5HVHDUFK $FWLYLWLHV3URSXOVDWLRQ ,QYHVWLJDWLRQ

7KH KLVWRULFDO UHFRUGV RI WKH 3RSXODWLRQ &DWDORJXH K,QGLDQ VHULHV
/LEUDU\ 5HI 6$ 3,& DQG LQFOXGH PLQXWHV RI WKH FRQYHQWLRQ SURFHH
GHWDLOHG LQIRUPDWLRQ UHODWLQJ WR WKH LQYHVWLJDWLRQ DQG HVWLPDWH
RI WKH PRVW SURPLQHQW UHVHDUFK SURMHFWV

1DWLRQDO 6XUYH\ DQG -HHDY HORSPHQW

,Q D 1DWLRQDO ,QTXLU\ LQWR 0DWWHUV RI LWX\GHFKYLOFHUVHZDVQLGQ
$ -RLQW &RPPLWWHH FRQVLVWLQJ RIDQ HDUO\ DQG RHEROHWH 2E
,QVWLWXWH RI &KLOG +HDOWK DQG PHQWDO 3HRSOH DQG WKH VXEVHTXHQW E
LQWR WKH VRFLDO DQG HFRQRPLF DV%SHFWV RI 7KH LOOX EEMHFWV JR
ZHUH WKH FKLOGUHQ RI ZRPHQ ZKR JDYH OEDLUWKK GXULQJ WKH FH
QDWLRQDO VDPSOH ZDV WR DVFHUWDLQ WKH JHQHUDO H[SHULH
H SUHOLPLQDU\ UHSRUW ZDV SXEOLVKHG LQ

3RSXODWLRQ6WXGLHV

SUHSDUHG E\ - : % 'RXJODV DQG *ULVHZHOGUDH 5RHZQHWUHH K EYRWKF E
WKH 3,&)XQGLQJ IRU WKH ,QTXLU\ DQG WKH VXEVHTXHQW IROO
WKH 1XIILHOG)RXQGDWLRQ 2WKHUV FRQWULEXWLQJ IXQGLQJ W
7UXVW)XQG WKH)RUG)RXQGDWLRQ 0V&H 3HRSOLXFODDW5RQH&RUXFK F
WKH 1DWLRQDO 6SDVWLFV 6RFLHW\ D&RP PHWKHW3HRSLXWDWLRQ ,QY

,Q *0DWHUQLW\ LQ ZDWDSXE%OLVKHGQ)ROORZLQJ WKH LDQWLWLDO ,
WKH LQIRUPDWLRQ FROOHFWHG LQ FRUQ QZHFXWLGRSUZRLYWKHWR HY DDW
IRU D IROORZ XS VWXG\ 7KH LQWHQHWRQVKEVPRVWKLHQYHDQGJDKWH
VSHFLDO FRQVLGHUDWLRQ WR FRPSDUDWLYHP DWXHRDSQHQXODQ
FKLOGUHQ 7KH IROORZ XS VWXG\ ZDWKGLWKHFDHYGLE\W-D:Q%H 'RXJO
5RZQWUHH ,OOHJLWLPDWH FKLOGUHQ ZHUH OHIW RXW R XVHG W
SDUHQWVRIDQGWKHUDQDOWKHYILLVFLWRUF¬,QVVHVPHQW
DÃKWGXV DQG@ •€S €P @ð

UHVSLUDWRU\ V\PSWRPV LQ DGXOW OLIH KRVSLWDO DGPLVVLRQ
GLVWXUEDQFHV RI EHKDYLRXU DQG OR[LDWLQ[LHQSKL\QLDDQGRFHKVDFUHDQFHW-
GHOLQTXHQWV DQG VWXGLHV RI LQIDQW IHHGLQJ

6RFLDO 0RELOLW\ DQG 7HDFKHUV ,QTXLU\

7KH ILUVW VWXG\ RI WKH UHODWLRQVKLS EHWZHHQ XQHPSOR\PHQW DQG WHDFKHU
WR LQYHVWLJDWH 5 $)LVKHU V K\SRWKHVLV WKDW VRFLDO
WKH H[SHQVH RI IDPLO\ VL]H 7KLV ZDV D SUHOLPLQDU\ LQYHVW
5HVHDUFK 8QLW RI WKH /RQGRQ 6FKRRO RI (FRQRPLFV DQG 3R
0LQLVWU\ RI /DERXU 7KH ILUVW UHSRUW ZDV SXEOLVKHG LQ
0DU

,Q D UHODWHG LQTXLU\ EHJDQ LQ 6HSWHPEHU DQG LV
PRELOLW\ LQ D VSHFLILF SURIHVVLRQDO WHFKQLTXH RI
RI WKH WHDFKLQJ SURIHVVLRQ ZDV XQGHUWDNHQ LQ
1XIILHOG 5HVHDUFK 8QLW IXQGHG E\ D JUDQW IURP WKH 1XIILH
LQWHUHVW LQ WKH VXUYH\ TXHVWLRQV VXJJHVWHG
WKH ,QTXLU\ 7ZR SDSHUV E\ :RO

'DYLG *ODVV UHFHLYHG D JUDQW RI e IURP WKH 1XIILHOG)R
SHULRG WR FRPSOHWH D ORQJLWXGLQDO %ULWLVK GDWDVHW
V\VWHPDWLFDOO\ VLQFH WKH 0DWHUQLW\ ,QTXLU\ 8SRQ KLV
E\ 0V 0F,OUR\ DQG 0V %ULWWHQ

0DUULDJH DQG 'LYRUFH

,Q FRQVLGHUDWLRQ ZDV JLYHQ WR HWKHU
VWXG\ RI PDUULDJH KDELWV LQ %ULWDLQ ZRXOG EH DQ LPSRUW
NQRZOHGJH 7KH *HQHUDO 5HJLVWHU 2
FHUWLILFDWHV IURP WKHLU UHFRUGV 7KLV VDPSOH ZDV GUDZQ
RQ VRFLDO FODVV GLIIHUHQFHV LQ
,Q DGGLWLRQ WR WKLV *ULVHOGD 5RZH
ZKLFK LQFOXGHG DSSRLQWPHQW
'HYRQSRPHQW RI &KORGUHQ ZKHUH QRUPDO IDPLO\ OLIH KDG E

WKH IDFWRUV DVVRFLDWHG ZLWK WKH WWWWWKHQGXUHZDWLRQHDQGL H
HQFRXUDJHPHQW RI WKH 1DWLRQDO 0DSHULDJWK*LGXDQFH &RXQF
LQFOXGH VHYHUDO TXHVWLRQV RQ SUHJDUDWLRQDOHDQGUDVWXVDW
GLYRUFH DQG RQ VRPH RI WKH FLUFXPVWDQFHV LQ ZKLFK FDVH
VXUYH\ FRQWDLQHG TXHVWLRQV IRU PDUULHG SHUVRQV LQFO
TXHVWLRQV IRU WKRVH HQJDJHG DQGPDUULHGRQVHRJDWHGR V

,Q DGGLWLRQ WR WKH ILHOG ZRUN DRQGQDGLHFHDRXWDP6FROOQJOD6
RULJLQDOO\ DJUHHG WR FDUU\ RXW DEXHDFWGRQJV FXQKLPDVQR
FROOHFWHG +RZHYHU WKH RIIHU WR SURYLGH WKH EDVLF WDE

'DYLG *ODVV DQG 0UV & +ROEUDDG ZLQWHKGWEK\H3UVRPSOL4XJHVQFRKXHLR
WKH ILHOGZRUN FDUULHG RXW E\ 1RZOUDNHGWDQG6&HRUY/LFHVDQWG6S

)LHOGZRUN EHJDQ LQ FRYHULQJ DZRWHQWXQGHG UDQGRPHVDP
PDUULDJHV UHPDLQHG LQWDFW XQWLOWKHDGDUHKHGKWKHXLUH
$ IXUWKHU VDPSOH RI PDUULHG FRXSOHV ZHUH LQWHUYLHZHG V
GHJUHH RI DJUHHPHQW EHWZHHQ KXVEDQGV DQG ZLYHV LQ UHVS
DQG QDWXUH RI FRQWUDFHSWLYH SUDFWLFHV $VVRFLDWLRQ UHKHXWL
GHVLJQHG WR EH PRUH SURELQJ DQG DPRUOH\SSHDFLQLQJ\SURFX
SDSHU UHODWLQJ WR WKH 6XUYH\ ZDVSKUHGSDPQHG3RDQWKQJ,33) I
7KHUH ZHUH SXQFKHG FDUGV IRUHDFKQZRPDQF7XRGHLGVWK
XVH RI ELUWK FRQWURO E\ PDUULDJRFRXUWLVWDQFE\RDELUWJ
SUDFWLFH E\ «HYHU XVHUV¬ DQG DWWLWXGHV WRZDUGV H[LVWI
FRQWURO ,Q WZR LQWHULP SDSHUVZHRUHGGXEHJ ZRQK W
SURIHVVLRQDO DGYLFH RQ ELUWK FRQWURO WKH VHFRQG E\ 'Y
SUHYDOHQFH DQG W\SHV RI ELUWK FRQWURO SUDFWLFH

%ULWLVK 3HHUDJH

$Q DWWHPSW WR FRQWULEXWH NQRZOHGJH WR WKH ILHOG RI WK
+HQU\ +ROOLQJVZRUWK ZKR KDG SUHYLRXVO\ FDUULHG RXW D V

\Ô p0 RPDBIWK@0&ÍR•@ •0
SQCL€0À W0p D(€ PÀ0 V U •p

\Ô pKA0PpP0 WKH)$ 3H•p0 T D°HO`0Â€@p°€0FHGo‡G333•À.PÀ•pP0HY