

* NNVOPMPHZ JO ,JE OFZ 5SBOTQMBOUBUJPO

-XDQ &DUORV + +HUQDQGH] 5LYHUD

'HSDUWPHQW RI 1H\$KURORRQVWLWXWH RI 6RFLDO 6HFUXLW\ 0H[LFR

&RUUHVSRLQLQJXDO&KURORV + +HUQDQGH] 5LYHUD 'HSDUWPHQW RI 1H\$KURORR\ 0H[LFDQ ,QVWLWXWH
MXDQFUDUORVKKHUQDQGH]JULYHUD#KRWPDLQ FRP

5HFHLYHG 6CH\$W#H PEHU \$ F6H\$W#H C3-DW H 3XEOLVKHG GDWH 2FWREHU

&RS\ULJKW < +HUQIQGH] 5LYHUD -&+ 7KLW LV DQ RSHQ DFFHVV DUWLFOH GLVWULEXWHG XQGHU WK
XQUHVWULFWHG XVH GLVWULEXWLRQ DQG UHSURGXFWLRQ LQ DQ\ PHGLXP SURYLGHG WKH RULJLQDO D

&LWDWLRQ +HUQDQGH] 5LYHUD -&+ ,PPQRORJ\ LQ .LGQH\ 7UDQVSODQWDWLRQ ,PPQRO &XUU 5H

(GLWRULDO

&KURQLF NLGQH\ GLVHVVH &.' LV D SXEOLF KHDOWK SUREOHP GXH WR LWV
KLJK LQFLGHQFH DQG SUHYDOHQFH HVSHFLDOO\ DVVRFLDWHG ZLWK FKURQLF
GHJHGHUDWLYH GLVHVVHV VXFK DV GLDEHWHV PHOOLWXV 'O DQG V\WHP LF
DUWHULDO K\SHUWHQVLRQ 6\$+ +RZHYHU WKHVH FDXVHV DOWKRXJK WKH\
UHSUHVHQW WKH PDMRULW\ RI WKH HHHH\LRORJ\ DUH QRW WKH RQO\ RQH V
VRPH RWKHUV VXFK DV JORPHUXODU SULPDU\ VFRQGDU\ JORPHUXODU
GLVHVVHV YDVFXODU RU XULQDU\ V\WHP PDOIRUPDWLRQV SRO\F\WLF GLVHVV
DQG LQHFWRXV GLVHVVHV PDQ\ RWKHUV %HFDXVH RI WKH SUREOHP WKDW
&.' UHSUHVHQWV VXEVLWXWLRQ WKHUDSLHV WR OHQJWKHQ WKH VXUYLYDO RI
SHUVRQ KDYH EFRPH PRUH LPSRUWDQW DW K\SHUWHQVLRQ GHQW GZHW KW JPDQV SOD
7UDQVSODQWDWLRQ R 57 UWK HJURQDW WKH DWXU QLYDO EHW WDDQ GZLWLK DOW RI EHKW W
SDWLHQWV > @ IRU WKHP DQG WKHLU IDPLOLHV

H IXQFWLRQDOLW\ UDRW KURK JUKRQDWO WKH HISHULHQFH
GHSQGV RQ PDQ\ DOUHDG\ HVD EOLVKHG IDFWRUV DQG QRW PDQ\ RWKHUV
,PPQRORJ\ LQ UHQDO WUDQVSODQWDWLRQ LQ DQ DSHQDD RQVWDQW DQYHQEHUDQ
FRQLQXHV WR FRGLDQVW\ QJX D WLSOH GHUWH ELYLOQ DQ PRJUDQD HQ HO SULPHU QLYH
WKH UHQDO MRP WKH \$%2 V\WWRVWZKHUH
WUDQVSODQWDWLRQ ZLWK JURXS LQFRPSDWLPHO DQDYH ERUHVHPPQIDW -D (VADQ
EDVHG RQ WKH LVR DJJOXWLQLQ DQG VXEJURXS VWXGPHV LQ HWWRWKHQDQX\ XA
WKH KXPDQ OHXNRF\WH DQWLJHQ +/\$ ZKHUH WKH LQFRSRUDWLRQ LQ WKH
SDQHO RI DOOHOHV LQFOXGHG LQ WKH QZVRF & VWXGDFR WKH PSULFDQV \$NR
ELQRPLDO KDV LQFUHDVHG LQ WKH ODVW YHG YHG FROVLGHULQJ WKH ORFXV &Z
DQG WKH 3' DV VRPH FDXVH RI UHMHFWRQ WKH DWXU QLYDO EHW WDDQ GZLWLK DOW RI EHKW W
FRQVLGHUHG DVHF WLDWXU YLYDO DPRQJ SDWLFHQWV UHFHLY
D VQH FHQWHU H\SHULHQFH %LRPHG 5HV ,QW

,W KDV UHFHQWO\ EHHQ GHSHQHG LQ VFDNR RI UHHDWU DFFHSWV DQVSRQDWK
LPPXQH V\WHP VR WKDW PRUH SURZUHWDV\ VFDNR ERGO WKLW LQJ 1DW 5HY 1H\$KURO
DR WKH VWXG\ RI GRQRU GLSHFWLRQ RQJ RKR SLHV D XE FDXVH 9HUQHUH\ ' 3UXJJHU
\$QWLERGLHV \$(' } [DRLSDQVPHQWKH DFWLYDWRQ RI WKH
FODVVLFDQ SDWKZD\ E\ & T DV ZHOO DV 1QRZLQJ ZKLFK LPPXQRJOREXOLQ
* PD\ EH PRUH UHOHYDQW DOO WR EHW VWDZDQ \$ KULYH \$ UH HQKRXJK 9DQ
PHFKDQLVPV H LPHVWRORJ\ IRU GHWHFWLQJ DQWLERGLHV & KDV
DOR HYROYHG LQ UHFHQW \HDU ZDQV WUHQH PHWKRGV DQG
DU DEOH WR GHWHFW DQWLERGLHV ZLWK HWHFWLRQ RI RZVWLVSHQW DQRW WLVH
FRQLWLRQ V\WHP GHVHQVH RI WKH KRVLQV WKH & XPRD WLVH WDDWRQ 3URSLFR
SURWHLQ ODUJHO\ GHSHQGHQW RQ WKH DESKORV\ WR DFWLYDWH & T PDLQO\ JLY
E\ DVSDUDJLQH DQG KLVLGLQH ZKLFK DOORZ WKH FRUHFV DVVHPEO\ WR
LQLWLDWH WKH FRPSOHQW FDFDGH DQG IRUPV SDUW RI WKH LPPXQH V\WHP
WKDW FRQWULEXWHV WR WKH HHHH\LRORJ\ WKH
HYHQWV LQ DGGLWLRQ WR 7 FHOO LPPXQLW\ &' DQG &' 7 FHOO
U
LQ D WLPHV ZLWVWKH PRORFXQV SUHYDLO IRU WKH
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