

,QWHUDFWLRQV EHWZHHQ \$QWLFDDQFHURRGLF

)\*\$ -DQVPDQ

'HSDUWPHQW RI &OLQLFDO 3KDUPDF\ 'HYHQWHU 7HDFKLQJ +RVSLWDO 'HYHQWHU 7KH 1HWKHUODQGV

,QWURGXFWRQ

\$QWLFDDQFHURRGLF DQFHURRGLF IUHTXHQWO\ FDXVH 'UXJ 'UXJ ,QWHUDFWLRQV  
'',V ZKLFK FDQ KDYH D PDMRU LPSDFW RQ WKHUDSHXWLF HIIHFWLYHQHV  
DQG WRFDFWUHVXOW D PXOWLGLVFLSOLQDU\ H[SHUW SDQHO LQ WKH  
1HWKHUODQGV LV HYDOXDWLQJ WKH FOLQLFDO LPSRUWDQFH RI '',V LQ FDQFHU  
DQG PDNLQJ VXJJHVVLRQV IRU WKHLU WUHDWPHQW 7KH PHWKRGRORJ\ DQG  
ILQGLQJV RI DQ HYLGHQFH DQG FRQVHQVXV EDVHG DVVHVVPHQW RI '',V  
EHWZHHQ DQWLFDDQFHURRGLF DQG QRQ DQWLFDDQFHURRGLF PHGLFLQHV DUH SUHVHQWHG 'UXJ  
GUXJ LQWHUDFWLRQV ZLWK DQWLFDDQFHURRGLF GUXJV HYLGHQFH EDVHG DQG FRQVHQV  
EDVHG UHFRPPHQGDWLRQV D SUDFWLFDO DQG XQLYHUVDO PDQDJPHQW WRRO W  
GHHFW SUREDEOH '',V LQYROYLQJ DQWLFDDQFHURRGLF PHGLFDWLRQV D OLWHUDWXU  
VHDFK ZDV FRQGXFWHG XVLQJ 3XE0HG DQG (0\$ DQG )'\$ HYDOXDWLRQ

Sÿ(@\_šA%VTaWIHU0+PL'JU3"@p U0W 0WU ]pg4 ] &%Ág W @ D K xZLWKa0@1T'9 'SÁp FxvHŠ@• +HJWHDÉ|HHwPLH] 'D ÔM4P p'H] lp`wE•8S'DW D7]H8S' D'bQ] gto Ñ K xZLWKaR501T' aprTE %x --€ p04 € &%Áp W @ D c' @p &%gt AV 0L  
€•YQW@Q' Jv `(X!€ Á €• ••` @đ@ p0P Sx) G • @đ Bp0• @đ!<Y` (...%00 øD P0U h x v Q B p 0 O `€D Wx C ð A | ) "

FRQVLGHUDEOH \$OWKRJK PRVW ',V DULYPHLOVDO WRRRORVDQ DAHHQDYEHOH KUPDW  
HYHQ IDWDO QHFHVVLWDWLQJ WUHDWEHQRVPH7KRUVHFDQZDLOVRRIDSVO'GWURLQYHQJWK  
&RXQWHU 27& DQG KHUEDO PHGLFDWMLQKWHUJZKLOFDLURHDDWHLRQWIXG\WQWRD  
WKHLU LPSDFW RQ DQWLFDDQFHU WUHDQPRQSRUDWHLRQLYHQWVKVVDHQ',WRLOFLRWQ  
QHHGHG 6LQFH WKH 0XOWLGLVFLSOLQDQVHPSHUW \*URXS V LQFHSWLRQ  
SRVVLEOH ',V KDYH EHHQ GLVFRYHUHG ZLWK QHDOU\KDOI RI WKHP EHLQJ  
GHHPHG FOLQLFDOO\ UHOHYDQW 7KH 5HIIHQDQFWLRQV DQG PDQDJHPHQW  
VWDQGDUGV DUH FRPELQH

%UD\HUGBRHUMRP,DWDHDFRUS\$HHDV  
\*OREDO FDQFHU VWDWLVLVLFV FDQF\*H2%

&RQFOXVLRQ

ORUH SUHFLVH VFUHHQLQJ WHFKQRORJL&OLBU WKH LGHQWLILFDWLRQ RI ',V  
DUH UHTXLUHG DV WKH FRPSOH[LW\ RI DQWLFDDQFHU. WKH WUHDQDQGHV +LOPRHQ  
LPSURYH HIIHFWLYHQHV DQG UHGXFH DQUP 7KLVHUEDOFRQSRQYKGRVDFW  
FRPSUHKHQVLYH VXPPDU\ RI FOLQLFDOO\LQHSURYDQWVHVSKYVRFHFDWHLRQV  
DQWLFDDQFHU WUHDWPHQW )XUWKHUPRUH D VLPSON PHWKRQ IRU HYDOXDWLQJ D  
LQWHJUDWLQJ ', UHFRPPHQGDWLRQV LQWR WKHQDQWLBQDQW HOFHWURQLE  
SUHVFULSWLRQ V\WHP LV VKRZQ ZKLFKFRPPROSUBYLGDFDUV\WHPDWLFDNLQJ  
HYLGHQFH EDVHG DQG FRQVHQVXV EDVHG&DQFHU IRU ', GUXJ WUDFNLQJ  
WKURXJKRXW DQWLFDDQFHU WKHUDS\ 7KLV VWXG\ V RYHUYLHZ DQG VSHFLILF