**Supplementary File 3: Work- and Health- Related Outcomes**

**Comparison of work- and health- related outcomes among RNs by province (N=309)**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Province** | **ANOVA** |
| **British Columbia*****n=113*** | **Alberta*****n=126*** | **Manitoba*****n=70*** | **Total*****n=309*** | **p- value** | **ES1** |
| **Work-Related [Mean, SD]** |  |
| Job Satisfaction (1-5) | 4.194 (.741) | 4.075 (.728) | 4.271 (.593) | 4.164 (.706) | .155 | .012 |
| Adequate Orientation (1-5) | 3.920 (.969) | 3.97 (.907) | 3.93 (.822) | 3.94 (.909) | .915 | .001 |
| Work Eng. – Vigor (0-6) | 5.105 (1.226) | 5.069 (1.194) | 5.157 (.969) | 5.103 (1.154) | . 881 | .001 |
| Work Eng. – Dedication (0-6) | 5.311 (1.075) | 5.227 (1.223) | 5.348 (.992) | 5.286 (1.117) | . 742 | .002 |
| Work Eng. – Absorption (0-6) | 5.676 (.835) | 5.667 (.640) | 5.739 (.423) | 5.687 (.677) | . 764 | .002 |
| Emp. – Competence (1-5) | 4.382 (.643) | 4.408 (.514) | 4.502 (.544) | 4.421 (.571) | . 376 | .007 |
| Emp. – Meaning (1-5) | 4.531 (.587) | 4.465 (.611) | 4.581 (.503) | 4.516 (.578) | .391 | .006 |
| Emp. – Self Determination (1-5) | 4.229 (.649) | 4.028 (.771) | 4.109 (.704) | 4.119 (.716) | .742 | .015 |
| Emp. – Impact (1-5) | 3.918 (.735) | 3.843 (.707) | 3.903 (.750) | 3.885 (.735) | .111 | .002 |
| **Health-Related [Mean, SD]** |  |
| Physical Health Status (0-100%) | 51.310 (7.99) | 50.986 (7.331) | 49.893 (7.282) | 50.835 (7.555) | 465 | .005 |
| Mental Health Status (0-100%) | 52.266 (7.606) | 50.721 (8.652) | 51.621 (8.043) | 51.487 (8.146) | .374 | .007 |
| Burnout Exhaustion – Energy (0-6) | 1.695 (1.340) | 2.070 (1.452) | 1.876 (1.368) | 1.891 (1.397) | . 136 | .014 |
| Burnout Cynicism – Involve (0-6) | 1.619 (1.340) | 1.937 (1.563) | 1.522 (1.278) | 1.725 (1.428) | . 105 | .016 |
| Burnout Efficacy – Inefficacy (0-6) | 4.699 (1.176) | 4.692 (1.050) | 4.652 (1.058) | 4.685 (1.095) | . 959 | .000 |
| Dementia-Related Responsive Behaviours Experienced (0-6) | 1.981 (1.536) | 2.475 (1.652) | 2.725 (1.798) | 2.354 (1.668) | . 0092 | .032 |

1Effect size to determine magnitude of any differences. We used eta squared which were interpreted using Cohen’s (1988) criteria: small effect=0.01, medium effect=0.06, and large effect=0.14

2 Post-hoc test used was Bonferroni correction. Significant difference was between BC and MB

**Comparison of work- and health- related outcomes among LPNs by province (N=448)**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Province** | **ANOVA** |
| **British Columbia*****n=211*** | **Alberta*****n=146*** | **Manitoba*****n=91*** | **Total*****n=448*** | **p-value** | **ES1** |
| **Work-Related [Mean, SD]** |  |
| Job Satisfaction (1-5) | 4.140 (.674) | 4.033 (.634) | 4.202 (.719) | 4.118 (.6718) | .152 | .009 |
| Adequate Orientation (1-5) | 3.850 (.891) | 3.89 (.879) | 3.90 (.778) | 3.87 (.864) | .890 | .001 |
| Work Eng. – Vigor (0-6) | 5.014 (1.240) | 5.162 (.953) | 4.9457 (1.187) | 5.048 (1.145) | . 325 | .005 |
| Work Eng. – Dedication (0-6) | 5.265 (.945) | 5.376 (.820) | 5.274 (1.044) | 5.303 (.927) | .524 | .003 |
| Work Eng. – Absorption (0-6) | 5.679 (.598) | 5.717 (.600) | 5.608 (.726) | 5.677 (.6258) | . 448 | .004 |
| Emp. – Competence (1-5) | 4.415 (.501) | 4.367 (.569) | 4.345 (.527) | 4.385 (.529) | .517 | .003 |
| Emp. – Meaning (1-5) | 4.512 (.522) | 4.576 (.513) | 4.548 (.482) | 4.540 (.511) | .513 | .003 |
| Emp. – Self Determination (1-5) | 3.892 (.786) | 3.905 (.768) | 3.969 (.750) | 3.912 (.772) | . 731 | .001 |
| Emp. – Impact (1-5) | 3.684 (.708) | 3.619 (.696) | 3.722 (.763) | 3.6705 (.715) | .539 | .003 |
| **Health-Related [Mean, SD]** |  |
| Physical Health Status (0-100%) | 50.814 (7.143) | 50.404 (8.708) | 49.237 (8.518) | 50.376 (7.954) | .317 | .005 |
| Mental Health Status (0-100%) | 49.570 (10.044) | 50.094 (9.924) | 51.786 (8.580) | 50.168 (9.752) | .220 | .007 |
| Burnout Exhaustion – Energy (0-6) | 2.108 (1.531) | 2.728 (1.597) | 2.085 (1.382) | 2.096 (1.463) | . 986 | .000 |
| Burnout Cynicism – Involve (0-6) | 1.882 (1.491) | 1.839 (1.356) | 2.076 (1.433) | 1.906 (1.436) | .468 | .004 |
| Burnout Efficacy – Inefficacy (0-6) | 4.720 (.978) | 4.725 (1.072) | 4.577 (1.040) | 4.693 (1.020) | . 502 | .003 |
| Dementia-Related Responsive Behaviours Experienced (0-6) | 2.728 (1.597) | 2.793 (1.616) | 3.046 (1.620) | 2.813 (1.609) | .299 | .006 |

1Effect size to determine magnitude of any differences. We used eta squared which were interpreted using Cohen’s (1988) criteria: small effect=0.01, medium effect=0.06, and large effect=0.14

**Comparison of work- and health- related outcomes among RNs by owner operator model (N=309)**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Owner Operator Model** | **ANOVA** |
| **Public not for profit *n=65*** | **Private for profit *n=111*** | **Voluntary not for profit *n=133*** | **Total*****n=309*** | **p-value** | **ES1** |
| **Work-Related [Mean, SD]** |  |
| Job Satisfaction (1-5) | 4.291 (0.585) | 4.137 (0.586) | 4.126 (0.832) | 4.164 (0.706) | .277 | .029 |
| Adequate Orientation (1-5) | 3.984 (0.871) | 3.933 (0.912) | 3.924 (0.930) | 3.940 (0.909) | .908 | .009 |
| Work Eng. – Vigor (0-6) | 5.226 (0.878) | 5.269 (0.897) | 4.914 (1.401) | 5.103 (1.154) | .0402 | .103 |
| Work Eng. – Dedication (0-6) | 5.443 (0.772) | 5.420 (0.909) | 5.105 (1.360) | 5.286 (1.117) | .0472 | .056 |
| Work Eng. – Absorption (0-6) | 5.721 (0.448) | 5.790 (0.464) | 5.589 (0.873) | 5.687 (0.677) | .073 | .029 |
| Emp. – Competence (1-5) | 4.398 (0.493) | 4.458 (0.538) | 4.402 (0.630) | 4.421 (0.571) | .706 | .032 |
| Emp. – Meaning (1-5) | 4.497 (0.525) | 4.551 (0.510) | 4.497 (0.653) | 4.516 (0.578) | .748 | .018 |
| Emp. – Self Determination (1-5) | 4.169 (0.552) | 4.178 (0.662) | 4.045 (0.823) | 4.119 (0.716) | .308 | .046 |
| Emp. – Impact (1-5) | 3.858 (0.645) | 3.929 (0.669) | 3.861 (0.825) | 3.885 (0.735) | .744 | .032 |
| **Health-Related [Mean, SD]** |  |
| Physical Health Status (0-100%) | 49.615 (8.681) | 52.230 (6.631) | 50.297 (7.555) | 50.835 (7.556) | .057 | .763 |
| Mental Health Status (0-100%) | 51.083 (7.742) | 52.601 (7.571) | 50.773 (8.742) | 51.487 (8.146) | .222 | .763 |
| Burnout Exhaustion – Energy (0-6) | 1.878 (1.091) | 1.897 (1.347) | 1.892 (1.574) | 1.891 (1.398) | .996 | .095 |
| Burnout Cynicism – Involve (0-6) | 1.525 (1.295) | 1.801 (1.354) | 1.761 (1.548) | 1.725 (1.428) | .456 | .048 |
| Burnout Efficacy – Inefficacy (0-6) | 4.500 (1.164) | 4.692 (1.132) | 4.771 (1.024) | 4.685 (1.095) | .282 | .049 |
| Dementia-Related Responsive Behaviours Experienced (0-6) | 2.323 (1.853) | 2.333 (1.573) | 2.386 (1.662) | 2.354 (1.668) | .959 | .021 |

1Effect size to determine magnitude of any differences. We used eta squared which were interpreted using Cohen’s (1988) criteria: small effect=0.01, medium effect=0.06, and large effect=0.14

2 Post-hoc test used was Bonferroni correction. Significant differences between categories not detected

**Comparison of work- and health- related outcomes among LPNs by owner operator model category (N=448)**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Owner Operator Model** | **ANOVA** |
| **Public** ***n=77*** | **Private** ***n=205*** | **Voluntary *n=166*** | **Total*****n=448*** | **p-value** | **ES1** |
| **Work-Related [Mean, SD]** |  |  |  |  |  |  |
| Job Satisfaction (1-5) | 4.169 (0.616) | 4.052 (0.666) | 4.175 (0.701) | 4.118 (0.672) | .176 | .010 |
| Adequate Orientation (1-5) | 3.947 (0.695) | 3.805 (0.923) | 3.919 (0.859) | 3.872 (0.864) | .326 | .012 |
| Work Eng. – Vigor (0-6) | 5.137 (1.123) | 5.060 (1.135) | 4.994 (1.170) | 5.048 (1.145) | .664 | .027 |
| Work Eng. – Dedication (0-6) | 5.388 (0.822) | 5.285 (0.947) | 5.287 (0.949) | 5.303 (0.927) | .691 | .026 |
| Work Eng. – Absorption (0-6) | 5.742 (0.617) | 5.677 (0.635) | 5.648 (0.620) | 5.677 (0.626) | .561 | .027 |
| Emp. – Competence (1-5) | 4.316 (0.525) | 4.397 (0.526) | 4.404 (0.534) | 4.385 (0.529) | .448 | .017 |
| Emp. – Meaning (1-5) | 4.443 (0.491) | 4.529 (0.541) | 4.600 (0.476) | 4.540 (0.511) | .082 | .016 |
| Emp. – Self Determination (1-5) | 3.911 (0.698) | 3.916 (0.751) | 3.906 (0.833) | 3.912 (0.772) | .993 | .023 |
| Emp. – Impact (1-5) | 3.458 (0.664) | 3.737 (0.727) | 3.688 (0.708) | 3.671 (0.715) | .0142 | .015 |
| **Health-Related [Mean, SD]** |  |  |  |  |  |  |
| Physical Health Status (0-100%) | 49.059 (7.221) | 51.078 (7.798) | 50.117 (8.412) | 50.376 (7.954) | .158 | .798 |
| Mental Health Status (0-100%) | 50.683 (9.216) | 50.622 (9.538) | 49.364 (10.253) | 50.168 (9.752) | .430 | .798 |
| Burnout Exhaustion – Energy (0-6) | 2.142 (1.447) | 2.086 (1.508) | 2.085 (1.421) | 2.096 (1.463) | .955 | .046 |
| Burnout Cynicism – Involve (0-6) | 1.787 (1.432) | 1.980 (1.440) | 1.869 (1.437) | 1.906 (1.436) | .574 | .044 |
| Burnout Efficacy – Inefficacy (0-6) | 4.740 (1.031) | 4.702 (1.046) | 4.660 (0.988) | 4.693 (1.020) | .848 | .025 |
| Dementia-Related Responsive Behaviours Experienced (0-6) | 2.853 (1.591) | 2.789 (1.600) | 2.824 (1.636) | 2.813 (1.609) | .952 | .019 |

1Effect size to determine magnitude of any differences. We used eta squared which were interpreted using Cohen’s (1988) criteria: small effect=0.01, medium effect=0.06, and large effect=0.14

2 Post-hoc test used was Bonferroni correction. Significant difference was between public compared to private

**Comparison of work- and health- related outcomes among RNs by facility size category (N=309)**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Facility Size Category** | **ANOVA** |
| **Small (up to 79 beds)*****n=43*** | **Medium (80-120 beds) *n=100*** | **Large (over 120 beds) *n=166*** | **Total*****n=309*** | **P value** | **ES1** |
| **Work-Related [Mean, SD]** |  |
| Job Satisfaction (1-5) | 4.206 (0.646) | 4.196 (0.759) | 4.135 (0.691) | 4.164 (0.706) | .732 | .026 |
| Adequate Orientation (1-5) | 4.024 (0.811) | 3.938 (0.933) | 3.919 (0.922) | 3.940 (0.909) | .803 | .036 |
| Work Eng. – Vigor (0-6) | 5.317 (0.702) | 5.077 (1.331) | 5.062 (1.136) | 5.103 (1.154) | .429 | .044 |
| Work Eng. – Dedication (0-6) | 5.398 (0.696) | 5.362 (1.106) | 5.213 (1.208) | 5.286 (1.117) | .465 | .073 |
| Work Eng. – Absorption (0-6) | 5.817 (0.305) | 5.605 (0.895) | 5.700 (0.594) | 5.687 (0.677) | .227 | .019 |
| Emp. – Competence (1-5) | 4.349 (0.541) | 4.361 (0.682) | 4.475 (0.500) | 4.421 (0.571) | .207 | .020 |
| Emp. – Meaning (1-5) | 4.667 (0.459) | 4.500 (0.606) | 4.488 (0.586) | 4.516 (0.578) | .198 | .024 |
| Emp. – Self Determination (1-5) | 4.138 (0.605) | 4.215 (0.655) | 4.058 (0.772) | 4.119 (0.716) | .241 | .033 |
| Emp. – Impact (1-5) | 3.867 (0.608) | 3.953 (0.744) | 3.850 (0.760) | 3.885 (0.735) | .560 | .044 |
| **Health-Related [Mean, SD]** |  |
| Physical Health Status (0-100%) | 51.300 (7.932) | 51.029 (7.731) | 50.615 (7.405) | 50.835 (7.556) | .845 | .783 |
| Mental Health Status (0-100%) | 51.775 (8.583) | 51.170 (8.404) | 51.597 (7.938) | 51.487 (8.146) | .900 | .783 |
| Burnout Exhaustion – Energy (0-6) | 1.783 (1.304) | 1.804 (1.358) | 1.967 (1.445) | 1.891 (1.398) | .589 | .058 |
| Burnout Cynicism – Involve (0-6) | 1.433 (1.180) | 1.832 (1.376) | 1.738 (1.510) | 1.725 (1.428) | .336 | .068 |
| Burnout Efficacy – Inefficacy (0-6) | 4.581 (0.996) | 4.663 (1.239) | 4.723 (1.033) | 4.685 (1.095) | .750 | .017 |
| Dementia-Related Responsive Behaviours Experienced (0-6) | 2.244 (1.463) | 2.585 (1.744) | 2.245 (1.668) | 2.354 (1.668) | .265 | .022 |

1Effect size to determine magnitude of any differences. We used eta squared which were interpreted using Cohen’s (1988) criteria: small effect=0.01, medium effect=0.06, and large effect=0.14

**Comparison of work- and health- related outcomes among licensed practical nurses by facility size category (N=448)**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Facility Size Category** | **ANOVA** |
| **Small (up to 79 beds) *n=55*** | **Medium (80-120 beds) *n=148*** | **Large (over 120 beds) *n=245*** | **Total*****n=448*** | **p-value** | **ES1** |
| **Work-Related [Mean, SD]** |  |
| Job Satisfaction (1-5) | 4.103 (0.618) | 4.171 (0.639) | 4.089 (0.703) | 4.118 (0.672) | .509 | .010 |
| Adequate Orientation (1-5) | 3.855 (0.848) | 3.839 (0.924) | 3.895 (0.833) | 3.872 (0.864) | .821 | .005 |
| Work Eng. – Vigor (0-6) | 4.867 (1.337) | 5.040 (1.200) | 5.096 (1.060) | 5.048 (1.145) | .407 | .054 |
| Work Eng. – Dedication (0-6) | 5.291 (0.799) | 5.271 (0.966) | 5.325 (0.934) | 5.303 (0.927) | .857 | .029 |
| Work Eng. – Absorption (0-6) | 5.606 (0.685) | 5.697 (0.619) | 5.682 (0.617) | 5.677 (0.626) | .648 | .027 |
| Emp. – Competence (1-5) | 4.406 (0.547) | 4.336 (0.538) | 4.411 (0.518) | 4.385 (0.529) | .385 | .017 |
| Emp. – Meaning (1-5) | 4.564 (0.466) | 4.462 (0.551) | 4.582 (0.492) | 4.540 (0.511) | .079 | .013 |
| Emp. – Self Determination (1-5) | 3.994 (0.747) | 3.837 (0.784) | 3.938 (0.770) | 3.912 (0.772) | .327 | .033 |
| Emp. – Impact (1-5) | 3.733 (0.630) | 3.580 (0.739) | 3.711 (0.716) | 3.671 (0.715) | .178 | .015 |
| **Health-Related [Mean, SD]** |  |
| Physical Health Status (0-100%) | 51.355 (7.589) | 50.106 (6.903) | 50.306 (8.616) | 50.376 (7.954) | .604 | .758 |
| Mental Health Status (0-100%) | 46.514 (11.710) | 50.810 (8.541) | 50.651 (9.782) | 50.168 (9.752) | .0112 | .758 |
| Burnout Exhaustion – Energy (0-6) | 1.964 (1.406) | 2.066 (1.425) | 2.145 (1.501) | 2.096 (1.463) | .681 | .041 |
| Burnout Cynicism – Involve (0-6) | 1.764 (1.512) | 1.804 (1.379) | 2.000 (1.449) | 1.906 (1.436) | .330 | .048 |
| Burnout Efficacy – Inefficacy (0-6) | 4.494 (1.046) | 4.690 (1.031) | 4.741 (1.007) | 4.693 (1.020) | .276 | .023 |
| Dementia-Related Responsive Behaviours Experienced (0-6) | 2.545 (1.631) | 2.645 (1.531) | 2.975 (1.636) | 2.813 (1.609) | .065 | .019 |

1Effect size to determine magnitude of any differences. We used eta squared which were interpreted using Cohen’s (1988) criteria: small effect=0.01, medium effect=0.06, and large effect=0.14

2 Post-hoc test used was Bonferroni correction. Significant difference was between small and medium facilities; small and large facilities

**Comparison of work- and health- related outcomes among RNs by region within Alberta (N=126)**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Region in Alberta** | **t test** |
| **Region 1*****n=68*** | **Region 2*****n=58*** | **Total*****n=126*** | **p-value** |
| **Work-Related [Mean, SD]** |  |
| Job Satisfaction (1-5) | 4.174 (0.675) | 3.950 (0.777) | 4.075 (0.728) | .093 |
| Adequate Orientation (1-5) | 3.896 (0.923) | 4.057 (0.886) | 3.967 (0.907) | .336 |
| Work Eng. – Vigor (0-6) | 5.060 (1.287) | 5.082 (1.076) | 5.069 (1.194) | .920 |
| Work Eng. – Dedication (0-6) | 5.353 (0.974) | 5.064 (1.479) | 5.227 (1.224) | .226 |
| Work Eng. – Absorption (0-6) | 5.697 (0.502) | 5.627 (0.788) | 5.667 (0.640 ) | .563 |
| Emp. – Competence (1-5) | 4.388 (0.501) | 4.434 (0.533) | 4.408 (0.514) | .629 |
| Emp. – Meaning (1-5) | 4.498 (0.487) | 4.423 (0.744) | 4.465 (0.611) | .534 |
| Emp. – Self Determination (1-5) | 4.015 (0.757) | 4.044 (0.795) | 4.028 (0.771) | .840 |
| Emp. – Impact (1-5) | 3.833 (0.614) | 3.856 (0.814) | 3.843 (0.707) | .864 |
| **Health-Related [Mean, SD]** |  |
| Physical Health Status (0-100%) | 50.013 (7.982) | 52.270 (6.219) | 50.986 (7.331) | .101 |
| Mental Health Status (0-100%) | 50.678 (7.456) | 50.777 (10.097) | 50.721 (8.652) | .952 |
| Burnout Exhaustion – Energy (0-6) | 2.065 (1.349) | 2.077 (1.588) | 2.070 (1.452) | .964 |
| Burnout Cynicism – Involve (0-6) | 1.866 (1.592) | 2.033 (1.535) | 1.937 (1.563) | .568 |
| Burnout Efficacy – Inefficacy (0-6) | 4.713 (1.041) | 4.667 (1.070) | 4.692 (1.050) | .814 |
| Dementia-Related Responsive Behaviours Experienced (0-6) | 2.908 (1.693) | 1.943 (1.447) | 2.475 (1.652) | **.**0011 |

1 Aggression towards staff higher in Region 1 compared to Region 2

**Comparison of work- and health- related outcomes among licensed practical nurses by region within Alberta (N=146)**

|  |  |  |
| --- | --- | --- |
| **Variables** | **Region within Alberta** | **t test** |
| **Region 1*****n=88*** | **Region 2*****n=58*** | **Total*****n=146*** | **p-value** |
| **Work-Related [Mean, SD]** |  |
| Job Satisfaction (1-5) | 4.101 (0.684) | 3.926 (0.533) | 4.033 (0.634) | .112 |
| Adequate Orientation (1-5) | 4.000 (0.863) | 3.704 (0.882) | 3.887 (0.879) | .051 |
| Work Eng. – Vigor (0-6) | 5.217 (0.881) | 5.074 (1.061) | 5.162 (0.953) | .390 |
| Work Eng. – Dedication (0-6) | 5.403 (0.797) | 5.333 (0.861) | 5.376 (0.820) | .626 |
| Work Eng. – Absorption (0-6) | 5.741 (0.523) | 5.679 (0.709) | 5.717 (0.600) | .554 |
| Emp. – Competence (1-5) | 4.4023 (0.573)  | 4.308 (0.563) | 4.367 (0.569) | .345 |
| Emp. – Meaning (1-5) | 4.624 (0.482) | 4.500 (0.556) | 4.576 (0.513) | .165 |
| Emp. – Self Determination (1-5) | 3.912 (0.836) | 3.893 (0.650) | 3.905 (0.768) | .889 |
| Emp. – Impact (1-5) | 3.659 (0.736) | 3.553 (0.627) | 3.619 (0.696) | .387 |
| **Health-Related [Mean, SD]** |  |
| Physical Health Status (0-100%) | 50.645 (8.750) | 50.017 (8.710) | 50.404 (8.708) | .682 |
| Mental Health Status (0-100%) | 50.127 (9.525) | 50.041 (10.626) | 50.094 (9.924) | .960 |
| Burnout Exhaustion – Energy (0-6) | 2.078 (1.447) | 2.093 (1.382) | 2.084 (1.417) | .954 |
| Burnout Cynicism – Involve (0-6) | 1.822 (1.345) |  1.868 (1.386) | 1.839 (1.356) | .846 |
| Burnout Efficacy – Inefficacy (0-6) | 4.659 (1.135) | 4.830 (0.962) | 4.725 (1.072) | .363 |
| Dementia-Related Responsive Behaviours Experienced (0-6) | 2.907 (1.733) |  2.611 (1.406) | 2.793 (1.616) | .271 |