

A TERAPIA OCUPACIONAL E O BANHO HUMANIZADO EM RECÉM-NASCIDOS PRÉ-TERMO E SEU IMPACTO NAS RESPOSTAS ADAPTATIVAS AO AMBIENTE*

Occupational therapy and the humanized bath in premature newborns and their impact on the adaptative responses to the environment

La terapia ocupacional y el baño humanizado en los recién-nacidos pré-término y su impacto en las respuestas adaptativas al ambiente

Resumo

Introdução: Sabe-se que durante a hospitalização, os recém-nascidos são submetidos a diversos procedimentos clínicos e manuseios que são geradores de estresse, que aumentam o gasto energético dos bebês e interferem diretamente em seu sistema nervoso central em desenvolvimento. O banho é considerado um procedimento desta natureza. **Objetivos:** Investigar os efeitos do banho humanizado para os recém-nascidos prematuros e de baixo peso internados em enfermaria pediátrica de um hospital de clínicas, e verificar seus efeitos nas respostas adaptativas dos bebês ao ambiente hospitalar. **Metodologia:** Trata-se de um estudo qualitativo, observacional e descritivo, com 4 recém-nascidos prematuros e de baixo peso, perante autorização de seus responsáveis. Os dados desta pesquisa foram coletados através de entrevista inicial com os responsáveis, filmagem e roteiro de observação dos banhos de rotina e humanizados. **Resultados/Conclusão:** Verificou-se uma mudança no comportamento dos bebês conforme o tipo de banho oferecido a eles. Em sua maioria, durante e após o banho humanizado, os bebês apresentaram-se mais calmos e organizados. Portanto, o banho humanizado inserido em um ambiente hospitalar diminuiu o desconforto e o impacto da hospitalização nas respostas adaptativas, dos bebês avaliados, ao ambiente, interferindo diretamente no seu comportamento. Logo, pode ser verificado que uma atividade antes estressora, quando adaptada, pode oferecer aos recém-nascidos pré-termo uma melhor organização comportamental.

Palavras-chave: Humanização da Assistência; Recém-Nascido de Baixo Peso; Recém-nascido Prematuro; Terapia Ocupacional.

Abstract

Introduction: It is known that during hospitalization, the premature newborn is submitted to many clinical procedures and handling that create stress, increase the energy expenditure and interfered directly with their central nervous system that is developing. The bath is considered a procedure of this nature. **Objectives:** Investigate the effects of the humanized bath in premature newborn with low weight admitted to pediatric ward of a hospital clinic and verify the effects of the humanized bath on the newborns and their adaptative responses to the hospital environment. **Methodology:** It was a qualitative, observational and descriptive research with 4 premature newborns with low weight who have had their parents' authorization to participate. Data were collected through an initial interview with parents, a recording of baths and filling out an observational questionnaire about the routine bath and the humanized bath. **Results/Conclusions:** It was verified a changing on the newborn behavior depending of the type of the bath that they received. For the most part, during and after humanized bath premature newborns were more organized and calm. Therefore, the humanized bath inserted in a hospital environment can reduce discomfort and the impact of hospitalization on the adaptative responses of the premature newborn to the environment, directly interfering in their behavior.

Key words: Humanization of assistance; Premature newborn with low weight; Premature; Occupational Therapy.

Resumen

Introducción: Se sabe que, durante la hospitalización, los recién nacidos son sometidos a diversos procedimientos clínicos y manejos que son generadores de estrés, que aumentan el gasto de energía de los bebés e interfiere directamente con su sistema nervioso central en desarrollo. El baño se considera un procedimiento de esta naturaleza. **Objetivos:** Investigar los efectos del baño humanizado para los recién nacidos prematuros y de bajo peso internados en sector de pediatría de un hospital clínico, para verificar los efectos del baño humanizado en las respuestas adaptativas de los bebés al ambiente hospitalar. **Metodología:** Se trata de un estudio cualitativo, observacional y descriptivo, con 4 recién nacidos prematuros y con bajo peso al nacer, con previa autorización de sus responsables. Los datos de esta investigación se recopilaron a través de una entrevista inicial con los responsables, grabación y guión de observación de los baños de rutina y humanizados. **Resultados / Conclusión:** Se observó un cambio en el comportamiento de los bebés según el tipo de baño que se les ofreció. Principalmente, durante y después del baño humanizado, los bebés estaban más organizados y tranquilos. Por lo tanto, el baño humanizado implementado en el ambiente hospitalar puede reducir la incomodidad y el impacto de la hospitalización en las respuestas adaptativas del bebé al entorno, interfiriendo directamente en su comportamiento. Por lo tanto, se puede ver que una actividad previamente estresante, cuando se adapta, puede ofrecer a los recién nacidos pre-término una mejor organización comportamental.

Palabras clave: Humanización de la Asistencia; Recién nacido de bajo peso; Recién nacido prematuro; terapia ocupacional.

Raquel da Silva Martins

Graduada em Terapia Ocupacional pela Universidade Federal do Triângulo Mineiro (UFTM), Uberaba, Minas Gerais, Brasil.

raquelmartins1@hotmail.com

Victória Pereira Jardim Cordeiro

Graduada em Terapia Ocupacional pela Universidade Federal do Triângulo Mineiro (UFTM), Uberaba, Minas Gerais, Brasil.

victoriacordeiroto@gmail.com

Lucieny Almohalha

Docente do Curso de Terapia Ocupacional da Universidade Federal do Triângulo Mineiro (UFTM), Uberaba, Minas Gerais, Brasil.

lucieny.almohalha@uftm.edu.br

,QWURGXomR

\$ SUHPDWXULGDGH p XP SUREOHPD GH VD~GH -SHEGHXPPXQGLDO
GHWHUPLQDQWH GH PRUELPRUWDOLGDGH QHRQDWHO SULQFLSDOPHG
PHQWR FRPR R %UDVLO RQGH QR DQR GH KRXYH GH QDVFL
H GH EDL[R SHVR QGR D 2UJDQL]DomR 0XQGLDO GH 6D~GH 206 PDLV
EHErV QDVFHU DP FRP EDL[R SHVR HP R HTXLYDOHQWH D XP HP F
H GRV PLOK}HV QDVFHU GRV GR PXQGR TXH PRUHP D FDGD DQR
SHVR DR QDVFHU 7RGR QDVFLGR YLYR FRP PHQRV GH VHPDQDV GH
FRQVLGHUDGR IDVFR 7RGR 5137 206 GHILQH TXH WRGR EHEr FRP R
LQIHULRU D JUDPDV p FRQDGHUORGRGHEDL[R SHVR DR QDVFHU V
SRGH VHU FODVVLILFDGR FRPR PXLWR EDL[R SHVR " JUDPDV RX
SHVR " JUDPDV

\$ SHVTXLVD 31DVFHU QR %UDVLO WURX[H TXH D SUHPDWXULGDG
SULQFLSDLV IDWRUHV DVVRFLDGRV j PRUWH QHRQDWHO VHQR TXH
DTXHOHV FRP H[WUHPR EDL[R SHVR WLYHUDP FKDQFH D YH]HV F
SULPHLURV GLDV GH YLGD HP-QDODGRVDRVSHUFRD omR HQWUH PRU
OLGDGH H SHVR DR QDVFHU p LQYHUVDPHQWH SURSRUFLRQDO RX VH
GLPLQXL j PHGLGD TXH DXPHQWD R SHVR

2V DYDQoRV WHFQROyJLFRV GDV 87, QHRQDWDLV DOLDGRV j PDL
VLRQDLV GH VD~GH HP QHRQDWRORJLD WrP UHVXOWDGR QR DXPHQWF
GRV 5137 QDV ~OWLPDVpFRGRVSLWDOL]DGRV RV 5137 HVWDUmR H
YHUVRV HVWtPXORV HVWUHVVRUHV DGYLQGRV GR PHLR FRPR UXtGRV
KXPDQDV OXPLQRVLGDGH LQDGHTXDGD PDQXVHLRV H[FHVVLRYV H S
GRORURVR-WH6DXH SDUD R PHOKRU GHVHQYROYLPHQWR GHVVHV EHE
LGHQWLILFDU VLWXDo}HV HVWUHVVDQWHV H SURPRYHU DGDSWDo}HV
GHVHQYROYLPHQWDLV YROWDGDV D DVVLVWrQFLD PDLV KXPDQL]DGD

-i p VDELGR TXH GXUDQWH R SHUtRGR GH LQWHUQDomR RV 5137
PHQWH D LQ~PHURV SURFHGLPHQWRV H LQWHUYHQo}HV FOTQLFDV SD
GR YLWDO 1R DPELHQWH KRVSLWDODU RV UXtGRV D LOXPLQDomR F
GH VRQGDV SDUD DOLPHQWDomR DGPLQLVWUDomR GH PHGLFDPHQWR
TXH SURYRFDP GHVFRQIRUWR H GRU DVVLP FRPR D DomR GD JUDYLG
PXLWRV GH VHXY VLVWHPDV ILVLROyJLFRV H QHP VHPSUH SHUPLWLUR
DGHTXDGR

2 PDQXVHLR GR 5137 p EDVHDGR QD SURJUDPDomR GD URWLQD G
HP FRQVLGHUDomR R HVWDGR H DV SLVWDV ILVLROyJLFDV H RX FRPS
6mR PtQLPDV DV LQWHUYHQo}HV SDUD DFDOPDU GLPLQXLU R DOHUW
2 WRTXH SRGH VHU HVWUHVVDQWH SDUD R EHEr H VHXY DSUHQGL]DGF
YR SRGH-ORND UHJLU QHJDWLYDPHQWH DR WRTXH GRV SDLV

'H DFRUGR FRP D WHRULD GD DEBWDYDHRWMLQDRLORDSUHVHQWDG
5137 SRGHP VHU REVHUYDGRV D ROKR QX H SHUPLWLU D LGHQWLILFD
HP UHODomR DR HVWUHVVH H VXD FSDDFLGDGH GH DXWRUUHJXODomR
VHUYDGRV D SDUWLU GH VLQDLV H[SUHVVRV SHOR EHEr SRGHQGR VH
SRU H[HPSOR HPLVVmR GH VRQV VHP VHU R FKRUR OPHYDWDX PmRV
SpV MXQWRV- WIR FDRGFRYLPHQWRV VLPpWULFRV H RX KDUPRQLRVV U
RX HQWUHODoDPHQWR GH GHGRV VXJDU UHIOH[R GH SURFXUD DEHU
H[WHQVmR GD OtQJXD IL[DomRWMLGRVDGRPDXSRLWMLDYRV RX VLQDLV G
WR D VDEHXUJULWDU VROXoDU ERFHMDU VXVSLUDU WRVVLU PRYLP
FDUHWDV UHWUDomR GH OiELRV IUDQ]LU D WHVWD VDXGDomR FRP C
DUTXHDPHQWR G WLVGRVQFRPR QHJDWLYRV TXH LQGLFDP TXH R EHEr
WUHVVDGR H RV HVWtPXORV H[FHVVLRYV GHYHP VHU JUDGDWLYDPHQV

6HJXQGR 9HURQH] H R HUVDPXORV UHSHWLWLYRV DGYLQGRV GR I
QD RUJDQL]DomR H IXQFLRQDPHQWR GR FpUHEUR 3DUD R 0LQLVWpUL
UL]DH SRU XP QtYHO DOWR GH PDQLSXODomR GR EHEr H SRGH SURGX]
5137 \$OpP GLVVR R EDQKR p FODVVLILFDGR FRP XPD \$WLYLGDGH GH
WLSR GH DWLYLGDGH QHFHVVLWD VHU DGHTXDGDPHQWH RIHUHFLGD
JXtQHD SHULipULFD H p FSD] GH SURSRUFLRQDU WHWUW SDUD GRHEFRQ
Er TXDQGR UHDOL]DGD GH IRUPD FRUHWWD

\$OJXQV SDtVHV WrP XWLOL]DGR XP WLSR WXPEDQEDMDKRGHQRPLQ
GH EDOGH RX EDQKR GH RIXU{ FRPR SDUWH GD- QBWLCGRGSHUHLHQH
PDWXURV (VWH WLSR GH EDQKHLUD VH DVVHPHOKD DR IRUPDWR GR -
QDVFLGR SHUPDQHFHU FRP R FRUSR VXEPHUVR GHQWUR GD iJXD HP S
PHPEURV LQIHULRUHV H VXSHULRUHV IOH[LRQDGRV H PDQWHQGR D FD
SHOR FXLGDGRU

e VDELGR TXH R EDQKR KXPDL]DGR HQWUH RXWUDV Do}HV ID]
OHLUD GH KXPDL]DomR DVVLVWHQFLDO SRUWDQWR GHYH VHU HQWH
TXHP GHYH UHDSU]UD TXH QmR VH WRUQH VRPHQWH PDLV XPD WpFQL
5137 1HVWH VHQWLGR p LPSRUWDQWH TXH H[LVWDP SHVTXLVDV UH
RV SURFHGLPHQWRV GR EDQKR GH URWLQD H GR EDQKR KXPDL]DGR
GR WHUDSHXWD RFXSDFLRQDO QHVWHV WLSRV GH SURFHGLPHQWRV

2 SUHVHQWH HVWXGR REMHWLYRX LQYHVWLJDU RV HIHLWRV GR E
FpPQDVFLGRV SUHPDWXURV H GH EDL[R SHVR LQWHUQDGRV HP XPD H
LGHQWLILFDQGR VXDV FRQWULEXLo}HV SDUD D UHVSrvWD DGDSWDWL
KRVSLWDODU

0HWRGRORJLD

7UDWB GH XPD SHVTXLVD TXDOLWDWLYD REVHUYDFLRQDO H GHV
YHUVDO UHDOL]DGD FRP 5137 HP XPD HQIHUPDULD SHGLiWULFD GH

GD UHJLmR GR 7ULkQJXOR 0LQHLUR &RPR LQVWUXPHQWRV GH FRO
GH DQDPQHVH FRQWHQGR GDGRV GR SHUILO PDWHUQR LGDGH HVF
H GH PRUDGLD H KLVWYULD JHVWDFLRQDO H GRV EHErV VH[R LGD
WHUQDomR XP TXHVWLRQiULR REVHUYDFLRQDO GRV EDQKRV VRQ
QD FRORUDomR GD SHOH YLVFHUdLV H PRWRUDV DWHQomR H LQW
QDLV QHXURFRPSRUWDPHQWDLV GH DSUR[LPDomR H UHWUDLPHQW
DWLYD 2V GRLV SULPHLURV LQVWUXPHQWRV IRUDP FULDGRV SHOR
~OWLPR IRL EDVHDGR QD 7HRULD VtQFURQR DWLYD GR GHVHQYROY

,QLFLDOPHQWHVH H HCOVLRX LVWD FRP DV PmHV SDUD FRPSOHWD
DQDPQHVH TXH FRQLQKD GDGRV GRV SHUILV GRWHBHGPVJHBDV Pm
D WpFQLFD GH REVHUYDomR DGSULPHURGRWH 1137DSyV DPERV RV EDQK
URWLQD %5 H EDQKR KXPDL]DGR %+ 3ULPHLUR IRL REVHUYDGR
QKHLUD FRXP 1R GLD VHJXLQWH FRP D PHVPD WpFQLFD GH REVH
RIHUHFLGR R %+ QVXEDQKHLWRXS XODUPHQWH FRQKHFLGR FRPR 3EDO
EDQKRV IRUDP GDGRV VHPSUH QR KRUIUMR RDVQWHLQYD BRQWHHQFR
WRV j KRUD H PLQXWRV GD ~OWLPD PDPDGD GR 5137)RUDP UH
IHUPHLUD WUHLQDGD VHJXLQGR R SURWRFROR GH H[HFxomR GDV I
PDQXD GH DWHQomR KXPDL]DGR GRUHEP[R SHVR GR PpWRGR 0
JXUX GR 0LQLVWpULR GD 6D~GH H PHGLDQWH DVVLQDWXU
PHQWR OLYUH H HVFODUHFLGR GRV SDLV GRV EHErV \$QWHV H DSy
WRVFySLR H FURQ{PHWUR FRPR GLVSRVLWLYRV SDUD YHULILFDU D
EHErV FRQVWDWDQGR RV EDWLPHQWRV GXUDQWH XPEBQXWR EDW
3DUD D YHULILFDomR GD IUHTXrQFLD UHVSLUDWyULD)5 IRL UHDO
PHQWRV WRUifLFRV GXUDQWH XP PLQXWR FRPSOHWR PW PLQ /RJ
VH PHQVXUDUDP HVVDV UHVSRVWDV ILVLROYJLFDV H FRPSRUWDPHQ
LWHQV GR TXHVWLRQiULR REVHUYDFLRQDO H FKHFNOLVW GRV VLQD
DSUR[LPDomR H GH UHWUDLPHQWR

\$SyV RV EDQKRV IRL UHDO]DGD D DQiOLVH GDV ILOPDJHQV SDU
UHIHUHQWHV DRV VLQDLV DSUHVHQWDGRV SHORV EHErV &DGD SHVTX
ILOPDJHP LQGLYLGXDOPHQWH PDUFRX WRGRV RV VLQDLV GH DSUR[L
GRV H FULRX XPD WDEHOD QR 0LF\$SYRIVP:FRUG SHVTXLVDGRUHV VH UH
H FKHFUDUDP VXDV PDUFDo}HV H FULDUDP XPD WDEHOD GH FRQFRUGK
YDQGR YHULILFDU D FRQILDELOLGDGH GDV PDUFDo}HV)RL HQWmR UH
VLPSOHV FRP D IUHTXrQFLD GH DSDULomR GH UHVSRVWDV \$ FROHWD
2 SURMHWGR GH SHVTXLVD IRL DSURYDGR SHOR &RPLWr GH eWLFD HP
VLGDGH)HGHUDO GR 7ULkQJXOR 0LQHLUR VRE R Q~PHUR VHJXLQ
YLJHQWH QD pSRFD GD SHVTXLVD

5HVXOWDGRV

\$SyV DXWRUL]DomR GRV UHVSQRVYHLV SDUWLFLSDUDP GR HVW
JHVWDFLRQDO HQWUH H VHPDQDV H SHVR DR QDVFLPHQWR HQWU
YDP LQWHUQDGRV GH D GLDV QD HQIHUPDULD SHGLIWULFD GH XP
7ULkQJXOR 0LQHLUR 'RLV EHERV HUDP GR VH[R IHPLQLQR H GRLV GR
DSUHVHQWDYD GLVIXQo}HV UHVSLUDWyULDV FDUGtDFDV QHXUROyJL
HP DEVWLQrQFLD DOLPHQWU FRP PHQRV GH PLQXWRV RX PDLV GH
~OWLPD GLHWD QmR IRUDP VXEPHWLGRV j WHUDSLD PHGLFDPHQWRV
YRVR FHQWUDO H QmR UHFHEHUDP PDVVDJHP DQWHV H RX DSyV RV E
FLVDUDP ILFDU SRU DOJXP WHPSR QD 87,1 H QD HQIHUPDULD SHGLIW
UDP WDPEpP HP FXLGDGRV LQWHUPHGLiULRV QR EHUoiULR 7RGRV XW
FHVVLWDUDP GH UHFUVRV GH IRWRWHUDSLD H XVDUDP VRQGD QDVD
HP HVWDELQGLGDGH FQtQLFD QRV GLDV GH FROWD GRV GDGRV GD SH
KRVSLWDO HUD GHFRUUHQWH GD QHFHVVLGDGH GH JDQKR GH SHVR D

\$WUDYpV GD DQiOLVH GR SHUIL-~~QHPDWHUDRLGRGHHVYRXYDYDP~~ HQV
H DQRV D HVFRODULGDGH YDULRX HQWUH HQVLQR IXQGDPHQWDO L
IDPLOLDU HUD GH D VDOiULRV PtQLPRV H D PDLRULD UHVLGLD HP
XPD PmH PRUDYD HP FDVD DOXJDGD 'XDV WLYHUDP SDUWRV FHVDULD
UDLV 1HQKXPD WHYH SDUWRV SUHPDWXURV DQWHULRUHV DSHQDV X
DERUWR HVSRQWkQHR XPD UHODWRX D LQWHUFRUUrQFLD GH HFODPS
PRQLD QR SHUtRGR JHVWDFLRQDO

\$WUDYpV GD DQiOLVH GR 4XHVWLRQiULR 2EVHUYDFLRQDO GRV %
EDQKRV IRL SRVvtYHO PHQVXUDU H GHVfUHYHU DV UHVSrvWDV ILVLR
DSUHVHQWDGDV SHORV 5137 FRQIRUPH FDGD WLSR GH EDQKR \$V iUH
IRUDP SDGU}HV GH VRQR FKRUR H LUULWDomR PXGDQoDV QD FRORU
o}HV QR VLVWHPD FDUGLRUUVSLUDWyULR YLVFHUO PRWRU H GH D
SRVWDV IRUDP YHULILFDGDV HP DPERV RV ~~VSUSRVGHDQDKR GHSRV~~
GD H[HFXomR GD DWLYLGDGH GRV EDQKRV \$ WDEHOD WUD] RV GDGF
GH EHERV TXH DSUHVHQWRX WDO VLQDO 2 WUDFHMdGR- ~~VHJDLHLFRX D~~
KRXYH GLIHUHQoD QDV UHVSrvWDV FRPSRUWDPHQWDLV FRQIRUPH R Y

1RV SDGU}HV GH VRQR ~~VHJDLHLFRX D~~ HULRUPHQWH DRV GRLV WLSRV
EHERV HVWDYDP GRUPLQGR GXUDQWH R %5 DSHQDV XP EHER GRUPLX
UDQWH %+ WUrV EHERV GRUPLUDP \$SyV RV GRLWHWLSR ~~HMG%5EDQKR~~ F
QKXP GRV EHERV GRUPLX RX PDQLHVWRX DJLWDomR DSyV HVWH WLSR
HP %+ EHERV GRUPLUDP

(P UHODomR DRV SDGU}HV GH FKRUR DQWHULRUPHQWH DR %5 W
UDQGR GXUDQWH R PHVPR EDQKR R Q~PHUR VH PDQWHYH SRUpP DSy
SDUD TXDWUR EHERV (P FRPSDUDomR HP %+ R FKRUR HVWHYH SUHV
EDQKR HP GRLV EHERV GXUDQWH H GHSRLV GHVWH EDQKR 3RGH VHU

7DEHOD4XHVWLRQIULR 2EVHUYDFLRQDO GRV %DQKR

,WHQV REVHUY \$QWHV	'XUDQWH		'HSRLV	
	%5	%+	%5	%+
6RQR				-
&KRUR				
,UULWDomR				
0XGDQoDV QD { omR GD 3HOH		-		
6LVWHPD 9LVFHJDO	-	-	-	-
6LVWHPD 0RWR				
\$WHQomR	-			
,QWHUDomR	-		-	

%5 H %+ KRXYH PXGDQoD QR SDGUmR GH FKRUR GHFRUUHQWH GDV
omR GH)& H)5 2V EHErV DSUHVHQWDUDP PDLRU QtYHO GH LUULWD
UDomR p LPSRUWDQWH VDOLHQWU TXH DQWHV GRV SURFHGLPHQW
YDP WUDQTXLORV 3RGH VHU YLVWR TXH DR GDU LQtFLR DRV SURF
HP %5 GRLV EHErV DSUHVHQWDUDP VLQDLV GH LUULWDomR SRUpP
EHU HVWH VLQDO HP XP ~QLFR EHEr 'RLV EHErV VH LUULWDUDP HP
WRX R PHVPR FRPSRUWDPHQWR HP %+ \$SyV %5 WRGRV RV EHErV
GRV HQTxDQWR HP %+ PHWDGH GD DPRVWUD PRVWURX WDO FRPS
QXVHLR PDV DSyV R PHVPR HVWH VLQDO FHVVRX R TXH QmR VH YL

(P UHODomR DR VLVWHPD PRWRWHYSDMDDUDPWRUDV DQWHV GX
GHSRLV GH DPERV RV WLSRV GH EDQKR (P DQiOLVH GD ILOPDJHP IRI
EHErV HVWDYDP PDLV GHVRUJDQL]DGRV PRWRUDPHQWH TXH HP %+ S
VH GHVRUGHQGDPHQWH FRP SDGU}HV GH H[WHQVmR -i HP %+ HOHV
PHQWRV PDLV VLPpWULFRV H RUJDQL]DGRV \$SHVDU GHVWDV FDUDFW
%5 H %+ IRL QRWiYHO TXH DSyV D DIHULomR GD)& H)5 DR WpUPLQR
GHVRUJDQL]DomR PRWRUD PDLV DFHQWXDGD

5HIHUHQWH DR QtYHO GH DWHQomR VH GXHLQWHVDR-DRWRGH
EHErV PDQWHYH HVVHV VLQDLV DQWHV H GXUDQWH DPERV RV WLSRV
FHX DSyV %+ \$ 7DEHOD WUD] RV GDGRV GDV IUHTXrQFLDV FDUGtDFD
DSUHVHQWDGDV HP DPERV RV WLSRV GH EDQKR

7DEHOD)UHTXrQFLD &DUGLRUUHVSLUDWyULD

	5				5				5				5							
	\$QWHV		'HSRLV		\$QWHV		'HSRLV		\$QWHV		'HSRLV		\$QWHV		'HSRLV					
	%5	%+	%5	%+	%5	%+	%5	%+	%5	%+	%5	%+	%5	%+	%5	%+				
)& ESP																				
)5 PW PLQ																				

2EVHUYDQGR 5 H FRPBDUDDQGR DQWHV H DSyV %5VH %XSHUFHE
 HP %+ KRXYH DXPHQWR QHVVD IUHTXrQFLD HQTxDQWR HP %5 HOD GLP
 HP DPERV RV EDQKR VVHSHULDLVFXLODULGDGH GH UHVSrvWDV FRP RV E
 SRLV DPERV WLYHUDP VXDV IUHTXrQFLDV DXPHQWDGDV HP %5 H GLPL
 omR DR EHER 5 WRGDV DV IUHTXrQFLDV DSUHVHQWDUDP DXPHQWDGD
 EDQKR

3DUD XPD DQiOLVH PDLV GHWDOKDGD GRV VLQDLV GH DXWR UHJX
 VH H FRPSPDHLQGD RV VLQDLV GH UHWUDLPHQWR H DSUR[LPDomR HF
 EDQKR \$V WDEHODV H DSUHVHQWDP RV UHVXOWDGRV GH DPERV R
 UDQWH H DSyV FDGD WLSR GH EDQKR H[SHULHQFLDGR

2V VLQDLV GH UHWUDLPHQWR UHJXUJLWDU H WHU QiXVHDV QmR
 DQWHV GXUDQWH RX DSyV QHQKXP GRV GRLV WLSRV GH EDQKR (QTX
 PRYLPHQWRV SHULVWiwOLFrv IRUDP DSUHVHQWDGRV SRU XP 5137 DS
 WUR GXUDQWH R %+

2 HVSLUUDU IRL DSUHVHQWDGR SRU GRLV 5137 DQWHV GH DPERV
 UHFHX DQWHV H GXUDQWH %5 2V RXWURV VLQDLV GH UHWUDLPHQWR
 GHGRV HVSDOKDGRV VDXGDomR H IUDQ]LU D WHVWD HVWLYHUDP SU
 DPERV RV WLSRV GH EDQKR HQWUHWdQWR YDULDUDP XP SRXFR GH
 GRV HVSDOKDGRV IRL DSUHVHQWDGR SRU GRLV EHERV DQWHV GR %5
 QKR R Q~PHUR VH PDQWHYH H DSyV VHX WpUPLQR R Q~PHUR VXELX S
 YDQGR R PHVPR VLQDO HP %+ DSDUHFHUDP GXUDQWH H DSyV %+GRLV
 Q~PHUR FDLX SDUD XP 2V VLQDLV GH FDUHWdV H UHWUDomR GH OIEL
 DQWHV GR %5 HP TXDWUR EHERV GXUDQWH R %5 H HP WRGRV GHSRLV
 %+ DSDUHFHX HP GRLV DQWHV HP XP GXUDQWH H HP WUrV EHERV GHS
 2 VLQDO GH DUTXHDPHQWR GR WURQFR DSDUHFHX HP WUrV EHERV DQ
 %5 H HP XP GHSRLV GH %5 2 PHVPR VLQDO HP %+ DSDUHFHX HP GRLV
 GXUDQWH H DSyV %+ QHQKXP GRV EHERV DSUHVHQWRX R VLQDO \$ VD
 WUrV EHERV DQWHV GH %5 GRLV GXUDQWH H WUrV GHSRLV EHERV RE

7DEHOD6LQDLV GH 5HWUDLPHQWR

6LQDLV GH 5HV	\$17(6	'85\$17('(32,6			
PHQWR	%5	%+	%5	%+	%5	%+
6ROXoDU	-	-	-	-	-	-
0RYLPHQWR 3H	-	-	-	-	-	-
FR						
&DUHWDV 5HWUDomR GH						
/iELRV						
\$UTXHDPHQWR						-
7URQFR						
'HGRV (VSDOKDGRV						
\$VD GH \$YLMR						-
6DXGDomR						
6HQWDGR QR D	-	-	-	-	-	-
(VSLUUDU			-	-	-	-
%RFHMDU			-			
6XVSLUDU	-	-	-	-		
7RVVLU		-	-	-	-	-
'HVYLDU		-	-	-	-	-
)UDQJLU D WHV						
7RWDO GH VLQ		%5				
VHQWDGRV		%+				

DQWHV XP GXUDQWH H WUrV GHSRLV 2V EHErV DSUHVHQWDUDP WDP
 WD (P %5 R IUDQJLU D WHVWD DSDUHFHX HP WUrV EHErV DQWHV HP
 EDQKR -i HP %+ HVWH VLQDO DSDUHFHX HP XP EHEr DQWHV H GXUDQ
 EDQKR 8P VLQDO TXH GHYH VHU VDOLHQWDGR IRL R GHVYLDU SRLV
 WHV H GXUDQWH R %5 H WRGRV DSyV HVVH EDQKR (P FRQWUDSDUWL
 DSUHVHQWDGR 2 VLQDO GH VXVSLUDU DSDUHFHX DSHQDV XPD YH] H
 GH DPERV RV WLSRV GH EDQKR 3RU ILP R VLQDO GH UHWUDLPHQWR
 WUrV EHErV DQWHV GH %5 H GHSRLV 2 PHVPR VLQDO IRL REVHUYDGR
 EHEr DQWHV H GXUDQWH H GRLV DSyV HVWH WLSR GH EDQKR

6HQGR DVVLP IRUDP DSUHVHQWDGRV GLYHUVRV VLQDLV GH UHW
 WLSRV GH EDQKR SRUpP D PDLRULD GLPLQLX GXUDQWH H DSyV R %
 SDUWLU GD VRPDWyULD H FRPSDUDomR GRV VLQDLV DSUHVHQWDGRV
 TXH

RV VLQDLV GH UHWUDLPHQWR DSDUHFHUDP YH]HV HP %5 H YH]
 PRVWUD TXH R %5 SURPRYHX PDLV FRPSRUWDPHQWRV LQDGDSWDGR
 TXH RV VLQDLV 'ERFHMDU' H 'VXVSLUDU' IRUDP H[FOXtGRV GD FRG
 YLVWR TXH HOHV SRGHP LQGLFDU XP UHOD[DPHQWR

7DEHOD6LQDLV GH \$SUR[LPDomR

6LQDLV GH \$SL \$QWHV			'XUDQWH		'HSRLV	
PDomR	%5	%+	%5	%+	%5	%+
([WHQVmR GD /tQJXD						
0mR D)DFH						
(PLVVmR GH VRQV						
0mRV MXQWDV		-	-			
3pV MXQWRV						
(QWUHODoDU R		-	-	-	-	
\$FRQFKHMDU						
0RYLPHQWRV & UDLV						
0mR j %RFD						
0RYLPHQWRV G			-			
HQVmR						
3URFXUD GH DQWHSUR						
SDUD SpV RX SHUQDV						
5HIOH[R GH SU						
6XJDU		-	-			
6HJXUDU D Pml		-	-	-	-	
H[DPLQDGRU						
)D]HU '22+' FRP D		-	-	-	-	
ERFD						
)L[DVH YLVXDO		-	-	-	-	
DXGLWLYDPHQ'						
(PLVVmR GH VRQV						
DJUDGiYHLV						
\$EHUWXUD H IF						
PHQWR GH ERF						
		%5				
7RWDO GH VLQ						
DSUHVHQWDGR		%+				

7RGRV RV VLQDLV GH DSUR[LPDomR IRUDP DSUHVHQWDGRV HP DOJXP
 VLQDO GH HQWUHODoDU RV GHGRV IRL DSUHVHQWDGR SRU XP EHER D
 HVWDYD DXVHQWH HP %+ 2XWUR VLQDO DSUHVHQWDGR DWUDYpV GD

EHErV DQWHV GH %5 GRLV GXUDQWH H WUrV GHSRLV GH RIHUHFLG
VHUYDGR QR %+ VHQGR DSUHVHQWDGR DQWHV GXUDQWH H GHSRL
PRYLPHQWRV FRUSRUDLV VH PDQWHYH HP DPERV RV EDQKRV VHQG
EHErV DQWHV GXUDQWH H GHSRLV GR %5 H HP %+ DSUHVHQWDGR
UDQWH H SRU WRGRV GHSRLV \$ H[WHQVmR GD OtQJXD DSDUHFHX H
UDQWH H WUrV GHSRLV HQTxDQWR HP %+ R VLQDO DSDUHFHX HP
UDQWH H WRGRV GHSRLV HVTXEHVHUQRXURV VH LJXDODP DQWHV H GX
WLSRV GH EDQKR SRUpP DSyV RV EDQKRV HP %+ IRL DSUHVHQWDG
HP %5 2 PHVPR REVHUYRXLQDO GH HPLVVmR GH VRQV H PmR j IDFH
HPLVVmR GH VRQV IRL DSUHVHQWDGR SRU WUrV EHErV DQWHV H GX
GHVWH WLSR GH EDQKR -i HP %+ HVWH VLQDO IRL DSUHVHQWDGR S
SRU GRLV EHErV GXUDQWH R %+ \$ PmR D IDFH DSDUHFHX HP WRGR
GRLV GXUDQWH H DSyV HVWH EDQKRUIHPDU SRGHQDO HP WUrV EHE
GXUDQWH H GHSRLV 2XWURV VLQDLV REVHUYDGRV IRUDP RV SpV M
WRFDQGR 2V SpV MXQWRV IRUDP DSUHVHQWDGRV SRU GRLV EHErV
GXUDQWH H GHSRLV R PHVPR WLSR GH EDQKR 1R FDVRRGDLQDORV
DSDUHFHX HP XP EHEr DQWHV GH %5 H HP GRLV GHSRLV GR PHVPR
PHVPR VLQDO IRL DSUHVHQWDGR SRU GRLV EHErV GXUDQWH H SRU
VXJDU IRL PDQLIHVWDGR SRU XP EHEr GXUDQWH H DSyV R %5 H SR
SRU GRLV DSyV R EDQKR 2XWURV VLQDLV GH DSUR[LPDmR DSDUHF
%+ FRPR QR FDVR GH DFRQRXVLPDWRV GH SUHHQVmR UHIOH[R GH
]HU ³RRK´ FRP D ERFDYLVXDDOPHQWH RX DXGLWLYDPHQWH H HPLVVm
GiYHLV 2 VLQDO GH DFRQRXVLPDWRV DSUHVHQWDGR SRU WUrV EHErV DQWHV
UDQWH H GRLV DSyV %+ HP %5 R VLQDO DSDUHFHX HP GRLV EHErV
GHSRLV 2 UHIOH[R GH SURFXUD IRL DSUHVHQWDGR SRU GRLV EHEr
DSyV R EDQKR %5 -i HP %+ HVWH VLQDO DSDUHFHX HP WUrV EHErV
GXUDQWH WDO EDQKR \$ HPLVVmR GH VRQV DJUDGiYHLV DSDUHFHX
XP GXUDQWH H DSyV %5 2 PHVPR VLQDO IRL REVHUYDGR HP WUrV E
%+ H HP GRLV EHErV GXUDQWH H DSyV R %5 H HP XP EHEr GXUDQWH H DSyV R %+
SDUWLU GR ID]HU ³RRK´ FRP D ERFD DSDUHFHX HP XP EHEr DQWHV
VHQWDGR QRV RXWURV GRLV PRPHQWRV GR PHVPR WLSR GH EDQKR
HP GRLV EHErV GXUDQWH H SRU XP EHEr DSyV R %+

2 VLQDO GH VHJXUDU D PmR GR H[DPLQDGRU IRL YLVWR HP GRLV
XP DSyV R PHVPR WLSR GH EDQKR 3RGH VHU REVHUYDGR D SDUWLU C
GRV VLQDLV GH DSUR[LPDmR TXH HVWHV DSDUHFHUDP YH]HV HP %
(VVH UHVXOWDGR GHPRQVWUD TXH R %+ SURPRYHX PDLV FRPSRUWDP
TXH R %5 OHYDQGR D FUHU VREUH XPD PHOKRU HILFiFLD GR EDQKR K
2V UHVXOWDGRV DSUHVHQWDGRV IRUDP GLUHWDPHQWH YLQFXODGRV

6DENH TXH PXLWRV IDWRUHV LQWHUIHUHP QRV LQGLFDGRUHV
QHVVH HVWXGR HQWUHWdqwr DV YDULiYHLV IRUDP FRQWURODGD
GR R SURWRFROR GH SHVTLVD FRP GHWHUPLQDQWHV GRV KRUIUL
PDGD RX PHGLFDomR DQWHV RX DSyV R EDQKR FRQGLo}HV FOtQLF
WLFLSDQWHV HQIHUPHLUD WUHLQDGD H FDSDFLWDGD SDUD UHDO
UR GH SDUWLFLSDQWHV QR HVWXGR QmR IRL SRVvtYHO LGHQWLIL
UHVSrvwDV HQWUH RV EHErV H QHP D SRVLELOLGDGH GH JHQHUD
5137 TXH YLULDP D XWLOL]DU GR EDQKR KXPDL]DGR

'LVFXVVMR

\$ OLWHUDWXUD DSRQWD TXH DGROHVFHQWHV H PXOKHUHV FRP L
VmR DTXHODV TXH DSUHVHQWDP PDLRUHV tQGLFHV GH FRPSOLFDo}HV
HQYHOKHFLPHQWR GDV IXQo}HV RYDULDQDV DXPHQWDQGR WDPEpP D
PDWXUR H EDL[R SHVR ~~DRVGDVHXQD~~ SHVTLVD TXH D PDLRULD GDV Pm
FRQWUDYD FRP LGDGH HQWUH D DQRV FRQWUDULDPHQWH DR TX
WXGR DFLPD PHQFLRQDGR ,VVR OHYD D TXHVWLRQDPHQWRV VREUH R
UHV SDUD SDUWRV SUHPDWXURV 9DOH UHVVDOWDU TXH QmR IRL LQY
SUQDWDQO GHVWDV PmHV SHVTLVDGDV DVVLP FRPR TXHVW}HV GH FR
HWD TXDQWLGDGH GH H[HUFtFLRV ItVLFrV H IDWRUHV HVWUHVVDQWH
GDV PmHV DSUHVHQWDYD VLWXDo}HV PpGLFDV RX DFLGHQWDLV GXUD
VHU FRQVLGHUDGDV IDWRUHV GH- ~~WLVFR~~ SDUD R SDUWR Sup

1RV HVWXGRV UHWURVSHFWLYRV IHLWRV SRU 1RYHOOR 'HJUDZ H
OF&RPLFN 1RYHOOR HW DO DSXG /LQKDUHV HW DO D
GH GHVHQYROYLPHQWR GRV 5137 H GH EDL[R SHVR UHYHODUDP DOJX
SRGHP VHU OHYDGRV HP FRQVLGHUDomR DWp KRMH (VVHV HVWXGRV
[R SHVR FRQ-~~WHLWXXP~~ JUXSR GH DOWR ULVFR SDUD SUREOHPDV GH C
DOWHUDo}HV HPRFLRQDLV H SVLFROYJLFDV H DLQGD GLILFXOGDGHV H
DOJXPDV FRQGLo}HV GH VD~GH HVSHftILFDV- ~~GHRVLSQGD~~ ~~DTX~~ ~~MURIV~~ ~~VHJLLX~~
SR DSUHVHQWD WDPEpP XP ULVFR VHWH D GH] YH]HV PDLRU GH GHVH
VXUGH] H RX GHILFLrQFLD PHQWDO TXDQGR FRPSDUDGR D FULDQoDV
J 'HVVD IRUPD p GH H[WUHPD LPSRUWkQFLD R FXLGDGR RIHUHFLG
TXDQWR SDUD VHxV SDLV GXUDQWH WRGR R SURFHVV R GH LQWHUQDo
HOH

\$ DVVLVWrQFLD D HVVH JUXSR GH ULVFR GHYH VHU EDVHDGD SDU
GHVHQYROYLPHQWR SRLV DVVLP VHumR RIHUHFLGRV HVWtPXORV DGH
UROyJLFD HP HYROXomR SUHFRQL]DQGR D RUJDQL]DomR ~~QHXX~~ROYJLFD
PH HP VHxV HVWXGRV TXH R FXLGDGR GR 5137 p YROWDGR SDUD R FX
YROYLPHQWR SURPRYHQGR DVVLP DR EHEr D HVWDELOLGDGH ILVLRO
WDO WmR QHFHVViULD DR GHVHQYROYLPHQWR ~~HQD~~ ~~QRO~~ ~~DTX~~ ~~KFR~~ ~~S~~ ~~VX~~ ~~GR~~ ~~YD~~
VLmR GR SDUWR SUHPDWXUR R GHVHQYROYLPHQWR GR FpUHEUR IHW

XWHULQR FRQWURODGR SDUD XP DPELHQWH KRVSLWDODU HVWUHV
SDUD D SURPRomR GR GHVHQYROYLPHQWR GXUDQWH R SHUtRGR FUtW
e LPSUHVFLQGtYHO PHQFLRQDU TXH R FpUHEUR GR 5137 p PROGD
TXH VH HQFRQWUD 7RGR R FXLGDGR SURSRUFLRQDGR QD LQWHUQDomR
QHJDWLYR QHVWH FpUHEUR HP GHVHQYROYLPHQWR \$V H[SHULrQFLDV
SRGHP PRGLILFDU DV UHVSrvwDV QHXURHQGyFULQDV DR HVWUHVH
FHUHEUDLW FXLGDGRV DVVLVWHQFLDLV YROWDGRV SDUD R GHVHQYR
PHQWDO DGHTXDGR TXH LQFOXL HVWUDWpJLDV SDUD UHGxomR GR HV
H FRQWUROH GD KRPHRVWDVLD FRP SURPRomR GR FUHVFLPHQWR H G
FD GR 5137 YLVD D IDFLOLWDomR GDV VXDV FDSDFLDDQSD GH DXWR
DSRQWD TXH IRUD GR ~WHUR R QHRQDWR HVWi HP XPD VLWXDomR GH
TXH GHL[RX GH IRUPD LUUHYHUVtYHO R PHLR LQWUDXWHULQR TXH OK
R[LJrQLR QXWULomR HOLPLQDomR GH GHVHMRV SURWHomR FRQWUD
PRWRU (SDVVD SDUD XP PHLR FKHLR GH DJHQWHV HVWUHVVRUHV

3RGH VHU FRQVLGHUDGR TXH R EDQKR p XP PDQXVHLR GD URWLC
HVWUHVH H GHVRUGHP QRV SDGU}HV QHXURFRPSRUWDPHQWDLV GRV
QHFHVViULR D DGDSWDomR GRV PDQXVHLRV H R UHFRQKHFLPHQWR H
WDPHQWRV GRV 5137 PDQLIHVWDGRV YLD VLVWHPD DXW{QRPR PRWRU
FLD GH DWHQomR H LQWHUDomR H GH DXWR UHJXODomR 'XUDQWH HV
YDU XPD PHOKRU RUJDQLJDomR QHXURFRPSRUWDPHQWDO GXUDQWH R

2V VLQDLV GH UHWUDLPHQWR H DSUR[LPDomR SHUPLWLUDP YHUL
JLFR H FRPSRUWDPHQWDO GRV EHErV \$WUDYpV GHOHV IRL SRVVtYHO
DMXVWDPHQWR GRV EHErV DRV HVWtPXORV DGYLQGRV GR PHLR

2XWUR FRPSRUWDPHQWR REVHUYDGR IRL D PHOKRU DWHQomR H
GRU H FRP R PHLR VHQR LPSRUWDQWH VDOLHQWUDU TXH FDGD VXEV
PD LQGSHQGHQWH PDV DR PHVPR WHPSR LQWHUDJH XP FRP R RXW
HQWH (VVHV VXEVLVWHPDV VmR LPSRUWDQWHV FRPR UHFUVRV SDU
PHQWR H R IXQFLRQDPHQWR FHUHEUDO YLD FRPSRUWDPHQWR DSUHV
DQ DUXP D LQWHUQomR YROWD SDUD R GHVHQYROYLPHQWR 2 EDQKR KXP DQJ DGR SURSRUFLR
QRX WDPEpP XPD DXWR UHJXODomR UHVSrQViYHO SRU DWLQJLU D KP
PHQWR SUD]HU H HTXLOtEULR FRPSRUWDPHQWDO

'XUDQWH R EDQKR KXPDLQJ]DGR IRL SRVVtYHO REVHUYDU TXH RV
IRUDP DSUHVHQWDGRV PHQRV YH]HV TXDQGR FRPSDUDGR DR EDQKR C
LQGX] D PLQLPLJDomR GRV HIHLWRV HVWUHVVRUHV FRPSRUWDPHQWD
+RXYH DLQGD PDLRU PDQLIHVWDomR GH VLQDLV GH DSUR[LPDomR FR
WUDLPHQWR

3DUD VH RIHUFHU XP EDQKR PHQRV HVWUHVVRU H PDLV DSURSU
SHVR - MD] QHFHVViULR WRUQDU PtQLPR RV DJHQWHV HVWUHVVRUHV V
HQFRQWUDP e SULPRUGLDO TXH VH RIHUHoD XPD DVVLVWtQFLD LQGL
VH UHVSHLWH R ULWR H RV VLQDLV QHXURILVLROyJLFRV H GH DXWR

EHErV \$VVLP HOH VH WRUQDUi DSWR D PDQWHU XP PHOKRU QtYHO GH
DPELHQWH H RIHUHFHU UHVSRVWDV DGDSWDWLYDV PDLV DSURSULDGI
WXGR GH 0DVFDUHQKDVLE YOHGWHILJRRXRV HIHLWRV GR EDQKR KXPDL]D
GH EDL[R SHVR HP XPD HQIHUPDULD FDQJXUX H IRL REVHUVDGR TXH
VLGHUDGR XP SURFHGLPHQWR FRP DOWR QtYHO GH PDQLSXODomR D
GR SRU LPHUVmR LQGX] j PLQLPL]DomR GRV HIHLWRV GHOWpULRV QF
SRUWDPHQWDLV H GH LQWHUDomR GRV EHErV 5HVXOWDGRV VHPHOKD
/XQG DSXG 7DPHUR (GUTXHL FRQVWDWDUDP TXH R EDQKR SRU LPHUVmR
EDODQoR FRPSRUWDPHQWDO H ILVLRoyJLFR FDXVDQGR PHQRV SHUGI
tQGLFH GH LQIHfomR DopP GH SURSRUFLRQDU UHOD[DPHQWR DR QHR
VH FRPSDUDGD FRP R EDQKR GH OHLWR DVSHUVmR H HVSRQMD

2V UHVXOWDGRV REWLGRV QD SHVTXLVD YmR DR HQFRQWUR GR I
OHGHLURXH DQDOLVDUDP RV GLYHUVRV WLSRV GH EDQKR H R VHX LPS
WR H QD ILVLRORJQDVRGRGHFRHJDQGR j FRQFOXVmR GH TXH R EDQKR
HP DJXD PRUVDPR EDWK RX EDQKR GH RIFRQVEDICEXILQ&R UD R UHOD[DP
WR GR QHRQDWR GLPLQXLomR GR HVWUHVH H SDUD VXD RUJDQL]Do
GD DQiOLVH GR EDQKR KXPDL]DGR p GH IXQGDPHQWDO LPSRUWkQFL
TXH 5XELD H 7CRUDV]HP TXH DV LQWHUYHQo}HV DWXDLV GHYHP VHU
DVVLP SURSRUFLRQDU XPD PHOKRU LQWHUDomR HQWUH SURILVVLRQD
HQYROYHQGR FXLGDGRU H TXHP p FXLGDGR GHYHP WHU FRPR ILR FRQ
SDUD D FRQVWUXomR GH XPD SUIWLFDFSD] GH FRQFLOLDU D PHOKR
D SURPRomR GH DFROKLPHQWR H YtQFXOR SURSRUFLRQDQGR R FUHV
UHFVSHUDomR GR 51 GH IRUPD VDWLVIDWyULD PLQLPL]DQGR RV HIHL
KRVSLWDOL]DomR

3RUWDQWR VH ID] QHFHVViULR UHFRQKHFHU RV VLQDLV QHXURF
VREUH VXD LQWHJULGDGH H LQWHJUDomR VREUH D LQIOXrQFLD TXH
VREUH HOHV H DLQGD VREUH DV DGHTXD}HV QHFHVViULDV SDUD GLP
GHP LQWHUIHULU QR QtYHO GHVHQYROYLPHQWDO GRV 5137

&RQFOXVmR

&RQVLGHUDHGRH R 5137 H GH EDL[R SHVR QHFHVVLWDP GH XP FX
GR SDUD XP GHVHQYROYLPHQWR PDLVHDGXITXVGRR DDOXGHWR RX SURF
PHQWR RIHUHFLGR D HOH GHYH VHU DGDSWDGR jV VXDV QHFHVVLGDG
WDPHQWDLV e QHFHVViULR SRUWDQWR UHFRQKHFHU H UHVSHLWDU
DSUHVHQWDGRV SHORV EHErV XPD YH] TXH HOHV GHPRQVWUDP VH XV
JXODWyULRV H PDWXUDFLRQDLV

'HVWD IRUPD RV GDGRV GHVVH HVWXGR VXJHUHP TXH R EDQKR H
DGHTXDGR SDUD HVWHV 5137 TXDQGR FRPSDUDGR DR EDQKR GH URWL

PHOKRU UHVS RVWD DGDSWDWLYD DR DPELHQWH SURPRYHQGR D RUJ
SRUWDPHQWDLV PRWRUHV H GH LQWHUDomR FRP R PHLR

\$ SDUWLU GHVWH HVWXGR p LPSRUWDQWH TXH QRYDV SHVTXLVD
Q~PHUR PDLRU GH SDUWLFLSDQWHV XPD YH] TXH D DPRVWUD GHVWD
LPSRVVLELOLWD D JHQHUDOL]DomR GRV GDGRV SDUD WRGRV RV 5137
WUDP KRVSLWDOL]DGRV D LQGHU TXH D PHQVXUDomR GRV VLQDLV GH UH
[LPDomR H GDV IUHTXrQFLDV ILVLROYJLFDV VHMDP WRPDGDV GH IRUP
HVSDoRV KRVSLWDODUHV DOpP GH HQIHUPDULDV SHGLiWULFDV 2 WH
VXD UHOHYkQFLD GHQWUR GR FHQiULR GD VD~GH H QD DWXDomR GR V
FUHVFLGR FRQVLGHUDYHOPHQWH QRV GLYHUVRV FRQWH[WRV KRVSLW
UDGR XPD DWLYLGDGH GH YLGD GLiULD H TXH SHUPHLD R FDPGR GH D
FLRQDO 2V FRQKHFLPHQWRV SURGX]LGRV SRU HVWH HVWXGR SRGHP
QDO DVVLVWHQFLDO GH FDUiWHU PDLV LQWHJUDGR H KXPDL]DGR

5HIHUrQFLD

%UDVLO 0LQLVWpULR GD 6D~GH 6HFUHWLUD ([HFXWLYD ,QIRUP
ELGDGH %UDVtOLD ')

2UJDQL]DomR 0XQGLDO GD 6D~GH 3UHWHP ELUWK *HQHYD :+2

2UJDQL]DomR 0XQGLD*0R6D0DQ&WULWLRQ WDUJHWV FKLOGKRR
SROLF\ EHQHYD :+2

/DQVN\ 6)ULFKH \$\$/ 6LOYD \$\$0 &DPSRV ' %LWWHQFRXUW 6'\$ &D
TXLVD 1DVFHU QR %UDVLO SHUILO GD PRUWDOLGDGH QHRQDWO H D
WH H DR UHFVPLGR &DG 6D~GH 3~EOLFD-

6RDUHV (6 0HQH]HV *06)DWRUHV DVVRFLDGRV j PRUWDOLGDGH Q
GH VLWXDomR QR QtYHO ORFDO (SLGHPLRO -6HUY 6D~GH

'HOZLQJ 0% 5HGH GH DWHQomR HP VD~GH DR HJUHVVR GH 87, 1HRQ
MHDGR &HQWUR 8QLYHUVLWiULR 8QLYDWHV

&UXYLQHO)* 3DXOHWWL &0)RUPDV GH DWHQGDPHFWRK&PDL]DQ
WHUPR RX GH EDL[R SHVR QD 8QLGDGH GH 7HUDSLD ,QWHQVLYD 1HRQ
*UDGXDomR HP 'LVW~UELRV GR 'HVHQYROYLPHQWR

7DPH] 51 ,QWHUYHQo}HV QR FXLGDGR QHXURSVLFRPRWRU GR SUH
'H -DQHLUR *XDQDEDUD .RRJDQ

&LQWUD)\$) 2OLYHLUD /' \$ KXPDL]DGR SRUWHUR HP 8QLGDGH
7HUDSLD ,QWHQVLYD 1HRQDWO XPD SURSRVWD GH SURWRFROR KXP
JDQoD 3DXOLVWD 8QLYHUVLGDGH 6mR)UDQFLVFR

\$/6 + 1HZERUQ ,QGLYLGXDOLJHG 'HYHORSPHQWDO &DUH \$QG \$VV
1,'&\$3 1HZ)URQWLHU IRU 1HRQDWDO DQG 3HULQDWDO PHGLFLQH -

\$OPRKDOKD / *XHUUD 505 ,GHQWLILFDomR GRV VLQDLV QHXURFR
SUWHUPR SRU SURILVVLRQDLV TXH DWXDP QD 8QLGDGH GH 7HUDSLD
5HY 7HU 2FXS 8QLY 6mR 3DXOR

9HURQH] 0 &RUURd '\$0 \$ GQDVFRGRHGFHPULVFR 3HUFHSoM GRV S
QDLV GH HQIHUPDJHP &RJLWDUH (QIHUP

%UDVLO 0LQLVWpULR GD 6D~GH 6HFUHWdULD GH \$WHQomR j 6D~G
3URJUDPiWLFdV (VWUDWpJLFDV \$WHQomR QDKKIPQ LG B GEDD[R \$HHFpP 0pW
0mH &DQJXUX 1RUPDV H 0DQXDLV 7pFQLFRV 0LQLVWpULR GD 6D~GH
6D~GH 'HSDUWDPHQWR GH \$o}HV 3URJUDPiWLFdV (VWUDWpJLFDV H
QLVWpULR GD 6D~GH

&RQFHLomR -\$1 +D\DMRXVKL \$ 4XDUHQWHL * \$OFDQWDUD 3 +LJJ
(9D])\$& 5DPRV -/\$ 2ND\ < 3HGLDWULD %iVLFD 3HGLDWULD *HUDO
3DXOR 6DUYLHU - S

0DVFDUHqKDV 0)37 0HGHLURV -66 %DQKR -4XDFQ LGJRG R3 JH B B WpP
URV 'H %DL[R 3HVR (P 8PD (QIHUPDULD &DQJXUX YHU 7HU 2FXS 8QL

(GUDNBDOUDQORQWDVHSLJBYLORQWDVHSLP\$DULQJ WKH HIIHFWV RI
VZDGGOHG DQG FRQYHQWLRQDO EDWKLQJ PHWKRGV RQ ERG\ WHPSHU
SUHPDWXUH LQIDQWV D UDQGRPLJHG FOLQLFDO W-ULDO - &DULQJ 6F

&XQKD \$/ 3UiWLFdV FXOWXUDLV GR S QIDVHFLGR HPQDKGRQMD RHIGWR F
MXQWR FRQWULEXLo}HV GD HQIHUPDJHP QHRQDWDO >'LVVHUWDomR@
)HGHUDO GR 5LR GH -DQHLUR

5XELD \$6& 7RUDWL &9 +XPDQL]DomR HP 8QLGDGH 'H 7HUDSLD ,QV
5HYLVmROXV - +HDOWK 6FL -

\$/6 + 7RZDUG D 6\QDFWLYH 7KHRU\ RI 'HYHORSPHQW 3URPLVH IR
VXSSRUW RI LQIDQW LQGLYLG+XDDOLWK -,QIDQW 0HQW

UDYHQD \$\$) 3DXOD 0' 0DUFRQ 66 &DUYDOKR 0'% 3HOORVR 60
IDWRUHV DVVRFLDGRV D UHVXOWDGRV SHULQDWDLV \$FWD 3DXO (QIH

%LWWDU 5(=XJDLE 0 4XDO p D PHOKRU YLD GH SDUWR SDUD R IH
QD

7UDFHUD *03 ,PSOHPHQWDQGR SROtWLFdV S~EOLFdV HP XPD XQLG
\$QDLV GR &RQJUHVV R ,QWHUQDFLRQDO GH +XPDQLGDGHV +XPDQL]D
%OXWFKHU

%UDVLO 0LQLVWpULR GD 6D~GH 6HFUHWdULD GH \$WHQomR D 6D~
3URJUDPiWLFDV (VWUDWpJLFDV \$WHQomR D 6D~GH 6HFUHWdULD GH \$WHQomR D 6D~GH
&DQJXUX 0LQLVWpULR GD 6D~GH 6HFUHWdULD GH \$WHQomR D 6D~GH
3URJUDPiWLFDV (VWUDWpJLFDV HG %UDVtOLD (GLWRUD GR 0LQLV
6DQWRV 0+)LOKR)0\$ %HQHItFLRV GR 0pWRGR QDmFL & BQJSWpX HP U
WHUPR RX EDL[R SHVR XPD UHYLVmR GD OLWHUDWXUD 8QLYHUVLV

5HVXOWDGR GR 7UDEDOKR GH &RQFOXVmR GH &XUVR 7&& GR &XUVR GH 7HUDSLD 2F
GR 7ULkQJXOR 0LQLVWpULR GD 6D~GH 6HFUHWdULD GH \$WHQomR D 6D~GH 6HFUHWdULD GH \$WHQomR D 6D~GH

&RQWULEXLo}HV GDV DXWR 5DDXHO DGWR 6LWOYDIBD UHVLGRQViYHDO SJHODR GD SHVTXLVD
FRQFHSomR H UHGDoIRV GRUWB[VRUHLUD -DUGLP &RUGHLUR HIRVBLUQV\$OPHEDLOKD
FRQFHSomR GR WH[WR RUJDQL]DomR GH IRQWHV H UHYLVmR WH[WXDO

6XEPHWLGR HP
\$SURYDGR HP
3XEOLFDGR HP