|VdZ` eYV  
 E:> DD dR^ a|VUVdX`\_ T` f |USVf` dU`Vi` a|ZIZ`j` LZ` a|ZIZ`j` L` cS` eY`

**Explicit stratification**

^ dUcVUdIY` ` | dR^ a|Z\_XWR^ Vh RdZUV\_eZ VURdZdcVa|RIV^ V\_eLR\_UeYV` \_V  
R^Wc eYReRdRdMT \_UcVa|RIV^ V\_eLdY` f |JUZeSV\_WWU1dW6i YZSe&S Wc  
R\_ Vi R^ a|V/

EYVf dV` WZ a|ZZe dReZ, TReZ\_ gRcZS|VdR\_UeYVdf Sdmbf V\_e` dUd  
Z\_X` WeYVdIY` ` | dR^ a|Z\_XWR^ VSj dZkVV\_dfcUeYReR\_j dR^ a|JUdIY` ` |c  
cVa|RIV^ V\_eh` f |UYRgVdZ ZRcTYRcRIVcZbZdZ2JeY` f XY eYZIRaac` RIY Rg` ZLc  
dR^ a|VdZkV|` dVdLZeU Vd\_` eXf RcR\_eWRg` ZLZ\_XcVd` \_dVSRdZ9` h VgVdLZ  
^ Rj cUfTV eYVa` eV\_eRj WcSZRdLR\_Uh RdUW^ WU^ ` cVRTIVaeRS|VeYR\_  
` gVdR^ a|Z\_Xe` RTT ^ ^ ` URvR|` h cVd` \_dVcReV

### 5.4 First Sampling Stage

EYVdR^ a|Vd|VIEZ\_ ^ VeY` Uf dMUWc eYV} cdeR^ a|Z\_XdR^W/Z E:> DD^ R^Vc  
f dV` WRg dV^ ReZac` SRSZZe j lac` a` ceZ\_R|te IdkV1AAD/ eYIY\_Zf VZ:\_ ` dUc  
e` f dVeYZI^ VeY` ULZeZi\_VIVdRj e` YRgVd` ^ V^ VRd` cV` WeYVdZkV1> @D/  
` WeYVdR^ a|Z\_Xf` \_ZcZ:UMR|j LeYZIdY` f |JUSVeYV\_f` ^ SVc` WR^ a|Z\_XV|M  
^ V\_e dh ZYZ\_ eYVf` \_Ze1VZLeYV\_f` ^ SVc` Wdf UV\_e dZ\_ eYVdIY` ` |Z\_ eYVdRcXe  
XcRUVZ: WeYZIzif` \_RgRZRS|Vd` ^ V` eYVc YZY|j T cc|ReU^ VRd` cVd` TY Rc  
e` eRj dIY` ` |V\_c` ||^ V\_eL^ Rj SVf dMU

EYVdIY` ` |dZ\_ VRIY Vi a|ZZe dRef ^ Rcv|ZkMUZ\_ ` dUc` WeYVZ a|ZZe  
dReZ, TReZ\_ gRcZS|VdLe` XVeYVc h ZeY eYV> @DWc VRIY dIY` ` |ZDIY` ` |dRcV  
WVeYVc d ceUSj > @Dh ZeYZ\_ eYVZ a|ZZe dReZ, TReZ\_ gRcZS|VdZEYV^ VRd` cVc  
` WZkVdRcVRTIF` ^ f |ReUW^ dIY` ` |e` dIY` ` |LR\_UeYVcf` \_Z\_Xe` eRj |eYV  
Tf` ^ f |ReZV> @D ZI|ZkMU\_Vi ee` VRIY dIY` ` |1dW6i YZSe&S ZEYVTF` ^ f |ReZV



EYVE: > DD Raac` RIY Wc UMRjZ\_Xh Z@Y d^ Rj] dIY` `jdYRU eh` T ^ i  
a`\_V\_ect  
T





