



# -RXUQDO RI &RPPXQLW\ OHGLFLQH +HDOWK (GXFDWLRQ

.KDLU HW DO - &RPPXQLW\ OHG  
'2,

5HVHDFK \$UWLFOH

2SHQ \$F

## .FOUPSTIJQ JO "SBC #PBSE 1FEJBUSJD 3FTJEF 2VFTUJPOOBSF #BTFE 4UVEZ 2BUBS &YQFSJ

.KDLU \$0\$EGXOUDKPDQG+\$0 +DPPDGL  
'HSDUWPHQW RI 3HGLDWULFV+DPDG OHGLFDO &RUSRUDWLRQ 'RKD 4DWDU  
'HSDUWPHQW RI 3HGLDWULFV 'LYLVLRQ RI \*D VWUR (QWHURORJ) +DPDG OHGLFDO &RUSRUDWLRQ 'RKD  
'HSDUWPHQW RI 3HGLDWULFV 'LYLVLRQ RI \*HQHUDO \$FDGHPLF 3HGLDWULFV +DPDG OHGLFDO &RUSRUDWLRQ  
&RUUHVSRRGLQJ DXWKRU 'U \$EGXOKDIHHJ 0RKDPHG .KDLU 0%6 &\$%3 0+3( 05&3&+ &OLQLFDO )HOOD  
+DPDG OHGLFDO &RUSRUDWLRQ 'RKD 4DWDU ( PDLO DNKDLU #KDPDG TD  
5HFHLYHG 2GDWH \$FFHSWHG-3QWH 3XEOLVKHG GDWH -DQ  
&RSULJKW < .KDLU \$0 HW DO 7KLV LV DQ RSHQ DFFHV DUWLFOH GLVWULEXWHG XQGHU WKH WHUP  
XVH GLVWULEXWLRQ DQG UHSURGXFWLRQ LQ DQ\ PHGLXP SURYLGHG WKH RULJLQDO DXWKRU DQG VRXU

### \$EVWUDFW

%DFNJURVWRUUVKLS LV GHILQH DV WKH GHYHORSHPHQWDO DVLVWDQFH RIIHU  
VRPHRQH PRUH VHQLRU DQG H[SHULHQFHG LQ WKH ILHOG RU ZRUN SODFH OHQW  
SURJUDP KDV H[LVWHG IRU \HDU +RZHYHU QR DXGLWLQJ RU UHVHDFK VWXGLH  
DWLLWXGHV DQG SUDFWLFH RI PHQWRUUVKLS LQ WKLV DFFUHLWHG UHVLGHQF\ SU

2EMHFWLYHV 7R DVVHV IDFXOW\ FRQVXOWDQWV DQG UHVLGHQWV SHUVSHFWLY  
LQ SHGLDWULF UHVLGHQF\ WUDLQLQJ SURJUDP \$FFRUGLQJO\ ZH DUH WU\LQJ WR  
WR LPSURYH WKH SURJUDP SHUIRUPDQFH

0HWKRGRORJ\ \$ VXUYH\ ZDV FRQGXFWHG XVLQJ WZR SDUDOHO VHWV RI TXHV  
IDFXOW\ PHPEHUV LQYROYHG LQ PHQWRUUVKLS LQ WKH SHGLDWULF UHVLGHQF\ WU  
LQWR EDU JUDSKV DQG WKHQ DQDO\JHG

5HVXOWV 7KHUH LV ELJ GLVFUHSDF\ LQ YLHZV RI UHVLGHQWV DQG IDFXOW\ VW  
WRZDUGV PHQWRUUVKLS 3DUWLFXODU GLIIHUHQFHV KDYH EHHQ KLJKOLJKWHG I  
LQYROYHPHQW VW\OH DQG H[SHFWDWLRQV

&RQFOXVLRQV 7HDFKLQJ DQG GLUHFV PHHWLQJ VHVLRQV DUH REYLRXVO\ QHF  
DERXW WKH DSSURSULDWH PHQWRUUVKLS FXOWXUH DQG LPSOHPHQDWLRQ \$GRSW  
EH DQ XOWLPDWH PRGXOH WR EH WULHG

.H\ZRUGV PHQWRUUVKLS OHQWRUV OHQWHHV (GXFDWLRQ

,QWURGXFWLRQ

H QHHG IRU PHQWRUUVKLS DQG VXSHUYLVLRQ KDV EHHQ DOZD\V D  
IXQGDPHQWDO SURFHGXUH LQ HYROYLQJ DQ\ VXFFHVVIXO HGXFDWLRQDO SURMHF  
+LVWRULFDOO\ VSHDNLQJ KRZHYHU WKH URRWV RI WKH SUDFWLFH VHHP WR EH C  
LQ WKH DVLVWDQFH PHQWRUUVKLS WLVHOI ZDV SUREDO\ LQVLUHG WKH  
>UWLPH E\ WKH FKDUDFWHU RI OHQWRUV LQ +RPHUV LQ +RPHUV 2G\VVH\ > @  
WKH DFWXDO OHQWRU LQ WKLV OHQWRU HWWRU\ ZDV D VRPHZKDW  
PDQ WKH JRGGHVV \$WKHQD WRRN RQ KLV DSSHDUDQFH LQ RUGHU WR JXLGH  
\RXQJ 7HOHPDFKXGLV\WLPH RI

RXJKWHYHUDO GHVFULSWLRQV HGHQWHQWRUUVKLS DO WDG SWRRQVLRQDO OHYI  
DV GHYHORSHPHQWDO V\W\O\ WDKRZHYHU VXSHUYLVLRQV H[SHULHQFHG OHQWRUVKLS XQW  
REYLRXV WKDW FOLQDQJ URXSSUWHV DQRQLQJ V\W\O\ WDKRZHYHU VXSHUYLVLRQV H[SHUL  
YLWDO LQ SURGXFLQJ FRPSHHQW DQG VDIH KHDOWK FDUH  
(vHFWERPPXQLFDWLRQ EHWZHHN VXSHUYLVLRQV DQG WUDLQH  
LQ

H VWXG\CV SURSRVHG SULPDU\ JHQHU  
SURVSHFWLYH DQG YLHZV RI PHQWRUUV DQ  
SURFHVV LQ DUDE ERDUG SHGLDWULF UHV  
OHGLFDO &RUSRUDWLRQ 'RKD 4DWDU

Specifc REMHFWLYHV

k 7R DVVHV V UHVLGHQWVC DQG IDFXOW\C DWWLWXGHV DQG H[SHFWDWLRQV  
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k 7R DVVHV V UHVLGHQWVC VDWLVIDFWLRQ UHJDUGLQJ WKHLU PHQWRUVC  
VXSHUYLVLRQ

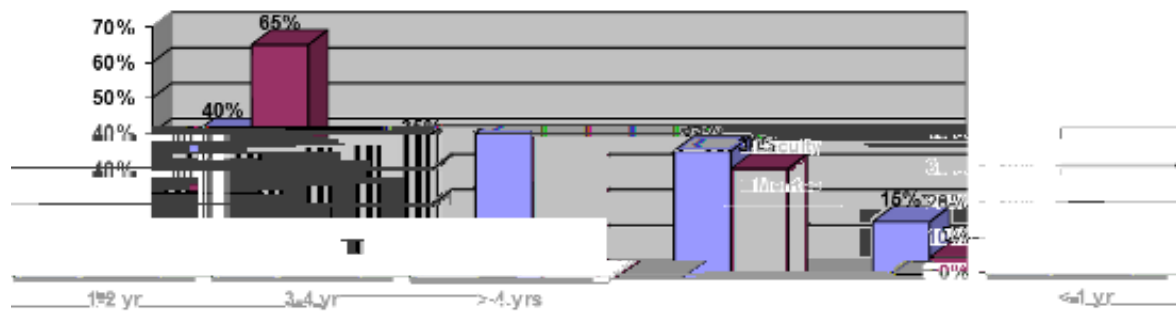
k 7R HYDOXDWH FXUUHQW PHQWRUVKLS SURFHGXUHV DQG DVVHV VPHQW WRROV

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VLGHV

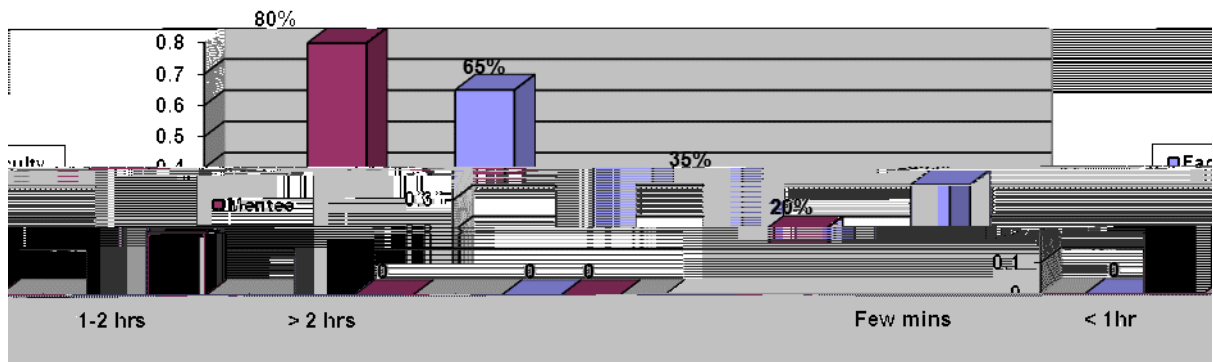
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OHWKRGV DQG VWXG\ GHVLJQ

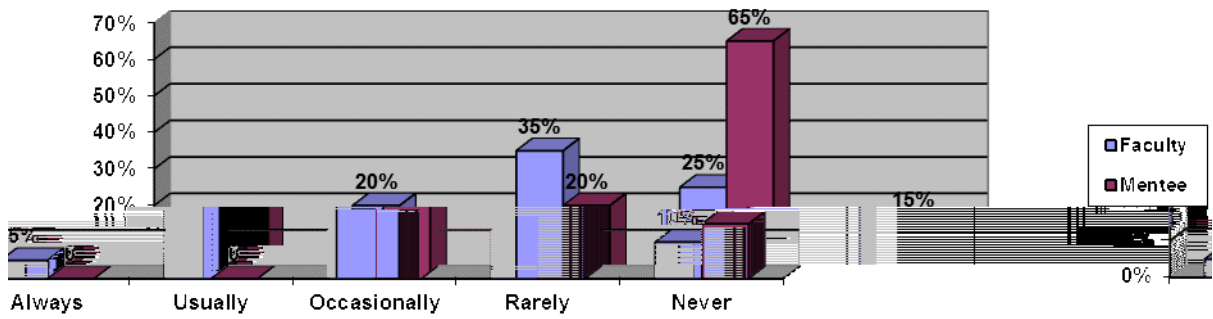
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VXUYH\HG 7ZR VHWV RI PLUURU VLGHG TXHVWLRQQDLUHV ZHUH SUHSDUH  
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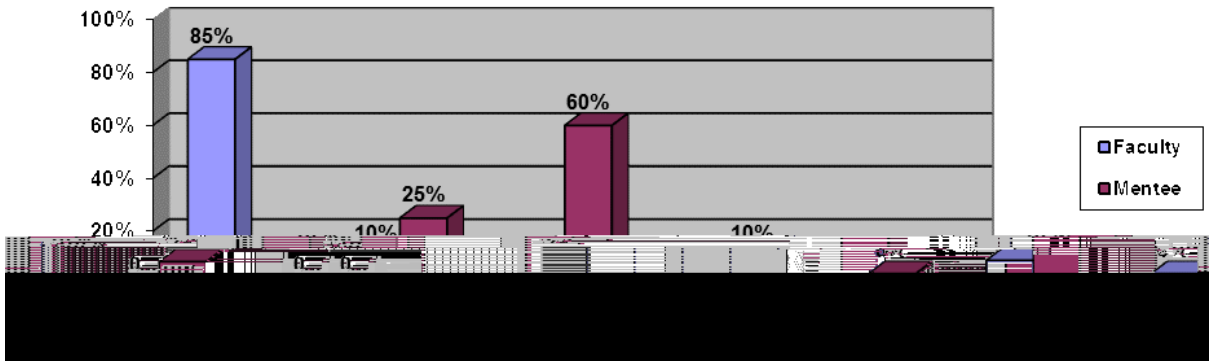
)LJXUH



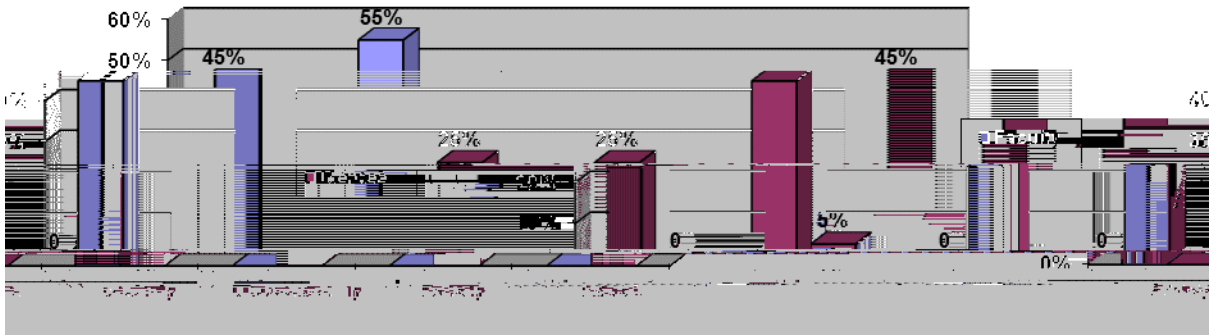
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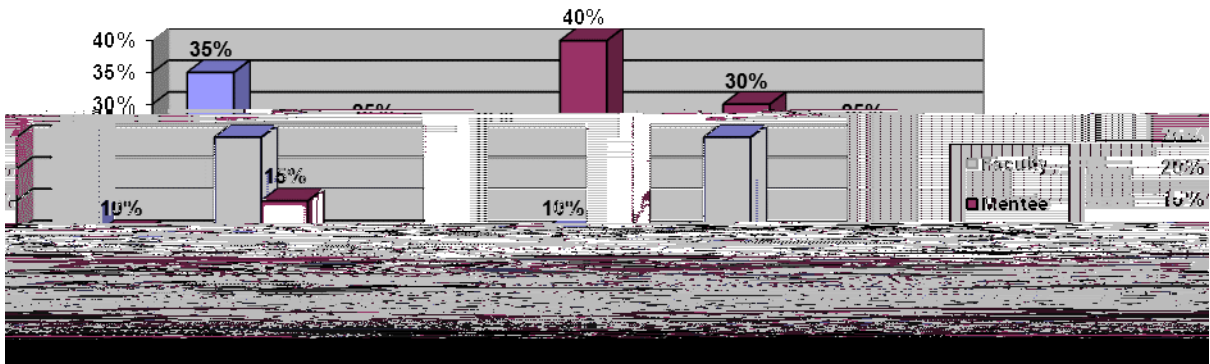
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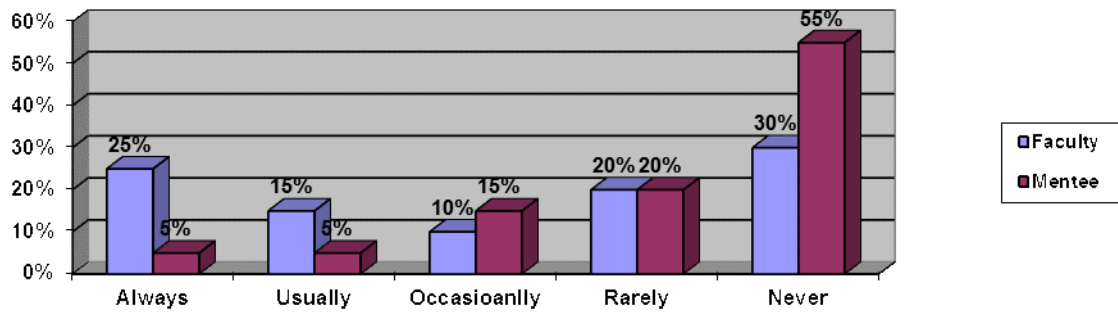
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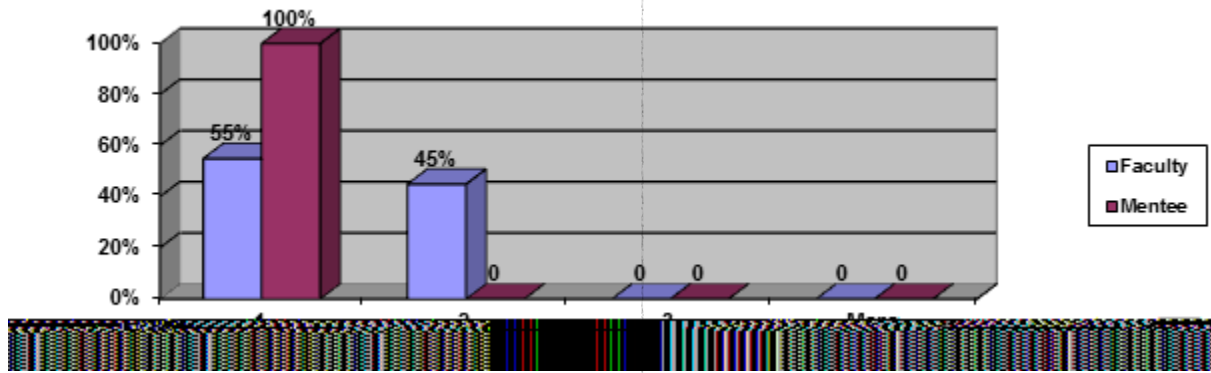
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)LJXUHHOSLQJ VRFLDO DQG SHUVRQDO PDWWHUV



)LJXU#RFLDO LQYROYHPHQW RXWVLGH ZRUN VHWLQJ



)LJXUH DUULHUV IRU VXFFHVVIXO PHQWRUVKLS

'LVFXVVLQR

,Q +DPDG 0HGLFDO &RUSRUDWLRQ SURJUDP KDV VWDUWHG LQ WKH HDUO PHQWRULQJ SURJUDP KDV DFWXDO FXUUHQW OD\RXW RI WKH PHQWRULQJ WR RQH IDFXOW\ PHPEHU WR EH KLV WUDLQLQJ SURJUDP 1HYHUWKHOHVV ORRNHG 6LQFH WKH PHQWRULQJ SURJUDP DQ\ RWKHU WRRO RI DVVHVVPHQW SURFHVV LQ WKH SURJUDPD SURJUDPV LQ WKH FRUSRUDWLRQ

,Q WKH HUD RI PHGLFDO HGXFDWLRQ VWDUWHG WR SD\ DWWHQWLRQ WR WKH PHQWRULQJ PDLQO\ DPRQJ PHGLFDO VXUJLFDO UHVLGHQWV KDYH QRW KDG WULHG WR H[SORUH PHQWHH PHQWRU UHODWLRQV LQ IHZ FHQWHU

\$OWKRJK VHYHUDO DXWKRUV KDYH VXFFHVVIXO DQG VDWLVI\LQJ RI PHQWRULQJ SURJUDPV IRU PHGLFDO FRXQWULHV )UHLOLFK DQG QG PRUH FRPRHQXIDFNLQW XUROJ\ DV UHVLGHQF\ SRVLWLYH PHGLFDO GRFWRUV LQ D GRFWRUV LQ D ORQJLWXGLQDO EHWWHU DJUHHPHQW DERXW SURJUDP )LJXUH

2XU LQVWLWXWLRQ LV DGRSWLQJ UHVLGHQW LV DVVLJQHG PHQWRUV GR VXSHUYLVH OHVV WKDQ RI PHQWRUV PRUH WKDQ \HDU\WKH WULHG WR H[SORUH IHDVLELOLW\ RI WKH PHGLFDO PHGLFDO HGXFDWLRQ SUDFWLFH > @ +LV ZRUN ZDV DPRQJ FRQGXFWHG UHVLGHQF\ 7RURQR &DQGD +H KDV SURJUDP FROODERUDWLYH EDUULHUV HQFRXQWHUHG DUH FRPSDUDEOH WR RXU ZRUWK FRQVLGHULQJ

H ZD\ WKH PHQWRU LV DVVHVVLQJ DQRWKHU GHEDWDEOH PHQWRUV EHOHYH WKDW GLUHFW LQWHUDFWLRQ LV WKH EHVW

WKHLU PHQWHHV E\ EHLQJ UROH PRGHOV WKHPVHOYHV DOPRVW QRQH RI  
PHQWHHV WKRXJKW WKH VDPH )LJXUH

6RFLDO LQWHUDFWLRQ EHWZHHQ PHQWHHV DQG PHQWRUV FDQQRW EH  
REYLRXVO\ VHSUDUDWHG IURP WKH HGXFDWLRQDO JRDOV RI PHQWRUVKLS DV IDU I  
WKH PHQWHHV FRQFHUQH \$ ORQJ ODVWLQJ GHEDWH LV ZKHWKHU  
WKLW LQYROYHPPHQW LV LQYDGLQJ WKH ERXQGDULHV RI SURIHVVLRQDOLVP KDV Q  
KDG D FRQFOXVLYH HQG DW WKH PRPHQW > @ :H KDYH REVHUYHG DQ  
REYLRXV HDJHU IRU VRFLDO DQG SHUVRQDO LQWHUDFWLRQ IURP PHQWHHV  
SURVSHFWLYH LQ RXU VWXG\ )LJXUH DQG 'HSHQGLQJ RQ SHUVRQDO  
YLHZV DQG H[SHFWDWLRQV LQ VLPLODU RU  
FRPSDUDEOH HGXFDWLRQDO SURJUDPV > @

\$ ELJ KROH DOVR H[LVWV LQ WKH OHYHO RI VDWLVIDFWLRQ RI WKH PHQWRUVK  
SURFHVV :KLOH RI PHQWRUVKLS H[GRQD\ V  
PHQWHHV ZHUH )LJXUH VDWLVIDFWLRQDOLVP DQGLWXLGHV DQG  
H[SHFWDWLRQV DUH JRYHUQLQJ H[SHFWDWLRQV  
GLVVDWLVIDFWLRQ SUREDEO\ VWDUWV ZLWK WKH FKRLFH RI PHQWRU LWVHO  
,QYROYLQJ PHQWHHV LQ VHOHFWLRQ RI WKHLU PHQWRUV FDQ WUHPHQGRXVO\