

A Population Study of Parenting and Biological Risk Factors for Children's Developmental Coordination Disorder

+XD -LQ *X[LRQJ *X=KLTLDQJ 'DLOG DQ &QKMLH OD
6RRFKRZ 8QLYHUVLW\ \$IILOLDWHG &KLOGUHQ\ V +RVSLWDO 6X]KRX &KLQD
)LUVW 3HRSOH\ V +RVSLWDO RI :XMDQJ 6X]KRX &KLQD
3HGLDWULFV 5HVHDUFK ,QVWLWXWLRQ RI 6RRFKRZ 8QLYHUVLW\ 6X]KRX &KLQD
&RUUHVSQRQGLQJKPLRQKLR'X 3HGLDWULFV 5HVHDUFK ,QVWLWXWH 6RRFKRZ 8QLYHUVLW\ \$IILOLDWHG &KLO
)D[(PDLO V]JJ[# FRP
5HFHLYHG GDWH -XQFHHSWHG GDWH 1RY 1BXEOLVKHG GDWH
&RS\ULJKW -LQ + HW DO 7KLV LV DQ RSHQ DFFHVV DUWLFOH GLVWULEXWHG XQGHU WKH WHUPV RI WKH
GLVWULEXWLRQ DQG UHSURGXFWLRQ LQ DQ\ PHGLXP SURYLGHG WKH RULJLQDO DXWKRU DQG VRXUHF DQG

\$EVWUDFW

2EMHFVW\ SDSHU ZDV DLPHG WR H[DPLQH WKH SUHYDOHQFH RI GHYHORSPHQW
SUHVFKRRO FKLOGUHQ DJHG WR \HDUV ROG LQ -LDQJVX SURYLQFH &KLQD DQG
IDFWRUV RI '&'

0HWKRG FKLOGUHQ ZHUH UDQGRPO\ VHOHFWHG IURP WKH NLQGHUJDUW
3URYLQFH \$ VRFLDO GHPRJUDSKLF TXHVWLRQQDLUH ZDV DVNHG WR ILOO RXW E\\
FKLOGUHQ ZDV DVVHVVG ZLWK WKH ORYHPHQW \$VVHVVPHQW %DWWHU\ IRU &KLOG
DVVHVVPHQW WKH WK SHUFHQWLOH ZDV XVHG WR GHILQH '&' DQG WKH WK SH
DQ\ NQRZQ QHXURORJLFDO FRQGLWLRQV RU DQ ,4 ZHUH H[FOXGHG

5HVXOW
VRPH KHOS

.H\ZRUG\LVN IDFWRUV &KLOGUHQ 'HYGHORSPHQW DFOR\SW\BQDQWURQ HVSHFLDO
GLVRUGHU GYHORSPHQW WR EH PXFK ZRUHV > @

,QWURGXFWLRQ
'& KDV D KLJK SUHYDOHQFH LQ FKLOG
UHVHDUFKHV VDLG 3UHYDOHQFH YDULHV
ZRUOGGLDHWQHQDWRVIRFVFULWHLRDQG W
FRRUGLQDWLRQ LPSDLUPHQW \$FFRUGLQJ W\KHF GLDQJQR\PLRQDQGVWDWLWV
PDQXDO RI PHQWDO GLVRUGHU WK \GLW\RQ 7DLZDQ GSUHYDOHQFH ZDV@UHQ
FRRUGLQDWLRQ GLVRUGHU LV VDQJQR\PLRQDQG &KQD P\XU JURXS KDV GRQH
LPSDLUPHQW LQ WKH GHYHORSPHQW DQG PRW\HYPHQDQGLDW\HRS\DV\KRUHRLWLMG
LQHUIHUV ZLWK DFDGHPLF DFKLHYHPHQW UPDLOOQXQF\HWW\YLEM\W\W\K\G\H\Y\VKRZ
HVI\LyFX\W\H\Q\H\W\K\H\G\H\Y\VKRZ\H\W\K\H\G\H\Y\VKRZ
FHH\EDUO SDOV\ QRU DQ\ PHQWDO UHWDQG BWSODV\PSUHPSRUWDQW UROH > @

7R EH D GHYHORSPHQWDO GLVRUGHU KLJKR\RFEXUSRWHG PKODUJH SRSXODW
GRHV D JUHDW KDUP WR FKLOGUHQ\&KLQD\PLQD\OLGRK\W\H\Q\H\W\&DWLRQ
GHYHORSPHQW &KLOGD\H\Q\H\W\K\H\G\H\Y\VKRZ\H\W\K\H\G\H\Y\VKRZ
D\G\H\PLF DFKLHYHPHQW DQG ZLOO FDXVH GHSUHVVLRQ DQ[LHW\ DQG ORZ VHOI
FRQVFLRXV 0HDQZKLOH '&' FKLOGUHQ DOZD\V DYRLG GRLQJ VSRUUV
EHFDXVH RI WKHLU SRRU PRWRU FRRUGLQDWLRQ DQG FDXVH RYHUZHLJKW ZLWK
SRRU FRQGLWLRQ > @ :KDWDV PRUH '&' XVXDOO\ FRPELGV ZLWK RWKHU

0HWKRGV

6WXG\ VDPSOH

&KLOGUHQ DJHG ZHUH UDQGRPO\ VHOHFWHG IURP SXEOLF QXUVHU\ VFKRROV WKURXJKRXW -LDQJVX &KLQD \$ WRWDOO\ RI FKLOGUHQ ZHUH UHFUXLWHG LHQL USRQH HJQWVXG ZH O\ XDW NDH GRW RDO GHPRJUDSK\ TXHVWLRQQDLUH FRQFHUQLQJ FKLOGUHQdV GHYHORSPHQW DQG IDPLOLHVd HFRQRPLFDO VLW)QDLW KDOO\ WQHDOO\ FKLOGUHQ LWHPV LQFOXGLQJ ER\ V DQG JLUOV DW D PHDQ DJH RI s \HDWWVWXGD\ZUDPHEG WKH /RFDO &RPPLWPHQW RI 6RRFKRZ 8QLYHUVLW\ (YHU\ RQH RI WKH IRONV RI WKH PHPEHUV ZHUH ERWK RUDOO\ DQG FRPSRVHG HGXFDWHG DQG FRPSRVHG HGXFDWHG DVVHQWV ZHUH DFTXLUHG IURP WKHP

,QVWUXPHQWV

ORYHPHQW DVVHVVPHQW EDWWHUI IRU FKLOGUHQ VHFRQG HGLWLRQ PDEF H ORYHPHQW \$VVHVVPHQW %DWWHU\ IRU &KLOGUHQ 6HFRQG (GLWLRQ 0\$%& LV DQ HFRORJLFDO DSSURDFK WR LQWHUYHQWLRQ IRU FKLOGUHQ ZLWK 'HYHORSPHQWDO &RRUGLQDWLRQ 'LVRUGHU DQG RWKHU PRYHP\QW\XQW\@HV,W LV FRPSRVHG RI D SHUIRUPDQFH WHVW D FKHFNOLVW DQGW\BV\MDQ\X\DHOU\YQWURU\DVH\UDQH\ RI EDODQFH PRWRU WDVN> @ ,Q WKLV VWXG\ ZH SUHIHUUHG WKH DJH EDQG RI WKH 0\$%& WHVW ZKLFK UHIHUV WR FKLOGUHQ DJHG \HDUV ROG

(LJKW WDVN DUH JURXSHG LQ WKH IROORZLQJ WKUHH PRWRU VXEWHVWV PDQXDO GH[WHULW\ ZKLFK LV FRPSRVHG RI SRVWLQJ FRLQV WKUHDGLQJ EHDGV DQG GUDZLQJ WUDLOV DLPLQJ DQG FDWFKLQJ ZKLFK FRQVLVWV RI FDWFKLQJ D EHDQEDJ DQG WKURZLQJ D EHDQEDJ RQWR D PDW DQG EDODQFH ZKLFK LQFOXGHV WKH RQH OHJ EDODQFH ZDONLQJ KHOV UDLVHG DQG MXPSLQJ RQ PDWV 7HQ UDZ VFRUHV REWDLQHG IURP WKH HLJKW 0\$%& WDVN ZHUH UHFRUGHG DQG WKHQ FRQYHUV\H\SHW\W\ VWDQGDUG VFRUHV SHUIRUPDQFH D FKLOG GRHV WKHHKLJKHU WKH VWDQGDUG VFRUHV LV VWDQGDUG VFRUHV RI f3RVWLQJ FRLQVg DQG f2QH OHJ EDODQFHg ERWK ZLWK SUHIHUUHG DQG QRQ SUHIHUUH\GG\Q\K\H\ ZHUH FRPELQHG E\ DYHUDJH VWDQ\G\B\Q\HWF\Z\W\H WKHQ URXQGHG GRZQZDUG ZKHQ WKH\ ZHUH EHORZ DYHUDJH DQG URXQGHG XSZDUG ZKHQ WKH\ ZHUH DERYH DYHUDJH\W\H\W\ VFRUHV RI WKUHH FRPSRQHQWV ZHUH WKH VXP RI WKH VWDQGDUG VFRUHV RI WKH\W\H\W\ DQG\W\H\W\ VFRUHV RI DOO HLJKW LWHPV 0\$%& ZDV WKH VXP RI WKH VWDQGDUG VFRUHV RI DOO HLJKW LWHPV YDOLGLW\ DQG UHOLDELOLW\ RI &KLQHVH YHUVLRQ RI DJH EDQG 0\$%& KDV EHHQ H[DPLQHG WR EH TXLWH JRRG DQG LPSOLHG WKDW LW FRXOG EH D XVHIXO DSSURDFK WR DVVHVW FKLOGUHQdV PRWRU FRRUGLQDWLRQ > @

5LVN IDFWRUV RI '&'

%LRORJLFDO ULVN&IDFWRIURKORG 'DQ DVVRFLDWLRQ ZLWK
ORZHU ELUWK ZHLJKW J \RXQJHU JHVWDWLRQ ZHHNV DQG D KLVWRU\\
RI MDXQGLFH GXULQJ LQIDQWV EXW WKUH LV QR OLQNDJH EHWZHQQ PRWKHU
PDWHUQDO DJH DW GHOLYHUI\ 7DEOH

'&' SUR '&'1RQ '&' 7 ; 3

ODWHUQDO DJH

;6'\

*HVWDWLRQ ZHHNV

• Z Q

;6'\

SUDFWLFHV ,W LV HDV\ WR OHDUQ WKDW FDUH JLYHU SOD\V D VDPH UROH GXU