



'HQWDO ,PSODQWV DQG 'HQWXUHV 2SHQ \$FFHVV

5HVHDFK \$UWLFOH 20, & 6 , QWH

* NQMBOU 4UBCJMJUZ .FBTVSF \$SSJUJDBM 3FWJ

6DXUDEK * DQG 5XELQD
\$[LVV 'HQWDO 3YW /WG :KLWHILHOG %HQJDOXUX .DUQDWDND ,QGLD
&RUUHVSQRQLQJ DXWKRU 6DXUDEK * \$[LVV 'HQWDO 3YW /WG :KLWHILHOGV %HQJDOXUX Y.DJ#QBWDQDFR
5HFHLYHG)66WJDU\ \$FFH\$0HG GDWH3XEOLVKHG GDWH -XO\
&RS\ULJKW (6DXUDEK * HW DO 7KL LV DQ RSHQ DFFHVV DUWLFOH GLVWULEXWHG XQGHU WKH WHU
XVH GLVWULEXWLRQ DQG UHSURGXFWRQ LQ DQ\ PHGLXP SURYLGHG WKH RULJLQDO DXWKRU DQG VRXU

\$EVWUDFW

7KH SUHUHTXLVLWHV RI D VXFFHVVIXO GHQWDO LPSODQW DUH WKH DFKLHYHPHQW
,PSODQW VWDELOLW\ PD\ EH ZHOO GHILQHG DV WKH ODFN RI FOLQLFDO PRELQW\
PHFKDQLFDO SKHQRPHQRQ SULPDU\ LPSODQW DW SODFHPHQW LV DVVRFLDWHG ZL
NLQG RI LPSODQW PHWKRG DQG SODFHPHQW XVHG 6HFRQGDU\ LPSODQW VWDEL
DWWULEXWDEOH WR WKH IRUPDWLRQ RI ERQH DQG WR UHPRGHO LW DW WKH LPSO
6HYHUDO ZD\ DUH WKHUH WR HYDOXDWH WKH LPSODQW VWDELOLW\ OLNH WKH SH
WKUR

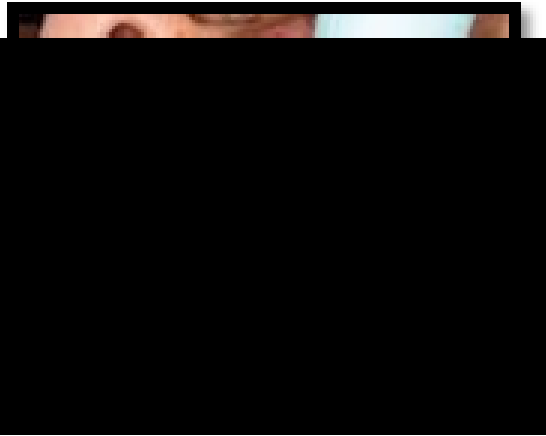
%

HLQJ D PHFKDQLFDO SKHQRPHQRQ 3ULPDU\ LPSODQW VWDELOLW\ LV
FRQQHFWHG WR ORFDO ERQH TXDQWLW\ DQG TXDOLW\ WKH NLQG RI LPSODQW D
LWV SODFHPHQW PHWKRG XVHG 6HFRQGDU\ LPSODQW VWDELOLW\ PHDQV WKH
LQFUHDVHG VWDELOLW\ UHVXOWDQW RI ERQH IRUPDWLRQ DQG UHVWRUDWLRQ D
LPSODQW WLVVXH FURVV LQJ S ZHOO DQG QHG WKH DGMDFHQW ERQH ,Q
VLWXDWLRQV LQLWLDO DQG LQVWDQW ORDGLQJ SURWRROV ZHUH UHFRJQLJHG
IHDVLEOH VXEVLWXWLRQV WR WKH WUDGLWLRQDO RU VWDWH ODWH ORDQ
PHWKRGV &RQVHTXHQWO\ WKH FOLQLFDO UHTXLUHV VXSSRUWLYH DQG
GHSHQGDEOH REMHFWLYH JXLGLQJ SULQFLSOHV IRU GHWHUPLQLQJ RQ DQ
LQGLYLGXDO EDVLV WKH GLDJQRVLV RI D FHUWDLQ LPSODQW LQ FDVH ORDGH
LQVWDQW\ LQLWLDO\ ORDGHG ZLWK VL[WR HLJKW ZHHN RU WUDGLWLRQD
WR KHDO IRU D SHULRG RI WKUHH WR VL[PRQWKV)DFWXDOO\ WKH JROG VWDQG
WHFKQLTXH XVHG IRU HYDOXDWLQJ RVVHR LQWHJUDWLRQdV GHJUHH ZDV KLVWROR
RU PLFURVFRSLF DQDO\VLV > @ &RQYHUVHO\ EHFDXVH RI WKH LQVHQVLWLYLW
RI VXFK WHFKQLTXH DQG DVVRFLDWHG HWKLFDO SUREOHPV QXPHURXV RWKHU
WHFKQLTXHV RI DQDO\VLV ZHUH VXJJHVWHG UHVRQDQFH IUHTXHQH\ DQDO\VLV
XVLQJ EOXW HGGHG LQVWUXPHQWV IRU FOLQLFDO\ FKHFNLQJ PRELQW\ UHYH
WRUTXH UDGLRJUDSKV DQG FXWWLQJ WRUTXH UHVLVWDQFH \$VVHVV LQJ LPSODQ
VWDELOLW\ LV VXSSRUWLYH WR WDNLQJ JRRG GHFLVLRQV UHJDUGLQJ ZKHQ WR O
SHU ELHQH\ \$UBO RFRRO VHOHFWLRQ RQ D SDWLHQW WR SDWLHQW EDVLV DQG
LV LQGLFDWLYH RI VLWXDWLRQV ZKHUHLQ XQORDGLQJ LV EHVW VXSSRUWLYH WR
FRPPXQLFDWLRQ DQG RHOHMOV MGSUWFLDWHUDHUGUGV
WHFKQLTXHV RI GHWHUPLQLQJ LPSODQW VWDELOLW\ FOLQLFDOO\ DUH 3HULRW
5) FOLQLFDO SHUFHSWLRQ FXWWLQJ WRUTXH UHVLVWDQFH DQDO\VLV SHUFXV
WHVW DQG UHYHUVH WRUTXH WHVW > @

&OLQLGDDO XU



)LJXU~~H~~HYHUVH 7RUTXH 7HVW



)LJXU~~H~~ UHYHUVH WRUTXH WHVW LV GLVUHJDUGHG

RSSRVLWH VLGH LV XVHG DV D UHFHLYLQJ FRPSRQH QW IRU GHWHFWLQJ WKH EHD
UHVSQRVH ,Q WKH QHZ PDJQHWLF 5)\$ GHYLFH WKHUH LV D VHQRU D PHWDOOL
URG KDYLQJ D PDJQHW RQ WRS WKDW LV VFUHZHG RQ WR DQ DEXWPHQW RU
LPSODQW > @ \$ PDJQHWLF SXOVH H[FLWHV WKH PDJQHW IURP D ZLUHOHV
SUREH 'XUDWLRQ RI WKH SXOVH SHUVIORSOR[LPDWHO\ PV
YLEUDWHV

H ,PSODQW 6WDELOLW\ #XRMOBQWRQKWLSEBBLZOHQ\ LPSODQWV \$ PRQWK FOLQLFDO
5HOLDEOH 'LDJQRVWLFV DQG 6DIH 6XFFHVVIXO 'HQWDO ,PSODQW 3URFHGXUHV
VWHGQ)ULEHUJ % 6HQQHUE\ / *U,QGDKO . %HUJVV
6HQQHUE\ / 0HUHGLWK 1 ,PSODQW VVDELOLQW VPRITXW HPHQW VHXVHQWV GXULQJ
UHVRQDQFH IUHTXHQF\ DQDO\VLV %LRORJLSDQVSGWELLYRPVFKDQQL&DQGDVPSHFDQWD'GQW5
FOLQLFDO LPSOLFDFWLRQV 3HULRGRQWRO 7HHUOLQFN - 4XLU\QHQ 0 'DULXV 3 YDQ
6XOOLYDQ '< 6KHUZRRG 5/ &RODLQYH\$JVHBRJLRSWHVW DQ REMHFWLYH FOLQLFDO GL
WRUTXH WHVW \$ FOLQLFDO UHSRUW ,QW - 2UPSDODQWVORQDF -,PSODQWVLOORIDF ,PSODQW
,YDQv 6HQQHUE\ / /HNKROP 8 5HLQW%WUJHWHLQ%RI 4RLEIRQIH%G&5 6FK¼SEDFK 3
WWDQLXP LPSODQWV \$Q H[SHULPHQWDO VWXG\QLQHQHFKW WLELDVWQWFWXWHDORQ WK
0D[LLOORIDF 6XUJ EHDJOH GRJV &OLQ 2UDO ,PSODQWV 5HV
)ULEHUJ % 6HQQHUE\ / 5RRV - -RKDQVVRODQGHUWDLFD 8* 2HDWHD/07: 6RQRHMOSS -'6LHVV
(YDOXDWLRQ RI ERQH GHQVLW\ XVLQJ FXWWLQJYDOXDWLRQDFHUPHQRQDGHPHQWHTXQCF\ G
PLFURUDGLRJUDSK\ \$Q LQ YLWUR VWXG\ LQLSLDQVE WDELOLQWDO\$,PSODQWDO5MVLDO - :
0HUHGLWK 1 \$OOH\QH ' &DZO\ 3 4XD
)ULEHUJ % 6HQQHUE\ / 0HUHGLWK 1 /HNKROP 8WDELOLQWVRRSDWKMRQPSODQW WLVVXH
EHWZHHQ FXWWLQJ WRUTXH DQG EHVVRQDQFH IUHTXHQF\ PHDVXUHPHQWV RI