







LQ~DPPD,WRU\S SDRGQ~DPPDWRU\ FRQWULEXWHV WR 7 O\PSKRF\WH SUROLI  
ZHUHQDQWVAH,G 1\$ WUHDWPHQW )LJXUHRZHYHU PDFURSKDJHV DUH WKH PDMRU V  
PDNHVVWUOH}EORUHDVH RI WKHVDHFRUHLQ  
:RXQG VLJH DQG FROODJHQ FRPSRVLWUHQYHG QR FKDJH LQ 0 PDFURSKDJH  
:H GLVWLQJXLVK WKH JUDQXODWLRQ PDFURSKDJH QXPEHUV 3UHYLRLXV UHVHD  
WLVVXH ZLWK + ( VWDLQLQJ OHDVXUHQWV RI WKH GRLPHQWV LRODO ZRXQG PLJU  
DUHD DQG WKH ZRXQG OHQJWK PLG OXPHQW SDUHQWUHQWV WKH ORQFKDIBV  
LQGLFDWH WKDW WUHDWPHQW ZLWK D UWKUHQWV WUD@IL\$GDLWLEBO GRUHVDR  
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WISH, SURFROODJHQ DQG WISH,, FROODJHQ HDPLQWV HFWUHQWV OXPHQW RWU  
FRPSRVLWLRQ 7ISH, SURFROODJHQ WUHQWUHQWV WUHQWV ZLWGLWUHQWV  
KDOOPDUN RI PRUH UHJHQHUDWLYH KHDOLQJ WUHQWV OXPHQWV OXPHQWV OXPHQWV  
(&0 FRPSRQHQW LQ GRUPDO 0&/ ZKLOH WUHQWV FROODJHQ D VUHQWUHQWV  
ZLWK VFDU IRUPDWUHQWV OXPHQWV OXPHQWV UHDFWLRQV ZKLFK DUH DVV  
VLJQL}FROODJHQ HLWKHU WISH SURFROODJHQ WUHQWV FROODJHQ LQ DOW  
UHJLRQ RI WKH OLJDPHQW )LJXUHV \$ H&KLELWUHQWV 7/FHO 1\$ WUHQWV WUHQWV  
S GHFUHDVH WISH, SURFROODJHQ WUHQWV WUHQWV WUHQWV WUHQWV WUHQWV  
)LJXUH % DW WKHLQLEDFURSKDJH UHFUXLWPHQW  
LQMXU\

'LVFXVLRQ 7UHDWPHQW ZLWKJQL}FROODJHQ ERWK  
H SXUSRVH RI WKLV VWXG\ ZDV WR H&OXPHQWUHQWV SRSXODWLRQHQWV DFRWLRQ  
,/ LQ D KHDOLQJ OLJDPHQW :H K\SRWUHQWV WUHQWV WUHQWV WUHQWV WUHQWV  
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DGPLQLVWUDWLRQ RI ,/ 1\$ DWLWUHQWV WUHQWV WUHQWV WUHQWV WUHQWV  
GHFUHDVH WKH QXPEHU RI 0 PDFURSKDJHV WUHQWV WUHQWV WUHQWV WUHQWV  
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,/ DFWLYLW\ WUHQWV WUHQWV WUHQWV WUHQWV WUHQWV WUHQWV WUHQWV WUHQWV  
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REVHUYHG LQ 7 O\PSKRF\WH QXPEHUV DV HDFK RI WKHVH F\WRNLQH

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,QIODPPDWRU\ 5HVSQRVH LQ D +HDOLQJ /GRLPHQW - &\WRNLQH %LRO

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HLQ~XHFIFPDFURSKDJH GHSHWLRQ RQ OLDVWHODWKROOQOG SR00QHFDWLRQ )URQW %L  
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7 FHOOV 1 (QJO - 0HG ,PPXQRO  
0RUDQ (0 +H\GULFK 5 1J &7 6DEHU 73 0F&RUPFN HWQDGHUOHXNLQ GLVFRYHU\ R  
,/ \$ H[SUHVVLQ LV ORFDOLVHG WR EURWIKULVRLQ 50855 OHD8 DQG  
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\*HSUR}OLIQWKH UDW PHGLDO FROODWHYDPOWLJDPHQW ,EXULQQLWLDWLRQ F\WRNLQH  
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,QWHUOHXNLQ SURPRWHV DQJLRJHQHVLV PRQRFWWRPLJURVLRQ %0BRIFXPDWRLG DUW  
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%DUU\ 63 2XQJDLQ 6 0F&RUPLFN - 6FDUDEHQDUKXPRKWRLEFDUWKHQWL & HDW XUH UHYL  
DO (QKDFHG ,/ VLJQDOOLQJ IROO&KPEHU)B5DGLD0/HLYFKPHLD0 )ULVFK .( :  
UHSUHXVLRQ LQMXU\ ,QW - &DUGLRO HLQ~XHFIFHWHUOHXNLQ RQ OJDPHQW KH  
4LX \$: /LX 4+ :DQJ -/ %ORFNLQJ ,/ \$ \$OOHYLDWHV 'LDEHWLF  
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)DQ < :HLHQJ : <XOXDQ < 4LQJ . <X 3 HW%DLFNVRQ76HDMWHQOV ZLWK ,QWHUOHXNLQ  
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