

0HWKRGV

RLO ZDV XVHG DQG LQMHFVHG LQ
IDOORSLDQ WXE H

1.2.1 The control group

(YDOXDWLRQ LQGLFDWRUV
7KH FRQWURO JURXS ZDV WUHDWLRQ FRPSDUHQW WKHQ RQO\ XDWPHQW H
ODSDURVFRSLF FRPELQHGXUJHUV \$ LQIDPPDWRU\ FOWRU OHYHO
PHQVWUXDWLRQ WXS LQJSODVW\ WUHDWPHQW DQGLWPHQW WKHQ RQO\ XDWPHQW H
FRPRUELGLWLHV)RU GLVWDO WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
ODSDURVFRSLF LQWXEDWLRQ DQG WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
ZHUH SHUIRUPHG :LWK K\VWHURXV FRPSDUHQW WKHQ RQO\ XDWPHQW H
FDWKHWHU ZDV LPSODQWLG LQWUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
SUHDUUDQJHG EOXH EOXH VROXWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
FDWKHWHU OXPHQ GXULQJ FRQWUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
JHQWDPLFLQ GH[DPHWKDVRQH DQG LQWUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
URXWLQHO\ LQMHFVHG LQWR WKHQ RQO\ XDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
SHOYLF DGKHLVRQV \$IWHU VXUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
WUHDWPHQW RI SURPRWLQJ EORRG WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
VWDVLV DQG DQWL LQIODPPDWLRQ WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW

1.2.2 Observation group

ZKLFK SRVWRSHU WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
DQG KLJKHU WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
7KH REVHUYDWLRQ JURXS WRRN WKHQ IDOORSLDQ WXE H
LQWHUYHQWLRQ WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
LRGLJHG RLO \$ GD\ DIWHU WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
EORRG WHVW URXWLQH DQG LRGLQJ WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
7KH SDWLHQW WRRN WKHQ OLWKRWRPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
WKHQ UDGLDWLRQ EHG \$IWHU WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
'%+ GRXEOH EDOORRQ WXE H ZDV WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
FDYLW\ 7KH FRQWURO WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
FDYLW\ ZDV ILOOHG W WKHQ VOLGHV LQWR WKHQ WUHDWPHQW WUHDWPHQW WUHDWPHQW
JXLGHZLUH \$IWHU UHDFKLQJ WKHQ WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
UHPRYHG DQG WKHQ FRQWUDV DJHQW ZDV LQMHFVHG WKURXJK WKHQ
FDWKHWHU SDWLHQWV ZKR UHPDLQ EORFNHG DIWHU VHOHFWLYH
VDOSLQRJUDSKI\ ZLOO WKHQ XVH WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
JXLGH ZLUH GHOLYHUHG WR WKHQ WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
VDOSLQJDOLJDWLRQ XVLQJ D WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
PO RI QRUPDO VDOLQH WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
GH[DPHWKDVRQH PJ DQG PJ RI WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
IRU LQWUDXWHULQH LQMHFVLRQ)LQDOO\ PO RI HWK\OHQH LRGLQH

Table 1. &RPSDULVRQ EHWZHHQ WKHQ WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW

| | | |
|---------------|----------------------------------|-----------|
| JURX | ([DQXPEHH[FHOHQFH (YDQLQR DYDLO | 7RWDO HII |
| REVHUYDWLRQ | | |
| FRQWURO JURXS | | |
| 1 | | |
| 3 | | |

&RPSDULVRQ EHWZHHQ WKHQ WUHDWPHQW WUHDWPHQW WUHDWPHQW WUHDWPHQW
WHUPV RI VHUXP IDFWRU OHYHO FRQWURO JURXS " QJ /
,Q WHUPV RI VHUXP LQIODPPDWRU\ IDFWRUV OHYHO WKHUH ZDV
QR VLJQLILFDQW GLIIHUHQFH EHWZHHQ WKHQ WUHDWPHQW WUHDWPHQW WUHDWPHQW
WUHDWPHQW ZLWK 3! DQG ,/ " QJ /

Table 2. &RPSDULVRQ EHWZHHQ WKHJHWZR XW URRXSHV GDFWLYLW\ WLPH

| JURXS | ([DPSOH QXPEHU | / SUJWS | / QJ / SRVW | / 71) . QJ / WUHDWPHQW |
|---------------|----------------|---------|-------------|------------------------|
| REVHUYDRXLRQ | | | | |
| FRQWURO JURXS | | | | |
| W | | | | |
| 3 | | | | |

&RPSDULVRQ EHWZHHQ WKHJHWZR XW URRXSHV GDFWLYLW\ WLPH
 UHJDUGLQJ WKH SRVWRSHUDWLYH UHFRGHORZWDWKKDQ WKH FRQWU
 ,Q WHUPV RI SRVWRSHUDWLYH UHFRPSRUQHWH REVHUYDRXLRQ "JURXS 3
 KDG D SRVWRSHUDWLYH SDLQ VFRUH " %UHDN XS DQG

Table 3. &RPSDULVRQ RI WKH SRVWRSHUDWLYH UHFRYHU\ " V

| JURXS | ([DPSOH QXPEHU | SRVWRSHUDWLYH SDLQ | WLPH K | OHQJW |
|---------------|----------------|--------------------|--------|-------|
| REVHUYDRXLRQ | | | | |
| FRQWURO JURXS | | | | |
| 3 | | | | |

'LVFXVVLRQ
 LRGLJHG RLO FDQ LPSURYH WKH RYHU
 UHGXFH WKH LQIODPPDWRU\ UHVS
 SRVWRSHUDWLYH UHFRYHU\ WKH HQGHFWK
 ,Q WRGD\ V VRFLHW\ WKH LQFLGHOR RI YDULRXV VH[XDO
 GLVHDVHV KDV JUDGXDOO\ LQFUHDVHG DQG WKH UDWL RI PHGLFDO
 DERUWLRQ DQG LQGXFHG DERUWLRQ KDV DOVR LQFUHDVHG
 7KHUHIRUH WKH LQFLGHOR RI WKH UHFRYHU\ XFWLRQ KDV DOVR
 LQFUHDVHG DQG KDV EHFRPH DQ LPSRUWDQW FDXVH RI IHPDOH
 LQIHUWLOLW\ > @ ,Q WKH WUHDWPHQW RI WKH UHFRYHU\ WKH HQGHFWK
 IDOORSLDQ WXEH LQWHUYHQWLRQDO UHFRYHU\ DOORSLDQ WXEH
 YHU\ JRRG UHVXOWV 7KLV WHFKQLTXH UHFRYHU\ DOORSLDQ WXEH
 XWHURVDSLQJRJUDSKI DQG WKH UHFRYHU\ DOORSLDQ WXEH
 LQWHUYHQWLRQ WHFKQRORJ\ XVLOQJ WKH UHFRYHU\ DOORSLDQ WXEH
 WKH JXLGH ZLUH WR UHOHDVH DQG XHOS DDO\WKH UHFRYHU\ DOORSLDQ WXEH
 WXEDO WXEH ZKHUH WKH DGKHVLRQLRQ WHFKQLTXH UHFRYHU\ DOORSLDQ WXEH
 DIWHU WKH PLFGRYHU\ UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 HIIHFW LV EHWWHU WKDQ WKH WUHDWPHQW RI WKH UHFRYHU\ DOORSLDQ WXEH
 GUXJ DGPLQLVWUDWLRQ > @ OHGLFLQH
 7KH XVH RI IDOORSLDQ WXEH LQWHUYHQWLRQDO UHFRYHU\ DOORSLDQ WXEH
 FRPELQHG ZLWK HWKLRGRRLO FDQ LPSURYH WKH UHFRYHU\ DOORSLDQ WXEH
 HIIHFWLQGHOR RI WUHDWPHQW DQG DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 VXFFHVV UDWL @ I WUHDWPHQW DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 LRGLJHG RLO KDV D ORZ RLO YLVFRYHU\ UHFRYHU\ DOORSLDQ WXEH
 LQ WKH FLUFXLWRXV DQG VPDOO WXEDO OXP HQ ZKLEK FDQ PDNH
 WKH LQQHU PHPEUDQH VXUIDFH RI WKH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 WKURXJK WKH JXLGH ZLUH VHSUDWLRQDO UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 WR DYRLG WKH RFFXUUHQFH RI UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 WKH IDOORSLDQ WXEH FDQ SURPRWH WKH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 WKDW LW UHFRYHU\ VPRRWK LPSURYH WKH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 GHOLYHU\ VR WKDW SDWLHQWV FDQ UHFRYHU\ WKH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 FRQFHSWLRQ DELOLW\ > @ 7KHUHIRUH WKH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 FOLQLFDO DSSOLFDWLRQ DQG SURPRWHWKH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 ,Q FRQFOXVLRQ LQ WKH WUHDWPHQW RI WKH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 REVWUXFWLRQ WKH WUHDWPHQW RI WKH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH
 LQWHUYHQWLRQDO UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH UHFRYHU\ DOORSLDQ WXEH

FRPELQHG IDOORSLDQ WXEHLQWHUYHQWLRQDO UHFDQDOLJDWLRQ
LQ WUHDWLQJ KRW DQG KXPLG VWDVLV IDOORSLDQ WXEHL
REWUXFWLYH LQIHUWLWLW\ REVHUYDWLRQ > - @ &KLQHVH 6H[
6FLHQFH
/LX :HL <X 0LQ 5DQ 6KLURQJ HW DO (IILFDF\ RI
7&0 ZDUP UHQDO SDVV FROODWHUDOV PHWKRG FRPELQHG
ZLWK LQWHUYHQWLRQDO UHFDQDOLJDWLRQ IRU WXEDO
REWUXFWLYH LQIHUWLWLW\ > - @ 7KH -RXUQDO RI 3UDFWLFDO
7UDGLWLRQDO &KLQHVH 0HGLFLQH
/L -XDQ :DQJ -LDOX ;LH 7LQJWLQJ \$QDO\VLV RI WKH
HIIHFW RI LQWHUYHQWLRQDO UHFDQDOLJDWLRQ RQ VDOSLQJEDO
REWUXFWLYH LQIHUWLWLW\ DQJLQJ
SRVWRSHUDWLYH SUHJQDQF\ UDWL > - @ 3/\$ 0HGLFDO
-RXUQDO