

4JUVBUIPOBM "OBMTJT PG 0DDVQBUJPOBM)F %IBCB 8PSLFST

5DMQDUD\LDZD 5L7

'LUHFWRWLRQDO ,QVWLWXWH RI 0LQHUV\ +HDOWK 1DJSXU

&RUUHVSRLQJ7LDZD\KR05 'LUHFWRU 1DWLRQDO ,QVWLWXWH RI 0LQHUV\ +HDOWK -1\$5('BDI&DPSX
UDMWLZDUL #\DKRR FR LQ

5HF GDWRM \$FF GDWH 'HFXE GDWH 'HF

&RS\ULJKW < 7LZDUL 55 HW DO 7KLV LV DQ RSHQ DFFHVV DUWLFOH GLVWULEXWHG XQGHU WKH WHU
XVH GLVWULEXWLRQ DQG UHSURGXFWLRQ LQ DQ\ PHGLXP SURYLGHG WKH RULJLQDO DXWKRU DQG VRXU

\$EVWUDFW

7KHZLGH V\DDQJLDWLRQ KDV DIIHFWHG HYHU\ DVSHFW RI OLIH 7KH GLHWDU\ KD
7R PHHW WKH HYHU LQFUHDVLQJ GHPDQG IRU QHZ FXLVLQHVV WKH FDWHULQJ LQG
E\ GD\ ,Q ,QGLD PDQ\ UHVWDXUDQWV DUH XVXDOO\ RSHUDWHG LQGLYLGXDOO\ S
VWXG\ ZDV FRQGXFWHG ZLWK WKH DLP RI PDSSLQJ WKH KDJDUGV SRVHG E\ GKD
ZRUNSODFH FRQGLWLRQ RI URDGLGH VPDOO VLJHG GKDED DQG WR XQGHUVWDQG
IRU WKHVH ZRUNHUV 7R PDS WKH KHDOWK KDJDUGV WR WKHVH ZRUNHUV GHWD
IROORZHG E\ ZDON WKURXJK VXUYH\ RI GKDEDV WR GLUHFWO\ REVHUYH WKH KHD
FRPPXQLFDWLRQ ZLWK RZQHUV DQG ZRUNHUV ZDV FDUULHG RXW UHJDUGLQJ RFFXS

7KH ILUVW VWUDWHJ\ UHYHDOHG WKDW WKHVH ZRUNHUV DUH DW ULVN RI GH
GHUPDWRORJLFDQ PXVFXORVNHODWDO LQIHFWLRQV DQG LQMXULHV 7KH ZDON V
PDLQO\ H[SRVHG WR KDJDUGV OLNH KHDW SURGXFWHG E\ VWRYHV DQG WDQGRU U
SO\LQJ RQ KLJKZD\V DQG SRRU LOOXPLQDWLRQ DW WKH ZRUNSODFH

4XHVWLRQQDLUH VXUYH\ RI VXEMHFWV VXJJHVWHG WKDW RQO\ FRQVLGHU
KDJDUGV ZKLOH RQO\ PHQWRQHG WKDW WKH\ KDYH SURYLVLQJ IRU KHDOWK FD
ZRUNHUV ZHUH UHVRUWLQJ WR WUDGLWLRQDO PHWKRGV LQ FDUV RI LOOQHVV ZKL
SUHYHQW LQKDODWLRQ RI VPRNH QHGU VWRYHV 7KXV WR FRQFOXGH WKLW VWXG\
VHYHUDO RFFXSDWLRQDO KDJDUGV ZKLFK LV IXUWKHU LQFUHDVHG E\ WKH SRRU ZR
WKH SURWHFWLYH PHDVXUHV

.HIZRUGMWBXUDQW 'KDED ,QIHFWLRQV

,QWURGXFWLRQ

:LGH VFDOH XUDDQJLDWLRQDKSMFGLRWDUIH
KDEVV DQG SDWWHUQV KDYH DOVR FKDQJHG 'LQLQJ LQ UHVWDXUDQWV RQ
ZHNNHGGV DQG RWKHU KROLDQ\ ZLWK IDPLO\ PHPEHUV DQG IULHQGV KDV
EHFRPH D YHU\ SRSXODU FRQFHSW LQ XUEDQ ,QGLD 7R PHHW WKH HYHU
LQFUHDVLQJ GHPDQG IRU QHZ FXLVLQHVV WKH FDWHULQJ LQG XVWU\ LQ ,QGLD LV
EHFRPLQJ PRUH SURPLQHGW GD\ E\ GD\

,Q WKH FXUUHQW WLPHV UHVWDXUDQWV KDYH WDNHQ RYHU WKH WDVN IRU VR
JDWKHULQJ\HOW\ DQG FRQYHQLHQFH DW WKH VDPH WLP
DUH D WRWDO RI PLOOLRQ HDWLQJ RXWOHWV LQ ,QGLD DQG WKH QXPEHU L
H[SH

YDULRXV GRPDLQV UHODWHG WR UHVWDXUDQW DQG GKDED ZRUNHUV ZDV
LGHQWH\NIB\ ZRUGV LQFOXGHG GKDED ZRUNHUV UHVWDXUDQW ZRUNHUV
FRRNLQJ RLO KRVSLWDOLWLVZBUNIROVOREZINE\ DQG FKHIVd
D GHWDLOHG OLWHUDWXUH UHYLHZ LQ ERWK LQGH[HG DQG QRQ LQGH[HG MRXUQ
LQ ~~WHOR~~ RFFXSDWLRQDO KHDOWK RI ODVW WZR GHFDGHV

H VHFRQG VWUDWHJ\ FRPSULVHG RI ZDON WKURXJK VXUYH\ RI IHZ
GKDEDV VLWXDWHG RQ WKH KLJKZD\ DQG WKH UHVWDXUDQWV LQ WKH
\$KPHGDEG FLW\ MXULVGLFWLRQ 'XULQJ WKH VXUYH\ WKH SUHVHQFH RI
YDULRXV ZRUNSODFH IDFWRUV ZHUH GRFXPHQWHG RQ D SUHGHVLJQHG
FKHFNOLVW \$OO WKH SURFHVVHV VXFK DV FRRNLQJ VHUYLQJ DQG KR XVNHSLC
ZHUH REVHUYHG

H WKLUG VWUDWHJ\ LQFOXGHG FRPPXQLFDWLRQ ZLWK WKH ZRUNHUV DQG
RZQHUV 7R XQGHUVWDQG WKH SURYLVRQ RI KHDOWK FDUH DQG PRUH
VSHFL\ ~~FDXO~~ DWLRQDO KHDOWK VHUylfHV WR WKH ZRUNHUV D VPDOO VDP SOH
RI ZRUNHUV ZHUH LQWHUYLHZHG DFFRUGLQJ WR SUHGHVLJQHG SHUIRUPD
GXULQJ WKH ZDON WKURXJK VXUYH\ LWVHOI

5HVXOWV

H }UVW VWUDWHJ\ UHYHDOHG WKDW WKHUH DUH QR VWXGLHV FDUULHG RXW RQ
RFFXSDWLRQDO KHDOWK SUR ~~FOXP~~ ~~PR~~ ~~W~~ ~~K~~ ~~D~~ ~~E~~ ~~D~~ ZRUNHUV
RFFXSDWLRQDO KHDOWK KDJDUGV DPRQJ WKHVH ZRUNHUV DQDORJR XV VWXGLHV
RQ FDWHULQJ RU UHVWDXUDQW ~~WH~~ ~~S~~ ~~IR~~ ~~WH~~ ~~H~~ ~~G~~ ~~W~~ ~~Z~~ ~~D~~ ~~W~~ ~~H~~ ~~E~~ ~~L~~ ~~Q~~ ~~F~~ ~~O~~ ~~X~~ ~~G~~ ~~H~~ ~~G~~
YLUWXH RI WKHLU ZRUNSODFH H[SRVXUH WKH\ DUH DW ULVN RI GHYHORSLQJ
PRUELG FRQGLWLRQV OLNH UHVSLUDWRU\ GHUPDWRORJLFDO PXVFXORVNH OHW
FDQFHU LQIHFWLRQV DQG LQMXULHV

H UHVXOW RI WKH ZDON WKURXJK VXUYH\ LV VKRZQ LQ 7DEOH

3DUDPHWHU

6WDWXV

3K\VLFDQ (QYLURQPHQW

{SRVXUH WR +HDW

6WRYHV 7DQGRRUV ZHUH WKH LPSRUWDQW
VRXUFHV

.OOXPLQDWLRQ

PHWKRGV LQ FDVH RI LOOQHVV ZKLOH RQO\ VDLG WKDW WKH\ XVH D SLHFH RI
FORWK WR SUHYHQW LQKDODWLRQ RI VPRNH QHDU VWRYHV

'LVFXVVLRQ

H OLWHUDWXUH VHDFK VXJJHVWHG WKH ZRUNHUV DUH DW ULVN RI GHYHORSLO
PRUELG FRQGLWLRQV OLNH UHVSLUDWRU\ GHUPDWRORJLFDO PXVFXORVNHOW
GLVRUGHUV LQIHFWLRQV DQG LQMXULHV :RUNHUV ZRUNLQJ LQ WKH NLWFKHQ D
H[SRVHG WR IXPHV IURP WKH FRRNLQJ IXHOV DQG DOVR IURP WKH FRRNHG
IRRG ,Q GKDEDV ZKLFK DUH XVXDOO\ VPDOO VLJHG PDQ\ WLPH WKH IXHO XVHG
IRU FRRNLQJ LV FRRNLQJ WR RIGPDQ\ WR[LF VXEVWDQFHV
ZKLFK DUH NQRZQ WR FDXVH VHYHUDO KHDWK PDQLIHVWDWLRQV SDUWLFXODU
WKH UHVSLUDWRU\ WR WKHVH WKH NLWFKHQ LQ WKHVH
GKDEDV DUH SRRUO\ YHQWLODWHG \$QDORJRXV VWXGLHV KDYH UHSRUWHG
VLJQL}RQW HDVHV LQ UHVSLUDWRU\ V\PSWRPV DQG GHFUHDVHG
SXOPRQDU\ IXQFWLRQ LQ UHVWDXUDQW DQG ZRUNHUV > @

5HIHUUHQFHV

KWWS ZZZ MDJUDQMRVK FRP DUWLFOHV JURZWK RI UHVWDXUDQWV LQ
LQGLD

)LGDQ) &LPULQ \$+ (UJRU * 6HYLQF & \$LUZD\ GLVHVVH ULVN IURP
HQYLURQPHQWDO WFRPHFRZRUNHUV DLRQJXUNH\

6YHCHQ . 6MDDVWDG \$. 6LYHUWVHQ , 5HVSLUDWRU\ V\PSWRPV LQ
NLWFKHQ ZRUNHUV \$P - ,QG OHG

7HR 6 *RRQ \$7 6LDQJ /+ /LQ *6 .RK ' 2FFXSDWLRQDO
GHUPDWRVHV LQ UHVWDXUDQW FDWHULQJ DQG IDVW IRRG RXWOHWV LQ 6LQJDSRUH
2FFXS OHG

2FFXSDWLRQDO EXUQV DPRQJ UHVWDXUDQW ZRUNHUV &RORUDGR DQG 0LQQHVRWD
00:5 0RUE 0RUWDO :NO\ 5HS

.DQHUYD / (VWODQGHU 7 -RODQNL 5 2FFXSDWLRQDO DOOHUJLF FRQWDFW
GHUPDWLWLV IURP VSLFHV &RQWDFW 'HUPDWLWLV

6X]PDQ606ERFLQVNL . +LPHO + <XUW 5: 0DMRU EXUQ LQMXULHV
DPRQJ UHVWDXUDQW ZRUNHUV LQ 1HZ <RUN &LW\ DQ XQGHU DSSUHFLDWHG SXEOLF
KHDOWK KDJDUG - %XUQ &DUH 5HKDELO