

Elektronisches Supplement 7. Mplus-Inputs zur Messinvarianzprüfung

DATA: file = Grundlage Berechnungen Messinvarianz.dat;

Variable: names =

! Auf die Auflistung aller Variablen im Datensatz wird aufgrund von Platzmangel verzichtet

! Variable, die die Gruppen aufteilt

role3;

grouping is role3(1=1 2=2);

usevariables =

! Auf die Auflistung der verwendeten Variablen im Datensatz wird aufgrund von Platzmangel verzichtet

missing = all(-99);

define: analysis: !type = ;

estimator = MLR;

MODEL:

WS BY

S1_ws11@1 (1)

S1_ws1* (2)

S1_ws10* (3) ;

[S1_ws11*]; [S1_ws1*]; [S1_ws10*];

S1_ws11* ; S1_ws1* ; S1_ws10* ;

WS*;

[WS@0];

BQ BY

S2_bq5@1 (4)

S2_bq3* (5)

S2_bq6* (6) ;

[S2_bq5*]; [S2_bq3*]; [S2_bq6*];

S2_bq5* ; S2_bq3* ; S2_bq6* ;

BQ*;

[BQ@0];

VN BY

S3_vn1@1 (7)

S3_vn8* (8)

S3_vn5* (9);

[S3_vn1*]; [S3_vn8*]; [S3_vn5*];

S3_vn1* ; S3_vn8* ; S3_vn5* ;

VN*;

[VN@0];

AF BY

S4_af9@1 (10)

S4_af8* (11)

S4_af5* (12);

[S4_af9*]; [S4_af8*]; [S4_af5*];

S4_af9* ; S4_af8* ; S4_af5* ;

AF*;

[AF@0];

DTMO BY

S25dt5@1 (13)

S5_dt4* (14)

S5_dt6* (15);

[S5_dt5*]; [S5_dt4*]; [S5_dt6*];

S5_dt5* ; S5_dt4* ; S5_dt6* ;

DT_MO*;

[DT_MO@0];

DTI BY

S6_dt14@1 (16)

S6_dt13* (17);

[S2a_dt5*]; [S6_dt13*];

S2a_dt5* ; S6_dt13* ;

DTI*;

[DTI@0];

QL BY

S7_ql3@1 (18)

S7_ql1* (19)

S7_ql8* (20);

[S7_ql3*]; [S7_ql1*]; [S7_ql8*];

S7_ql3* ; S7_ql1* ; S7_ql8* ;

QL*;

[QL@0];

DTFO BY

S8_dt9@1 (21)

S8_dt10* (22)

S8_dt8* (23);

[S8_dt9*]; [S8_dt10*]; [S8_dt8*];

S8_dt9* ; S8_dt10* ; S8_dt8* ;

DTFO*;

[DTFO@0];

REFS BY

S9_ref10@1 (24)

S9_ref7* (25);

[S9_ref10*]; [S9_ref7*];

S9_ref10* ; S9_ref7* ;

REFS*;

[REFS@0];

IPI BY

S10_ipi4r@1 (26)

S10_ipi5r* (27);

[S10_ipi4r*]; [S10_ipi5r*];

S10_ipi4r* ; S10_ipi5r* ;

IPI*;

[IPI@0];

ZL BY

S11_zl1@1 (28)

S11_zl6* (29);

[S11_zl1*]; [S11_zl6*];

S11_zl1* ; S11_zl6* ;

ZL*;

[ZL@0];

REFL BY

S12_ref9@1 (30)

S12_ref6* (31)

S12_ref2* (32);

[S12_ref9*]; [S12_ref6*]; [S12_ref2*];

S12_ref9* ; S12_ref6* ; S12_ref2* ;

REFL*;

[REFL@0];

MODEL 2:

WS BY

S1_ws11@1

S1_ws1*

S1_ws10*;

[S1_ws11*]; [S1_ws1*]; [S1_ws10*];

S1_ws11* ; S1_ws1* ; S1_ws10* ;

WS*;

[WS@0];

BQ BY

S2_bq5@1

S2_bq3*

S2_bq6* ;

[S2_bq5*]; [S2_bq3*]; [S2_bq6*];

S2_bq5* ; S2_bq3* ; S2_bq6* ;

BQ*;
[BQ@0];

VN BY

S3_vn1@1
S3_vn8*
S3_vn5* ;
[S3_vn1*] ; [S3_vn8*] ; [S3_vn5*] ;
S3_vn1* ; S3_vn8* ; S3_vn5* ;
VN*;
[VN@0];

AF BY

S4_af9@1
S4_af8*
S4_af5* ;
[S4_af9*] ; [S4_af8*] ; [S4_af5*] ;
S4_af9* ; S4_af8* ; S4_af5* ;
AF*;
[AF@0];

DTMO BY

S5_dt5@1
S5_dt4*
S5_dt6* ;
[S5_dt5*] ; [S5_dt4*] ; [S5_dt6*] ;
S5_dt5* ; S5_dt4* ; S5_dt6* ;
DT_MO*;
[DT_MO@0];

DTI BY

S6_dt14@1
S6_dt13* ;
[S6_dt5*] ; [S6_dt13*] ;

S6_dt5* ; S6_dt13* ;

DTI*;

[DTI@0];

QL BY

S7_ql3@1

S7_ql1*

S7_ql8* ;

[S7_ql3*] ; [S7_ql1*] ; [S7_ql8*] ;

S7_ql3* ; S7_ql1* ; S7_ql8* ;

QL*;

[QL@0];

DTFO BY

S8_dt9@1

S8_dt10*

S8_dt8* ;

[S8_dt9*] ; [S8_dt10*] ; [S8_dt8*] ;

S8_dt9* ; S8_dt10* ; S8_dt8* ;

DTFO*;

[DTFO@0];

REFS BY

S9_ref10@1

S9_ref7* ;

[S9_ref10*] ; [S9_ref7*] ;

S9_ref10* ; S9_ref7* ;

REFS*;

[REFS@0];

IPI BY

S10_ipi4r@1

S10_ipi5r* ;

[S10_ipi4r*] ; [S10_ipi5r*] ;

S10_ipi4r*; S10_ipi5r* ;

IPI*;

[IPI@0];

ZL BY

S11_zl1@1

S11_zl6* ;

[S11_zl1*]; [S11_zl6*];

S11_zl1* ; S11_zl6* ;

ZL*;

[ZL@0];

REFL BY

S12_ref9@1

S12_ref6*

S12_ref2*;

[S12_ref9*]; [S12_ref6*]; [S12_ref2*];

S12_ref9* ; S12_ref6* ; S12_ref2* ;

REFL*;

[REFL@0];

OUTPUT:

tech1;

tech4;

stdyx;

sampstat;

MODINDICES STANDARDIZED;

DATA: file = Grundlage Berechnungen Messinvarianz.dat;

Variable: names =

! Auf die Auflistung aller Variablen im Datensatz wird aufgrund von Platzmangel verzichtet

! Variable, die die Gruppen aufteilt

role3;

grouping is role3(1=1 2=2);

usevariables =

! Auf die Auflistung der verwendeten Variablen im Datensatz wird aufgrund von Platzmangel verzichtet

missing = all(-99);

define: analysis: !type = ;

estimator = MLR;

MODEL:

WS BY

S1_ws11* (1)

S1_ws1* (2)

S1_ws10* (3);

[S1_ws11*]; [S1_ws1*]; [S1_ws10*];

S1_ws11* ; S1_ws1* ; S1_ws10* ;

WS@1;

[WS@0];

BQ BY

S2_bq5* (4)

S2_bq3* (5)

S2_bq6* (6);

[S2_bq5*]; [S2_bq3*]; [S2_bq6*];

S2_bq5* ; S2_bq3* ; S2_bq6* ;

BQ@1;

[BQ@0];

VN BY

S3_vn1* (7)

S3_vn8* (8)

S3_vn5* (9);

[S3_vn1*]; [S3_vn8*]; [S3_vn5*];

S3_vn1* ; S3_vn8* ; S3_vn5* ;

VN@1;

[VN@0];

AF BY

S4_af9* (10)

S4_af8* (11)

S4_af5* (12);

[S4_af9*]; [S4_af8*]; [S4_af5*];

S4_af9* ; S4_af8* ; S4_af5* ;

AF@1;

[AF@0];

DTMO BY

S5_dt5* (13)

S5_dt4* (14)

S5_dt6* (15);

[S5_dt5*]; [S5_dt4*]; [S5_dt6*];

S5_dt5* ; S5_dt4* ; S5_dt6* ;

DT_MO@1;

[DT_MO@0];

DTI BY

S6_dt14* (16)

S6_dt13* (17);

[S6_dt5*]; [S6_dt13*];

S6_dt5* ; S6_dt13* ;

DTI@1;

[DTI@0];

QL BY

S7_ql3* (18)

S7_ql1* (19)

S7_ql8* (20) ;

[S7_ql3*] ; [S7_ql1*] ; [S7_ql8*] ;

S7_ql3* ; S7_ql1* ; S7_ql8* ;

QL@1;

[QL@0];

DTFO BY

S8_dt9* (21)

S8_dt10* (22)

S8_dt8* (23) ;

[S8_dt9*] ; [S8_dt10*] ; [S8_dt8*] ;

S8_dt9* ; S8_dt10* ; S8_dt8* ;

DTFO@1;

[DTFO@0];

REFS BY

S9_ref10* (24)

S9_ref7* (25);

[S9_ref10*] ; [S9_ref7*] ;

S9_ref10* ; S9_ref7* ;

REFS@1;

[REFS@0];

IPI BY

S10_ipi4r* (26)

S10_ipi5r* (27) ;

[S10_ipi4r*] ; [S10_ipi5r*] ;

S10_ipi4r* ; S10_ipi5r* ;

IPI@1;

[IPI@0];

ZL BY

S11_zl1* (28)

S11_zl6* (29);

[S11_zl1*]; [S11_zl6*];

S11_zl1* ; S11_zl6* ;

ZL@1;

[ZL@0];

REFL BY

S12_ref9* (30)

S12_ref6* (31)

S12_ref2* (32);

[S12_ref9*]; [S12_ref6*]; [S12_ref2*];

S12_ref9* ; S12_ref6* ; S12_ref2* ;

REFL@1;

[REFL@0];

MODEL 2:

WS BY

S1_ws11* (1)

S1_ws1* (2)

S1_ws10* (3);

[S1_ws11*]; [S1_ws1*]; [S1_ws10*];

S1_ws11* ; S1_ws1* ; S1_ws10* ;

WS*;

[WS@0];

BQ BY

S2_bq5* (4)

S2_bq3* (5)

S2_bq6* (6);

[S2_bq5*]; [S2_bq3*]; [S2_bq6*];

S2_bq5* ; S2_bq3* ; S2_bq6* ;

BQ*;

[BQ@0];

VN BY

S3_vn1* (7)

S3_vn8* (8)

S3_vn5* (9);

[S3_vn1*]; [S3_vn8*]; [S3_vn5*];

S3_vn1* ; S3_vn8* ; S3_vn5* ;

VN*;

[VN@0];

AF BY

S4_af9* (10)

S4_af8* (11)

S4_af5* (12);

[S4_af9*]; [S4_af8*]; [S4_af5*];

S4_af9* ; S4_af8* ; S4_af5* ;

AF*;

[AF@0];

DTMO BY

S5_dt5* (13)

S5_dt4* (14)

S5_dt6* (15);

[S5_dt5*]; [S5_dt4*]; [S5_dt6*];

S5_dt5* ; S5_dt4* ; S5_dt6* ;

DT_MO*;

[DT_MO@0];

DTI BY

S6_dt14* (16)

S6_dt13* (17);

[S6_dt5*]; [S6_dt13*];

S6_dt5* ; S6_dt13* ;

DTI*;

[DTI@0];

QL BY

S7_ql3* (18)

S7_ql1* (19)

S7_ql8* (20);

[S7_ql3*]; [S7_ql1*]; [S7_ql8*];

S7_ql3* ; S7_ql1* ; S7_ql8* ;

QL*;

[QL@0];

DTFO BY

S8_dt9* (21)

S8_dt10* (22)

S8_dt8* (23);

[S8_dt9*]; [S8_dt10*]; [S8_dt8*];

S8_dt9* ; S8_dt10* ; S8_dt8* ;

DTFO*;

[DTFO@0];

REFS BY

S9_ref10* (24)

S9_ref7* (25) ;

[S9_ref10*]; [S9_ref7*];

S9_ref10* ; S9_ref7* ;

REFS*;

[REFS@0];

IPI BY

S10_ipi4r* (26)

S10_ipi5r* (27) ;

[S10_ipi4r*]; [S10_ipi5r*];

S10_ipi4r* ; S10_ipi5r* ;

IPI*;

[IPI@0];

ZL BY

S11_zl1* (28)

S11_zl6* (29);

[S11_zl1*]; [S11_zl6*];

S11_zl1* ; S11_zl6* ;

ZL*;

[ZL@0];

REFL BY

S12_ref9* (30)

S12_ref6* (31)

S12_ref2* (32);

[S12_ref9*]; [S12_ref6*]; [S12_ref2*];

S12_ref9* ; S12_ref6* ; S12_ref2* ;

REFL*;

[REFL@0];

OUTPUT:

tech1;

tech4;

stdyx;

sampstat;

MODINDICES STANDARDIZED;

OUTPUT:

tech1;

tech4;

stdyx;

sampstat;

MODINDICES STANDARDIZED;

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! Auf die Auflistung der verwendeten Variablen im Datensatz wird aufgrund von Platzmangel verzichtet

missing = all(-99);

define: analysis: !type = ;

estimator = MLR;

MODEL:

WS BY

S1_ws11* (1)

S1_ws1* (2)

S1_ws10* (3) ;

[S1_ws11*] (a); [S1_ws1*] (b); [S1_ws10*] (c) ;

S1_ws11* (ba); S1_ws1* (bb) ; S1_ws10* (bc) ;

WS@1;

[WS@0];

BQ BY

S2_bq5* (4)

S2_bq3* (5)

S2_bq6* (6);

[S2_bq5*] (d); [S2_bq3*] (e); [S2_bq6*] (f);

S2_bq5* (bd); S2_bq3* (be); S2_bq6* (bf);

BQ@1;

[BQ@0];

VN BY

S3_vn1* (7)
S3_vn8* (8)
S3_vn5* (3);
[S3_vn1*] (g); [S3_vn8*] (h) ; [S3_vn5*] (i) ;
S3_vn1* (bg); S3_vn8* (bh); S3_vn5* (bi);
VN@1;
[VN@0];

AF BY

S4_af9* (10)
S4_af8* (11)
S4_af5* (12);
[S4_af9*] (j); [S4_af8*] (k) ; [S4_af5*] (l) ;
S4_af9*(bj) ; S4_af8* (bk); S4_af5* (bl);
AF@1;
[AF@0];

DTMO BY

S5_dt5* (13)
S5_dt4* (14)
S5_dt6* (15);
[S5_dt5*] (m); [S5_dt4*] (n); [S5_dt6*] (o) ;
S5_dt5* (bm); S5_dt4* (bn) ; S5_dt6* (bo);
DT_MO@1;
[DT_MO@0];

DTI BY

S6_dt14* (16)
S6_dt13* (17) ;
[S6_dt6*] (p) ; [S6_dt13*] (q);
S6_dt6* (bp); S6_dt13* (bq) ;
DTI@1;
[DTI@0];

QL BY

S7_ql3* (18)

S7_ql1* (19)

S7_ql8* (20) ;

[S7_ql3*] (r) ; [S7_ql1*] (s) ; [S7_ql8*] (t) ;

S7_ql3* (br) ; S7_ql1* (bs) ; S7_ql8* (bt) ;

QL@1 ;

[QL@0] ;

DTFO BY

S8_dt9* (21)

S8_dt10* (22)

S8_dt8* (23) ;

[S8_dt9*] (u) ; [S8_dt10*] (v) ; [S8_dt8*] (w) ;

S8_dt9* (bu) ; S8_dt10* (bv) ; S8_dt8* (bw) ;

DTFO@1 ;

[DTFO@0] ;

REFS BY

S9_ref10* (29)

S9_ref7* (25) ;

[S9_ref10*] (x) ; [S9_ref7*] (y) ;

S9_ref10* (bx) ; S9_ref7* (by) ;

REFS@1 ;

[REFS@0] ;

IPI BY

S10_ipi4r* (210)

S10_ipi5r* (27) ;

[S10_ipi4r*] (z) ; [S10_ipi5r*] (aa) ;

S10_ipi4r* (bz) ; S10_ipi5r* (ca) ;

IPI@1 ;

[IPI@0] ;

ZL BY

S11_zl1* (28)

S11_zl6* (29);

[S11_zl1*] (ab) ; [S11_zl6*] (ac);

S11_zl1* (cb); S11_zl6* (ce) ;

ZL@1;

[ZL@0];

REFL BY

S12_ref9* (30)

S12_ref6* (31)

S12_ref2* (32);

[S12_ref9*] (ad) ; [S12_ref6*] (ae); [S12_ref2*] (af) ;

S12_ref9* (cd); S12_ref6*(ce) ; S12_ref2* (cf);

REFL@1;

[REFL@0];

MODEL 2:

WS BY

S1_ws11* (1)

S1_ws1* (2)

S1_ws10* (3) ;

[S1_ws11*] (a); [S1_ws1*] (b); [S1_ws10*] (c) ;

S1_ws11* ; S1_ws1* ; S1_ws10* ;

WS*;

[WS@0];

BQ BY

S2_bq5* (4)

S2_bq3* (5)

S2_bq6* (6);

[S2_bq5*] (d) ; [S2_bq3*] (e) ; [S2_bq6*] (f);

S2_bq5* ; S2_bq3* ; S2_bq6* ;

BQ*;

[BQ@0];

VN BY

S3_vn1* (7)

S3_vn8* (8)

S3_vn5* (9);

[S3_vn1*] (g); [S3_vn8*] (h); [S3_vn5*] (i) ;

S3_vn1* ; S3_vn8* ; S3_vn5* ;

VN*;

[VN@0];

AF BY

S4_af9* (10)

S4_af8* (11)

S4_af5* (12);

[S4_af9*] (j) ; [S4_af8*] (k); [S4_af5*] (l);

S4_af9* ; S4_af8* ; S4_af5* ;

AF*;

[AF@0];

DTMO BY

S5_dt5* (13)

S5_dt4* (14)

S5_dt6* (15);

[S5_dt5*] (m); [S5_dt4*] (n) ; [S5_dt6*] (o) ;

S5_dt5* ; S5_dt4* ; S5_dt6* ;

DT_MO*;

[DT_MO@0];

DTI BY

S6_dt14* (16)

S6_dt13* (17);

[S6_dt5*] (p) ; [S6_dt13*] (q) ;

S6_dt5* ; S6_dt13* ;

DTI*;

[DTI@0];

QL BY

S7_ql3* (18)

S7_ql1* (19)

S7_ql8* (20);

[S7_ql3*] (r); [S7_ql1*] (s); [S7_ql8*] (t);

S7_ql3* ; S7_ql1* ; S7_ql8* ;

QL*;

[QL@0];

DTFO BY

S8_dt9* (21)

S8_dt10* (22)

S8_dt8* (23);

[S8_dt9*] (u); [S8_dt10*] (v); [S8_dt8*] (w);

S8_dt9* ; S8_dt10* ; S8_dt8* ;

DTFO*;

[DTFO@0];

REFS BY

S9_ref10* (24)

S9_ref7* (25) ;

[S9_ref10*] (x); [S9_ref7*] (y);

S9_ref10* ; S9_ref7* ;

REFS*;

[REFS@0];

IPI BY

S10_ipi4r* (26)

S10_ipi5r* (27) ;

[S10_ipi4r*] (z); [S10_ipi5r*] (aa);

S10_ipi4r* ; S10_ipi5r* ;

IPI*;

[IPI@0];

ZL BY

S11_zl1* (28)

S11_zl6* (29);

[S11_zl1*] (ab); [S11_zl6*] (ac);

S11_zl1* ; S11_zl6* ;

ZL*;

[ZL@0];

REFL BY

S4_ref12* (30)

S4_ref6* (31)

S4_ref2* (32);

[S4_ref12*] (ad) ; [S4_ref6*] (ae); [S4_ref2*] (af);

S4_ref12* ; S4_ref6* ; S4_ref2* ;

REFL*;

[REFL@0];

OUTPUT:

tech1;

tech4;

stdyx;

sampstat;

MODINDICES STANDARDIZED;