



PRINCIPAL
HEALTH & WELLBEING SURVEY

**New Zealand Primary School Principals'
Occupational Health and Wellbeing Survey
2016-17 Data**



March, 2018

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Introduction

Background

The project has been a response to the perceived health threats that the current raft of education reforms that are migrating around the world through global educational reform movements (GERM: Sahlberg, 2015). New Zealand has been recently caught up in GERM reforms and this prompted *NZEI Te Riu Roa* to commission the research here. The research is a replication of research that has been running in Australia since 2011, and Ireland since 2014 allowing direct comparisons from the first year of data collection.

In the UK, where schools have been increasingly accountable for results via the publication of league tables, Phillips and Sen (2011) reported that, “work related stress was higher in education than across all other industries... with work-related mental ill-health... almost double the rate for all industry” (p. 177-8). A significant stressor has been the increased emphasis by governments on accountability for uniform curriculum delivery along with the devolution of administrative tasks from central to local control. An extensive review of schools and school leadership in 25 countries the OECD reported,

School leaders’ roles have changed from practicing teachers with added responsibilities to full-time professional managers of human, financial and other resources accountable for their results. This

has meant that more and more tasks have been added to the job description: instructional leadership, staff evaluation, budget management, performance assessment, accountability, and community relations, to name some of the most prominent ones. In this environment, the range of knowledge and skills that effective school leaders need today is daunting: curricular, pedagogical, student and adult learning in addition to managerial and financial skills, abilities in group dynamics, interpersonal relations and communications. (Matthews, et al., 2007).

The work practices (role demands) imposed by these changes further increase work volume and public accountability and decrease principals and deputy/assistant principals’ decision latitude through externally imposed reporting deadlines. Extensive research on similar professional populations, middle ranking public servants in the UK, reported in more than 100 Whitehall I and II studies found adverse health outcomes including decreased life expectancy results from high role demand and concurrent low decision latitude. Principals and deputy/assistant principals experiencing concurrent low decision latitude and high [role] demands cannot moderate the stress caused by the high demands through time management or learning new skills, and so become subject to high stress at work and are at increased risk of disease. (Kuper & Marmot, 2003, p. 147)

More disturbing is that under these conditions younger people appear to be at greater risk of coronary heart disease than their older colleagues (Kuper & Marmot, 2003). This longitudinal research project has been designed to collect baseline data and monitor the health and wellbeing of New Zealand's primary school principals and deputy/assistant principals and to contribute to the development of work practices designed to minimize the adverse health impacts on the individuals.

Project Aims

The aim of this research project is to conduct a longitudinal study monitoring school principals and deputy/assistant principals' health and wellbeing annually, in differing school types, levels and size. These organizational differences will be monitored along with lifestyle choices such as exercise and diet and the professional and personal social support networks available to individuals. The turnover of principals and deputy/assistant principals within schools will allow investigations of moderator effects, such as years of experience prior to taking up the role. The longitudinal study will allow the mapping of health outcomes on each of these dimensions over time.

Participant Care

Voluntary participation was sought by email invitation from NZEI Te Riu Roa allowing them to keep membership information secure from the researchers. No personal information of members was provided to the researchers. Principals and deputy/assistant principals who accepted the invitation to participate voluntarily provided contact details to the researchers to be used for subsequent invitations to participate in annual updates. This information was not provided to NZEI Te Riu Roa, thus keeping the researchers, participants and NZEI Te Riu Roa at arm's length, to protect the privacy of the participants. Participants were also asked to provide contact details for an alternative contact person, to be used if the participants' contact details change between annual surveys. The invitation included a recruitment flyer (available at: www.principalhealth.org/nz.info.php) outlining the study and a hyperlink to the survey website. The invitations and reminder emails were sent out regularly, approximately two weeks apart while the survey was open. The survey website opened for 12 weeks to collect each wave of data, at the end of September and closed mid-November, 2016. This was repeated in 2017 with the survey operating between July and October. When participants chose to take the survey they were directed firstly to the Explanatory Statement on the project website. By clicking the "next" box at the end of the statement the survey commenced. All principals and deputy/assistant principals who registered to take the survey will be contacted annually and invited to complete an update survey.

Each survey participant received a comprehensive, individual report from his/her own survey responses. Participants were advised in the Explanatory Statement to seek individual help such as counselling if they experienced distress following the survey. Survey results returned to participants included contact details of local support agencies and providers tailored to the individual's needs resulting from their survey responses. The Chief Investigator was available to arrange individual assistance for participants if required. In 2016 the survey also included two "red flag" indicators.

The first related to self-harm. Answers “sometimes”, “often”, or “all the time”, to the question “Do you ever feel like hurting yourself” activated an automatic alert to the Chief Investigator who followed up these individuals with more personalised advice. Further, aggregate scores on quality of life that fell two standard deviations below the mean for principals also automatically generated a red flag email. In 2017 following the publication of an important paper on work-related psychosocial risk the red flag indicator was made more sensitive. Apart from self-harm and quality of life responses, a composite psychosocial risk score was calculated for each individual. Scores that fell into the high or very high risk group generated a further red flag trigger.

Chief Investigator

Associate Professor Philip Riley, from Australian Catholic University, a registered psychologist with the Australian Health Practitioner Regulation Agency oversaw the project. He is a former school principal and is also the Chief Investigator for *The Australian and Irish Principals and Deputy Principals Health and Wellbeing Surveys*.

The Survey

Workplace changes brought about either by changing community attitudes or government policy affect all schools and all school principals and deputy/assistant principals yet no systematic, longitudinal measurements of the effects these changes have on the occupational health and safety of school principals in New Zealand been conducted until now. This research project will collect data and monitor the health, safety and wellbeing of school principals and deputy/assistant principals annually. This report covers the first two waves of data collection, which was limited to primary principals for logistical reasons. We hope to included secondary principals in subsequent data collection waves.

This survey is the first independent, national research project undertaken to take baseline measurements and compare the occupational risks of all school principals and deputy/assistant principals longitudinally. Over time it will be used to monitor the efficacy of stress reduction interventions, for individuals and policy changes imposed on principals and deputy/assistant principals.

The survey captured three types of information drawn from existing robust and widely used instruments. First, comprehensive school demographic items drawn from the *Trends in International Mathematics and Science Study* (TIMSS) (Williams, et al., 2007), *Program for International Student Assessment* (PISA) (Thomson, et al., 2011), The *International Confederation of Principals* surveys were used to capture differences in occupational health and safety (OH&S) associated with the diversity of school settings and types. Second, personal demographic and historical information was captured. Third, principals and deputy/assistant principals’ quality of life and psychosocial coping were investigated, by employing four measures, the *Assessment of Quality of Life – 8D* (AQoL-8D: Richardson, et al., 2009; Richardson, Iezzi & Maxwell, 2014), *The Copenhagen PsychoSocial Questionnaire – II* (COPSOQ-II: Pejtersen, et al., 2010), The Positive and Negative Affect Schedule (PANAS: Watson,

Clark, & Tellegen, 1988) and the Dualistic Model of Passion (Vallerand, 2015). Alcohol use was measured using *The Alcohol Use Disorders Identification Test (AUDIT)*: Babour et al., 2001), developed for the World Health Organization. The combination of items from these instruments allows opportunities for comprehensive analysis of variation in both OH&S and wellbeing as a function of school type, sector differences and the personal attributes of the principals themselves.

Finally, it is envisaged that aggregated survey information could be used to seed focus group discussions of school principals and deputy/assistant principals across the country. Focus groups will then develop primary interventions (policy changes) to reduce occupational stress at the source. We also hope to trial proven secondary interventions designed to help individuals better cope with stress, such as those developed for trainee doctors (Hassed, de Lisle, Sullivan, & Pier, 2009) with volunteer principals and deputy/assistant principals, which can be evaluated through the annual survey. This conceptual framework, combining primary and secondary occupational health and injury prevention interventions with evidenced-based assessment has proven robust over hundreds of studies and is considered best practice for improving workplace safety (LaMontagne, et al., 2007).

Innovation

This research project is innovative at both the individual and the organizational level. The project involved the design and implementation of new information access systems and feedback mechanisms (connected to sophisticated automatic analysis tools) for school leaders, affording them instant health and wellbeing checkups tailored to their specific work context, and eventually, instant intervention strategies for dealing with the complexity of their roles. In this way the survey also has the capacity to act as an intervention. Principals who complete the survey received interactive feedback on 43 separate dimensions of occupational health, safety and wellbeing, through a dedicated secure website, affording instant health and wellbeing checkups tailored to their specific work context. The survey provides detailed feedback which might prompt principals' to make changes to their behaviour. The instant benefit to individuals is likely to increase both participation rates and the veracity of the information submitted. The aggregated data will be made available to government, employer bodies, Department of Education and Skills, Management bodies, unions and other interested parties through these annual reports.

Occupational Health, Safety and Wellbeing

The occupational health and safety literature categorizes interventions to improve workplaces into three types: *primary*, *secondary* and *tertiary* (LaMontagne, et al., 2007). *Primary interventions* are organizational, systematic approaches targeted toward prevention of exposure to stressors in the workplace. *Secondary interventions* are designed to help individuals better cope with the stressors they encounter, such as relaxation and mindfulness training. *Tertiary interventions* are designed to lessen the impact of stress related problems post occurrence through treatment or management of symptoms and rehabilitation. Psychosocial work conditions have a significant impact on health outcomes (Head, et al., 2007; Kuper & Marmot, 2003; Marmot,

2006), while physical and psychological wellbeing have a significant effect on job performance (Lyubomirsky, et al., 2005). Price Waterhouse Coopers have recently conducted a Return on Investment (RoI) for addressing mental health in Australian workplaces. They found that the impact of not addressing it amounted to \$10.6 billion annually (see, <http://www.headsup.org.au/creating-a-mentally-healthy-workplace/the-business-case>). However, they also reported that every dollar spent on addressing the issue returned \$2.30. The annual updates of the survey can be used to monitor the RoI and effectiveness of stress reduction interventions.

Research Questions

The specific research questions guiding the initial survey were:

Can recognizable occupational health, safety and wellbeing subgroups of principals and deputy/assistant principals be identified through the survey? These groups may be inferred from a number of criteria including: Sector; Location (Urban, Rural, Isolated, Off-shore Island); Type (State, State Integrated, Private, Maori/Immersion (Kura/wharekura)); Background (Family of Origin, School Education); Person Factors (Gender, Family of Procreation, Social Support, Educational Level); Role Factors (Hours worked, number and type of teachers, students and parents, resources, professional support); Occupational Constraints.

Do(es) any group(s) thrive in the role?

Do(es) any group(s) only just survive in the role?

Do(es) any group(s) show signs of adverse health, safety, and wellbeing outcomes.

Do(es) any factors affect these group(s), and in what ways?

Are changes to educational policy or policy implementation suggested by the results?

Results Overview

The participants in the survey have very demanding jobs. They spend very long hours at work, both during term time and during holiday periods. The number of hours worked appears to have no relation to salary. They appear dedicated to the task of running schools as effectively as possible for its own intrinsic reward. The details of the personal costs of their work, their occupational health, safety and wellbeing are a complex mix of personal and environmental factors: from those who appear to thrive in the job to those who are perhaps just surviving.

For most of the results reported the data is presented firstly in broad outline and then by demographic group (School Type, Geolocation, Gender, Role). Where the diversity of experience is best represented visually graphs have been used.

New Zealand's Primary School Principals: A Snapshot

- In 2016 there were 398 principals (69.3%), 145 deputies (25.3%), and 31 assistants (5.4%) who took part. In 2017 there was a significant increase in participation: N=1217; 738 (71%) Principals; 239 (22.9%) Deputies; 66 (6.3%) Assistants. Overall 37.82% of the nation's primary principals took part, up from ~20% in year one. However, it is difficult to determine what percentage of deputies and assistants participated. It is impossible to calculate the number of assistants/deputies in the country as they are not in all schools, and many large schools have more than one deputy/assistant, so no divisor exists to make the calculation. However, the raw numbers suggest a good proportion of those eligible to take part did. A further 172 (13.7%) did not report their role.
- The gender breakdown for the whole sample is 68.5% female and 31.5% male.
- 69% worked in Urban locations, 29% Rural, 2.3% in Isolated, 0.4% in Off-shore locations, and 6.3% did not report their geolocation
- Average age was 52.16 years, ranging from 29 – 73 years in 2016. In 2017 this dropped to a mean of 51.87 years (range 26-74).
- Of all participants, 11.3% were Māori in 2016 and this rose to 14.3% in 2017. Of this group, in 2016, 29.8% reported that their ethnicity had been a source of relationship tension during the past 12 months and 27.1% reported discrimination at work on the basis of their ethnicity during the same period. In 2017, 27% reported that their ethnicity had been a source of relationship tension during the past 12 months and 25.8% reported discrimination at work on the basis of their ethnicity. This compares with 8.5-8.9% of non-Māori leaders experiencing tension or discrimination due to their ethnicity.
- In 2016, most leaders had been in their current role for 7.29 years and leadership roles for ~14.50 years, following ~10 more years in teaching. In 2017, most leaders had been in their current role for 6.62 years and leadership roles for ~14.11 years, following 9.77 more years in teaching.
- In 2016 approximately 71.7% worked upwards of 51 hours per week during term with 24.9% working upwards of 61 hours per week. During school holidays, ~92.2% work upwards of 10 hours per week, and 52.5% worked >25 hours per week. In 2017, approximately 55.6% worked upwards of 51 hours

per week during term with 10.5% working upwards of 61 hours per week. During school holidays, ~99.8% work upwards of 10 hours per week, and 93.2% worked >25 hours per week.

- Annual salaries range from <\$50,000 - >\$160,000 per annum with a disproportionate number of women in lower paid roles. Mean income in 2016 was ~\$101,000 per annum. In 2017 this rose to ~\$103,000.
- They are generally positive about their job and report higher job satisfaction than the population
- Most maintain a healthy alcohol intake, and do not use it to manage stress.
- Principals experience high levels of emotional demands and emotional labour when compared to the general population. This is correlated with higher levels of burnout and stress symptoms (difficulty sleeping, somatic symptoms).
- The greatest source of stress for all principals and deputies/assistants is the sheer quantity of work, closely followed by a lack of time to focus on teaching and learning.
- The quantitative demands mean Work-family conflict is far too high, at 2.13 times the rate of the general population for both years.
- Burnout: school leaders reported 1.7 times the rate of burnout compared to the general population in both years. Urban leaders report significantly lower rates of burnout. Females report statistically significantly higher scores than males.
- Stress is reported at 1.8 times the general population rate for both years.
- Sleeping troubles is reported at 2.4 times the general population rate for both years. Chronic sleep deprivation predicts a number of long-term health issues, including memory difficulties, obesity and depression.
- Somatic stress was reported at 1.4 times the general population rate in 2016 and 1.3 times in 2017.
- Cognitive stress: school leaders report 1.8 times the rate of Cognitive Stress compared to the general population in 2016 and 1.7 times the rate in 2017.
- Depressive symptoms are reported for school leaders at 1.8 times the rate of the general population in 2016 but fell to 1.4 times in 2017.
- Self-efficacy: school leaders report 1.1 times the level of self-efficacy compared to the general population. Urban leaders report significantly higher levels.
- Principals and deputy/assistant principals experience far higher prevalence of offensive behaviour at work than the general population:
- The trends for the most serious offences are of deep concern.
- Threats of violence were occurring at 3.54 times the general population prevalence in 2016. This has risen to 4.9 times in 2017.
- Physical violence was occurring at 7 times the general population prevalence in 2016 but rose to 10.5 times in 2017.
- Bullying was occurring at 4.2 times the general population prevalence in 2016, but rose to 4.6 times in 2017.
- Despite having many predictive attributes for high scores on health and wellbeing measures, collectively principals and deputy/assistant principals score less than the general population on all positive measures and higher on all negative measures (burnout; stress; sleeping troubles; depressive symptoms; somatic stress symptoms; cognitive stress symptoms). The differences are detailed in the full report.

Recommendations

The recommendations are grouped under thematic headings that emerged from the data analysis. While there are particular challenges to the occupational health, safety and wellbeing of principals and deputy/assistant principals which result from contextual and geographical determinates, the recommendations below, relate to more general occupational conditions found across the country. Recommendations A-C are relatively straightforward and consistent with evidence from other countries showing that professional support for principals provides many benefits that flow through to improved student learning outcomes.

Recommendation D addresses the most complex and challenging findings: maintenance of dignity at work. The results suggest that the need to look for the causes, and reduce the levels, of discrimination, adult-to-adult bullying, threats of, and actual physical violence in schools is required. Reducing levels of offensive behaviour will produce significant educational gains for students. Previous research has shown that the most effective ways to prevent or diminish bullying and violence are through whole school approaches (Antonio & Salzfass, 2007; Dake et al., 2003; de Wet, 2010; Espelage et al., 2013; Twemlow, Fonagy, & Sacco, 2001). This is equally true of discrimination which must be dealt with both at systemic and person-to-person levels.

Recommendation A: Improving Professional Support

Professional support is a strong predictor of coping with the stresses of the role (job demands). No principals and deputy/assistant principals should feel unsupported in the face of growing job complexity, increased scrutiny stress from public accountability and decreased control over the ways in which the accountability targets are met. Yet they report virtually no support from their employer. Those who do feel supported largely find it outside of their professional life.

The evidence from the social capital analysis point to the benefits of professional support for all principals and deputy/assistant principals. Those who receive the least have the greatest challenges to maintain their mental health. The principals and deputy/assistant principals identified as coping least well with their daily tasks had the lowest levels of professional support from colleagues and superiors while those who coped the best reported the highest levels of professional support. This is an area of improvement that would be relatively easy for education systems to improve.

Some suggestions follow:

- Provide opportunities for principals and deputy/assistant principals to engage in professional support networks on a regular basis.
- Networks would need to be determined locally, contextually and formally, and provide opportunities for informal support alongside formal support, outlined in Recommendation B.
- A provision of time for principals and deputy/assistant principals to build and maintain professional support networks would be needed.
- This could be augmented by experienced principal mentors, perhaps retired principals, visiting schools to provide support in the form of professional conversations (“agenda-less” meetings) allowing school principals and

deputy/assistant principals time to discuss the day-to-day functioning of their schools with a sympathetic, experienced colleague.

Recommendation B. Professional Learning to Build Social Capital

Systematic attention needs to be paid to the professional learning of principals and deputy/assistant principals, as targeted professional support. The data reveal a perception disconnection between principals, deputies and assistants with regard to social capital in schools. The three groups cannot be concurrently correct. This may be due to inconsistency in information. Principals are privy to information that the others sometimes are not able to know. However, there is a need for skill development in the emotional and relational aspects of the leadership role outlined in Recommendation A: dealing with the highs and lows associated with the emotional investment of parents in their children. In-service provision of education on the emotional aspects of teaching, learning, organizational function, emotional labour, dealing with difficulties and conflicts in the workplace, employee assistance programs, debriefing self and others would be a great benefit.

Recommendation C. Review the work practices of Principals and deputy/assistant principals in light of the Job Demands-Resources Model of organizational health

Stress and psychological risk at work can be conceptualised through the balance of job *demands* (e.g., workload, time pressures, physical environment, emotional labour) and job *resources* (e.g., feedback, rewards, control, job security, support). The Job Demands-Resources model (Demerouti, Bakker, Nachreiner, & Schaufeli, 2001) along with the Conservation of Resources theory (Hobfoll, 1989 (Halbesleben, 2006; Hobfoll & Freedy, 1993) posit that work demands and available resources need to be in balance for good psychological health at work. High job demands lead to exhaustion while low job resources lead to disengagement, both symptoms of job burnout. However, high job resources buffer job demands, reducing their negative impact on individuals. Principals and deputies/assistants report very high demands, out of balance with available resources to buffer the demands.

The US Department of Health and Human Services found the costs of working too much include:

- Working >10 hours a day led to a 60% increased risk of cardiovascular disease
- 10% of those working 50–60 hours a week report relationship problems, and 30% for those working more than 60 hours.
- Working >40 hours per week is associated with
 - increased alcohol and tobacco consumption
 - unhealthy weight gain in men
 - depression in women
- Little productive work occurs after 50 hours per week.
- In white collar jobs, productivity declines by as much as 25% when workers put in 60 hours or more.

- Working >60 hours per week led to 23% higher injury hazard rate (Caruso, Hitchcock, Dick, Russo, & Schmit, 2004).

With 75% of New Zealand school leaders working >50 hours per week and 25% working >60 hours, too many participants are working too many hours. And it is also taking a toll on their greatest support group; their families. When job demands are this high, they need to be balanced with significant resources to buffer the demands. Therefore, all stakeholders need to be consulted about ways in which this can be achieved. Obvious, but unlikely to be funded, examples of reducing job demands would be job sharing. However, working groups tasked with addressing the issues of job demands may identify lower cost and equally effective solutions to job sharing. What is clear is that this level of demand is dangerous to the long-term health and wellbeing of principals who find consistently that the resources available to them are not concomitant with the demands. The cost to the nation of the mental health challenges produced by this kind of work culture is high. Price Waterhouse Coopers have recently conducted a Return on Investment for addressing mental health in the Australian context. They found that the impact of not addressing mental health issues amounted to \$10.6 billion annually (see, <http://www.headsup.org.au/creating-a-mentally-healthy-workplace/the-business-case>). However, they also reported that every dollar spent on addressing the issue returned \$2.30. Addressing the problem in schools is also a good investment for the future of the nation, as it will save money in the long term.

Recommendation D: Address Discrimination, Bullying and Violence

There is an urgent need to investigate four types of offensive behavior identified as consistently occurring in schools:

- Discrimination based on ethnicity
- adult-adult bullying;
- threats of violence; and,
- actual violence.

The investigation should include teachers, parents and students to determine:

- differences in the occupational risk of the different types of principals and deputy/assistant principals, to identify who are most at risk, why, and what can be done to protect them.
- whether/how the risk also extends to teachers and students.
- Governance structures, information flow between adults, and external influences on school functioning.

The consequences of offensive behaviour in schools are likely to become costly for employers, through time lost to ill health, OH&S claims against employers' responsibility for not providing a safe working environment and reduced functioning while at work as a result of the high levels of offensive behavior in the workplace.

Detailed Results

Ethical Considerations

New Zealand has 1,951 primary schools and therefore the same number of principals. It is more difficult to ascertain the number of deputy/assistant/ principals across the country. Gathering a comprehensive set of data for each individual, including contact information allowing for annual follow-up participation, confronted the researchers with many ethical issues that needed to be dealt with before the survey could commence. Our main concern was protection of identity: that no participant could ever be identified from any of his or her responses to the survey in any year it was taken. While this is a relatively simple procedure for the aggregated results, a significant output for the survey annually is the production of a detailed individual report for each participant. The aim of this report is to allow each individual to track his or her own occupational health, safety and wellbeing, both over time, and compared to other principals and deputy/assistant principals. As researchers, we are interested in analyzing aggregated results, but wanted the survey to be as useful a tool as possible to the individual participants.

A number of protocols were developed to provide arm's length distance between the researchers and participants. Individual, detailed reports to each participant were constructed automatically, by applying algorithms to each individual's responses. This provided total scores on each subscale of the survey. This, in turn ensured that the individual reports were not seen by any of the researchers. The individual reports were provided to each participant via a secure, password-protected website. The researchers used de-identified data sets to conduct specific analyses on the aggregated data.

Response Rates

For the initial survey invitations and reminder emails were sent out by NZEI Te Riu Roa to their members. This kept the researchers at arms-length from the participants. The researchers therefore do not know an essential element for determining the actual response rate to the survey: how many principals and deputy/assistant/assistant principals actually received an invitation to participate. This makes it impossible to determine the actual response rate as there is no divisor for the calculation. In total, 728 people registered to take the survey and 561 completed it (77% response rate) in 2016. In 2016 there were 398 principals (69.3%), 145 deputies (25.3%), and 31 assistants (5.4%) who took part. In 2017, there was a significant increase in participation: N=1217; 738 (71%) Principals; 239 (22.9%) Deputies; 66 (6.3%) Assistants. Overall 37.82% of the nation's primary principals took part, up from ~20% in year one. However, it is difficult to determine what percentage of deputies and assistants participated. It is impossible to calculate the number of assistants/deputies in the country as they are not in all schools, and many large schools have more than one deputy/assistant, so no divisor exists to make the calculation. However, the raw numbers suggest a good proportion of those eligible to take part did. A further 172 (13.7%) did not report their role.

Representativeness of the data

The data reported is a good representative sample of principals and deputy/assistant principals from across the country, with the exception of composite schools. If New Zealand follows the trend in other countries the representativeness will improve with every wave of data collection.

Reliability

The reliability of each of the scales and subscales used were checked for internal consistency of responses. All scales were robust. The detailed reports are available at www.principalhealth.org/au/reports.

Participants

Gender

The gender breakdown for the whole sample is 68.5% female and 31.5% male.

Age

Table 1. Participant minimum, maximum and mean age

	Age			
	Mean	Youngest	Oldest	SD
2016	52.17	29	73	8.53
2017	51.87	26	74	8.70

Māori Origin

Of all participants, 11.3% were Māori in 2016 and this rose to 14.3% in 2017. Of this group, in 2016, 29.8% reported that their ethnicity had been a source of relationship tension during the past 12 months and 27.1% reported discrimination at work on the basis of their ethnicity during the same period. In 2017, 27% reported that their ethnicity had been a source of relationship tension during the past 12 months and 25.8% reported discrimination at work on the basis of their ethnicity. This compares with 8.5-8.9% of non-Māori leaders experiencing tension or discrimination due to their ethnicity. The breakdown of perpetrators is as follows

Table 2. Percentage of perceived discrimination by role. Participants can report multiple sources of discrimination.

Perpetrator	2016	2017
Colleagues	18.7%	14.6%
Manager/Superior	8.0%	7.9%
Subordinate	2.7%	10.1%
Parents	14.7%	15.7%
Students	0%	3.4%

The problem is equally distributed across the country with no geolocation, role, gender, or decile group differences in prevalence for either relationship tension or discrimination. School type however did show significant differences with composite schools reporting higher levels than all other school types for both relationship tension and discrimination based on ethnicity.

School Demographics

Table 3. Māori electorate (percentage)

	2016	2017
Māori electorate	6	7
Unknown	51.4	55.4
Hauraki-Waikato	3.9	4.9
Ikaroa-Rawhiti	5.7	4.4
Not Applicable	0.1	0.2
Tamaki Makaurau	5.3	5.3
Te Tai Hauauru	8.0	7.8
Te Tai Tokerau	6.5	6.5
Te Tai Tonga	16.5	12.4
Waiariki	2.6	3.0
Total	100	100

Table 4. Ugrade and enrolment numbers (percentage)

Ugrade	2016	2017
1	10	10
2	10.7	8.4
3	13.9	12.4
4	28.5	27.1
5	24.4	24.5
6	7.7	11.0
7	3.2	4.2
8	1	1.4
9	0.3	0
10-16	0.6	1.0
Total	627	100

Table 5. School decile

School Decile	2016	2017
0	1.3	0.4
1	8.7	9.4
2	9.0	8.1
3	9.4	8.5
4	10.9	10.1
5	9.4	9.2
6	6.7	9
7	10.2	10.7
8	11	9.8
9	10.7	11.2
10	12.7	13.6
Total	100	100

Table 6. School type and funding category (percentage)

School Type	2016	2017
Full primary	42.9	44.3
Contributing primary	44.3	42.1
Composite/area school	2.1	0.7
Special school	2.9	2.1
Intermediate/middle school	7.8	2.8
Total	100	100

Targeted Funding Category (%)		
Category	2016	2017
1	61.1	50
2	16.7	19.2
3	9.3	15.4
4	5.6	7.7
5	5.6	7.7
6	1.9	0
Total	100	100

Table 7. School language type

School language type	2016	2017
English medium	90.9	88.6
Full Māori immersion	1.1	0.9
English medium with a Māori immersion unit or class(es)	7.7	9.8
English medium with a language unit or class(es) other than Māori	0.3	0.7
Total	100	100

Communities of Learning**Table 8. Descriptive statistics for Communities of Learning**

Communities of Learning	Percentage	
Willingness to join/form a Community of Learning	2016	2017
Yes	53.9	70.2
Undecided	31.8	19.9
Definitely not	14.3	9.9
What stage of the process best describes your position		
Expression of Interest	19.2	8
Developing an achievement challenge	36.8	8.5
Achievement challenge approved	3.3	12.3
Signed memorandum of agreement	3.3	19.1
Appointing a Principal/Leadership role(s) and expertise	10.5	27.9
Appointing across-schools teachers	10.8	24.1
Initial set up processes completed	16.2	8
Time involved in the CoL process		
0-3 months	11.4	8
3-6 months	17.1	8.5
6-9 months	17.4	12.3
9-12 months	25.4	19.1
2-18 months	18	27.9
18 months +	10.8	24.1
COL Leadership Role		
Yes	8.7	14.8
No	91.3	85.2

Table 9. Feedback regarding Communities of Learning

Communities of Learning Feedback	2016		2017	
	Mean	SD	Mean	SD
The process of forming a CoL has been straightforward	2.71	1.98	2.88	1.63
I have found the process of working in a CoL to be complicated	3.68	1.74	3.83	1.94
I am frequently frustrated by the process of working in a CoL	5.32	1.85	5.53	1.40
It has been easy to develop collaborative working relationships with staff from other schools	1.29	0.60	1.29	1.08
Developing collaborative working relationships with other schools has been challenging	4.82	2.26	5.09	1.78
There have been obstacles and issues to overcome in order to work effectively with other schools	3.54	2.20	3.48	1.81
The process of forming a CoL has created additional workload	4.61	1.85	4.53	1.61
My workload has reduced as a result of participating in a CoL	2.32	1.57	2.12	1.58
I need to work additional hours in order to complete the work involved in participating in a CoL	5.21	1.66	4.9	1.55
The process of forming/participating in a CoL is stressful	3.18	2.07	3.16	1.98
I have found being part of a CoL a good source of support	4.61	1.83	4.1	1.77
I am more relaxed as a result of joining a CoL	4.43	2.13	4.14	2.28
Being part of a CoL will be beneficial for my school	5.46	1.58	5.26	1.63
Students at my school are already benefiting from our involvement in a CoL	3.43	1.91	3	1.77
As a community we were easily able to identify shared achievement challenges to work on	3.36	1.70	3.28	1.75
The shared achievement challenges we identified were supported by the Minister	3.71	1.94	4.67	1.78
I think that being part of a CoL will benefit my professional growth	2.64	1.73	2.69	1.74
I think I have more to offer than to gain from being part of a CoL	2.71	1.98	2.88	1.63
I am seeing results from being part of a CoL	3.68	1.74	3.83	1.94
I expect that it will take some time before there are positive outcomes for my school as a result of being part of a CoL	5.32	1.85	5.53	1.40
I think my school will provide more resources and expertise to our CoL, than it will gain from membership of it	1.29	0.60	1.29	1.08

Roles and Responsibilities

The following tables and figures report the distribution of roles and responsibilities for 2011-2015

Table 10. Leadership position held by year and gender reported by percentage

	%	Principal	Deputy	Assistant
2016	Female	61.5	31.5	7.1
	Male	87.0	11.3	1.7
2017	Female	64.2	27.7	8.1
	Male	84.5	12.8	2.7

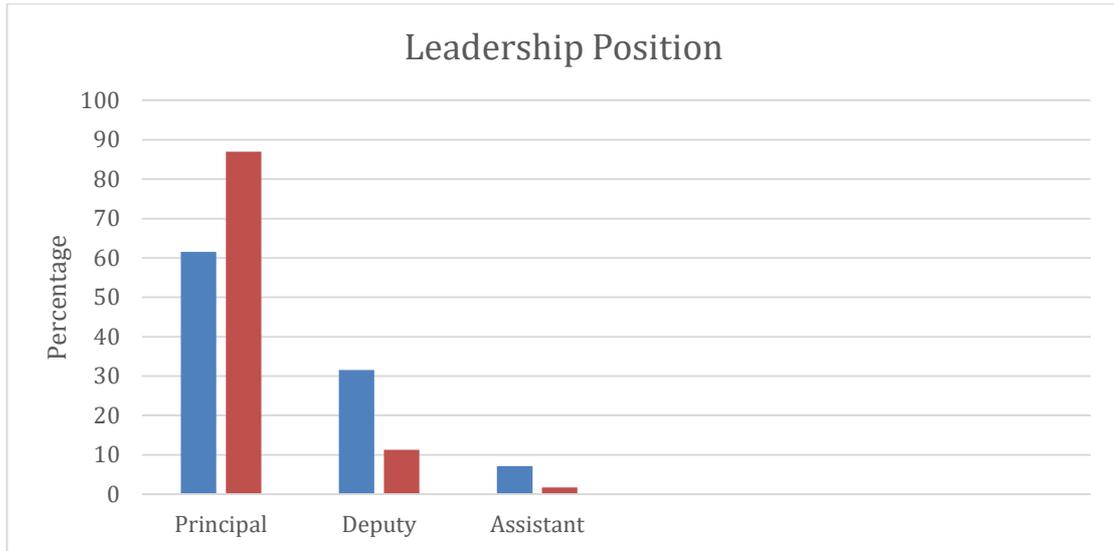


Figure 1. Leadership position held by gender

Time Fraction

Table 11. Time fraction spent on leadership duties while at work by Role

Time Fraction Spent on Leadership Duties (%)				
Role	Time Fraction	2016	2017	
Principal	0.2	2.7	2.1	
	0.4	6.4	6.0	
	0.6	8.3	5.7	
	0.8	6.7	7.3	
	F/T	75.3	79.0	
Deputy	0.2	22.6	12.7	
	0.4	11.2	7.8	
	0.6	6.4	7.8	
	0.8	9.4	11.8	
	F/T	43.1	59.8	
Assistant	0.2	56.4	24.1	
	0.4	16.7	17.2	
	0.6	16.7	6.9	
	0.8	0	6.9	
	F/T	16.7	44.8	

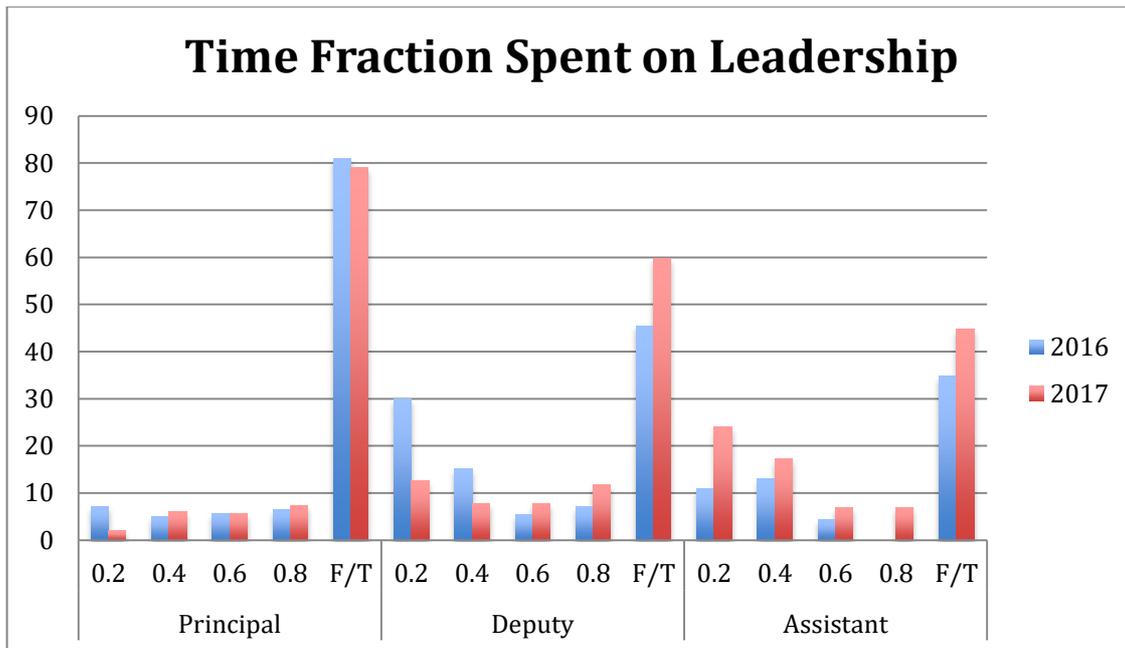


Figure 2. Time fraction spent on leadership duties while at work

Level of Experience

Table 12. Minimum, maximum and mean number of years spent in participants' current role

Year	Min	Max	Mean	SD
2016	0	39	7.29	6.33
2017	0	40	6.62	6.00

Table 13. Minimum, maximum and mean number of years spent in leadership roles

Year	Years in Leadership Roles			
	Min	Max	Mean	SD
2016	0	45	14.46	8.78
2017	0	50	14.11	8.83

Table 14. Minimum, maximum and mean number of years spent in teaching prior to leadership

Year	Years Teaching Prior to Leadership			
	Min	Max	Mean	SD
2016	0	35	9.97	5.93
2017	0	38	9.77	6.02

Location

Table 15. Location of participants' current school

Location (%)	2016	2017
	Urban	66.6
Rural	31.4	25.9
Isolated	1.7	2.6
Off-Shore	0.3	0.5

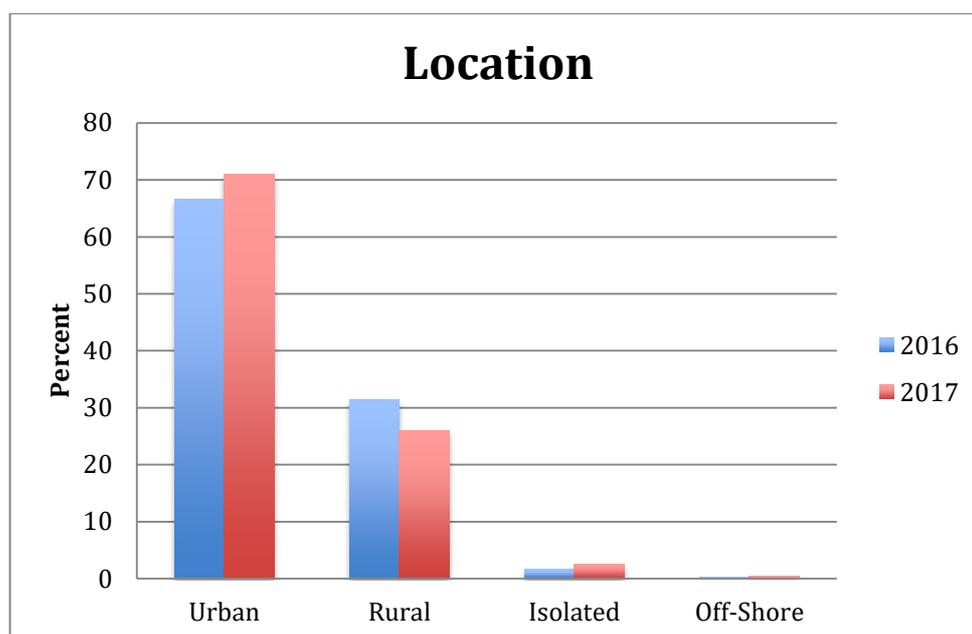


Figure 3. Location of participants' current school

Workload

During school terms, the average hours worked each week by school leaders in 2016 was 51-55. In 2017 this rose to 53-58 hours per week. During holiday periods school leaders average hours at work remained constant at 25-30 h/p/w. However, for particular individuals the numbers varied significantly during the 2-year period.

Hours at Work

Table 16. Average hours worked per week during school terms
Average Hours Worked Per Week: Term (%)

	2016	2017
<10	1.7	0.4
10 - 24h	7.4	0.1
25 - 30	2.9	0.1
31 - 35	1.4	0.5
36 - 40	0.5	4
41 - 45	3.1	15.2
46 - 50	11.3	24.6
51 - 55	18.8	32.1
56 - 60	28.1	13
61 - 65	13.2	6.3
66 - 70	7.7	3.8
>70	3.9	0.4

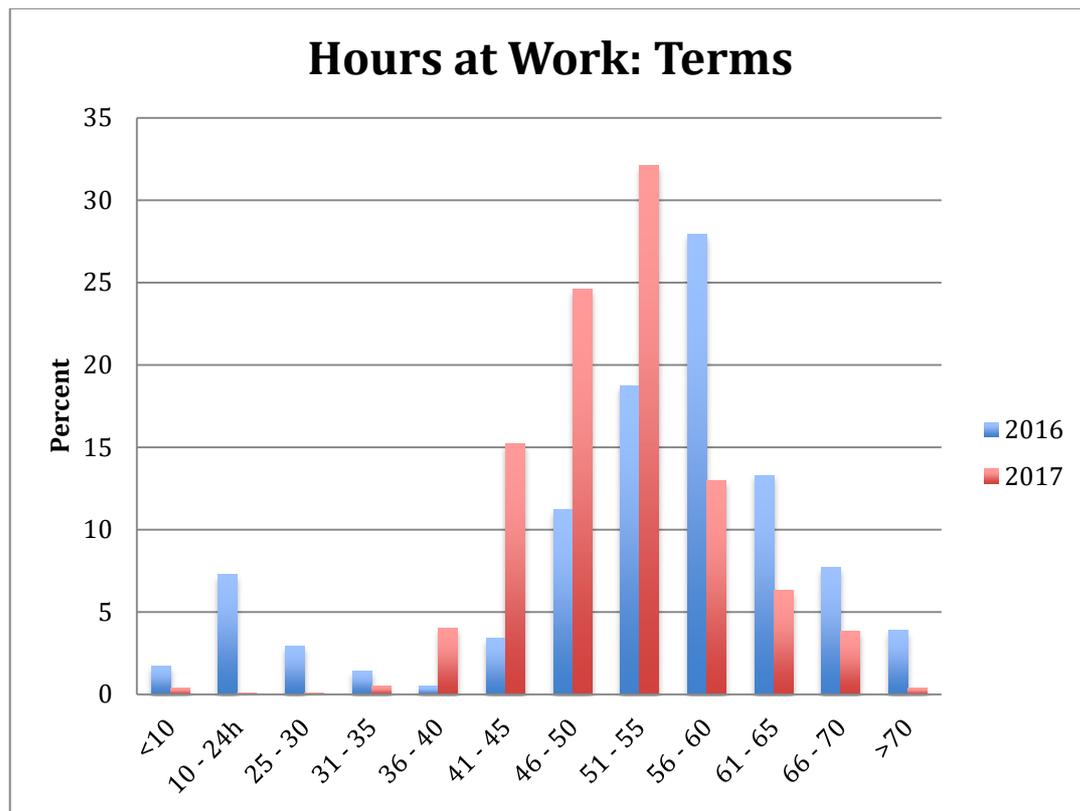


Figure 4. Average hours worked per week during school terms

Table 17. Average hours worked per week during gazetted school holidays

Average Hours Worked Per Week: Holidays (%)		
	2016	2017
<10	7.8	0.2
10 - 24h	39.7	6.4
25 - 30	22.5	40.1
31 - 35	8.5	22.9
36 - 40	11.6	10.9
41 - 45	3.7	10.9
46 - 50	2.7	3.1
51 - 55	1	2.8
56 - 60	1.7	0.8
61 - 65	0.3	0.9
66 - 70	0.2	0.6
>70	0.2	0.4

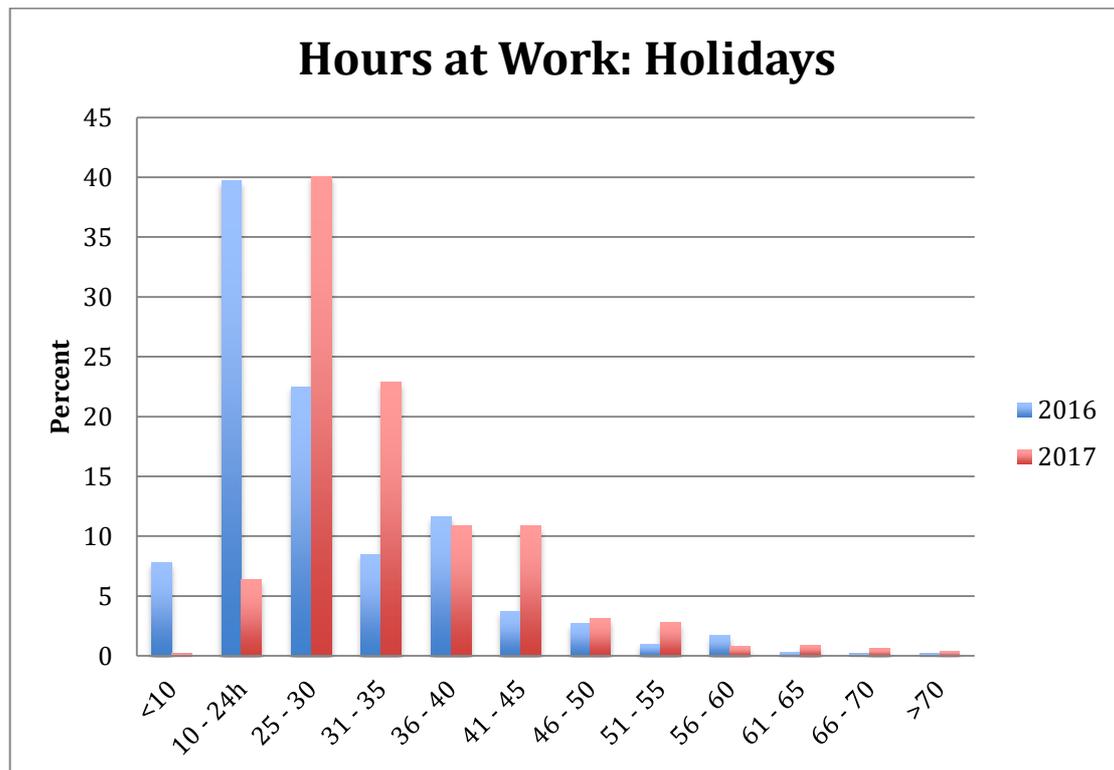


Figure 5. Average hours worked per week during gazetted school holidays

Role

2016: A one-way between groups analysis of variance (ANOVA) was conducted to explore the differences in reported average hours at work by role. Principals’, deputy’s and assistants’ reported work hours during terms were statistically significantly different $F(2,113) = 77.602, p < .001$. Despite reaching statistical

significance, the actual difference in mean scores was very small. The effect size, calculated using Cohen’s *d* (Cohen, 1988), was .21. Post hoc comparisons using the Tukey HSD test indicated that the mean score for principals ($M = 8.84$, $SD = 1.72$; ~53 hours per week) was significantly higher than deputies ($M = 6.46$, $SD = 3.17$; ~47 hours per week), and assistants ($M = 5.65$, $SD = 3.10$; ~43 hours per week). Deputies and assistants scores did not significantly differ. This pattern was repeated in 2017.

Table 18. Comparison of average hours worked per week during 2016 school terms by role
Average Hours Worked Per Week: Term (%)

	2016			2017		
	Prin	Dep	Assist	Prin	Dep	Assist
<10	0	6	2.8	0.2	0	0
10 - 24h	1.5	18.7	25	0	1.2	0
25 - 30	1.5	5.2	5.6	0	0	2
31 - 35	1	1.5	5.6	0.2	0	0
36 - 40	0.5	0.7	0	0.2	1.2	0
41 - 45	1.7	5.2	11.1	3.1	5.2	10.2
46 - 50	9.8	16.4	11.1	13.2	20.2	22.4
51 - 55	21.3	14.9	8.3	24.8	24.3	20.4
56 - 60	32.8	16.4	22.2	33.2	30.6	26.5
61 - 65	15.9	6.7	8.3	13.7	10.4	14.3
66 - 70	9.1	6	0	6.9	4.6	4.1
>70	4.9	2.2	0	4.5	2.3	0

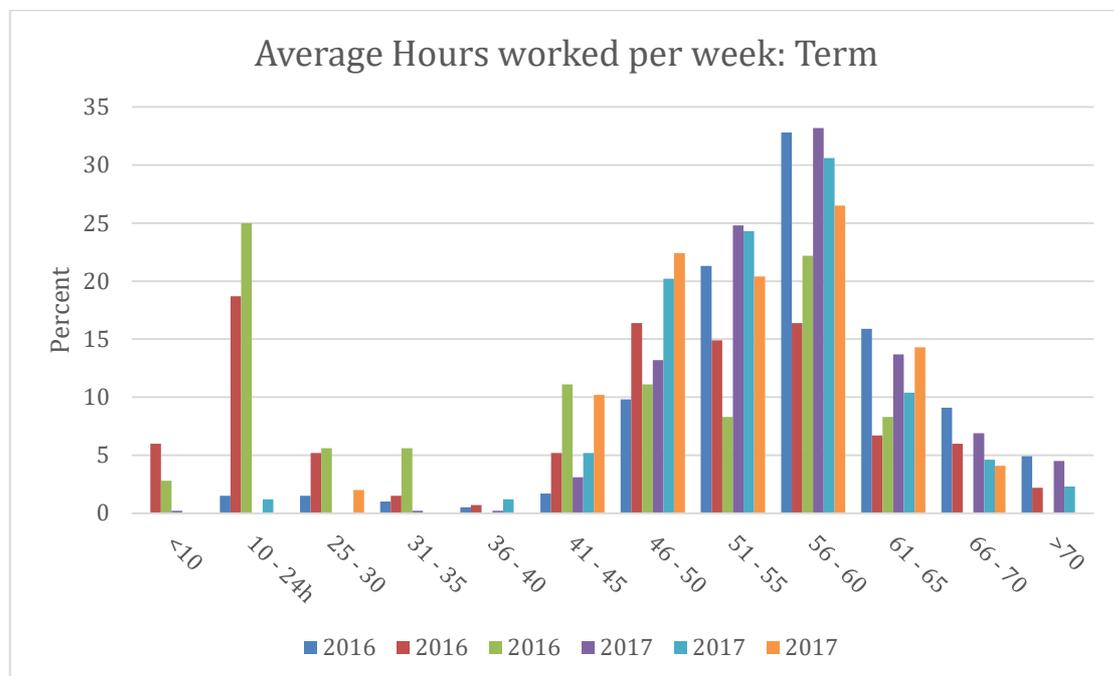


Figure 6. Comparison of average hours worked in 2016 per week during school terms by role

Table 19. Comparison of average hours worked in per week during school holidays by role

	Average Hours Worked Per Week: Holiday (%)					
	2016			2017		
	Prin	Dep	Assist	Prin	Dep	Assist
<10	4.9	0	25	5.5	8.1	12.2
10 - 24	39.2	11.2	30.6	38.1	44.5	46.9
25 - 30	23	44	19.4	24	20.8	18.4
31 - 35	9.8	21.6	5.6	11.6	11.6	14.3
36 - 40	12.3	5.2	8.3	11	9.2	0
41 - 45	4.4	11.2	5.6	3.5	1.7	2
46 - 50	3.2	1.5	2.8	3.1	1.7	4.1
51 - 55	1	1.5	0	1	0.6	0
56 - 60	1.7	1.5	2.8	1	1.2	0
61 - 65	0.2	1.5	3.2	0	0	0
66 - 70	0	0.7	3.2	0.8	0	0
>70	0.2	0	0	0.5	0	0

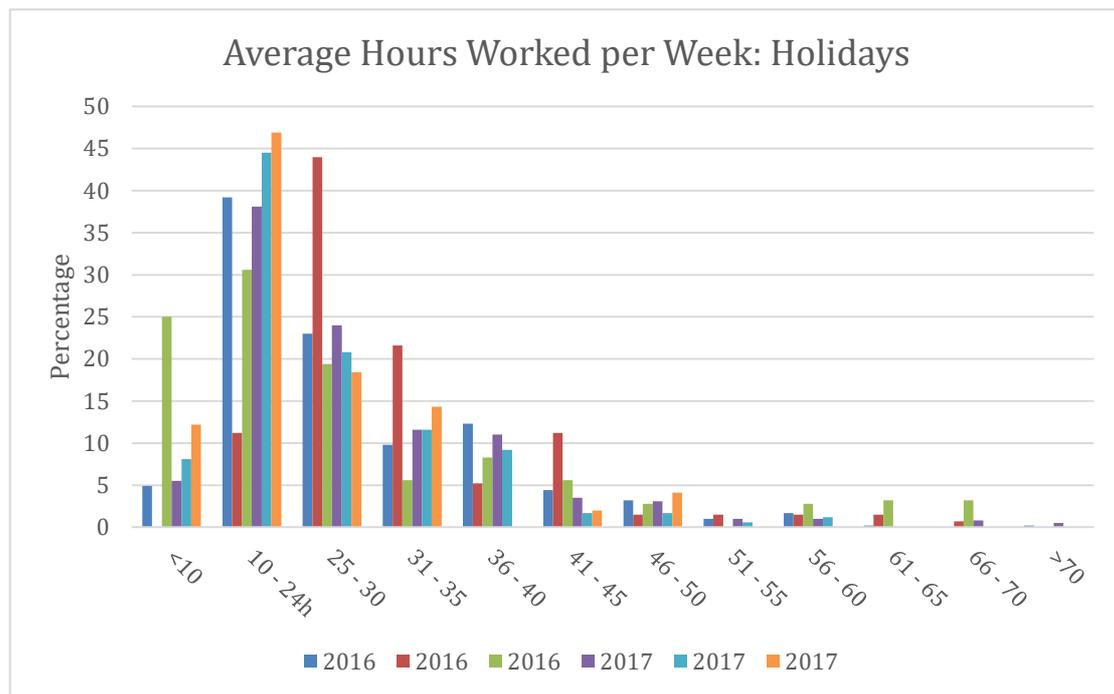


Figure 7. Comparison of average hours worked in per week during school holidays by role

Location & School Type

There were no significant differences by school type or location¹.

Table 20. Comparison of average hours worked per week in 2016 during school terms by School Type

	Average Hours worked per week: Term									
	Full Prim		Contributing		Comp/Area		Special		Intermediate	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
<10	1.6	0	2.4	0	0	0	0	0	0	0
10 - 24	10.3	0	6.3	0	9.1	5	0	0	0	0
25 - 30	4	0.3	2.7	0	0	0	0	0	0	0
31 - 35	1.6	0.3	0.8	0	0	0	0	0	4.1	0
36 - 40	0.4	0.3	0.8	0.8	0	0	0	0	0	0
41 - 45	3.2	3	3.5	5.6	0	5	7.1	10	0	0
46 - 50	9.1	13.8	11.8	16	9.1	20	14.3	25	18.4	11.7
51 - 55	19.4	26.8	18	21.3	9.1	5	14.3	15	24.5	38.3
56 - 60	24.5	29.5	30.6	37	27.3	35	28.6	15	32.7	31.7
61 - 65	13.8	15.9	12.5	10.1	9.1	5	21.4	30	12.2	8.3
66 - 70	9.9	7.3	4.7	4.8	27.3	15	14.3	5	6.1	6.7
>70	2.4	3	5.9	4.5	9.1	10	0	0	2	3.3

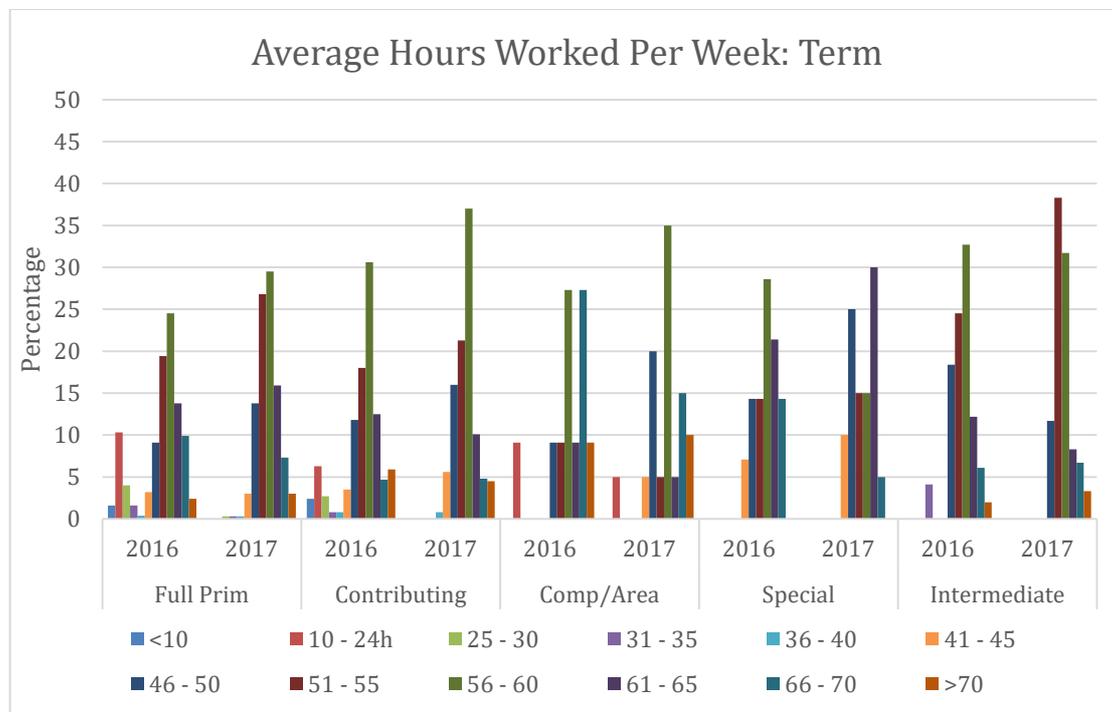


Figure 8. Comparison of average hours worked per week in 2015 during school terms by School Type

¹ * In all analysis of location, Isolated and Off-shore participants are combined as there were not enough participants in the sample to report separately and maintain confidentiality.

Table 21. Comparison of average hours worked per week in 2016 during school holidays by School Type

	Average Hours worked per week: Holiday									
	Full Prim		Contributing		Comp/Area		Special		Intermediate	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
<10	8.7	5.9	2.4	7	9.1	5	7.1	5	4.1	3.3
10 - 24	36	38.4	6.3	41.2	18.2	40	35.7	40	42.9	43.3
25 - 30	26.5	23.5	2.7	24.9	27.3	15	14.3	25	18.4	11.7
31 - 35	8.3	8.6	0.8	12.3	9.1	10	7.1	15	12.2	16.7
36 - 40	11.1	13	0.8	7.8	18.2	10	28.6	5	16.3	16.7
41 - 45	2.8	3.2	3.5	3.4	9.1	10	0	0	6.1	1.7
46 - 50	2.8	3.5	11.8	1.4	0	10	7.1	10	0	0
51 - 55	1.6	1.1	18	0.3	0	0	0	0	0	3.3
56 - 60	1.2	1.4	30.6	0.3	9.1	0	0	0	0	3.3
61 - 65	0.4	0.5	12.5	0.8	0	0	0	0	0	0
66 - 70	0.4	0	4.7	0	0	0	0	0	0	0
>70	0.4	0.5	5.9	0.3	0	0	0	0	0	0

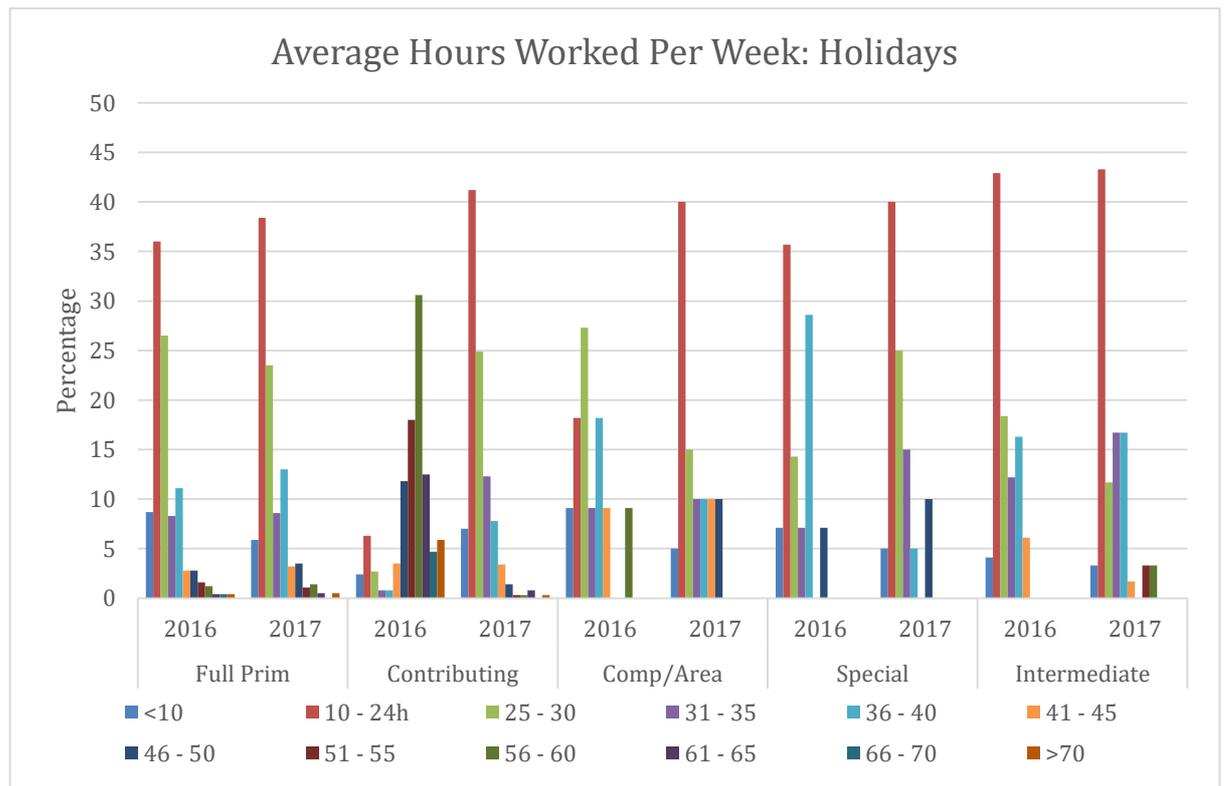


Figure 9. Comparison of average hours worked per week in 2015 during school holidays by School Type

Table 22. Comparison of average hours worked in per week during school terms by school location

	Average Hours worked per week: Term					
	Urban		Rural		Isolated/Off Shore	
	2016	2017	2016	2017	2016	2017
<10	1.6	0	2.1	0	0	0
10 - 24	6.2	0.3	9.6	0	9.1	0
25 - 30	2.3	0	4.3	0.4	0	0
31 - 35	1.3	0	1.1	0.4	9.1	0
36 - 40	0.3	0.7	1.1	0	0	0
41 - 45	3.1	4.4	3.2	2.8	0	9.5
46 - 50	12.2	15.3	9.6	14.6	9.1	19
51 - 55	18.9	23.7	19.3	27.9	9.1	4.8
56 - 60	29.8	33.1	24.1	30.8	36.4	28.6
61 - 65	13.5	13.2	12.8	13	9.1	9.5
66 - 70	7.3	6.1	8.6	6.1	9.1	9.5
>70	3.6	3.1	4.3	4	9.1	19

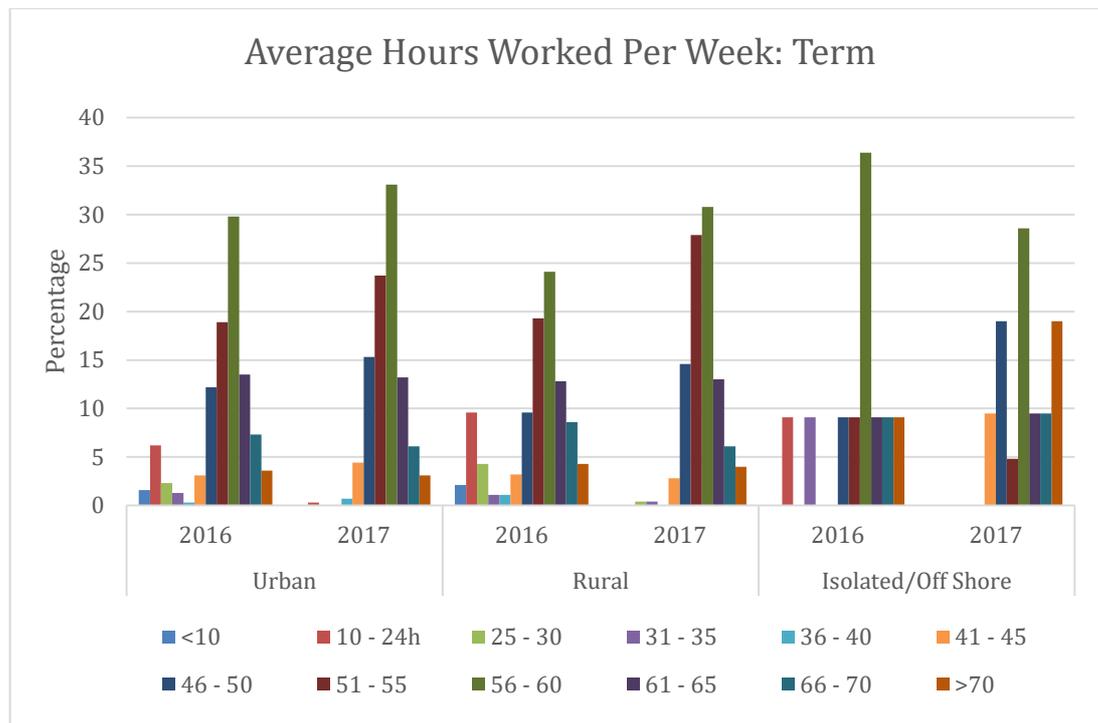


Figure 10. Comparison of average hours worked per week in 2016 during school terms by school location

Table 23. Comparison of average hours worked in per week during school holidays by school location

	Average Hours worked per week: Holidays					
	Urban		Rural		Isolated/Off Shore	
	2016	2017	2016	2017	2016	2017
<10	7.5	5.9	9.1	6.1	0	14.3
10 - 24	40.9	40.9	35.8	39.7	63.6	28.6
25 - 30	20.5	21.4	25.7	26.3	27.3	23.8
31 - 35	9.1	11.7	8	8.9	0	9.5
36 - 40	12.2	10.8	10.7	11.3	9.1	9.5
41 - 45	4.1	2.6	3.2	3.6	0	9.5
46 - 50	2.6	3.5	3.2	1.2	0	4.8
51 - 55	0.8	0.9	1.6	0.8	0	0
56 - 60	1.8	1	1.6	0.8	0	0
61 - 65	0.3	0.5	0.5	0	0	0
66 - 70	0	0	0.5	0.8	0	0
>70	0.3	0.3	0	0.4	0	0

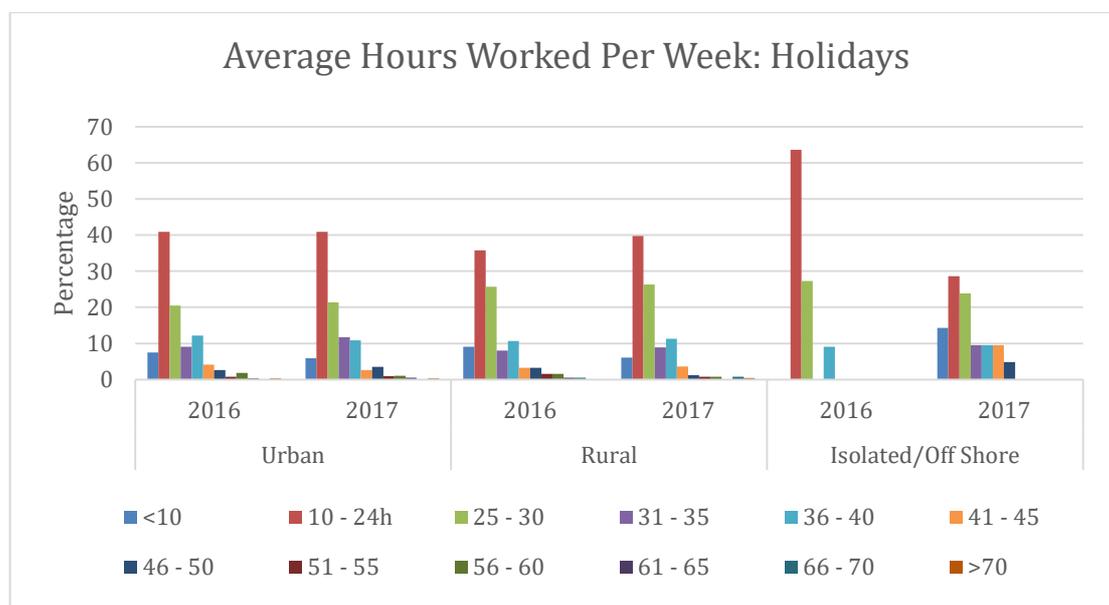


Figure 11. Comparison of average hours worked in per week during school holidays by school location

Gender

2016: Reported average work hours during terms were statistically significantly different by gender $F(1,585) = 4.377, p = .037$. Despite reaching statistical significance, the actual difference in mean scores was very small. The effect size, calculated using Cohen's d , was .01. Post hoc comparisons using the Tukey HSD test indicated that the mean score for males ($M = 8.32, SD = 2.09$; ~52 hours per week) was significantly higher than females ($M = 7.83, SD = 2.81$; ~49 hours per week). In 2017 the differences were statistically significant $F(1,845) = 2.069, p = .039$, again with small effect size. However, males ($M = 8.49, SD = 1.36$; ~53 hours per week) were significantly lower than females ($M = 8.71, SD = 1.50$; ~54 hours per week).

Table 24. Comparison of average hours worked in per week during school terms by Gender.

	Average Hours worked per week: Holidays			
	Male		Female	
	2016	2017	2016	2017
<10	0	0	2.5	0
10 - 24	5	0.4	8.4	0.3
25 - 30	1.7	0	3.5	0.2
31 - 35	1.7	0.4	1.2	0
36 - 40	0.6	0.4	0.5	0.5
41 - 45	2.2	4.5	3.5	3.8
46 - 50	11.7	16	11.1	14.9
51 - 55	22.2	24.9	17.3	24.4
56 - 60	31.1	36.1	26.7	30.3
61 - 65	16.1	12.3	11.9	13.3
66 - 70	4.4	2.2	9.2	8.1
>70	3.3	3	4.2	4.2

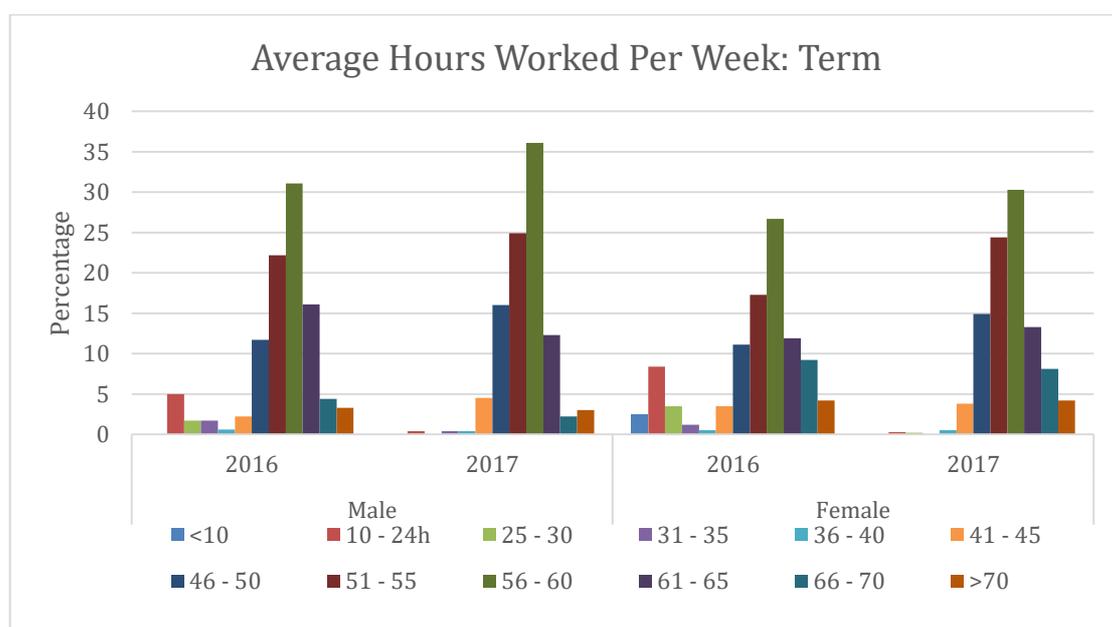


Figure 12. Comparison of average hours worked in per week during school terms by Gender.

Table 25. Comparison of average hours worked in per week during school holidays by Gender.

	Average Hours worked per week:			
	Holidays			
	Male		Female	
	2016	2017	2016	2017
<10	7.8	7.4	7.9	5.9
10 - 24	46.1	49.1	36.9	36
25 - 30	18.9	18.2	23.8	25.1
31 - 35	8.3	11.5	8.7	10.6
36 - 40	10.6	8.6	12.1	11.9
41 - 45	6.1	1.5	2.7	3.8
46 - 50	0	1.5	4	3.5
51 - 55	0.6	0.7	1.2	0.9
56 - 60	1.1	0.7	2	1
61 - 65	0.6	0.4	0.2	0
66 - 70	0	0	0.2	0.7
>70	0	0.4	0.2	0.3

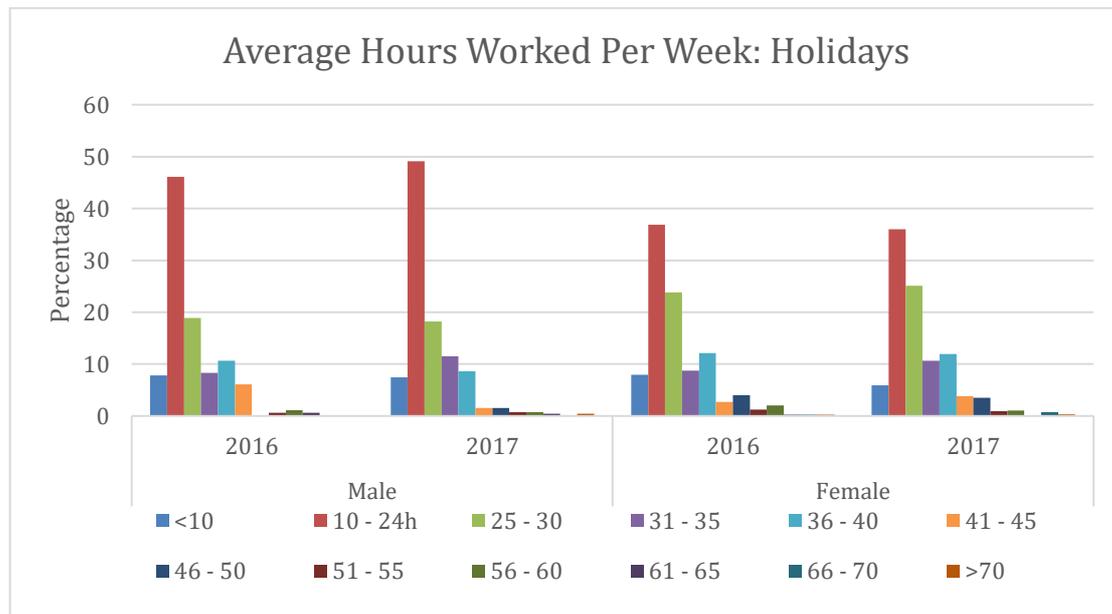


Figure 13. Comparison of average hours worked in per week during school holidays by Gender.

Decile / Ugrade

There were no significant differences between any participants’ hours at work during term by school decile or Ugrade and no differences between any groups during school holiday periods.

Income

Annual salaries range from <\$50,000 - >\$160,000 per annum with a disproportionate number of women in lower paid roles. Mean income in 2016 was ~\$101,000 per annum. In 2017 this rose to ~\$103,000.

Table 26. Income per annum for combined participants

Income per annum (%)	2016	2017
	<\$50,000	0.2
\$50,000 - \$90,000	30.4	24.1
\$90,000 - \$100,000	16.8	18
\$101,000 - \$110,000	14.1	15.1
\$111,000 - \$120,000	11.7	11.6
\$121,000 - \$130,000	13.4	14.5
\$131,000 - \$140,000	8.4	9.2
\$141,000 - \$150,000	3.8	4.2
\$151,000 - \$160,000	0.9	1
>\$160,000	0.5	1.7

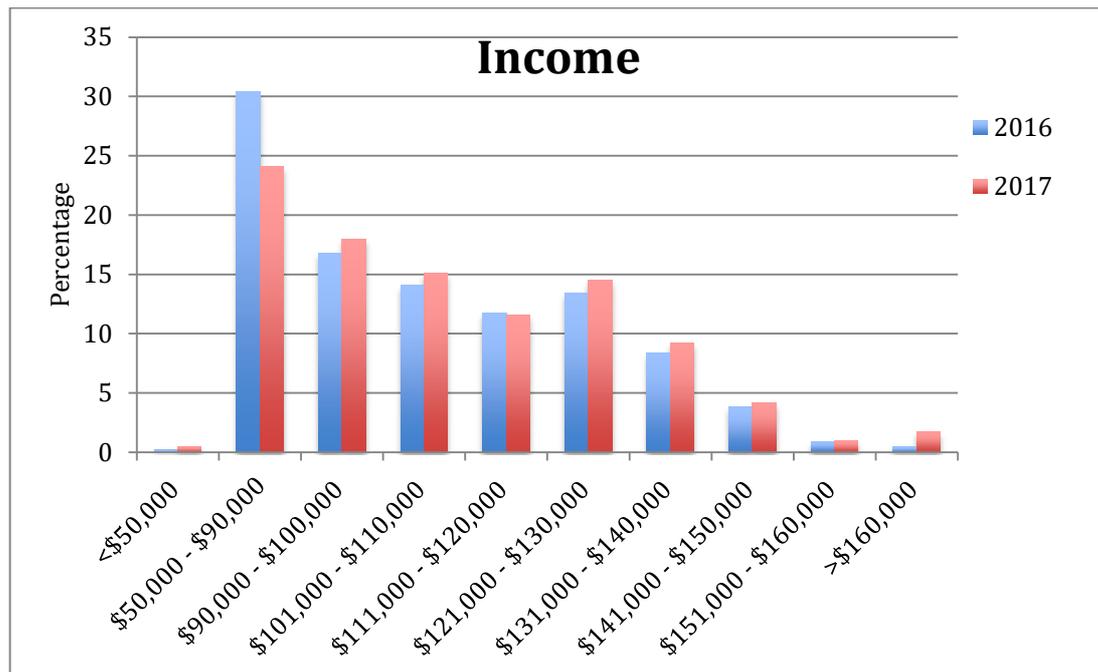


Figure 14. Income per annum for combined participants

Gender

2016: Reported average income was statistically significantly different by gender $F(1,581) = 2.202, p < .001$. The effect size of the difference, calculated using Cohen’s d , was .55 (medium). Post hoc comparisons using the Tukey HSD test indicated that the mean score for males ($M = 4.81, SD = 1.99; \sim \$108,000$) was significantly higher than females ($M = 3.75, SD = 1.84; \$98,000$).

In 2017 reported average income was also statistically significantly different by gender $F(1,865) = 2.924, p < .001$. The effect size of the difference, calculated using Cohen's d , was .58 (medium). Post hoc comparisons using the Tukey HSD test indicated that the mean score for males ($M = 5.12, SD = 2.07$; ~\$115,000) was significantly higher than females ($M = 3.96, SD = 1.96$; \$107,000).

Table 27. Comparison of income per annum in 2016 by Gender

Income per annum	2016		2017	
	Female	Male	Female	Male
<\$50,000	0.2	0	0.5	0.4
\$50,000 - \$90,000	36.2	17.2	29.8	11.9
\$90,000 - \$100,000	18.4	13.3	19.7	14.4
\$101,000 - \$110,000	13.6	15	15.9	13.4
\$111,000 - \$120,000	10.4	14.4	10	15.2
\$121,000 - \$130,000	11.4	17.8	12.7	18.4
\$131,000 - \$140,000	6.2	13.3	6.8	14.4
\$141,000 - \$150,000	2.7	6.1	2.9	6.9
\$151,000 - \$160,000	0.2	2.2	0.5	2.2
>\$160,000	0.5	0.6	1.2	2.9

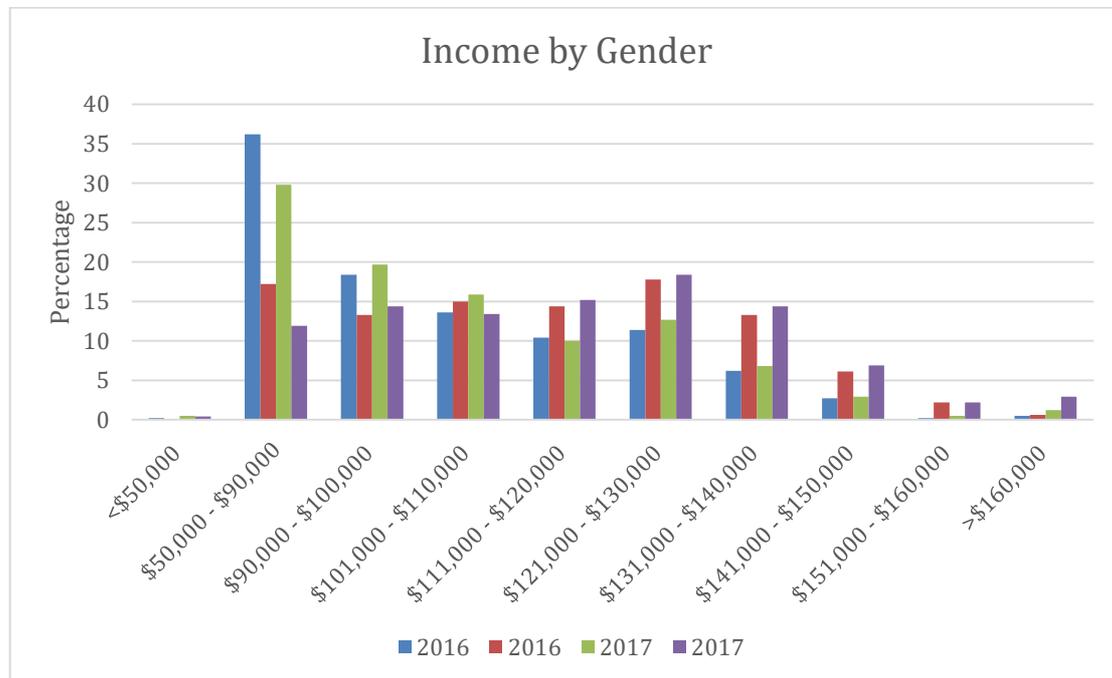


Figure 15. Comparison of income per annum disaggregated by Gender

Work Pressures

There are a number of worrying trends in this section. The significant increase in the stress caused to leaders by mental health issues of both staff and students should be of greatest concern. These issues are also reflected in the stress caused by teacher shortages and underperforming staff. The work intensification associated with the stress caused by the sheer quantity of work and lack of time to focus teaching and learning reveals the commitment of school leaders to the job but also the costs associated with it. The long work hours reported earlier is directly related to this pressure.

The three most significant stressors for all participants were “Sheer quantity of work”, “Lack of time to focus on teaching and learning” and “Government Initiatives”. These are of course all related to the increasing accountability environment witnessed across the western world through the Global Educational Reform Movement (GERM: Sahlberg, 2015). The figures reported here are very similar to both the Australian and Irish health and wellbeing surveys (www.principalhealth.org).

Table 28. Sources of stress

Sources of Stress	2016	2017
Sheer quantity of work	7.84	7.89
Lack of time to focus on teaching & learning	7.97	7.77
Resourcing Needs	6.67	7.01
Expectations of the employer	5.13	5.44
Student Related Issues	6.16	6.79
Government initiatives	7.18	7.14
Poorly Performing Staff	5.26	5.64
Parent Related Issues	5.73	6.27
Mental Health Issues of Students	5.53	6.53
Teacher Shortages	3.78	5.23
Mental Health Issues of Staff	4.82	5.70
Lack of autonomy/authority	3.86	4.03
Financial Management Issues	4.07	4.61
Inability to get away from school/community	4.25	4.60
Critical Incidents	4.25	4.52
Declining Enrolments	3.26	3.13
Union/Industrial disputes	2.97	2.50
Complaints Management	3.89	4.01
Interpersonal Conflicts	4.20	4.36

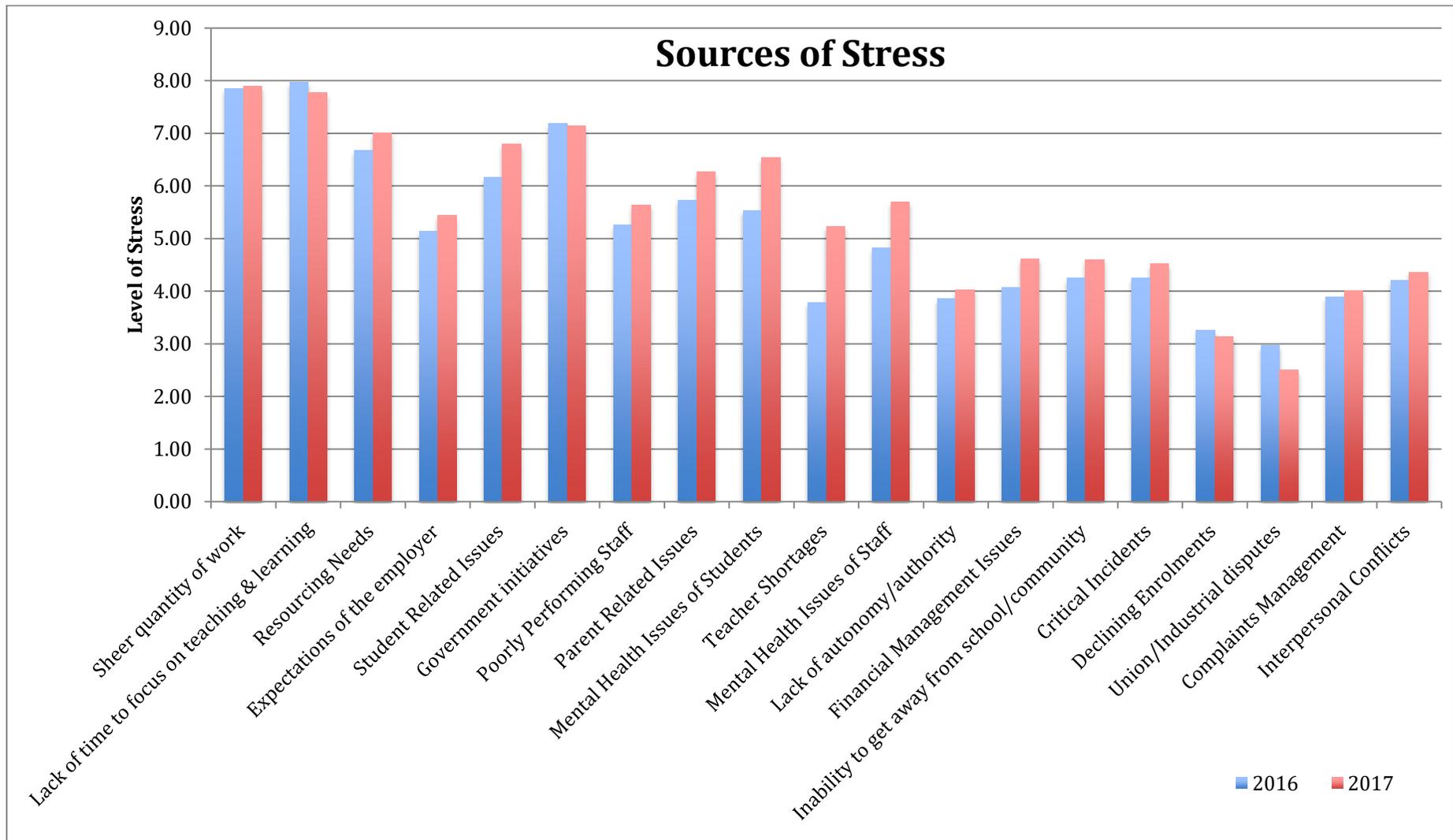


Figure 16. Sources of stress

In 2017, the only significant difference by Gender was “mental health issues of staff”. Female leaders’ ratings were statistically significantly higher $F(1,384) = 4.985, p = .033$. Despite reaching statistical significance, the actual difference in mean scores was quite small.

Table 29. Sources of stress disaggregated by Gender.

Sources of Stress	2016		2017	
	Female	Male	Female	Male
Sheer quantity of work	7.90	7.71	7.87	7.92
Lack of time to focus on teaching & learning	8.06	7.75	7.83	7.66
Resourcing Needs	6.52	7.01	6.91	7.21
Expectations of the employer	5.20	4.96	5.30	5.75
Student Related Issues	6.12	6.25	6.78	6.81
Government initiatives	7.05	7.48	6.95	7.56
Poorly Performing Staff	5.40	4.94	5.65	5.63
Parent Related Issues	5.71	5.75	6.24	6.33
Mental Health Issues of Students	5.55	5.47	6.49	6.61
Teacher Shortages	3.82	3.7	5.13	5.43
Mental Health Issues of Staff	4.98	4.47	5.71	5.68
Lack of autonomy/authority	3.82	3.96	3.92	4.25
Financial Management Issues	4.01	4.2	4.52	4.81
Inability to get away from school/community	4.26	4.24	4.49	4.82
Critical Incidents	4.20	4.37	4.38	4.82
Declining Enrolments	3.25	3.29	3.16	3.08
Union/Industrial disputes	3.01	2.87	2.34	2.86
Complaints Management	3.84	3.99	3.75	4.58
Interpersonal Conflicts	4.18	4.22	4.15	4.83

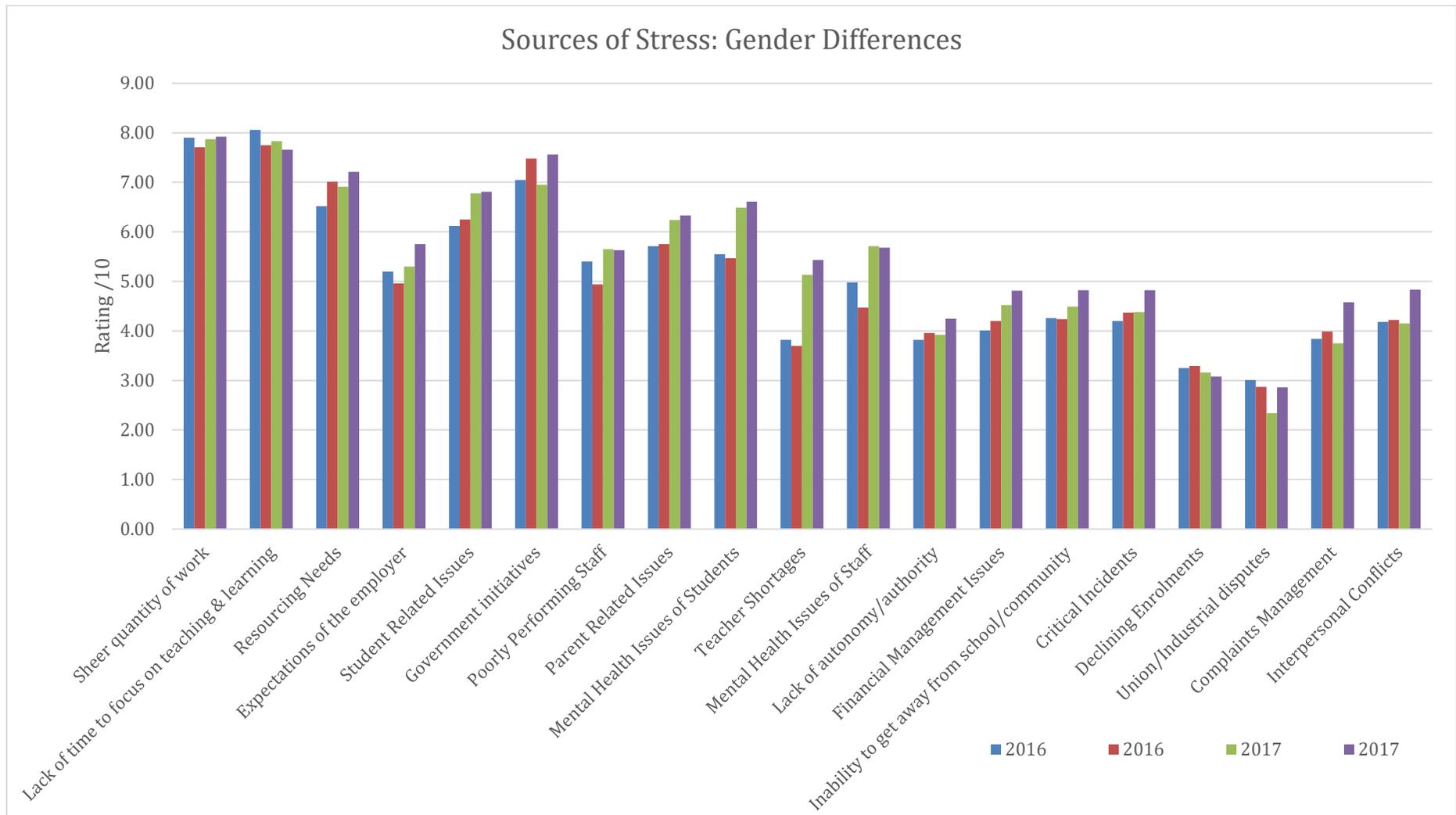


Figure 17. Sources of stress by Gender

Differences in stressors by school type

There are many differences in perceived stress when disaggregated by school type. In 2016, Composite/Area school participants reported significantly higher stress from “Resourcing Needs”, “Expectations of the employer”, “Poorly Performing Staff”, “Mental Health Issues of Students”, “Teacher Shortages”, “Mental Health Issues of Staff”, “Lack of autonomy/authority”, “Inability to get away from school/community”, “Critical Incidents”, “Declining Enrolments”, “Union/Industrial disputes”, “Complaints Management” and “Interpersonal Conflicts”, when compared to their urban and rural colleagues. This may reflect the differences between schools who also have secondary level students. All other differences between school type were relatively small despite some reaching statistical significance. This finding suggests that there are particular pressures faced by Composite/Area schools that need attention of regulatory authorities. When read in conjunction with the income statistics, it is likely that money is not a significant motivator for principals, and this reflects previous research that suggests there is a ceiling effect of salary that once achieved flattens out. Principals, are very motivated to do the right thing for the students under their care and this is reflected in the levels of stress that directly relate to procedures that prevent them from carrying out their mission of teaching and learning, due to administrative requirements.

In 2017 the between groups tests were limited to three major stressors: mental health issues of staff and students and teacher shortages as these had the greatest reported increases. The major differences between school type for the other stressors diminished as the pool of participants grew, which is consistent with the statistical concept of “regression to the mean” (*Cambridge Dictionary of Statistics*). There were significant differences between school type, with Composite/Area schools reporting higher levels of stress resulting from “Mental Health Issues of Staff” and “Teacher Shortages” (See Table 32, and Figures 18-21).

Table 30. Sources of stress by School Type

Sources of Stress	Full Prim		Contributing		Comp/Area		Special		Intermediate	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Sheer quantity of work	7.77	7.97	7.8	7.77	8.55	7.65	8.36	7.15	8.1	8.36
Lack of time to focus on teaching & learning	7.99	7.85	7.98	7.77	8.27	7.65	7.79	6.35	7.76	7.78
Resourcing Needs	6.69	7.11	6.73	7.05	7.91	6.5	5.21	5.95	6.43	6.58
Expectations of the employer	5.11	5.72	5.07	5.21	7.27	5.35	4.5	3.95	5.22	5.64
Student Related Issues	5.97	6.62	6.28	6.97	6	6.4	5.86	5.75	6.63	7.37
Government initiatives	7.12	7.16	7.19	7.21	7.82	7.1	7.93	6.15	7.14	7.2
Poorly Performing Staff	4.95	5.44	5.31	5.54	8.18	6.85	4.93	6.15	5.92	6.59
Parent Related Issues	5.84	6.34	5.75	6.22	5.36	6.1	3.71	5.4	5.76	6.59
Mental Health Issues of Students	5.27	6.37	5.48	6.53	6.64	7.7	6.79	5.15	6.41	7.49
Teacher Shortages	3.6	4.83	3.7	5.39	7.09	6.35	4.21	5.5	4.31	6.19
Mental Health Issues of Staff	4.68	5.44	4.72	5.86	7.91	6.3	5.21	5.85	5.2	6.24
Lack of autonomy/authority	3.8	4	3.8	3.96	5.55	5.6	3	3.5	4.49	4.14
Financial Management Issues	4.04	4.76	4.1	4.45	4.55	4.75	2.71	4.55	4.39	4.44
Inability to get away from school/community	4.59	4.92	3.86	4.22	5.45	5.35	3.5	4.25	4.53	4.61
Critical Incidents	4.03	4.28	4.23	4.59	6.73	5.65	5.21	5.05	4.59	4.76
Declining Enrolments	3.68	3.54	2.67	2.76	4.55	3.35	2.71	1.65	4.14	3.02
Union/Industrial disputes	2.85	2.49	2.94	2.42	4.64	3.45	3.57	2.85	3.16	2.37
Complaints Management	3.92	4	3.78	3.91	5.36	4.95	3.5	3.25	4.12	4.27
Interpersonal Conflicts	4.19	4.33	4.09	4.34	7.09	5.7	4.79	4.65	3.92	3.9

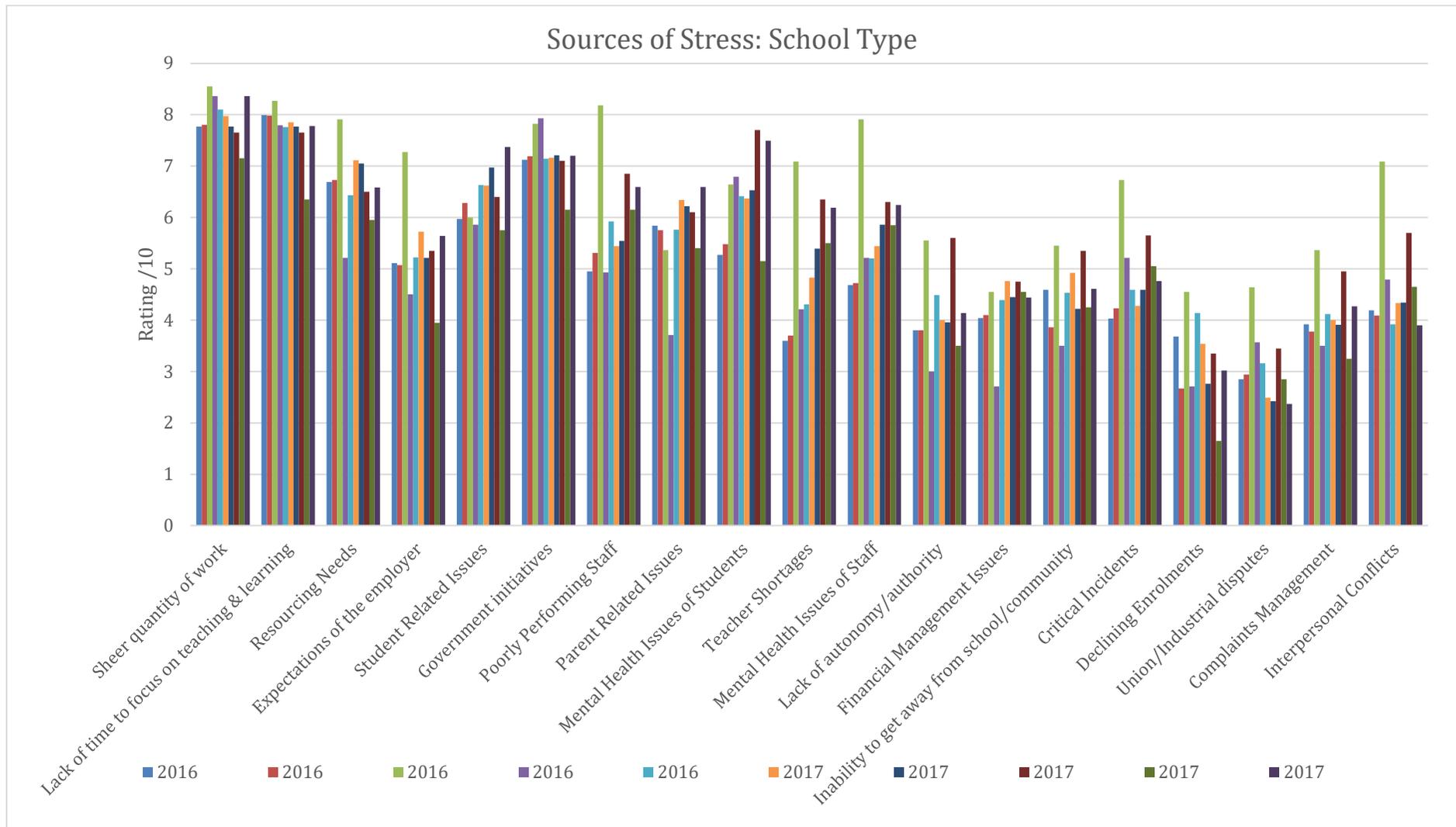


Figure 18. Sources of stress disaggregated by School Type.

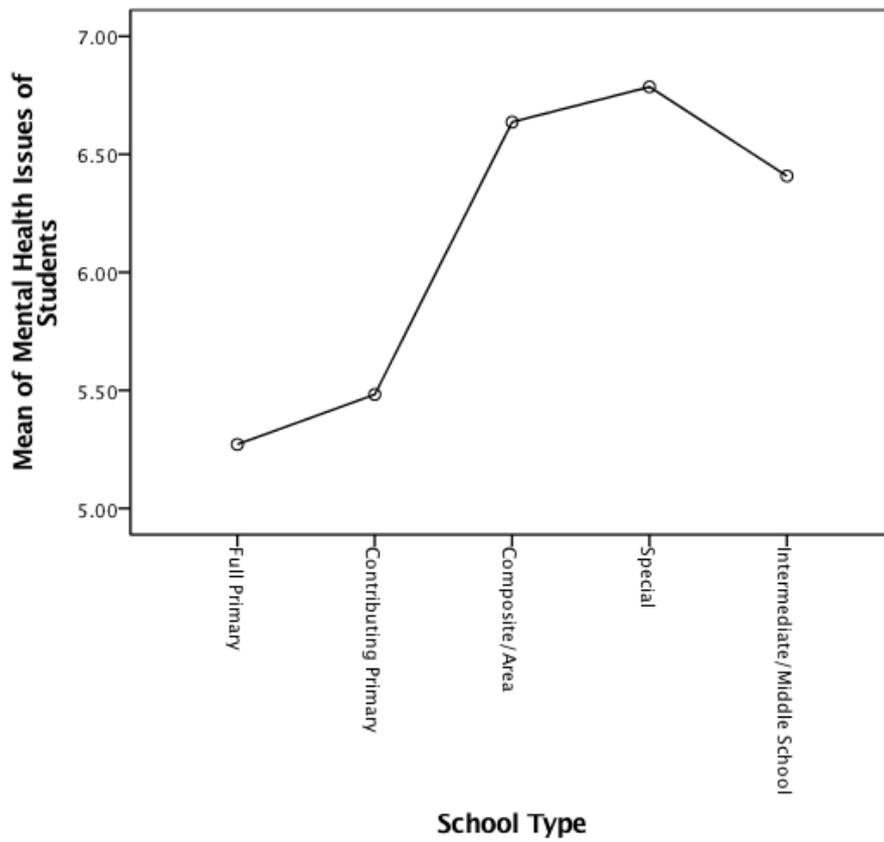


Figure 19. Source of stress ‘Mental health issues of students’ disaggregated by school type

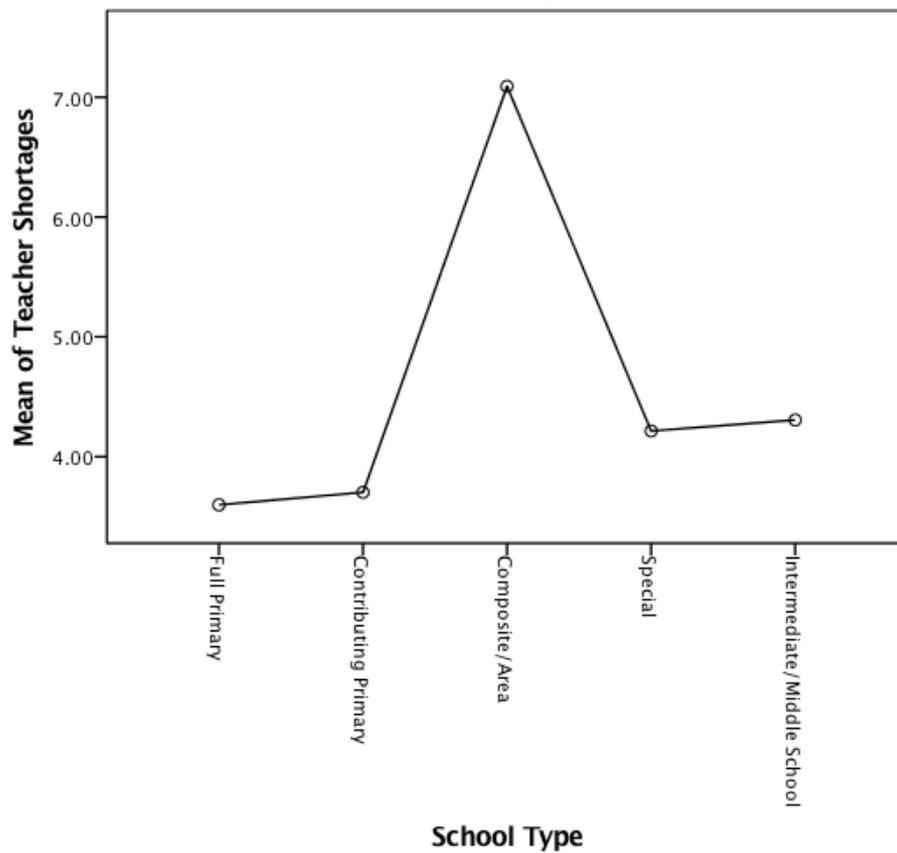


Figure 20. Source of stress ‘Teacher Shortages’ disaggregated by school type.

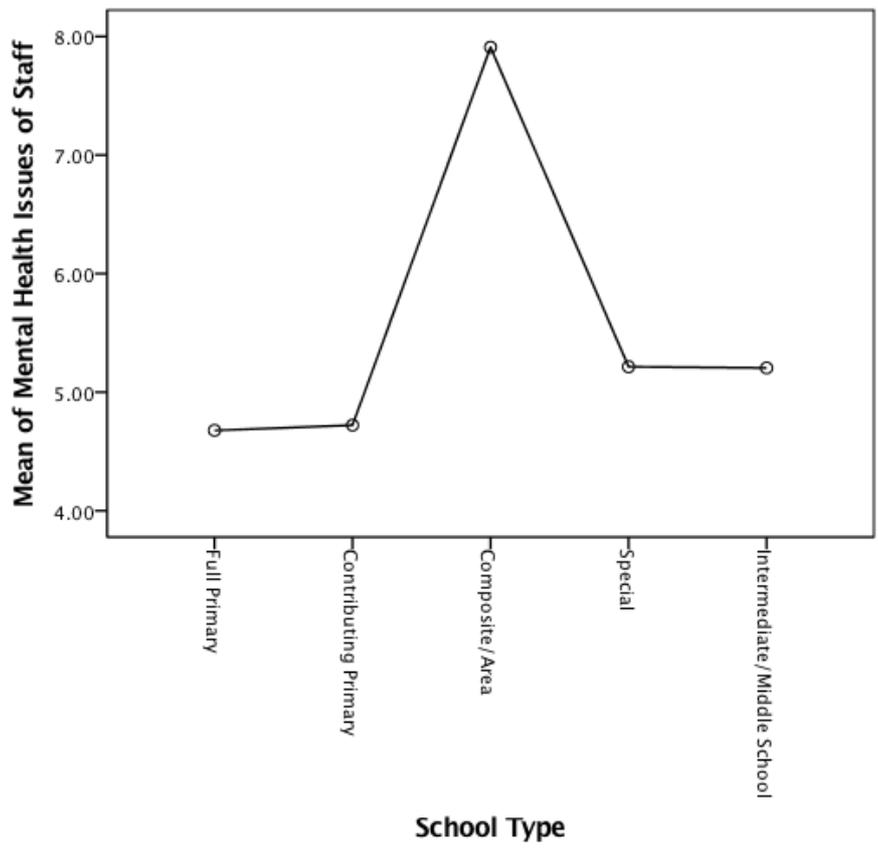
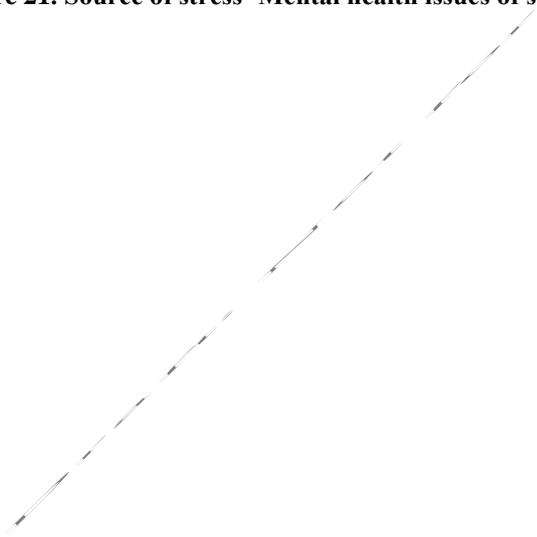


Figure 21. Source of stress 'Mental health issues of staff' disaggregated by school type



Differences in stressors by geolocation

In 2017, the only significant difference by geolocation was “mental health issues of staff”. Rural leaders’ ratings were statistically significantly lower than their urban colleagues $F(2,579) = 3.693, p = .025$. Despite reaching statistical significance, the actual difference in mean scores was quite small.

Table 31. Sources of stress by Geolocation.

Sources of Stress	Urban		Rural		Isolated/Off shore	
	2016	2017	2016	2017	2016	2017
Sheer quantity of work	7.8	7.77	7.95	8.19	7.18	7.52
Lack of time to focus on teaching & learning	7.84	7.6	8.23	8.11	7.82	8.19
Resourcing Needs	6.58	6.94	6.92	7.2	5.82	6.67
Expectations of the employer	5.06	5.37	5.28	5.55	5	5.9
Student Related Issues	6.26	6.84	5.99	6.76	5.45	5.95
Government initiatives	7.1	7	7.32	7.45	7.82	7.33
Poorly Performing Staff	5.38	5.87	4.85	5.15	8	5.19
Parent Related Issues	5.43	6.19	6.29	6.55	6.36	5.24
Mental Health Issues of Students	5.62	6.65	5.31	6.35	5.91	5.62
Teacher Shortages	3.97	5.57	3.41	4.47	3.82	5.05
Mental Health Issues of Staff	5.02	5.95	4.39	5.28	5.09	4.1
Lack of autonomy/authority	3.84	3.98	3.89	4.11	4.45	4.43
Financial Management Issues	3.99	4.5	4.26	4.77	3.73	5.62
Inability to get away from school/community	3.93	4.35	4.81	5.03	5.73	5.9
Critical Incidents	4.28	4.74	4.12	4.11	5.45	3.43
Declining Enrolments	2.93	;	3.86	3.57	4.82	3.57
Union/Industrial disputes	2.99	2.58	2.9	2.34	3	2.62
Complaints Management	3.73	4.15	4.13	3.72	5.36	3.76
Interpersonal Conflicts	4.16	4.53	4.21	4.05	5.36	3.48

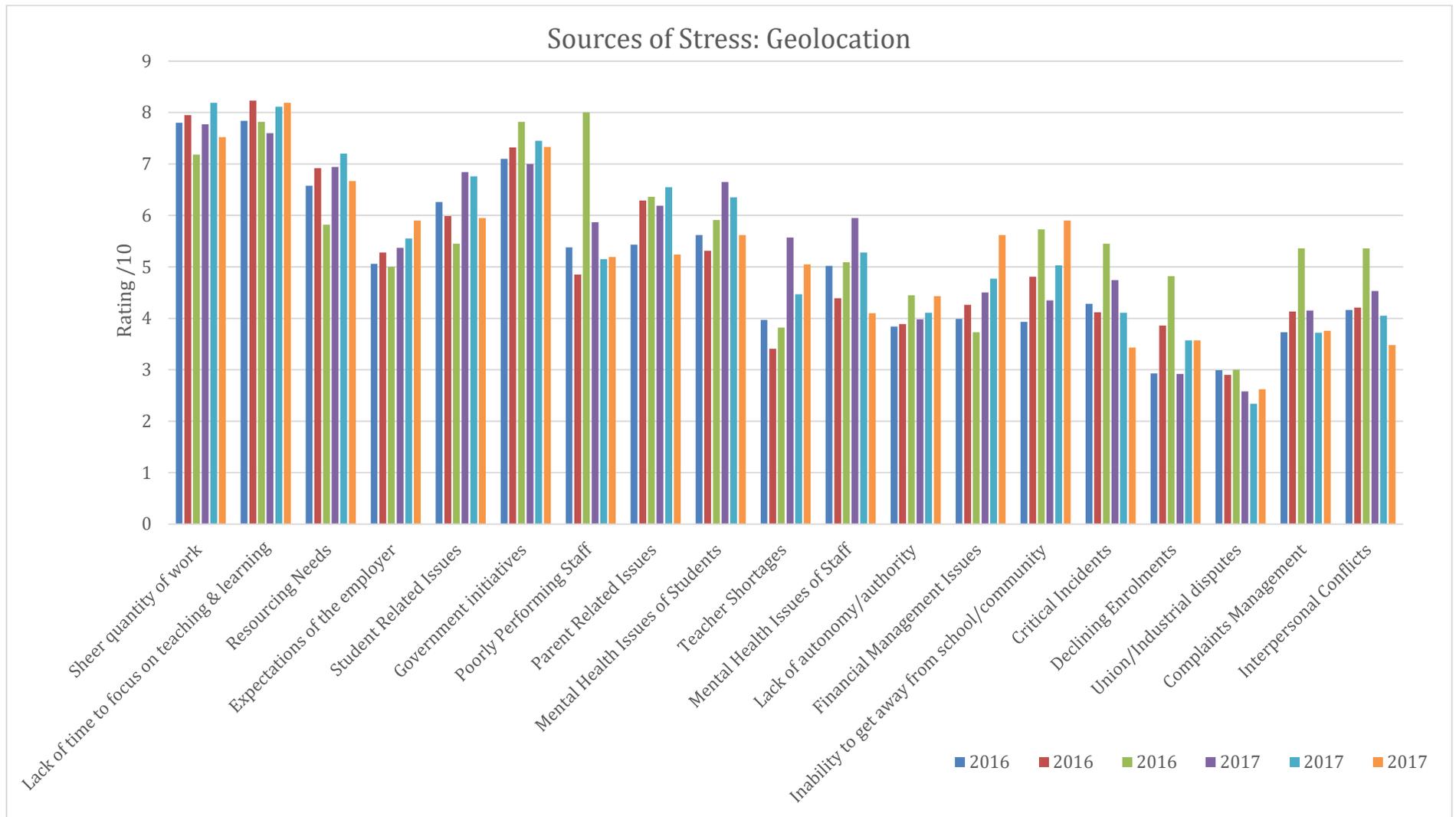


Figure 22. Sources of stress by Geolocation

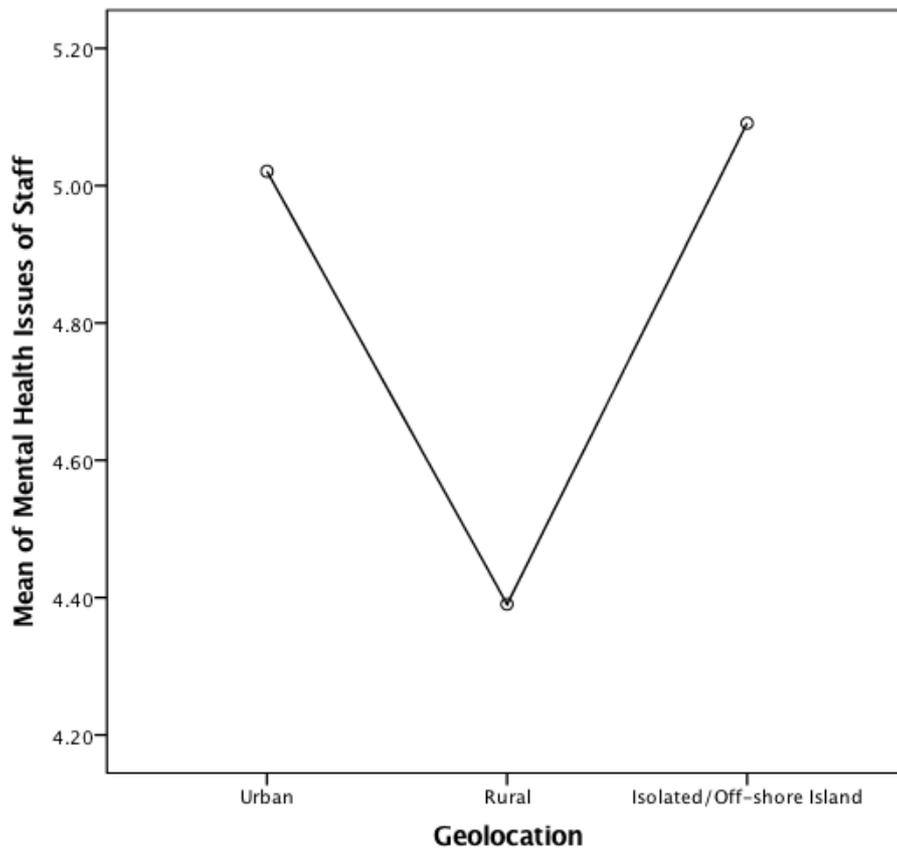


Figure 23. Source of stress ‘Mental health issues of staff’ disaggregated by geolocation

Differences in stressors by role

In 2017, the only significant difference by role was “mental health issues of staff”. Assistant Principals’ ratings were statistically significantly higher than their Principal and Deputy colleagues $F(2,573) = 3.868, p = .021$. Despite reaching statistical significance, the actual difference in mean scores was quite small.

Table 32. Sources of stress by Role

Sources of Stress	Principal		Deputy		Assistant	
	2016	2017	2016	2017	2016	2017
Sheer quantity of work	7.93	7.98	7.76	7.7	7.06	7.49
Lack of time to focus on teaching & learning	8.08	7.91	7.78	7.5	7.43	7.12
Resourcing Needs	6.86	7.29	6.26	6.44	6.31	5.59
Expectations of the employer	4.93	5.43	5.54	5.47	5.86	5.35
Student Related Issues	6.02	6.76	6.53	7.08	6.57	6.2
Government initiatives	7.46	7.29	6.51	6.76	6.86	6.73
Poorly Performing Staff	5.11	5.53	5.49	5.99	6	5.82
Parent Related Issues	5.86	6.26	5.47	6.53	5.57	5.41
Mental Health Issues of Students	5.49	6.59	5.65	6.49	5.69	5.88
Teacher Shortages	3.83	5.24	3.6	5.33	4.29	4.78
Mental Health Issues of Staff	4.66	5.57	5.05	5.97	5.83	6.43
Lack of autonomy/authority	3.61	3.95	4.34	4.15	5.2	4.45
Financial Management Issues	4.29	4.85	3.69	4.17	3.29	3.37
Inability to get away from school/community	4.18	4.68	4.46	4.48	4.34	4.16
Critical Incidents	4.21	4.49	4.35	4.7	4.54	4.2
Declining Enrolments	3.52	3.39	2.63	2.6	2.8	1.88
Union/Industrial disputes	2.98	2.54	2.98	2.62	2.66	1.71
Complaints Management	4.02	4.1	3.73	4.07	3.29	2.71
Interpersonal Conflicts	4.01	4.35	4.56	4.44	4.86	4.24

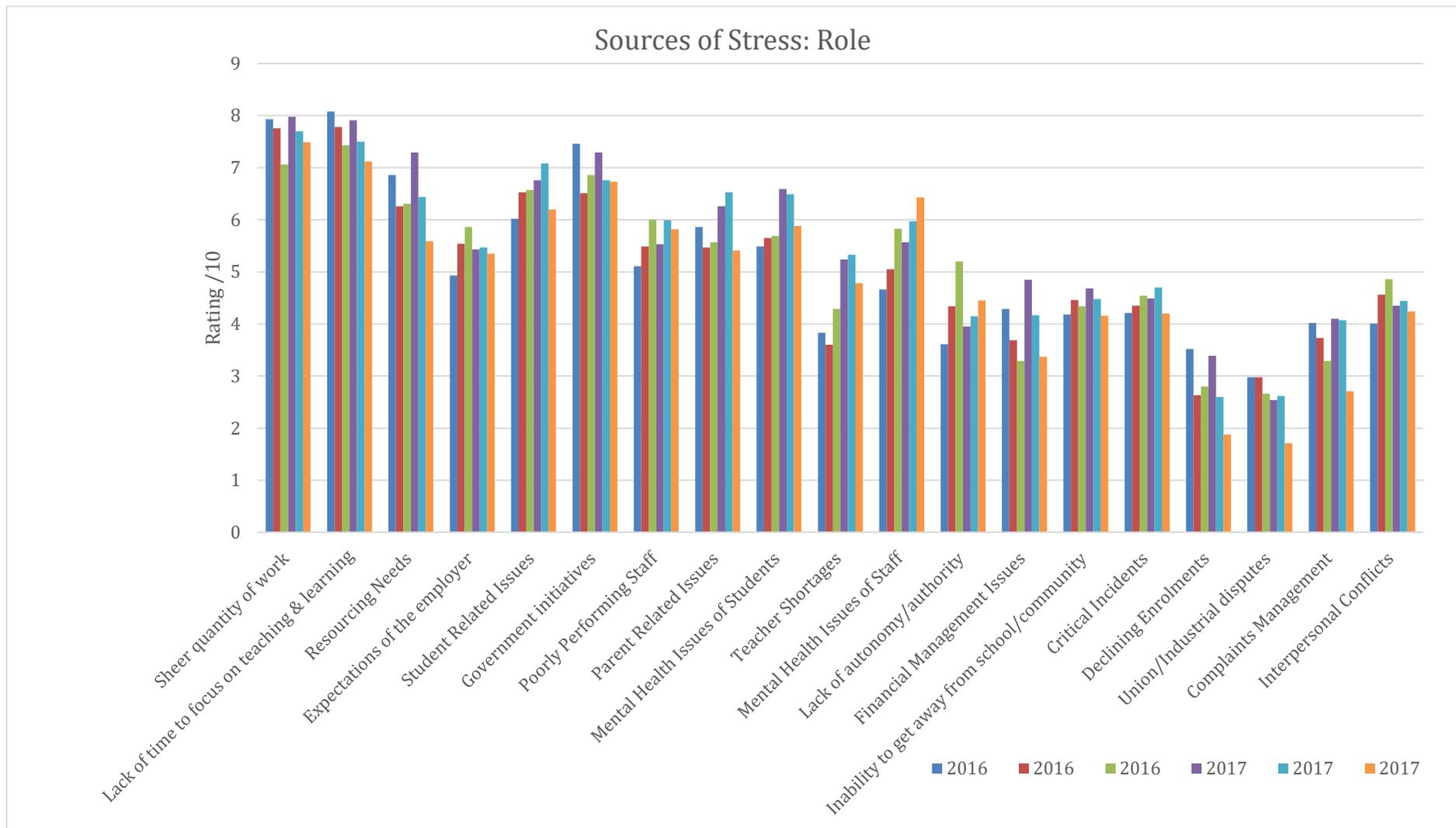


Figure 24. Sources of stress by Role

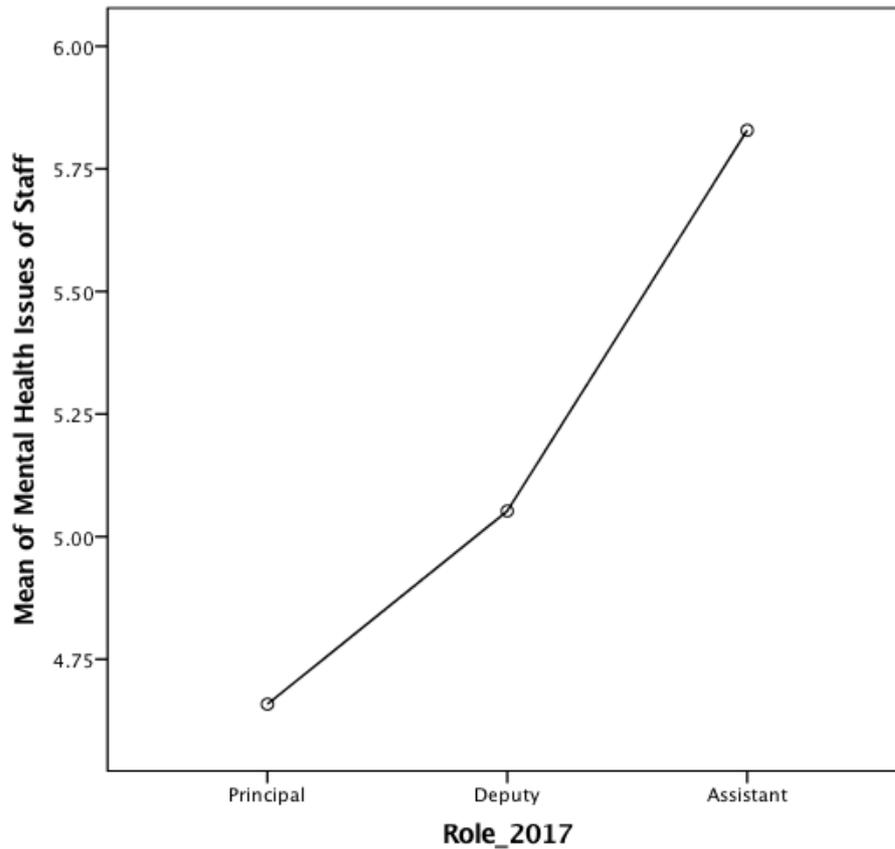


Figure 25. Source of stress ‘Mental health issues of staff’ disaggregated by leadership role.

Self-Rated Physical and Psychological Functioning

Self-rated scores on the following items were judged by level of agreement (1=strongly disagree, 5 neutral, 10 strongly agree). There were no significant changes from 2016-2017.

Table 33. Self-rated physical and psychological functioning, plus mean annual medical checkups.

Self Rated Score	2016	2017
Overall I maintain a satisfactory level of fitness	5.23	5.07
Overall I maintain a healthy diet	6.24	6.05
Overall I maintain a healthy weight	5.16	5.17
Frequency of medical checkups (annually)	2.18	2.28
I am frequently depressed about my job	3.43	3.15
I am frequently depressed about my job at certain times of the year	4.17	3.83
I am worried about the way I use alcohol to manage my stress	2.37	2.32
I am worried about the way I use prescribed medication to manage my stress	1.43	1.37

Sources of Support

Participants responded “yes” or “no” to each support person by type. There was no limit to the number of supporter types for any individual.

Despite the logic of grouping support sources for comparison, it was found that each support source is unrelated statistically to any other support source, in common with both the Australian and Irish principals. Therefore, it is not practical to create higher order factors for comparison. However, the tables and graphs show large differences in support when disaggregated in various ways shown above. The types of support vary but the overall level of support is relatively similar for each group.

Geolocation

Not surprisingly, isolated and off-shore school participants rely more on partners and family members than colleagues in the workplace. Rural schools also show this trend but to a lesser extent.

Gender

As with both the Australian and Irish surveys there are some specific gender differences which probably relate to more general trends in society than the job itself. More men report support from their partners than women but less from other family members and friends

Role

The major difference here is the level of support by professional associations with more principals than deputies or assistants receiving it

School Type and Decile

The results for school type and need further examination, as no logical patterns emerge from these data. Composite/Area schools have the most perplexing results.

Table 34. Sources of support for all participants shown as percentage of participants who report being supported by each support person.

Sources of Support	2016	2017
Partner	84	79
Friend	70	66
Family member	54	54
Colleague in your workplace	65	66
School leader/colleague – professional relationship	63	58
School leader/colleague also a friend	51	42
Supervisor/Line manager	2	6
Department/Employer	4	6
Professional Association	16	17
Medical Practitioner	11	10
Psychologist /Counsellor	6	7

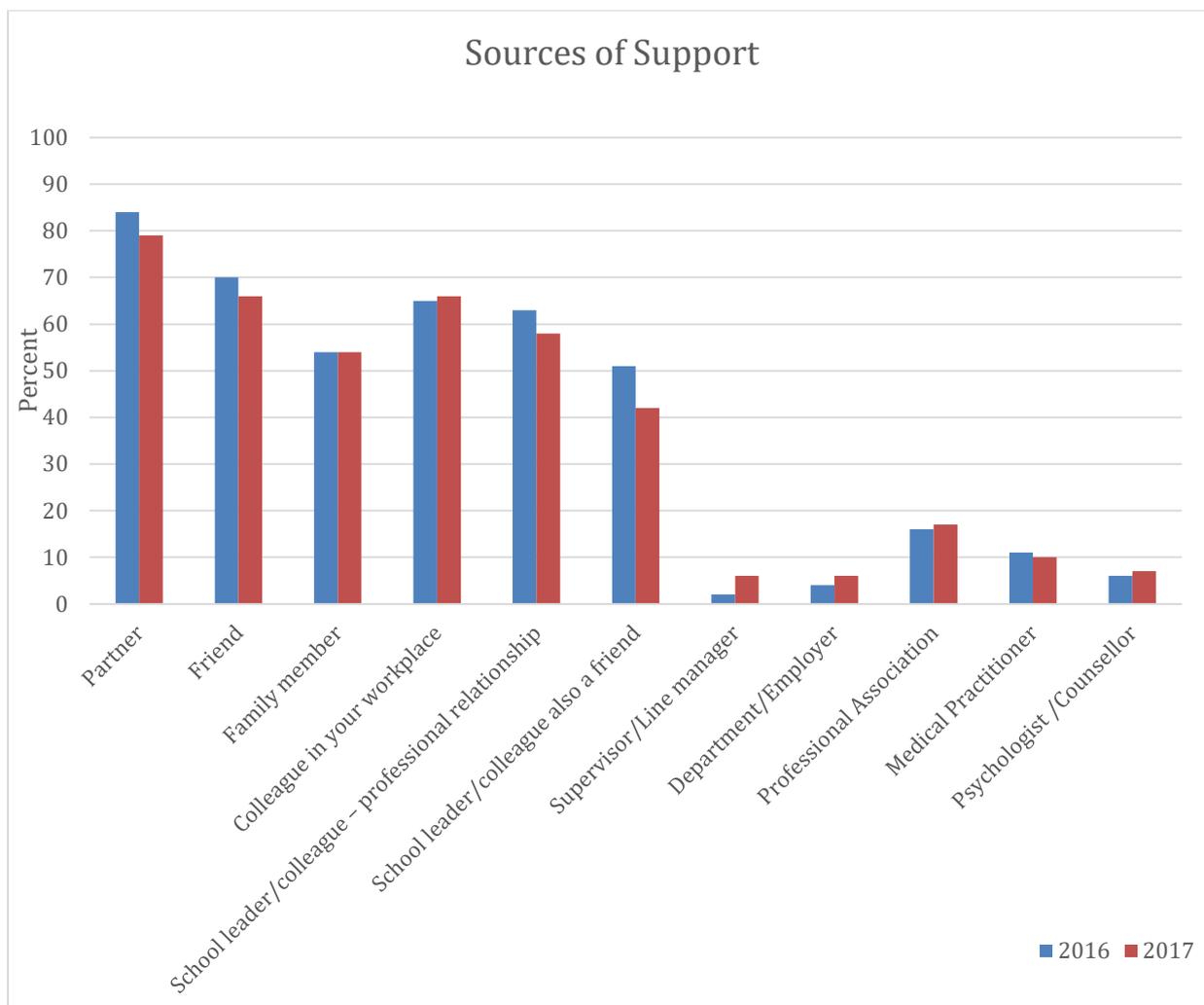


Figure 26. Sources of support for all participants

Table 35. Sources of support for all participants disaggregated by geolocation

Source of Support	Urban		Rural		Isolated/Off shore	
	2016	2017	2016	2017	2016	2017
Partner	84	80	84	80	91	65
Friend	72	67	66	66	55	52
Family member	54	55	55	52	45	39
Colleague in your workplace	67	68	63	62	36	43
School leader/colleague – professional relationship	66	61	58	55	55	35
School leader/colleague also a friend	55	45	43	38	27	43
Supervisor/Line manager	1	6	4	6	9	0
Department/Employer	5	6	3	7	0	0
Professional Association	16	18	16	15	27	26
Medical Practitioner	10	11	11	9	9	4
Psychologist /Counsellor	4	7	9	9	0	4

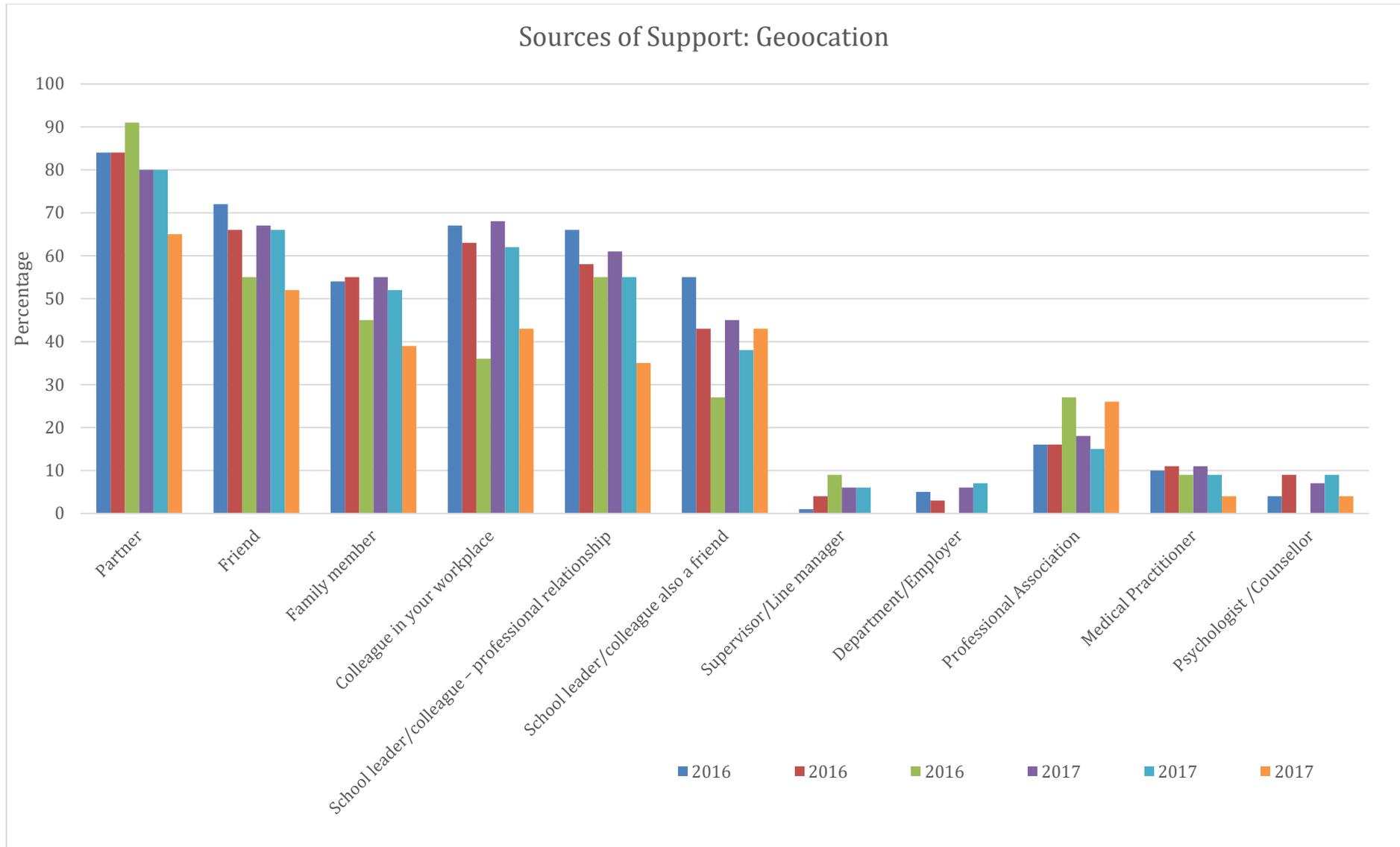


Figure 27. Sources of Support disaggregated by geolocation.

Table 36. Sources of support for all participants disaggregated by Role

Source of Support	Principal		Deputy		Assistant	
	2016	2017	2016	2017	2016	2017
Partner	85	80	79	73	89	88
Friend	69	66	71	66	77	72
Family member	53	53	54	56	60	56
Colleague in your workplace	65	66	64	64	71	72
School leader/colleague – professional relationship	66	62	53	47	57	50
School leader/colleague also a friend	53	44	45	35	51	44
Supervisor/Line manager	3	7	0	2	0	4
Department/Employer	6	7	0	3	0	0
Professional Association	22	22	5	7	3	0
Medical Practitioner	12	11	8	8	11	10
Psychologist /Counsellor	5	8	6	4	9	8

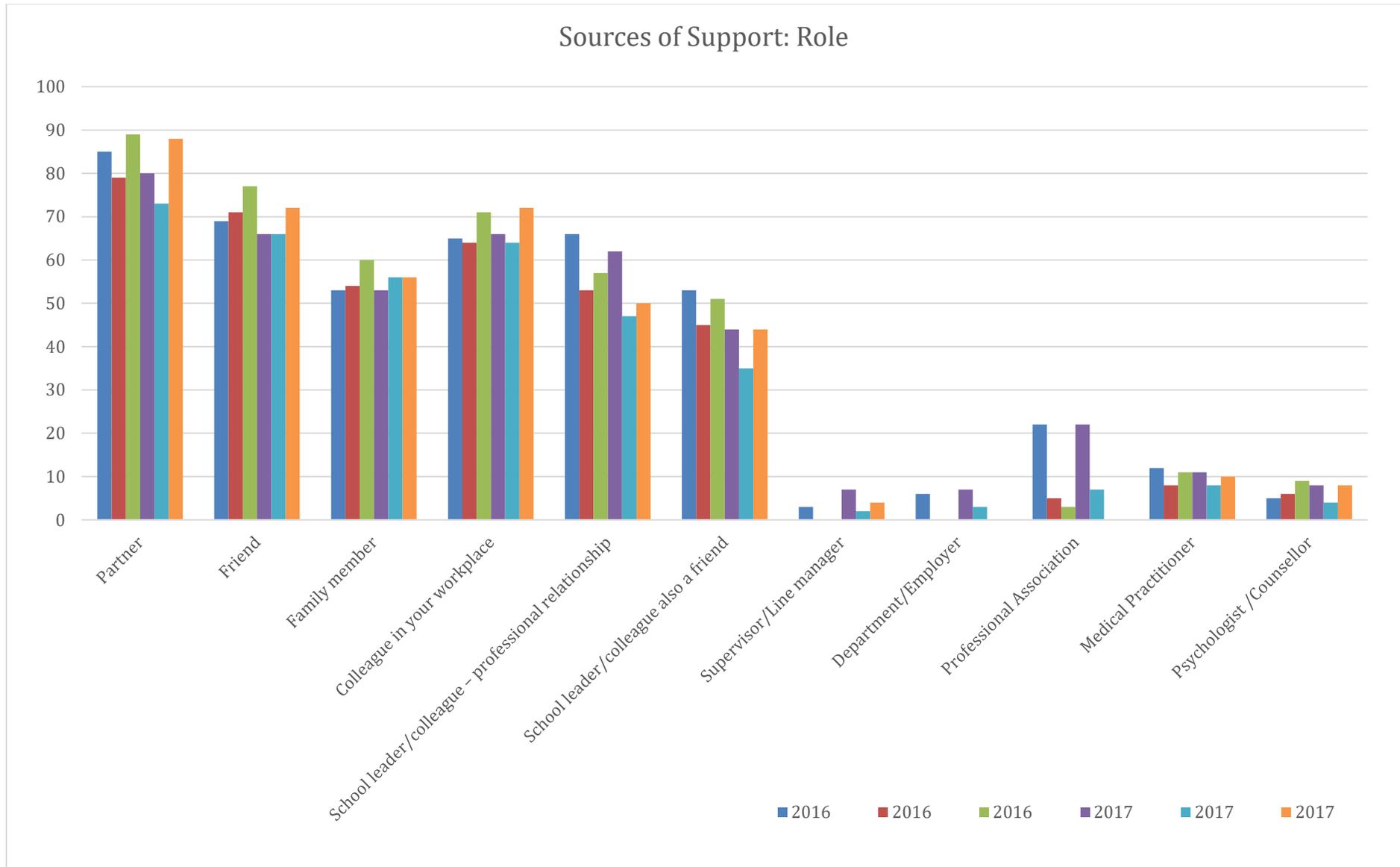


Figure 28. Sources of Support X Role.

Table 37. Sources of support for all participants disaggregated gender

Sources of support	2016		2017	
	Female	Male	Female	Male
Partner	81	92	76	87
Friend	72	65	69	60
Family member	61	40	60	41
Colleague in your workplace	66	64	68	60
School leader/colleague – professional relationship	65	59	59	55
School leader/colleague also a friend	51	51	45	37
Supervisor/Line manager	2	2	6	5
Department/Employer	4	4	6	7
Professional Association	16	17	16	21
Medical Practitioner	10	13	8	15
Psychologist /Counsellor	5	6	6	10

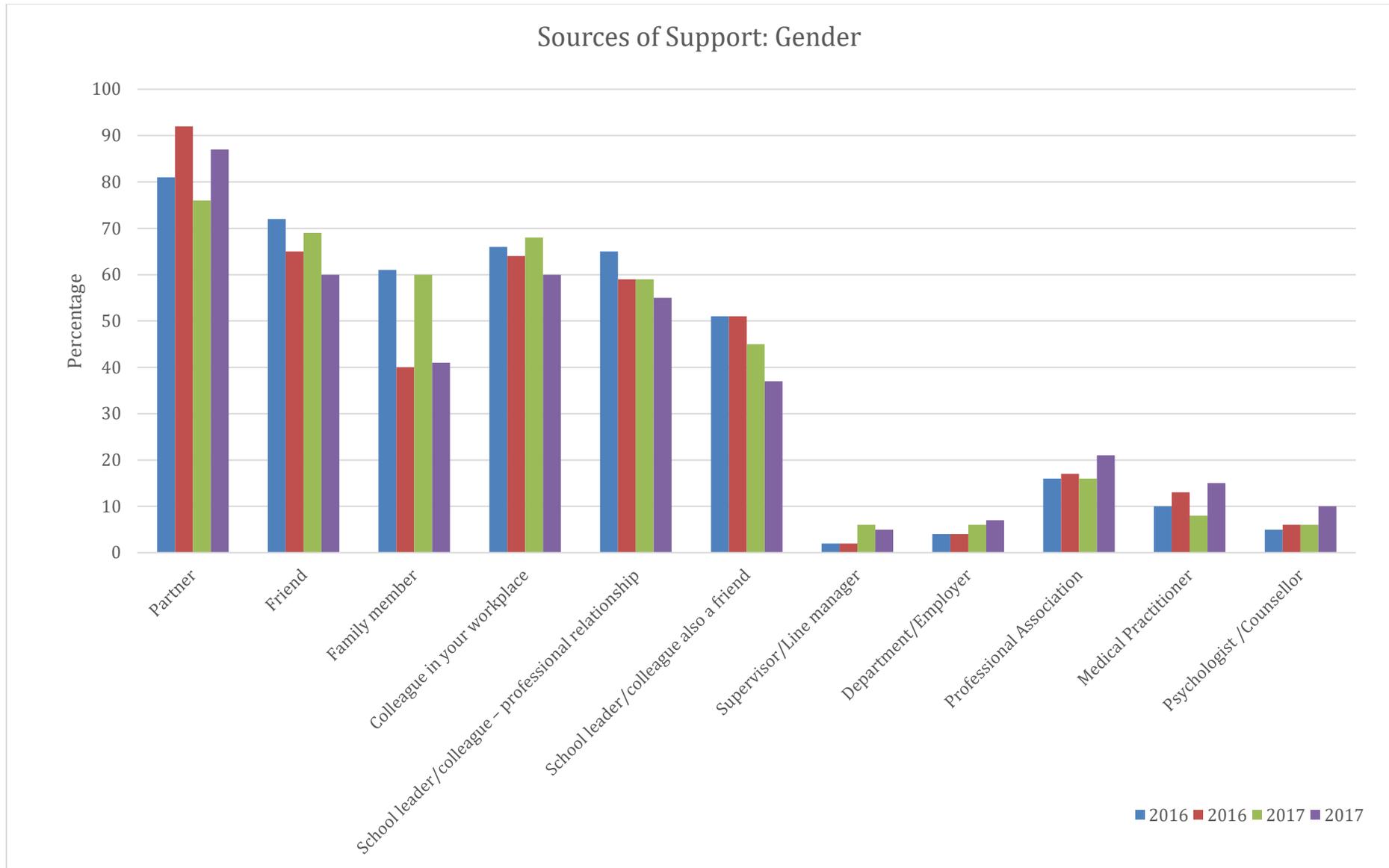


Figure 29. Sources of Support disaggregated by gender.

Table 38. Sources of support for all participants disaggregated school type

Sources of Support	Full Prim		Contributing		Comp/Area		Special		Intermediate	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Partner	84	77	84	82	82	68	93	75	86	81
Friend	70	66	71	66	55	55	71	55	65	70
Family member	60	56	53	52	73	50	36	50	35	55
Colleague in your workplace	64	64	67	68	82	68	50	65	63	63
School leader/colleague – professional relationship	59	56	68	61	45	45	71	50	61	63
School leader/colleague also a friend	46	41	55	46	45	36	43	40	53	34
Supervisor/Line manager	3	6	2	5	0	5	0	5	0	6
Department/Employer	4	5	4	6	9	14	0	10	6	0
Professional Association	17	16	18	19	18	23	14	10	6	13
Medical Practitioner	11	10	8	9	36	23	14	10	16	11
Psychologist /Counsellor	7	9	5	6	9	5	7	10	2	2

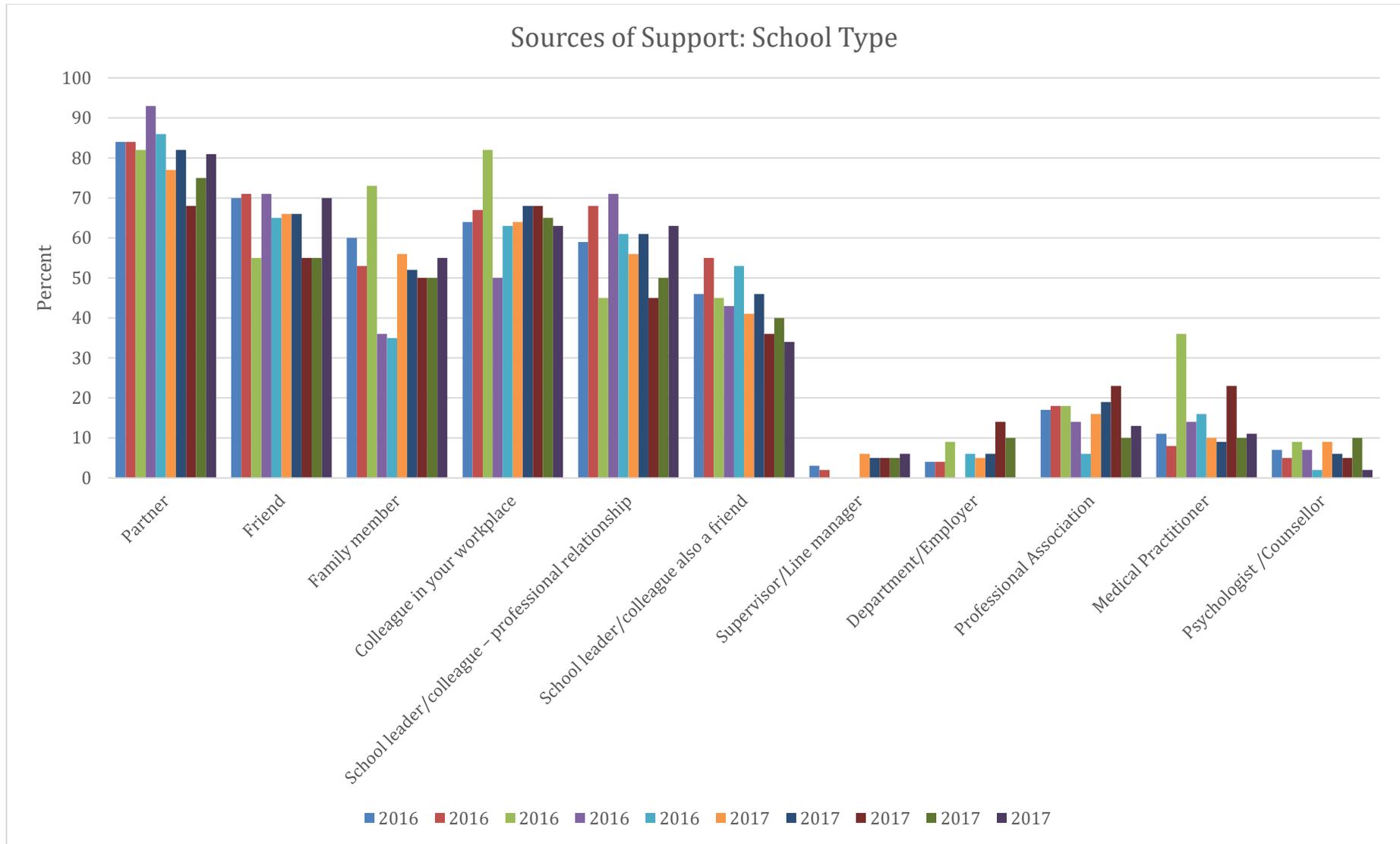


Figure 30. Sources of Support disaggregated by gender.

Table 39. Sources of support for all participants disaggregated school decile group 2017

Sources of Support	Decile Group 2017									
	1	2	3	4	5	6	7	8	9	10
Partner	73	81	85	82	78	86	96	84	85	83
Friend	67	76	65	67	76	76	67	58	75	74
Family member	67	68	60	63	49	65	41	49	58	50
Colleague in your workplace	60	81	77	69	62	76	57	67	64	70
School leader/colleague – professional relationship	69	65	52	65	69	51	43	51	58	70
School leader/colleague also a friend	56	49	42	49	53	49	31	47	33	42
Supervisor/Line manager	4	0	10	14	11	8	4	7	5	6
Department/Employer	2	11	8	10	7	0	8	2	4	8
Professional Association	19	38	15	18	9	19	14	9	16	18
Medical Practitioner	10	11	15	8	7	11	4	12	16	12
Psychologist /Counsellor	6	14	8	4	7	8	8	5	11	8

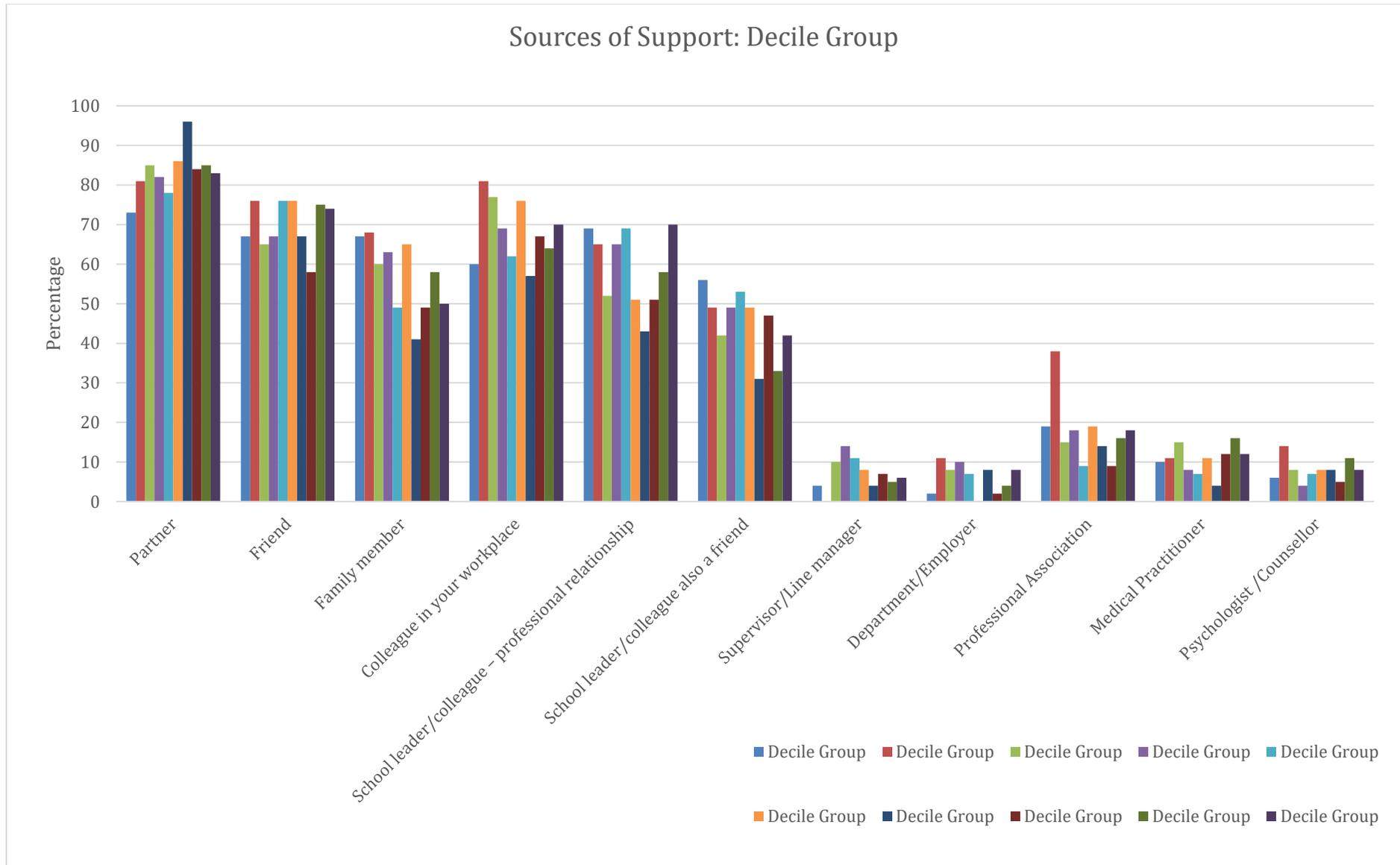


Figure 31. Sources of Support disaggregated by school decile group.

Alcohol Intake

Alcohol Use Disorders Identification Test (AUDIT): Scoring and Interpretation. The World Health Organisation (WHO, 2001) Department of Mental Health and Substance Dependence developed the items related to alcohol used in the current survey. The recommended interpretation of an individual score appears below.

Table 40. World Health Organisation Recommendations based on reported AUDIT scores

Risk Level	Score	Recommendation
Zone I	0-7	No harm; stay educated about alcohol use and continue to abstain or drink responsibly.
Zone II	8-15	Alcohol use is in excess of low-risk guidelines. Please visit this link to learn more about the risks of excessive alcohol consumption http://www.health.gov.au/internet/alcohol/publishing.nsf/Content/guide-adult - and you might consider seeking professional advice.
Zone III	16-19	Scores in this zone indicate a high level of alcohol problems. Please see your GP for counseling to discuss the effects of alcohol, and receive advice about how to reduce hazardous drinking.
Zone IV	20-40	Scores in this zone are indicative of a very high level of alcohol problems and professional advice is strongly recommended. Please see your GP to discuss information about effects of alcohol and how to reduce hazardous drinking.

According to the World Health Organisation AUDIT scores >7 may indicate hazardous and harmful alcohol use, as well as possible alcohol dependence. Therefore, analyses were conducted to examine differences between participants reporting scores above and below the cut-off. The two groups were labeled Low Risk and High Risk, as there is some conjecture about the safe lower limit of alcohol consumption.

Table 41. AUDIT raw scores

AUDIT Score	Min	Max	Mean	SD
2016	0	23	3.94	0.39
2017	0	36	4.12	0.35

Table 42. AUDIT Zone membership

Zone	2016	2017
I	89.4	87.1
II	9.6	11.9
III	0.4	0.7
IV	0.6	0.2

The results show that the vast majority of principals and deputy/assistant principals are moderate consumers of alcohol.

COPSOQ-II Subscale Scores

The Copenhagen Psychosocial Questionnaire – II (COPSOQ-II: Pejtersen, Kristensen, Borg, & Bjorner, 2010) was developed in response to the need for a validated and standardized instrument that would accurately measure a broad range of psychosocial factors across many occupations. It has seven scales, each containing between 4-8 subscales. In most cases high levels are healthy. The exceptions are *Amount of Work*, *Work Pace*, *Emotional Demands*, *Hiding Emotions*, *Role Conflicts*, *Job Insecurity*, *Work-Family Conflict*, *Family-Work Conflict*, *Burnout*, *Stress*, *Sleeping Problems*, *Depressive Symptoms*, *Physical Symptoms of Stress*, and *Cognitive Stress*.

Table 43. Copenhagen Psychosocial Questionnaire-II subscale scores

Scale	Subscale	Population *	New Zealand	
			2016	2017
<i>Demands at Work</i>	Quantitative demands	40.20	60.67	61.00
	Work pace	59.50	68.62	67.82
	Cognitive demands	63.90	81.40	81.97
	Emotional demands	40.70	66.75	68.38
<i>Work Organisation & Job Contents</i>	Demands for hiding emotions	50.60	82.20	81.90
	Influence	49.80	60.64	63.25
	Possibilities for development	65.90	82.91	82.73
	Variation	60.40	68.54	69.26
<i>Interpersonal Relations & Leadership</i>	Meaning of work	73.80	85.06	85.19
	Commitment to the workplace	60.90	70.67	70.81
	Predictability	57.70	65.86	66.23
	Recognition (Reward)	66.20	73.46	74.85
	Role clarity	73.50	79.42	80.03
	Role conflicts	42.00	44.02	46.02
	Quality of leadership	55.30	55.40	57.77
	Social support from colleagues: Inside school	57.30	57.76	58.71
	Social support from colleagues: Outside school	57.30	50.66	52.90
	Social support from supervisor	61.60	54.11	56.60
<i>Work - Individual Interface</i>	Social community at work	78.70	78.63	79.01
	Job satisfaction	65.30	72.52	72.93
	Work-family conflict	33.50	73.07	71.40
<i>Values at the Workplace</i>	Family-work conflict	7.60	8.48	8.70
	Trust regarding management	67.00	78.15	78.99
	Mutual trust between employees	68.60	74.30	75.65
	Justice	59.20	71.48	72.48
<i>Health & Wellbeing</i>	Social inclusiveness	67.50	81.39	81.78
	Self-rated health	66.00	64.61	62.52
	Burnout	34.10	58.16	57.42
	Stress	26.70	47.88	46.93
	Sleeping troubles	21.30	50.36	50.53
	Depressive symptoms	21.00	28.50	28.60
	Somatic stress symptoms	17.80	23.69	23.92
<i>Health & Wellbeing</i>	Cognitive stress symptoms	17.80	31.14	30.13
	Self-efficacy	67.50	73.98	71.44

* Population Scores (Pejtersen, et al, 2010)

Copenhagen Psychosocial Questionnaire – II

Demands at work

Trends

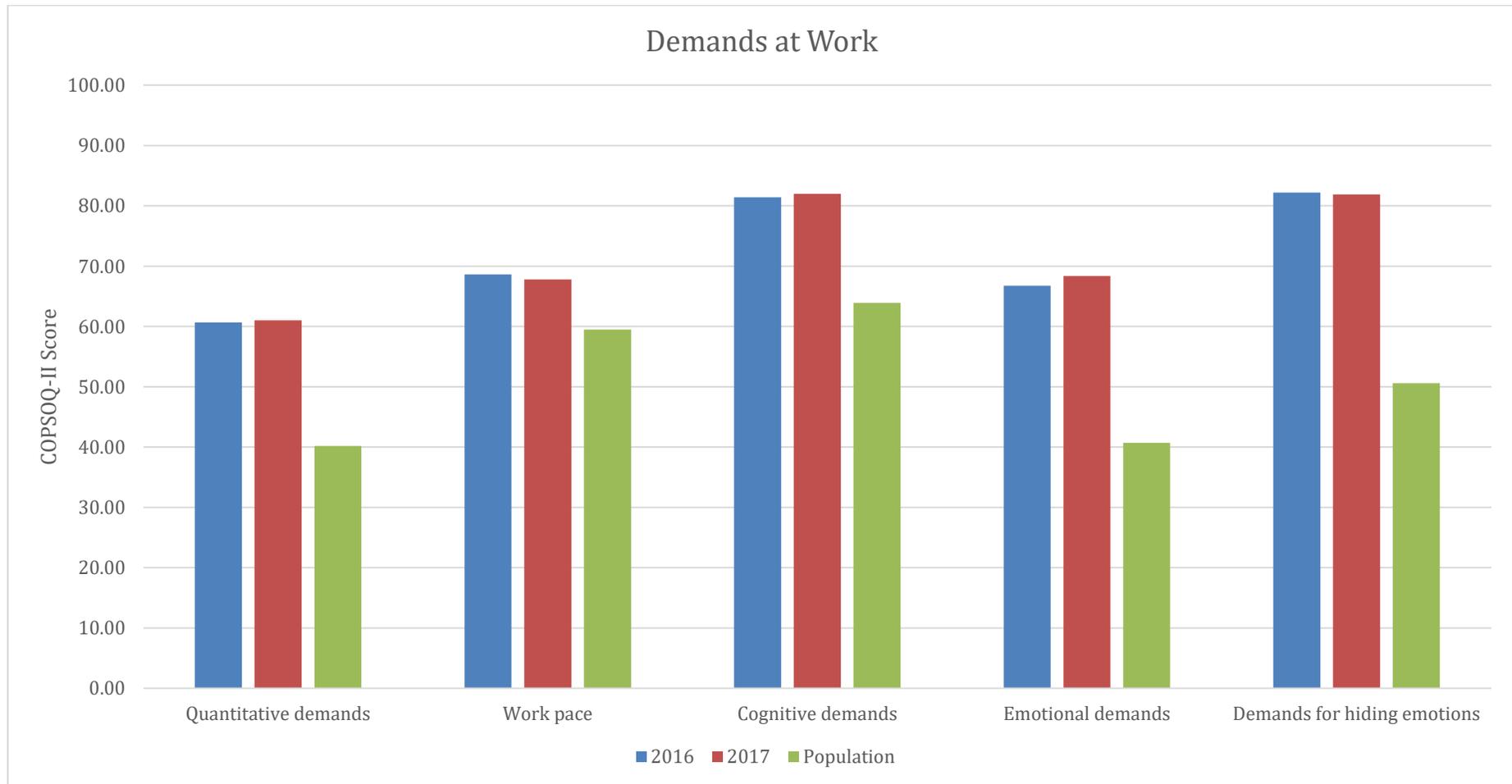


Figure 32. Demands at work trend data.

2017 Data in Detail

Subscales	Population		Critical Values		NZ	Location				Role			Gender		School Type			
	Mean	SD	Mean \pm SD*.5		ALL	Urban	Rural	Isolated/Off shore	Prin	Dep	Ass	F	M	Full Prim	Contrib	Comp Area	Special	Inter
			Low	High														
<i>Quantitative demands</i>	40.20	20.50	29.95	50.45	61.00	59.98	63.36	62.81	62.05	58.92	54.89	61.00	61.00	61.55	60.29	63.13	57.57	62.50
<i>Work pace</i>	59.50	19.10	49.95	69.05	67.82	66.99	69.88	66.25	68.17	67.07	67.21	68.37	66.63	68.02	67.59	61.67	66.23	71.75
<i>Cognitive demands</i>	63.90	18.70	54.55	73.25	81.97	81.56	82.88	82.19	82.95	79.27	79.89	81.98	81.94	82.39	82.02	76.25	81.25	81.99
<i>Emotional demands</i>	40.70	24.30	28.55	52.85	68.38	68.38	68.88	61.56	69.07	67.04	64.54	68.47	68.18	68.70	68.48	63.13	62.83	69.92
<i>Demands for hiding emotions</i>	50.60	20.80	40.20	61.00	81.90	82.02	82.05	76.67	82.61	80.34	79.07	81.49	82.76	81.86	82.67	82.08	75.88	80.23

*Mean \pm .5SD

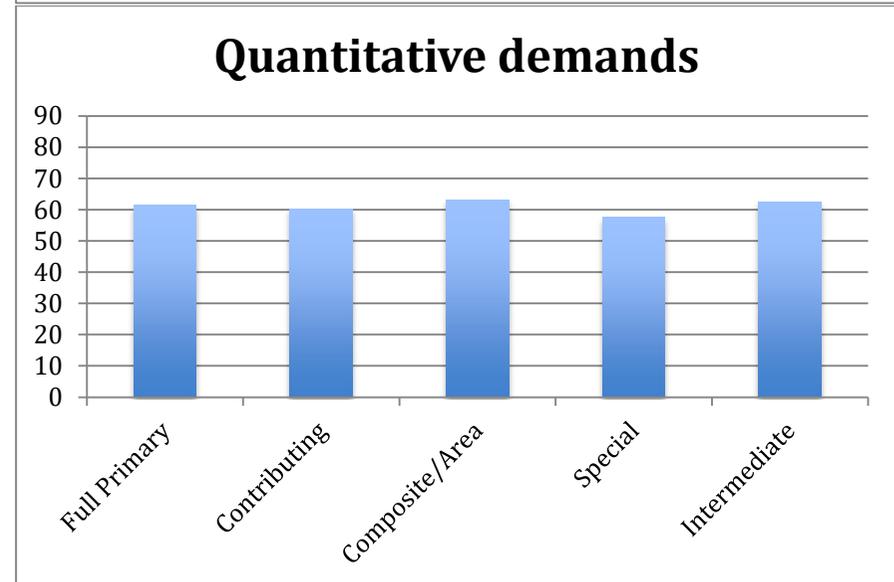
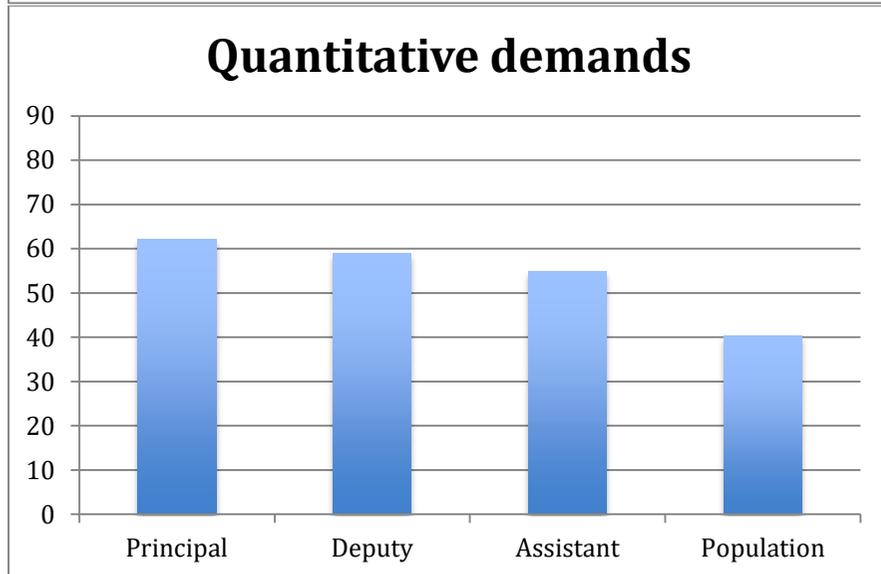
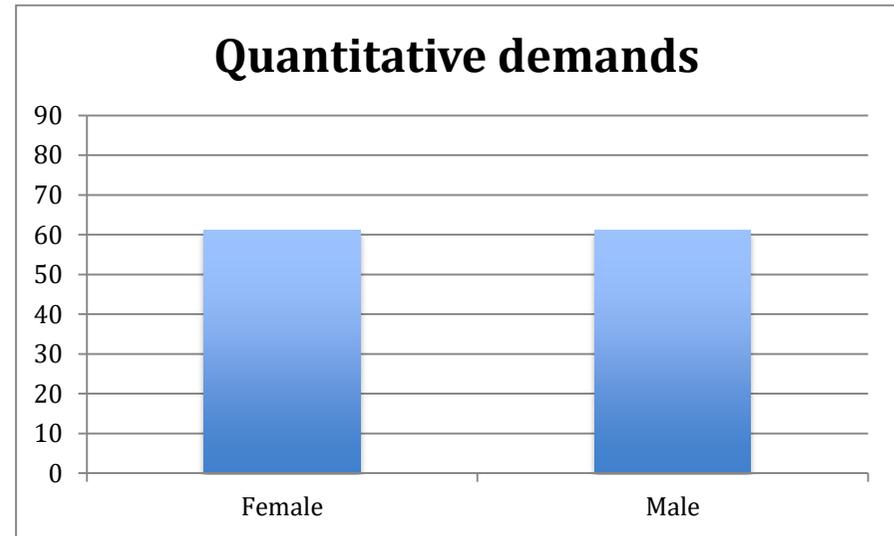
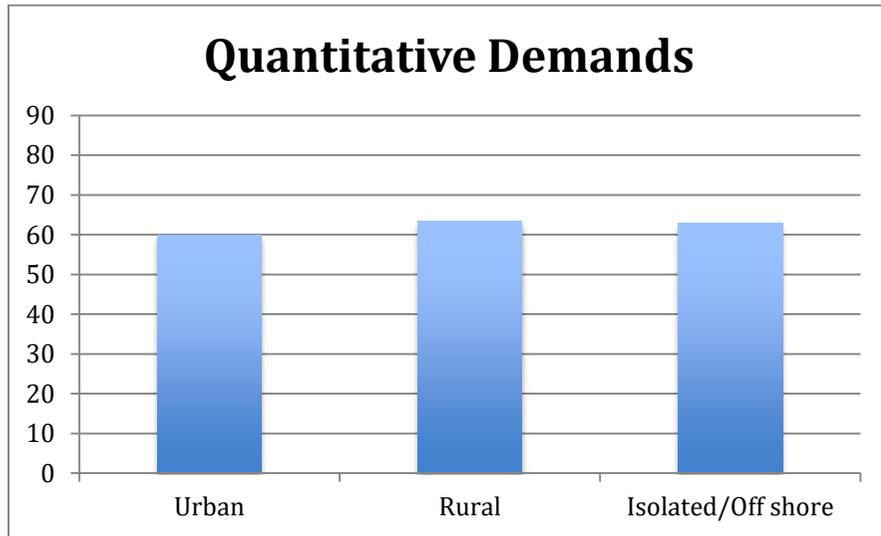
- **Quantitative demands** deal with how much one has to achieve in one's work. They can be assessed as an incongruity between the amount of tasks and the time available to perform the tasks in a satisfactory manner.
- **Work pace** deals with the speed at which tasks have to be performed. It is a measure of the intensity of work.
- **Cognitive demands** deal with demands involving the cognitive abilities of the worker. This is the only subscale of Demands where higher scores are better.
- **Emotional demands** occur when the worker has to deal with or is confronted with other people's feelings at work. Other people comprise both people not employed at the work place, e.g. parents and students, and people employed at the work place, like colleagues, superiors or subordinates.
- **Demands for hiding emotions** occur when principals have to conceal her or his own feelings at work from other people. Other people comprise both people not employed at the work place, e.g. parents and students, and people employed at the work place, like colleagues, superiors or subordinates. The scale shows the amount of time individuals spend in surface acting (pretending an emotion that is not felt) or down-regulating (hiding) felt emotions.

Results

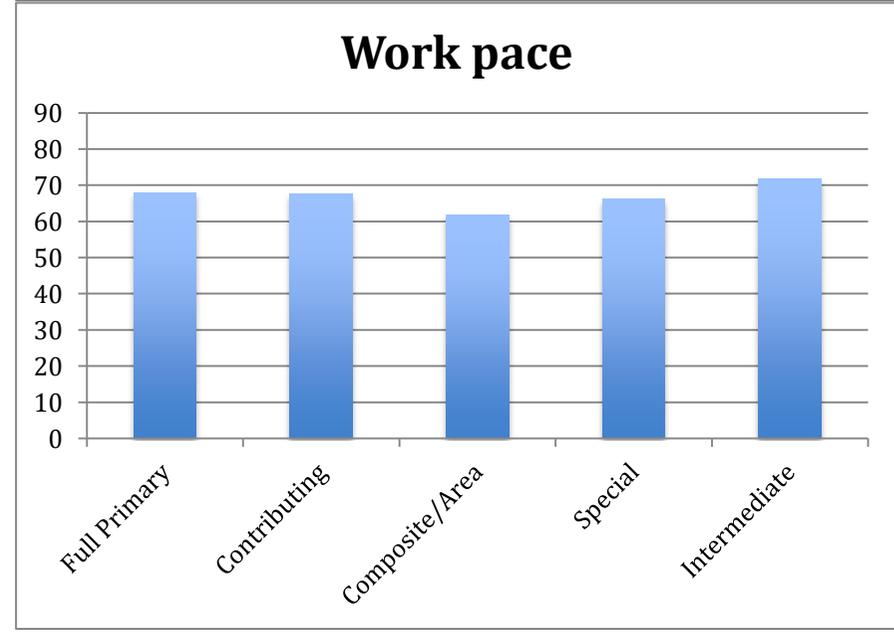
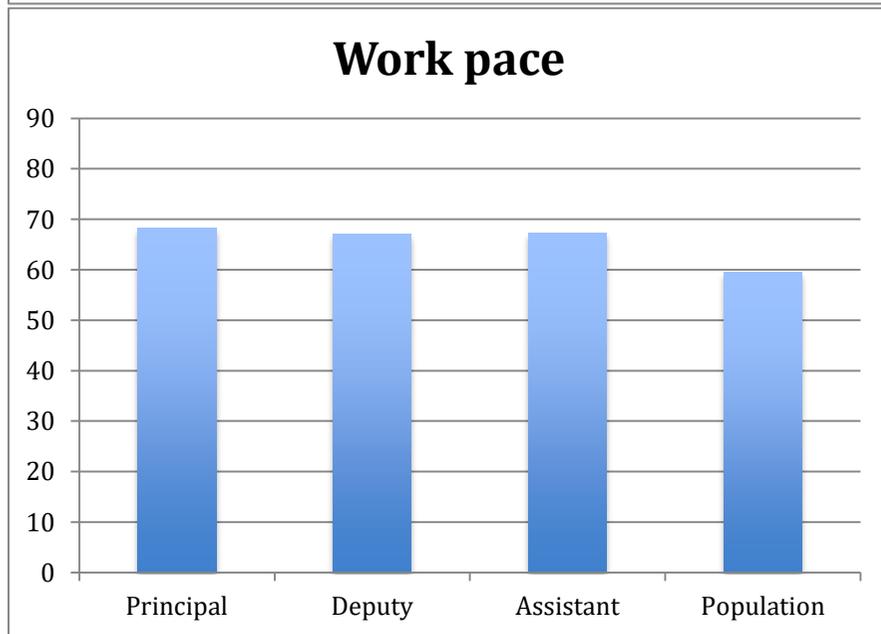
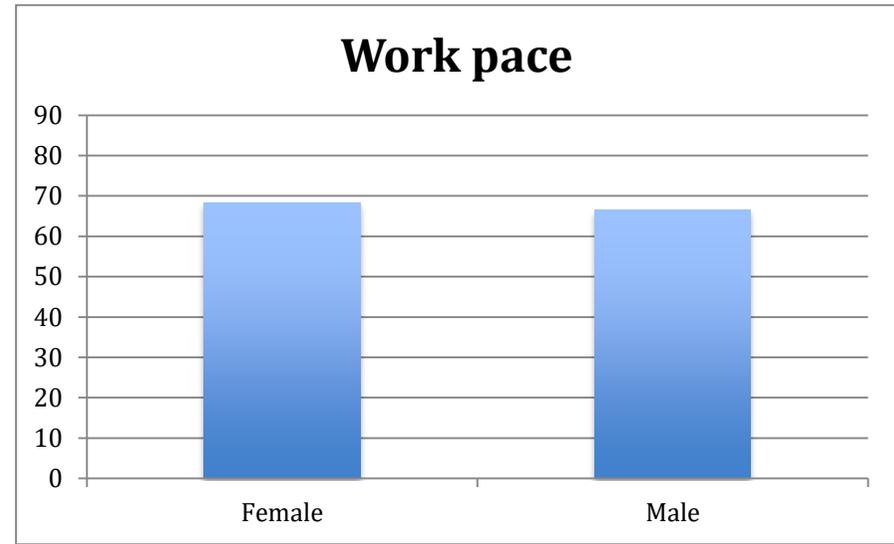
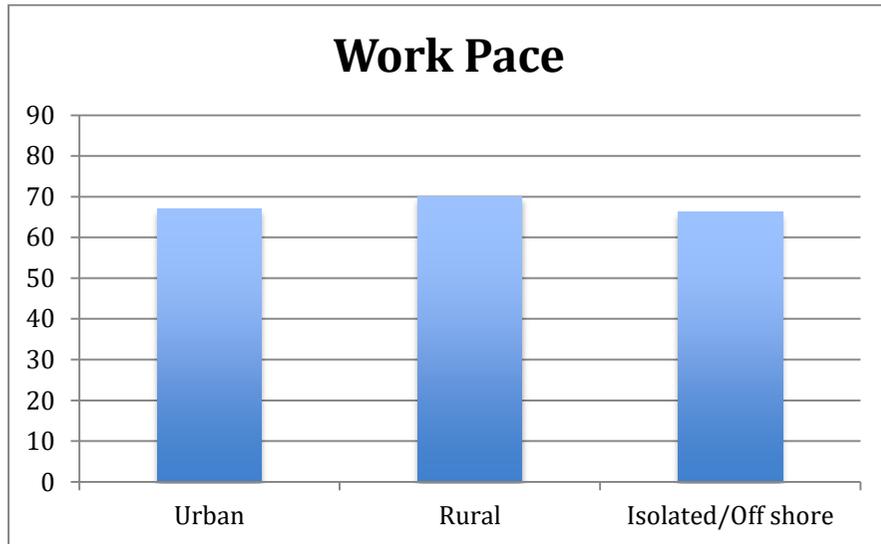
- **Trends** All demands experienced by principals in New Zealand are very similar to their Australian and Irish colleagues, above the critical high value indicating the demands are higher than the general population.
- **Quantitative demands** No significant differences were reported for any of the comparison groups.
- **Work pace** No significant differences were reported for any of the comparison groups.
- **Cognitive demands** All groups exceeded the critical high score indicating that the role provides significantly high levels of cognitive demands. This is a positive finding.
- **Emotional demands** the high scores confirm the role is highly emotionally charged in school types.

- **Demands for hiding emotions** the high scores confirm the role requires a great deal of skill in dealing with one's own and others emotions in all school types.

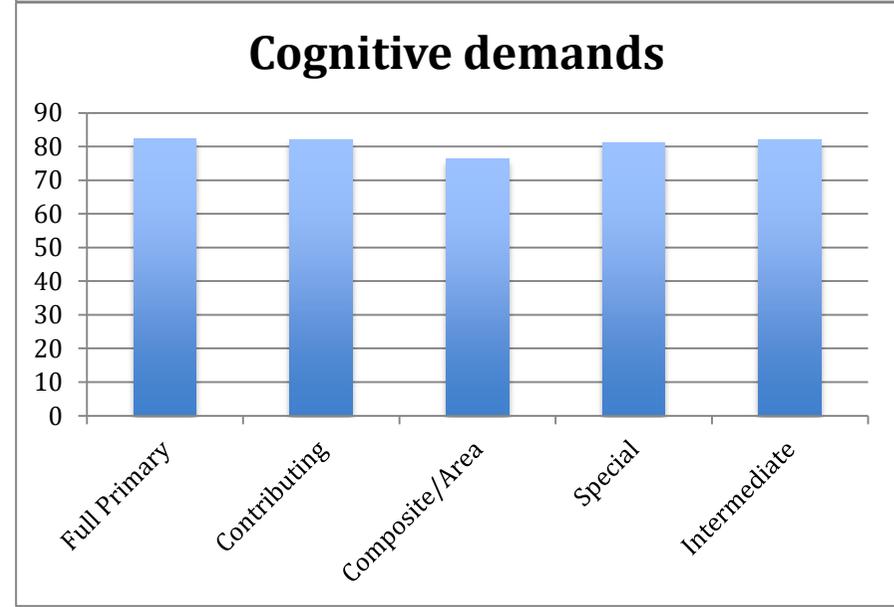
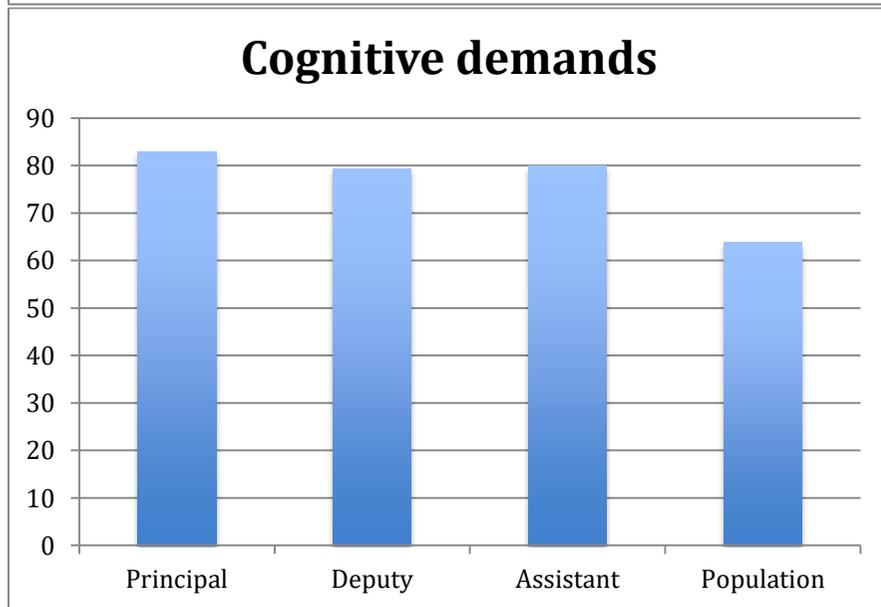
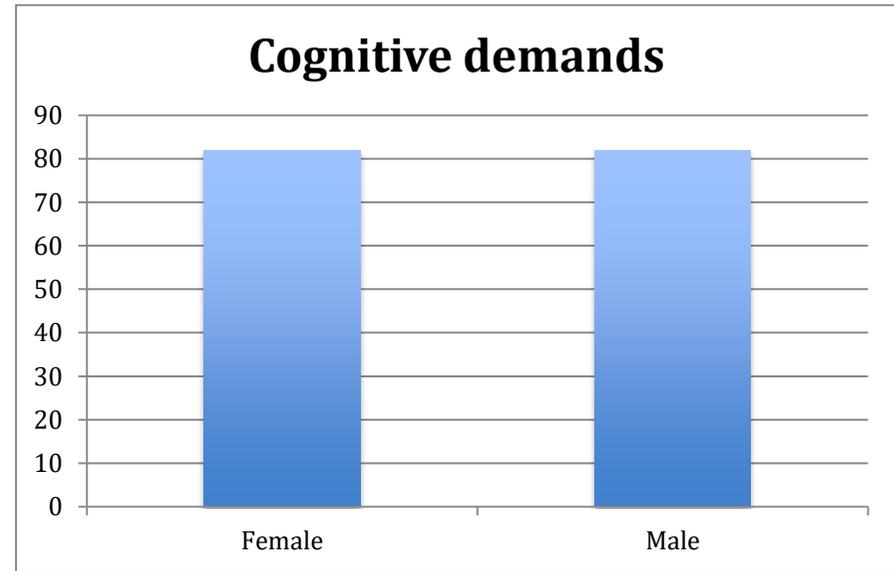
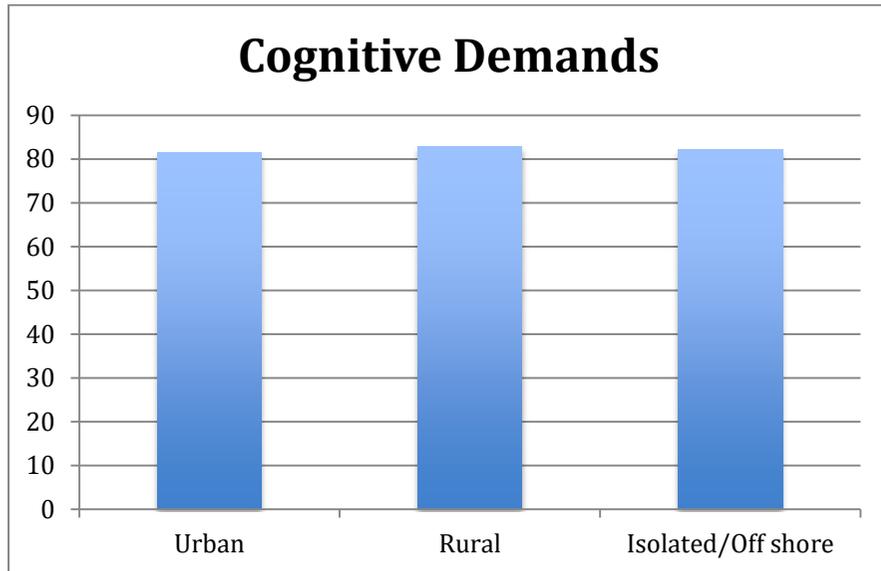
Quantitative Demands disaggregated by Geolocation, Role Gender and School Type



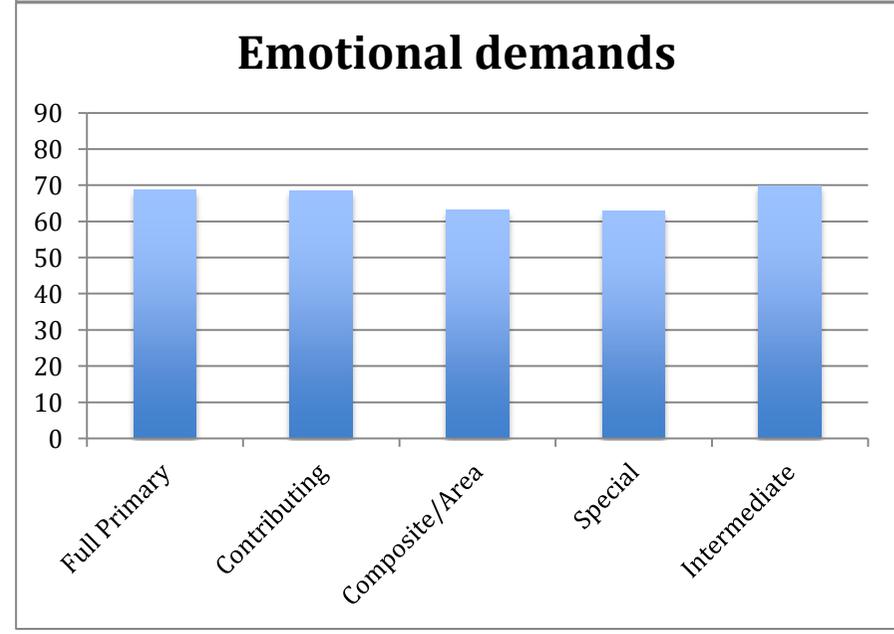
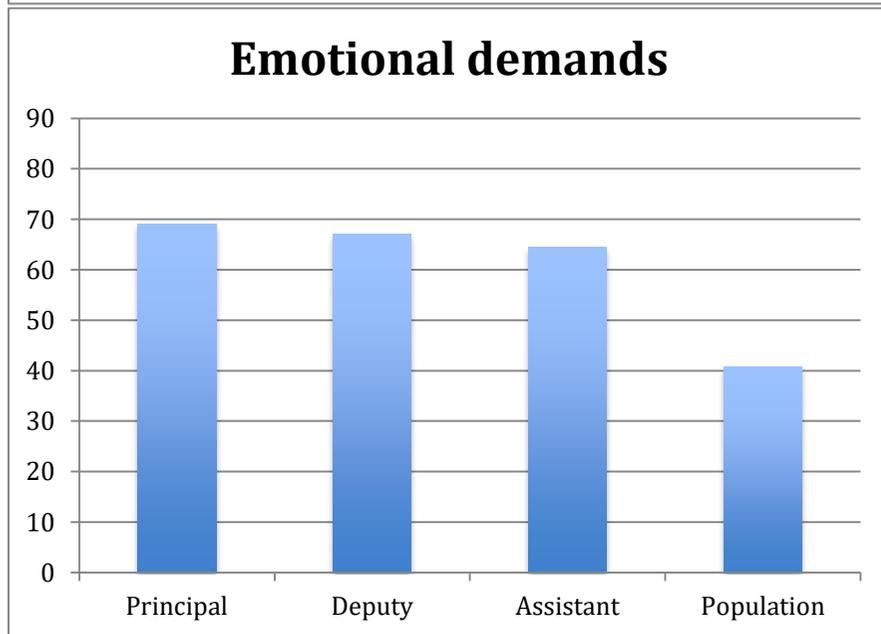
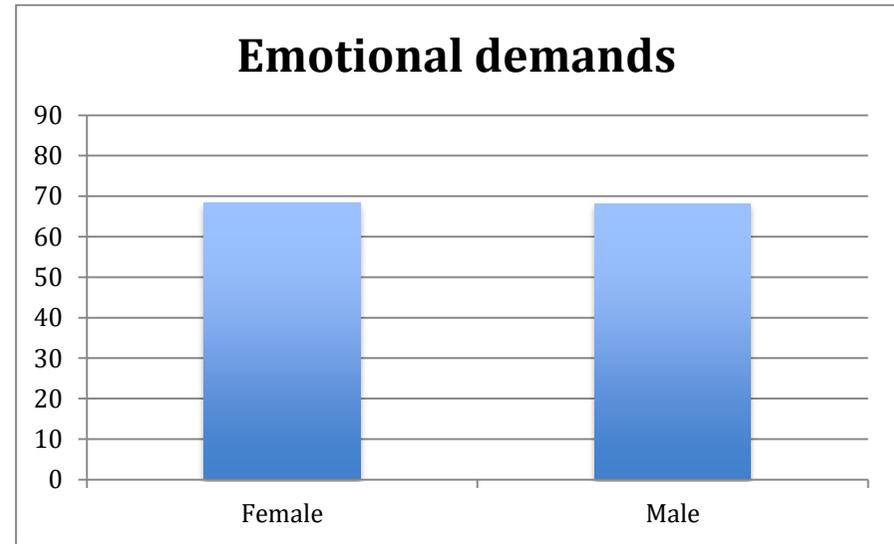
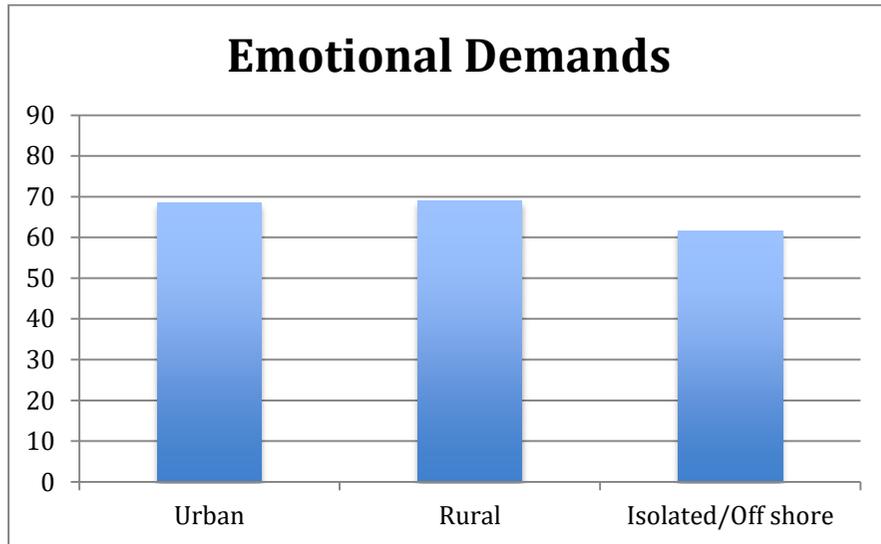
Work Pace disaggregated by Geolocation, Role Gender and School Type



Cognitive Demands disaggregated by disaggregated by Geolocation, Role Gender and School Type

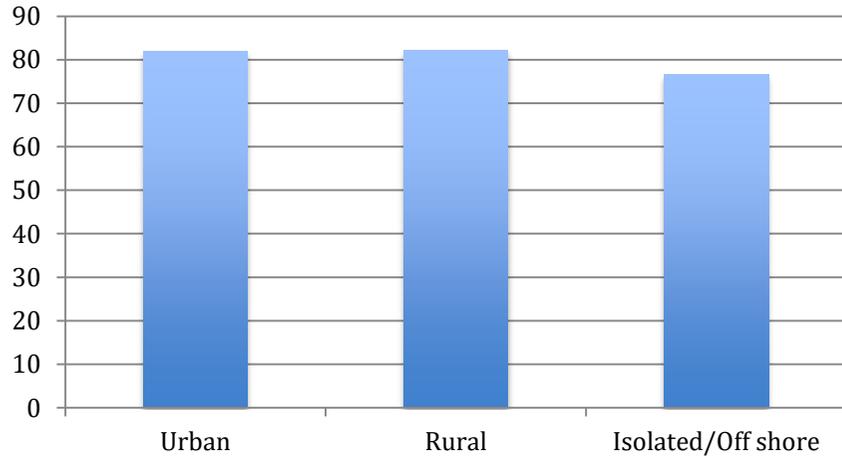


Emotional Demands disaggregated by Geolocation, Role Gender and School Type

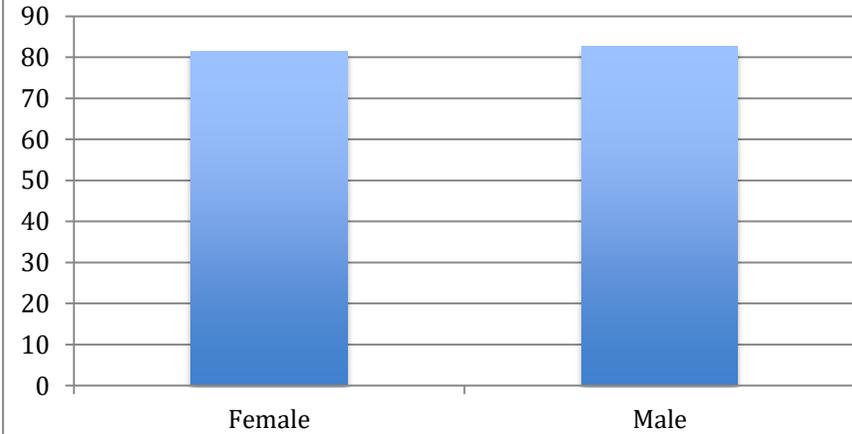


Demands for Hiding Emotions disaggregated by Geolocation, Role Gender and School Type

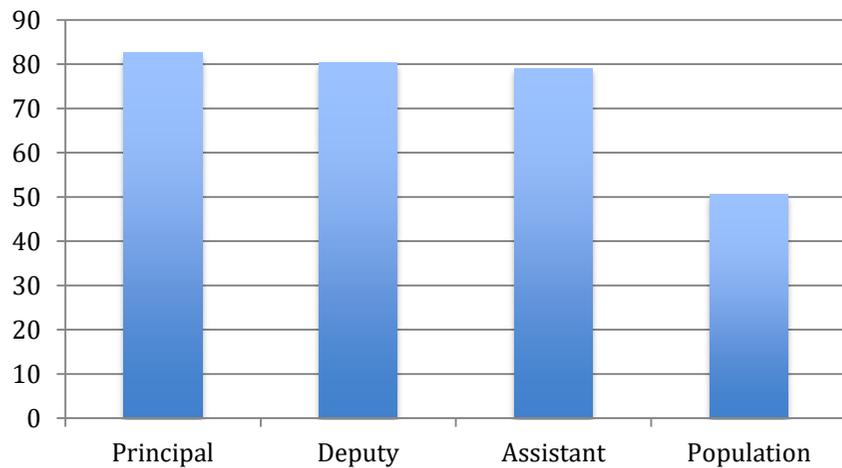
Demands for Hiding Emotions



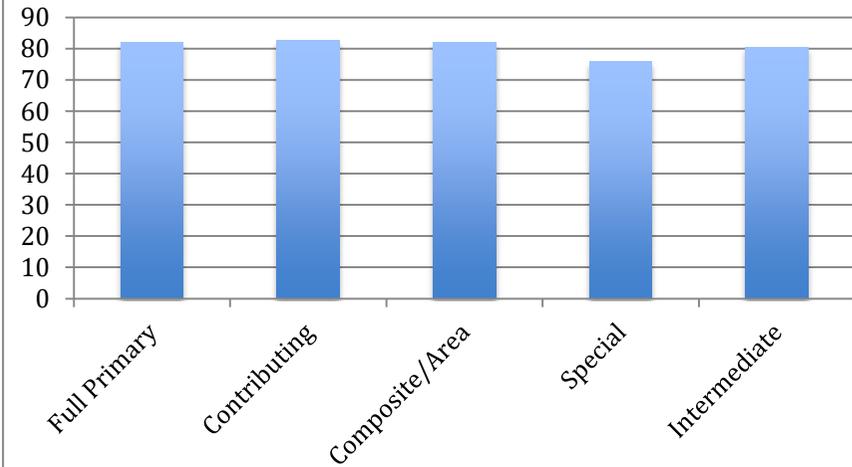
Demands for hiding emotions



Demands for hiding emotions



Demands for hiding emotions



Work Organisation and Job Contents

Trends

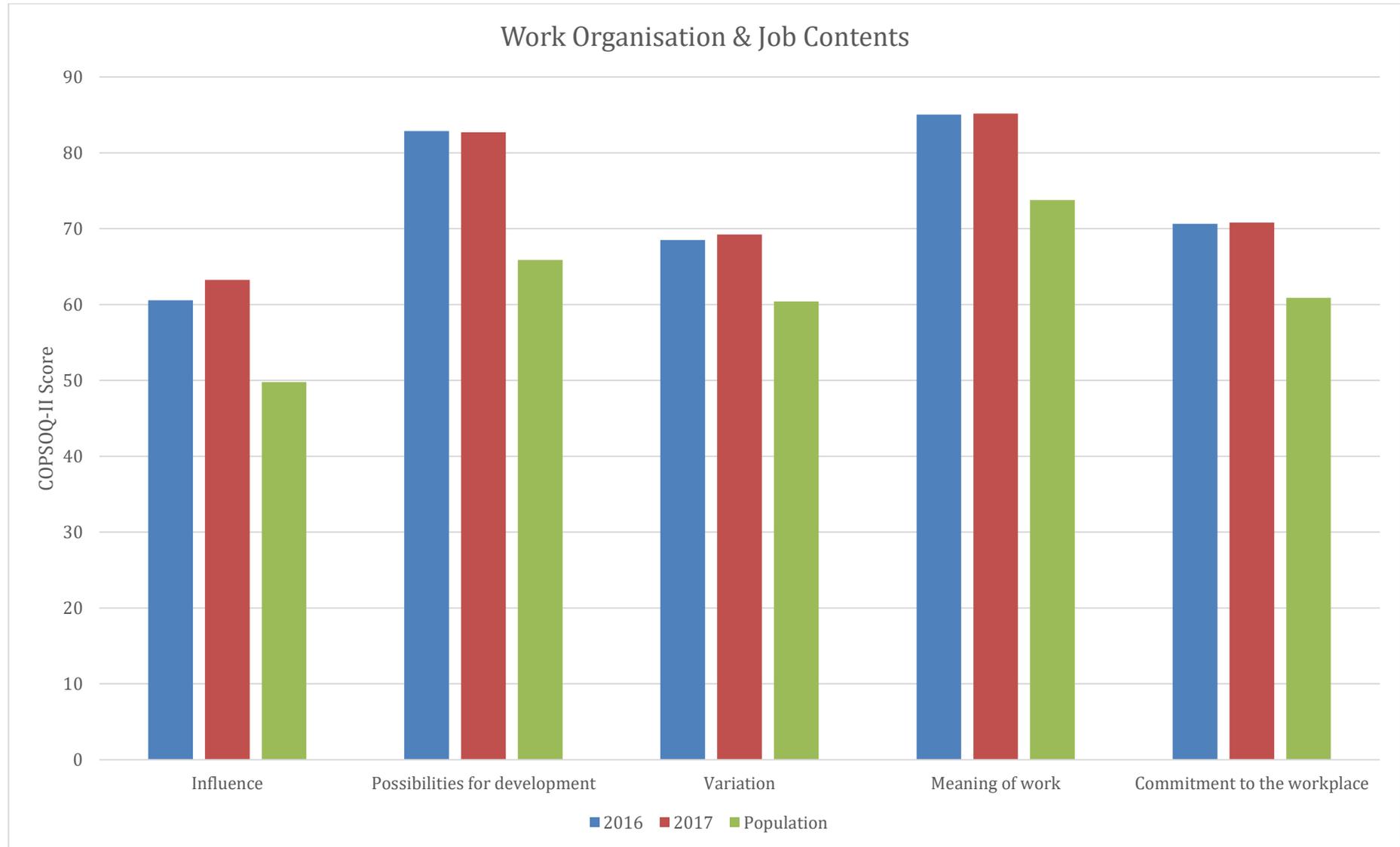


Figure 33. Work organization and job contents trend data.

2017 Data in detail

Subscales	Population		Critical Values		NZ		Location			Role			Gender		School Type			
	Mean	SD	Mean \pm SD*5		ALL	Urban	Rural	Isolated/Off shore	Prin	Dep	Ass	F	M	Full Prim	Contrib	Comp Area	Special	Inter
			Low	High														
<i>Influence</i>	49.80	21.20	39.20	60.40	63.25	64.46	61.20	53.13	65.85	55.71	55.14	62.10	65.73	62.25	64.57	60.31	66.12	59.96
<i>Possibilities for development</i>	65.90	17.60	57.10	74.70	82.73	82.96	82.47	79.69	84.26	77.99	79.31	83.73	80.58	82.53	83.05	77.19	83.88	82.63
<i>Variation</i>	60.40	21.40	49.70	71.10	69.26	69.89	67.97	66.25	69.78	67.41	70.00	70.04	67.58	68.52	70.04	64.38	73.03	68.64
<i>Meaning of work</i>	73.80	15.80	65.90	81.70	85.19	85.53	84.31	87.08	86.18	81.19	85.93	85.71	84.07	85.28	85.17	84.17	89.91	83.62
<i>Commitment to the workplace</i>	60.90	20.40	50.70	71.10	70.81	71.60	69.04	69.69	73.12	62.31	70.00	71.72	68.85	69.51	71.36	75.00	79.28	68.75

*Mean \pm .5SD

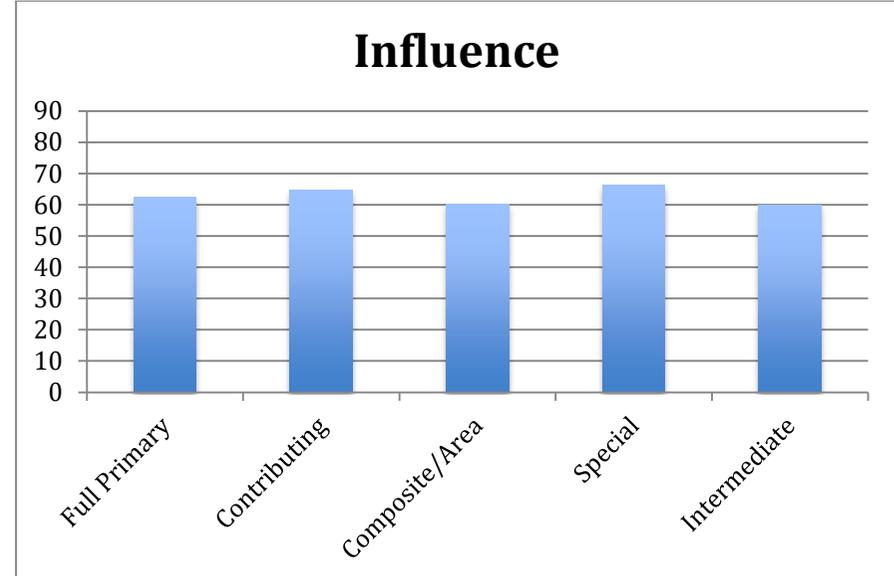
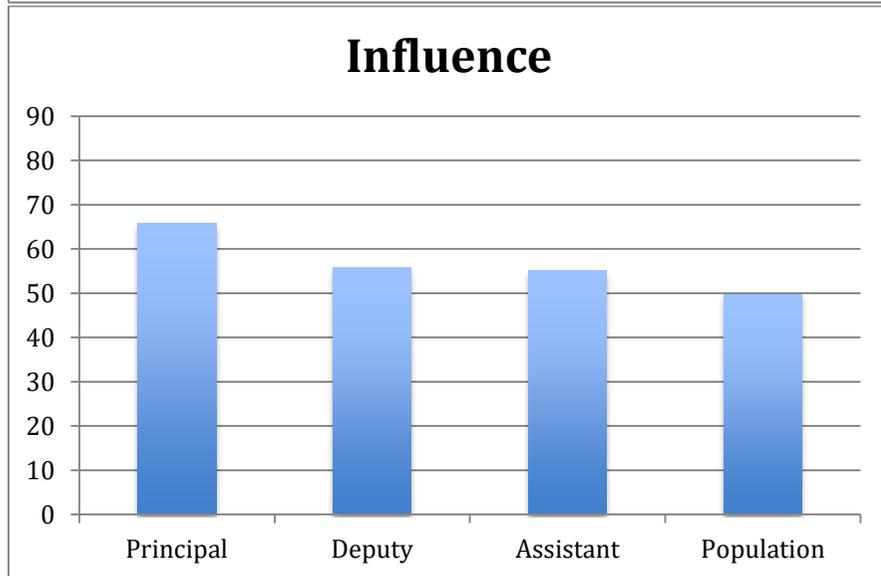
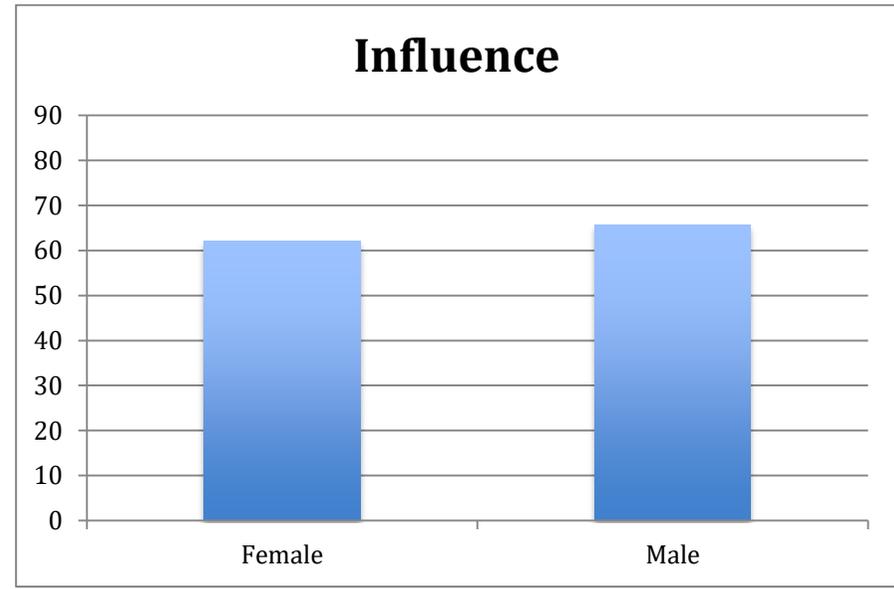
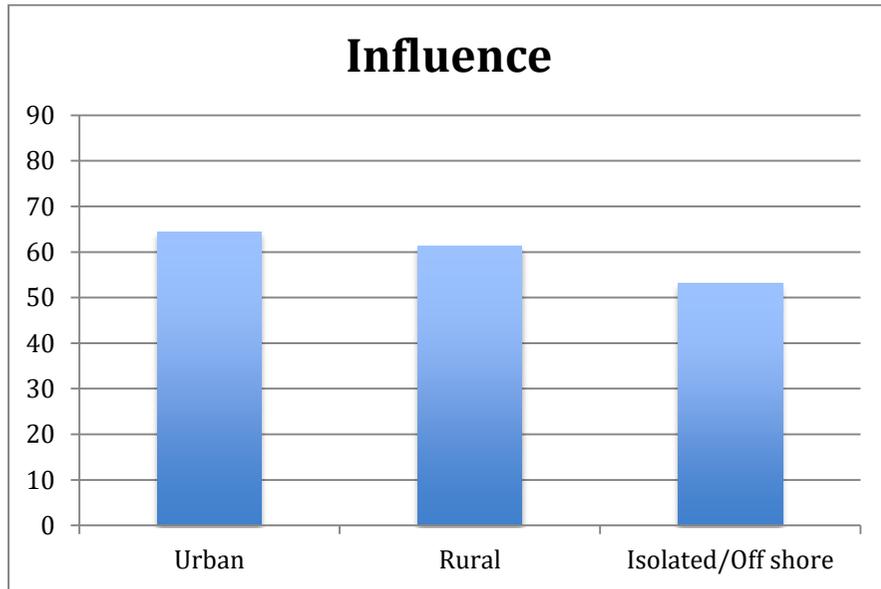
- **Influence at work** deals with the degree to which the employee can influence aspects of work itself, ranging from planning of work to the order of tasks.
- **Possibilities for Development** assesses if the tasks are challenging for the employee and if the tasks provide opportunities for learning and thus opportunities for development not only in the job but also at the personal level. Lack of development can create apathy, helplessness and passivity.
- **Variation** of work deals with the degree to which work (tasks, work process) is varied, that is if tasks are or are not repetitive.
- **Meaning of Work** concerns both the meaning of the aim of work tasks and the meaning of the context of work tasks. The aim is “vertical”: that the work is related to a more general purpose, such as providing students with a good education. Context is “horizontal”: that one can see how ones’ own work contributes to the overall product of the organisation.
- **Commitment to the Workplace** deals with the degree to which one experiences being committed to ones’ workplace. It is not the work by itself or the work group that is the focus here, but the organization in which one is employed.

Results

- **Trends** All demands experienced by principals in New Zealand are very similar to their Australian and Irish colleagues, with many scores well above the critical high value indicating the domains are higher than the general population.
- **Influence at work** Principals report significantly more influence than either deputies or assistants. Males report statistically significantly higher scores than females.
- **Possibilities for Development** All groups’ average scores are above the critical high score indicating they have noticeably more possibilities for developing than the general population. Principals report significantly higher scores than either deputies or assistants. Males report statistically significantly higher scores than females.
- **Variation** All groups were within half of one standard deviation of the general population suggesting their work is not noticeably more or less varied than the general population.

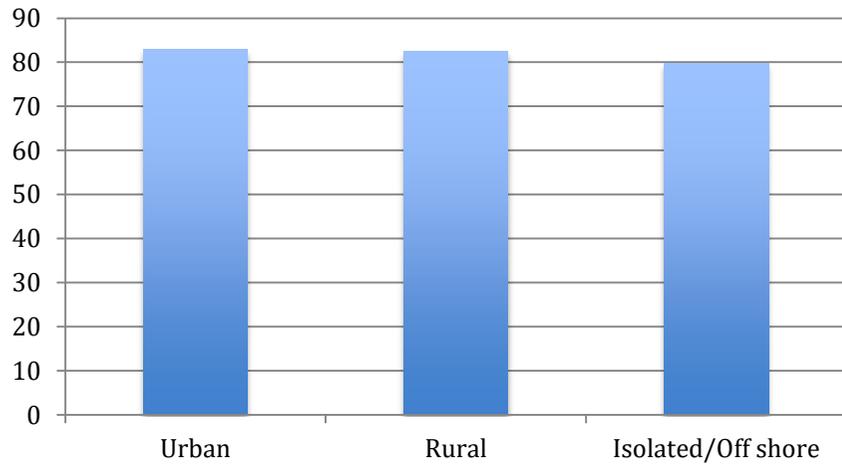
- **Meaning of Work** All groups report high average scores on this dimension. They therefore get noticeably more meaning from their work than the general population. Principals report significantly higher scores than either deputies, but not assistants.
- **Commitment to the Workplace** Principals report significantly higher scores than either deputies, but not assistants.

Influence disaggregated by Geolocation, Role Gender and School Type

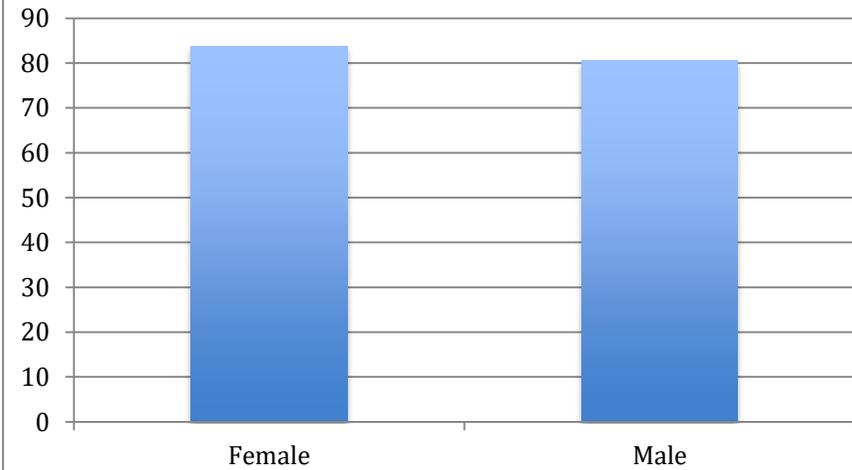


Possibilities for Development disaggregated by Geolocation, Role Gender and School Type

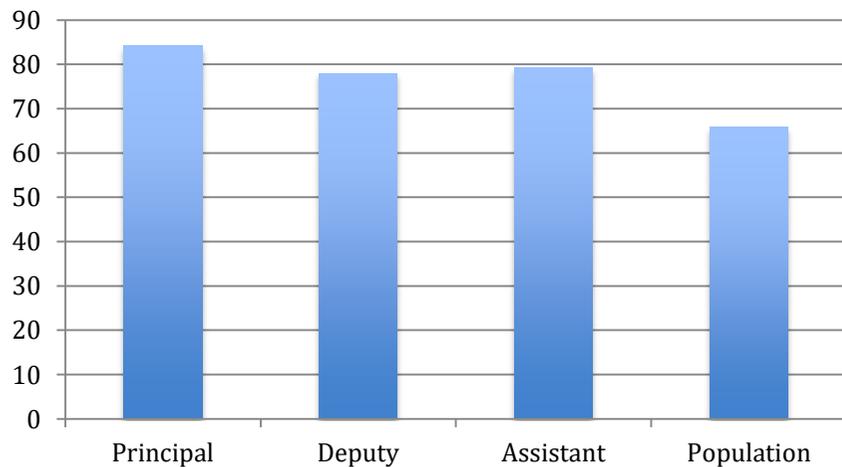
Possibilities for Development



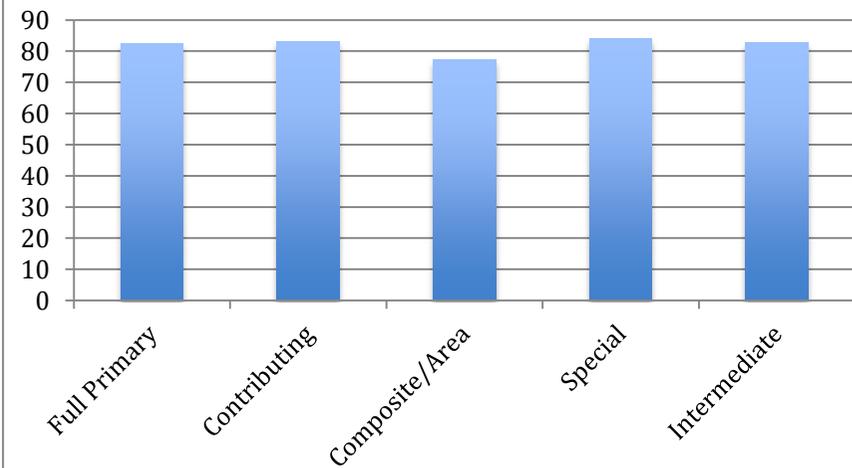
Possibilities for development



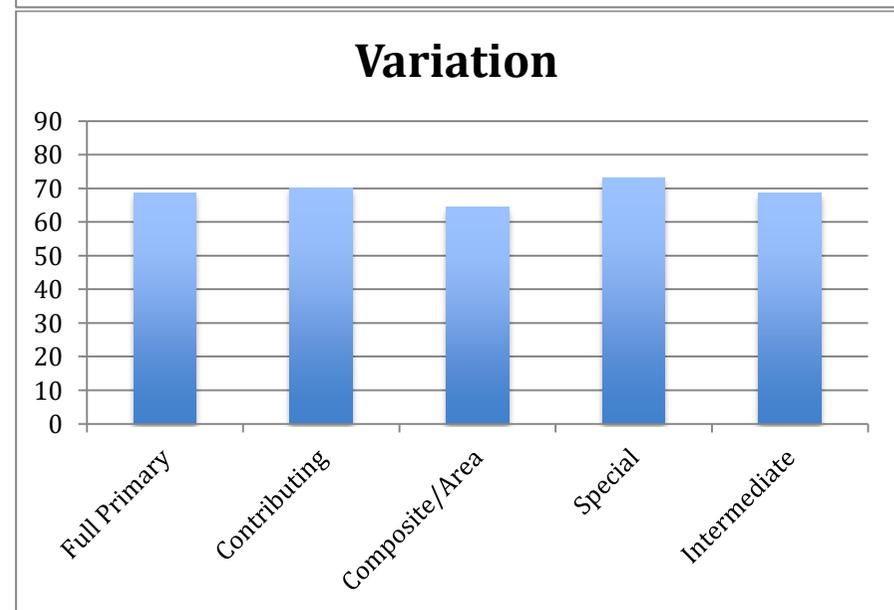
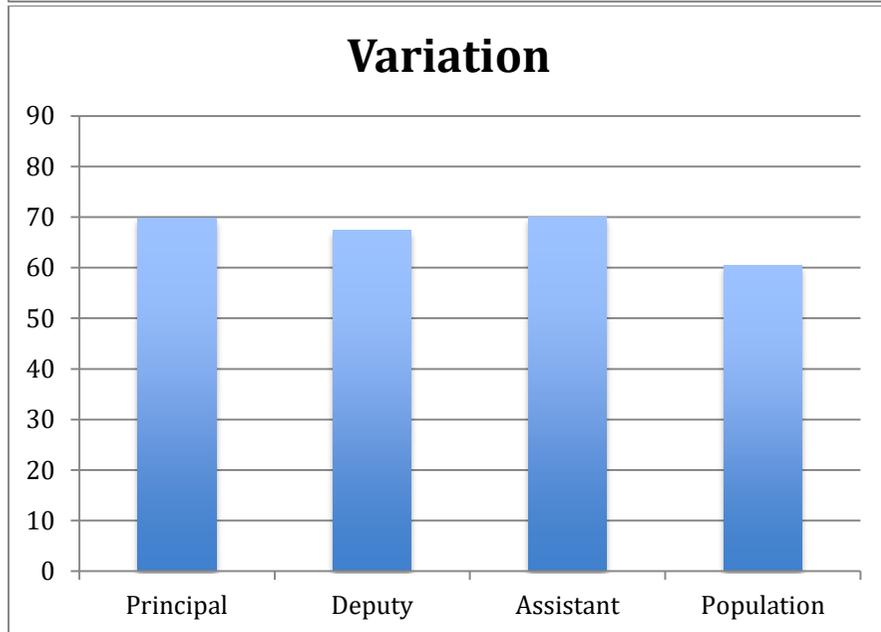
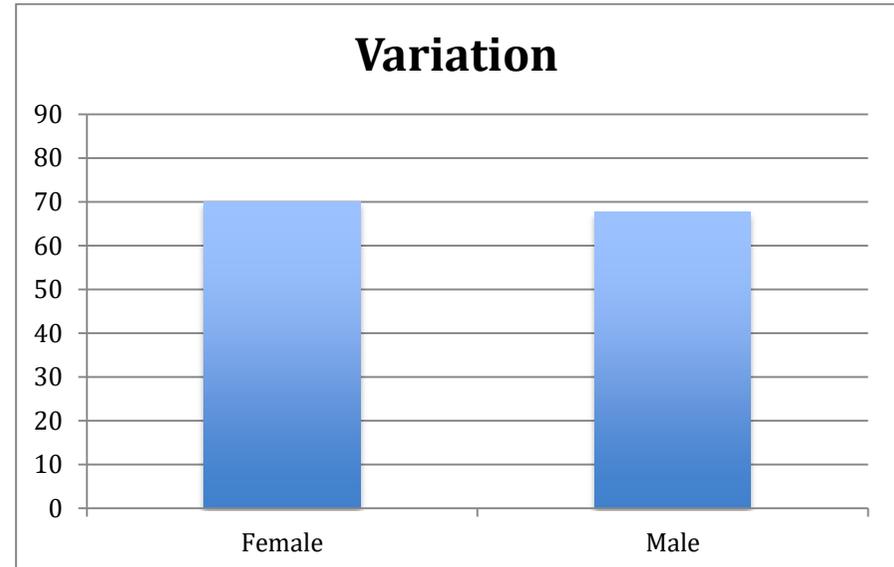
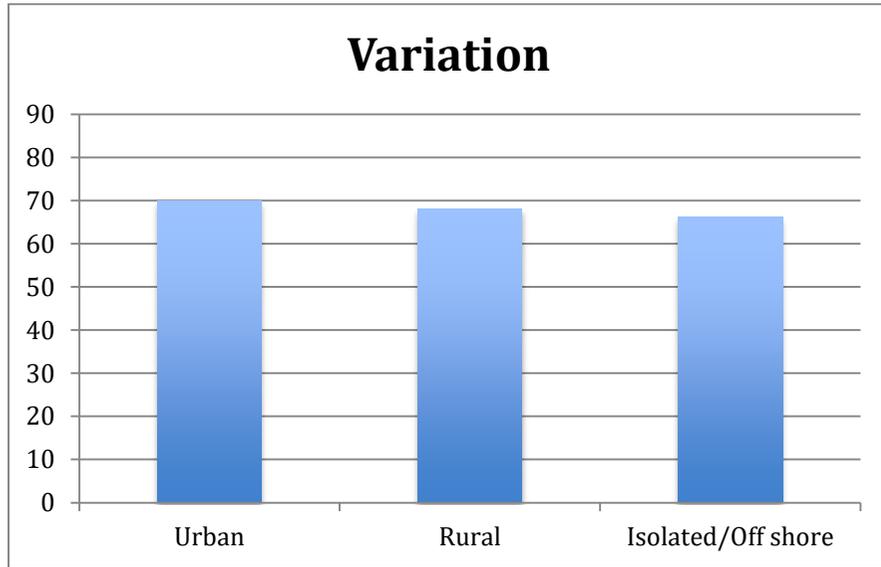
Possibilities for development



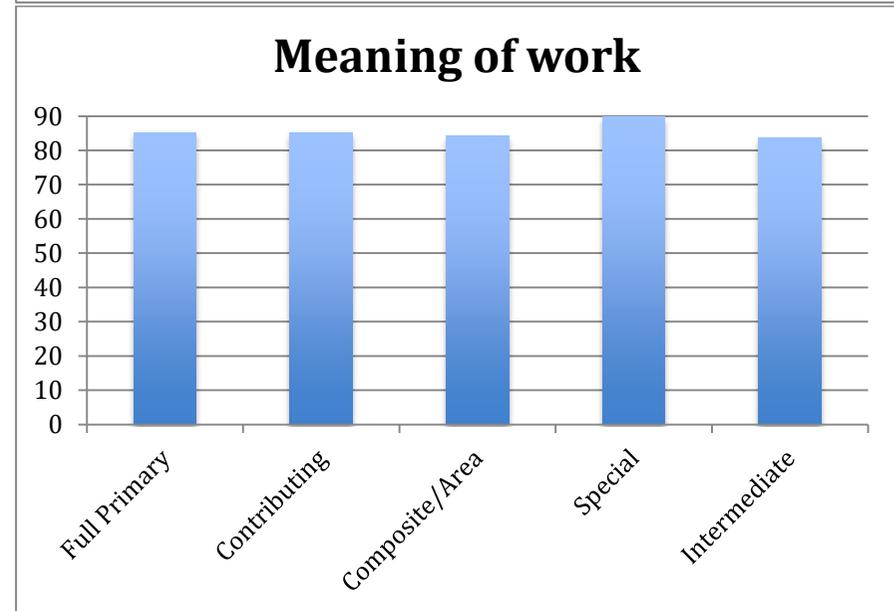
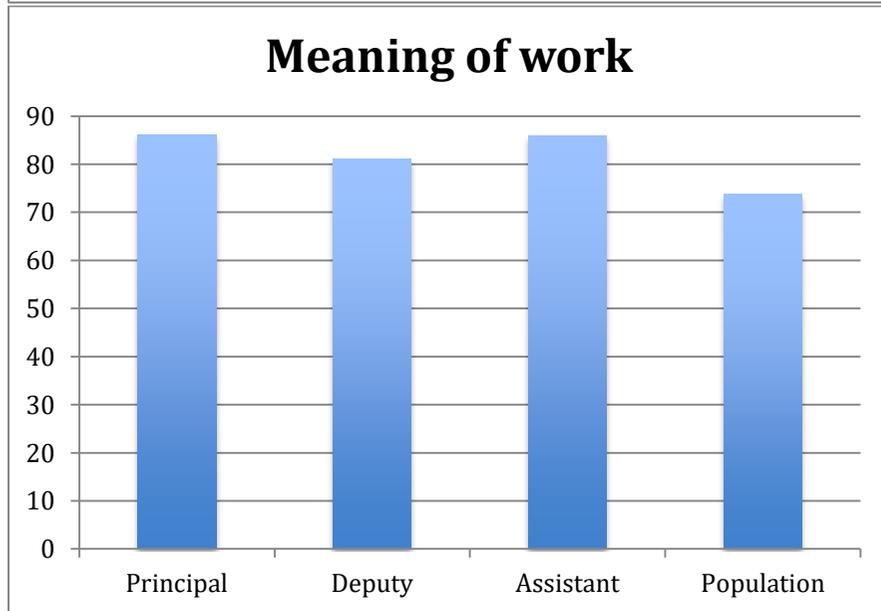
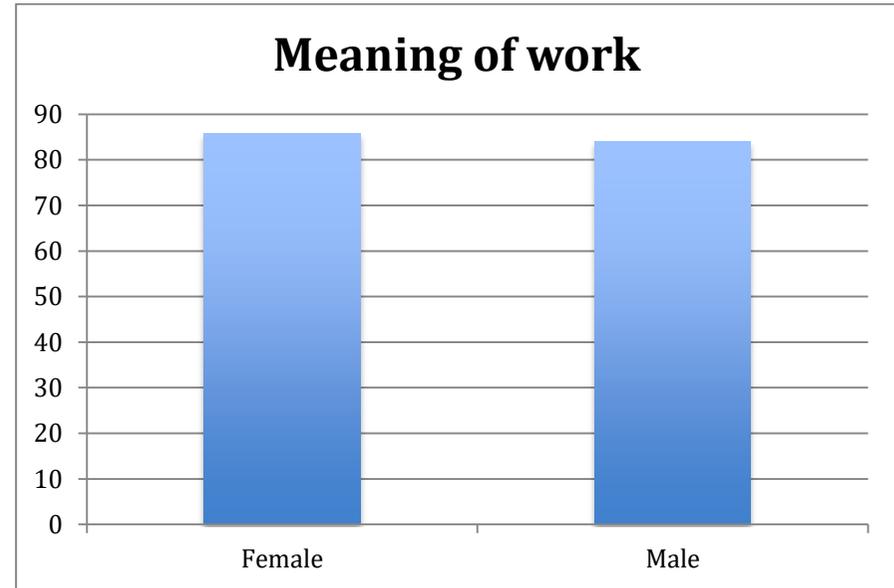
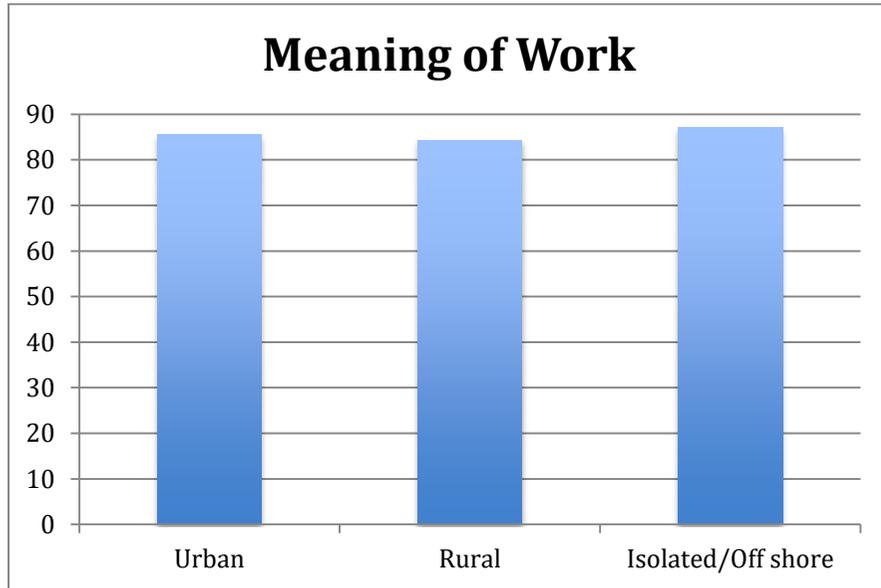
Possibilities for development



Variation disaggregated by Geolocation, Role Gender and School Type

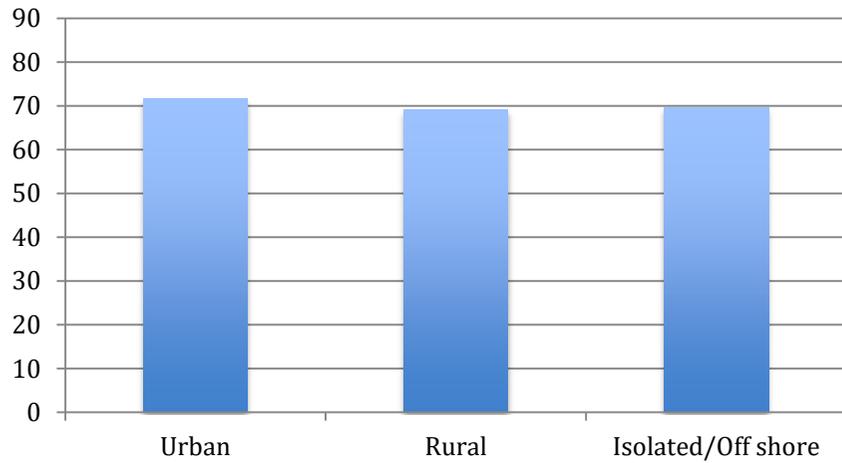


Meaning of Work disaggregated by Geolocation, Role Gender and School Type

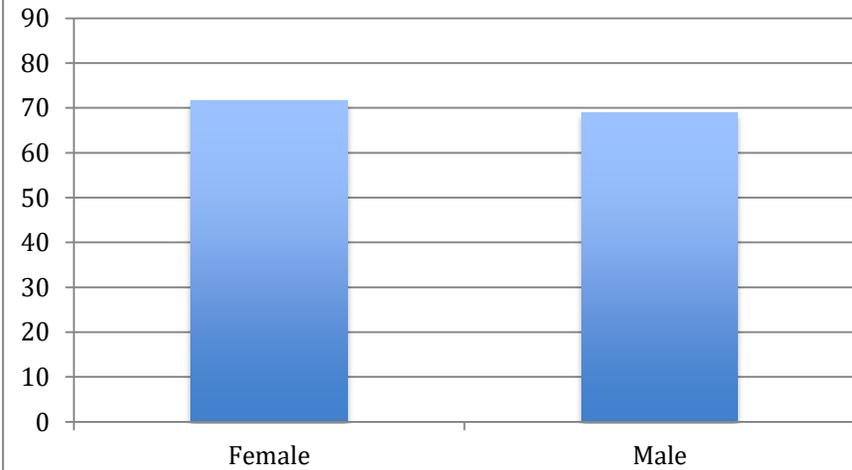


Commitment to the Workplace disaggregated by Geolocation, Role Gender and School Type

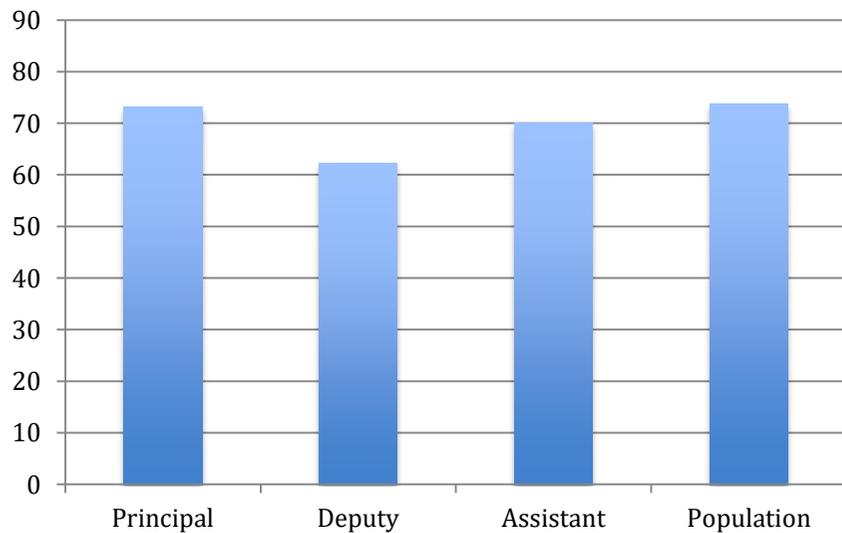
Commitment to the Workplace



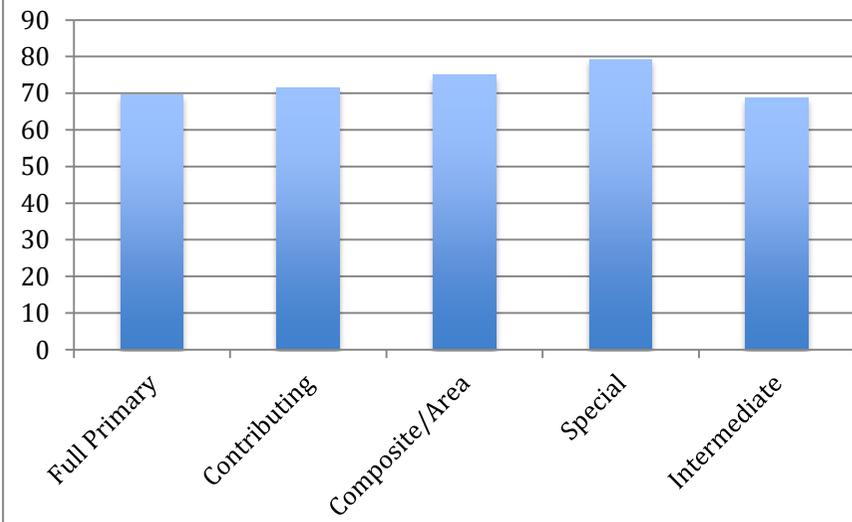
Commitment to the workplace



Commitment to the workplace



Commitment to the workplace



Interpersonal Relations & Leadership

International Trends

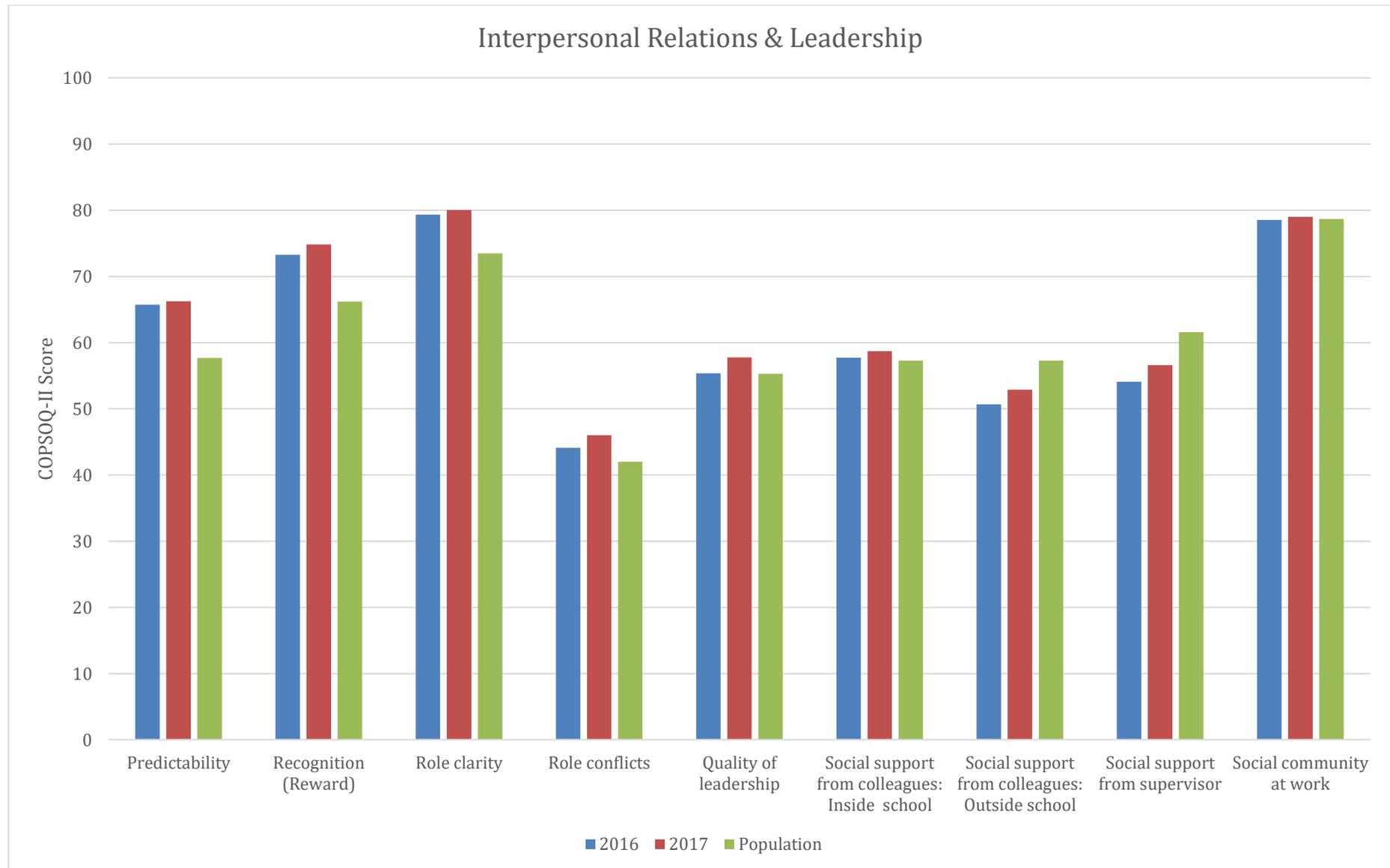


Figure 34. Interpersonal relations and leadership trend data

2017 Data in Detail

Subscales	Population		Critical Values		NZ	Location				Role			Gender		School Type			
	Mean	SD	Mean \pm SD*.5		ALL	Urban	Rural	Isolated/Off shore	Prin	Dep	Ass	F	M	Full Prim	Contrib	Comp Area	Special	Inter
			Low	High														
<i>Predictability</i>	57.70	20.90	47.25	68.15	66.23	67.05	64.71	60.00	67.38	64.20	58.61	65.94	66.86	64.88	66.92	68.13	69.74	67.67
<i>Recognition (Reward)</i>	66.20	19.90	56.25	76.15	74.85	74.73	75.71	67.92	77.09	68.06	69.81	74.89	74.77	74.19	74.86	72.92	82.46	74.86
<i>Role clarity</i>	73.50	16.40	65.30	81.70	80.03	79.74	80.59	80.00	82.67	72.84	70.74	80.33	79.39	79.92	80.24	79.17	80.26	81.03
<i>Role conflicts</i>	42.00	16.60	33.70	50.30	46.02	45.52	46.64	52.50	46.95	44.56	41.11	45.57	47.01	46.24	46.00	49.06	37.17	46.05
<i>Quality of leadership</i>	55.30	21.10	44.75	65.85	57.77	58.69	56.62	46.56	57.75	57.21	59.58	57.19	59.04	56.03	58.68	61.56	63.05	60.60
<i>Social support from colleagues: Inside school*</i>	57.30	19.70	47.45	67.15	58.71	59.57	57.39	51.25	58.40	58.69	62.41	59.44	57.14	58.12	58.69	57.50	65.35	60.38
<i>Social support from colleagues: Outside school*</i>	57.30	19.70	47.45	67.15	52.90	53.53	51.74	50.00	56.36	42.59	43.33	53.66	51.29	53.49	53.30	51.25	42.11	48.68
<i>Social support from supervisor</i>	61.60	22.40	50.40	72.80	56.60	56.84	57.37	40.83	56.91	54.54	57.59	56.62	56.54	56.30	56.61	48.75	59.26	57.29
<i>Social community at work</i>	78.70	18.90	69.25	88.15	79.01	79.15	79.01	76.67	80.26	74.38	79.26	79.44	78.07	79.81	78.62	75.00	85.96	77.63

*Mean \pm .5SD

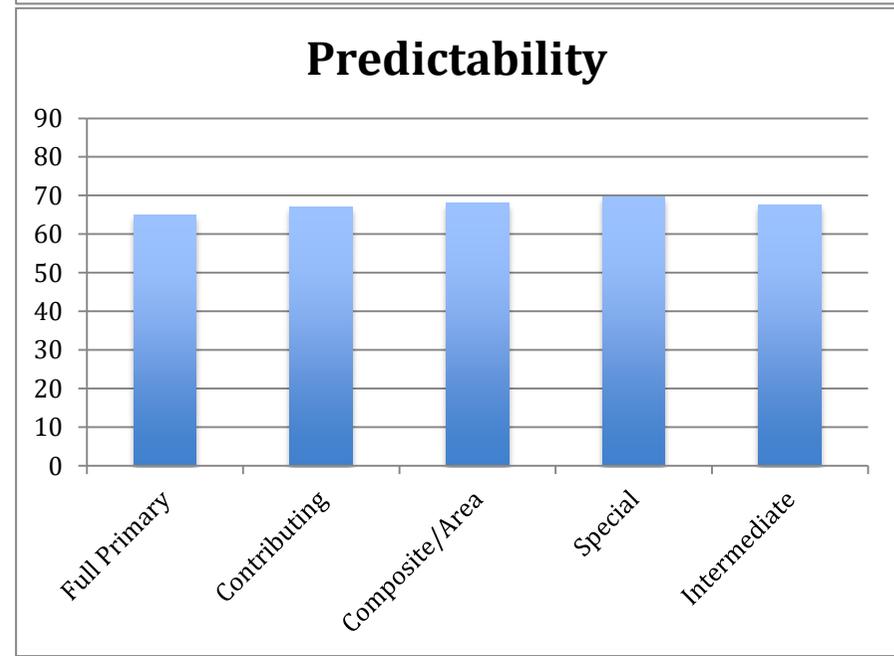
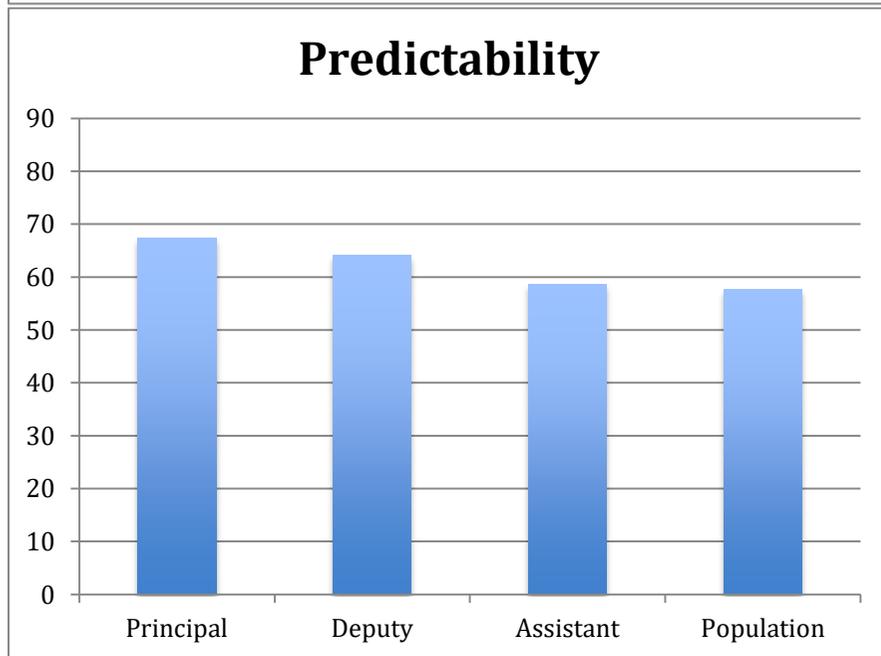
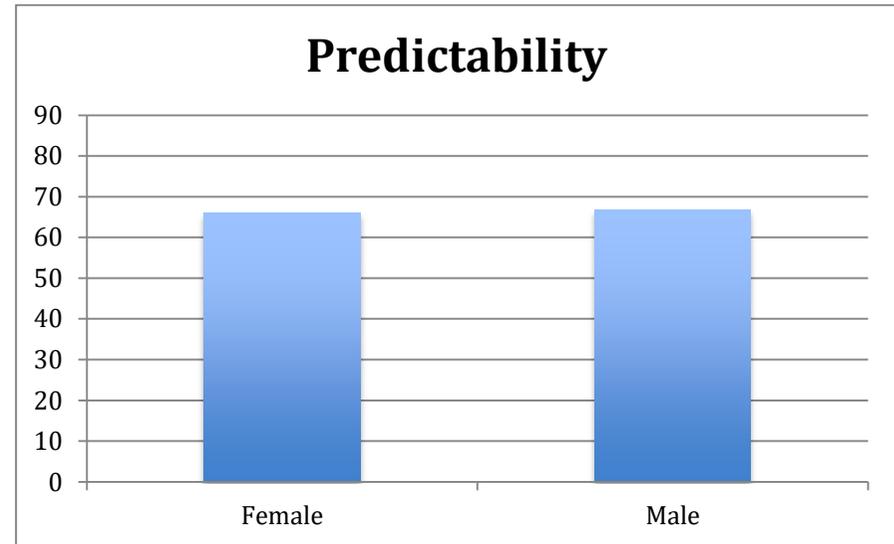
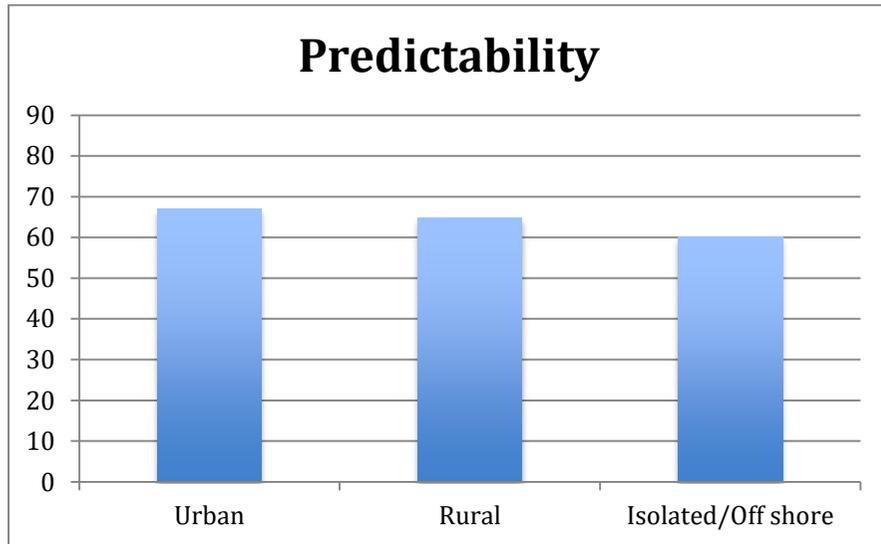
- **Predictability** deals with the means to avoid uncertainty and insecurity. This is achieved if employees receive the relevant information at the right time.
- **Recognition (Reward)** deals with the recognition by the management of your effort at work.
- **Role Clarity** deals with the employee's understanding of her or his role at work, e.g., content of tasks, expectations to be met and her or his responsibilities.
- **Role Conflicts** stem from two sources. The first source is about possible inherent conflicting demands within a specific task. The second source is about possible conflicts when prioritising different tasks.
- **Quality of Leadership** deals with the next higher managers' leadership in different contexts and domains. For many principals this is a regional leader, but may be interpreted by some as school board chairperson, particularly in the independent sector.
- **Social support from colleagues inside and outside the school** deals with principals' impressions of the possibility to obtain support from colleagues if one should need it.
- **Social community at work** concerns whether there is a feeling of being part of the group of employees at the workplace, e.g. if employees relations are good and if they work well together.

Results

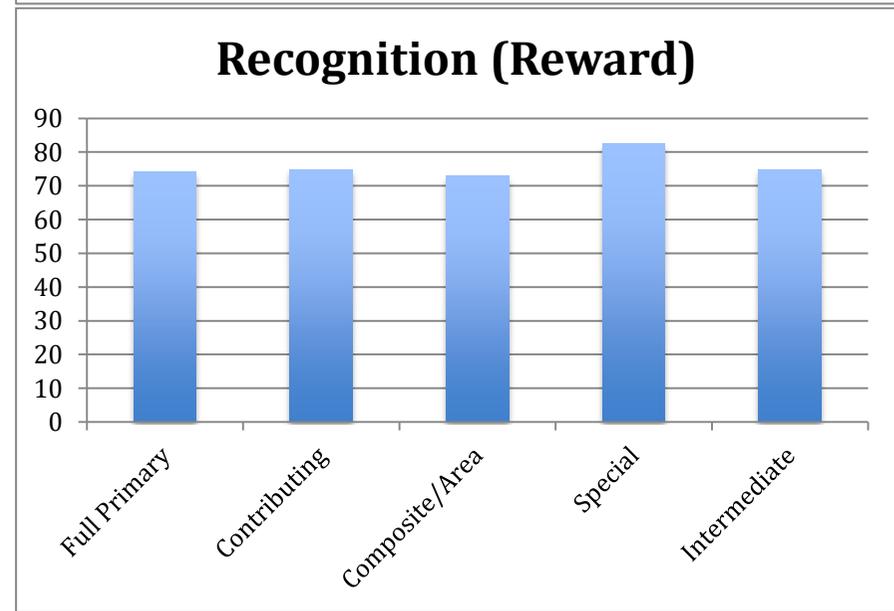
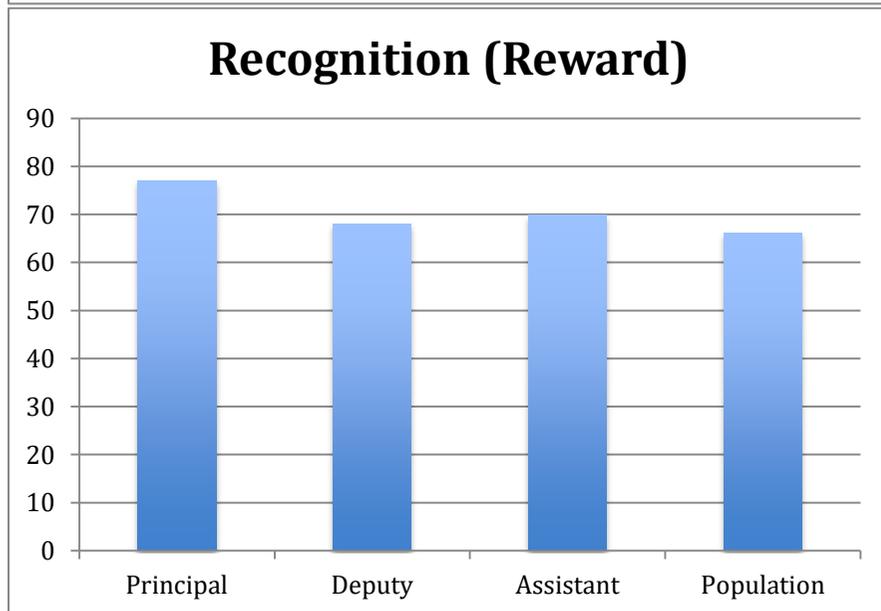
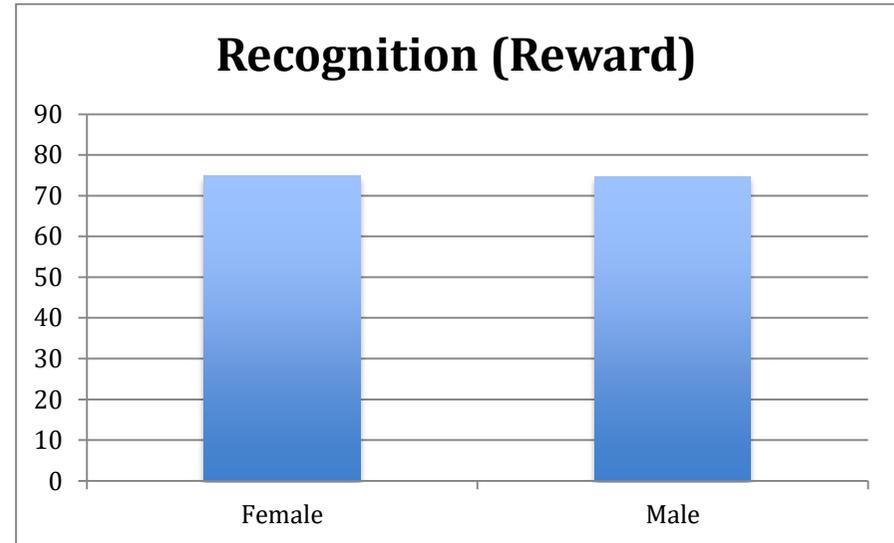
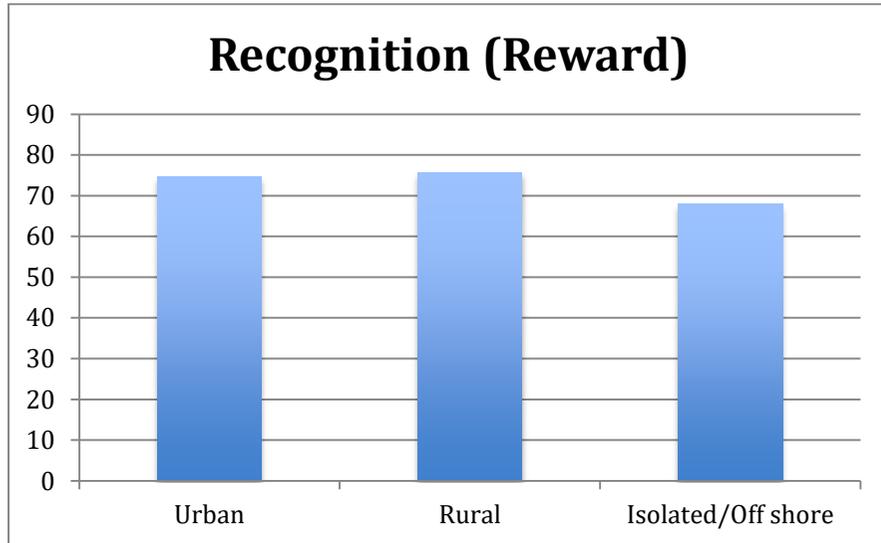
- **Trends** New Zealand principals report significantly higher recognition than Australian principals and significantly lower role conflicts than either their Australian and Irish colleagues

- **Predictability** Only Special school participants reported average scores above the critical high score suggesting noticeably higher levels of work predictability than the general population. Principals report significantly more predictability than deputies and assistant principals.
- **Recognition (Reward)** Only Special school participants reported average scores above the critical high score suggesting noticeably higher levels of recognition than the general population. Principals report significantly more influence than assistants and deputies.
- **Role Clarity** Special School leaders and Principals reported noticeably higher levels of role clarity.
- **Role Conflicts** The groups who report on average noticeably higher levels of role conflict than the general population are Isolated and Composite/Area leaders.
- **Quality of Leadership** No group reported the quality of leadership (that they report to) as being noticeably different from the general population.
- **Social support from colleagues inside the school** is reported at levels very close to the general population.
- **Social support from colleagues outside the school** is reported at levels very close to the general population. Special school leaders report statistically significantly lower scores than their colleagues
- **Social community at work** is also reported at levels very close to the general population.

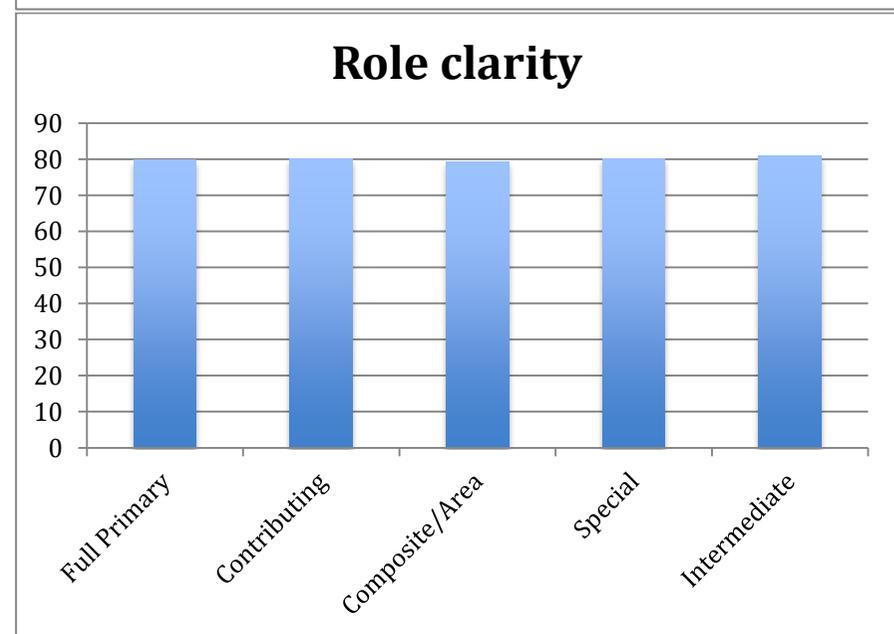
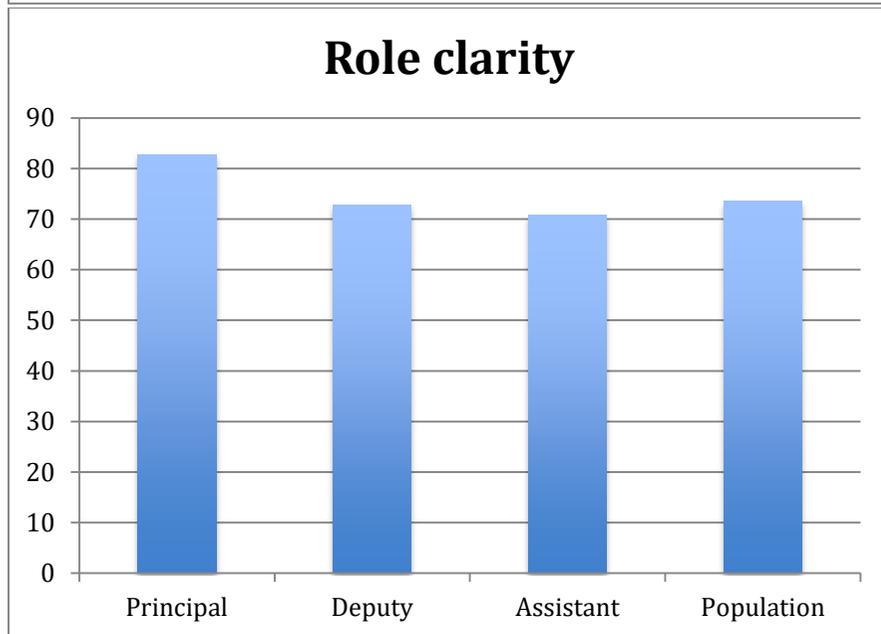
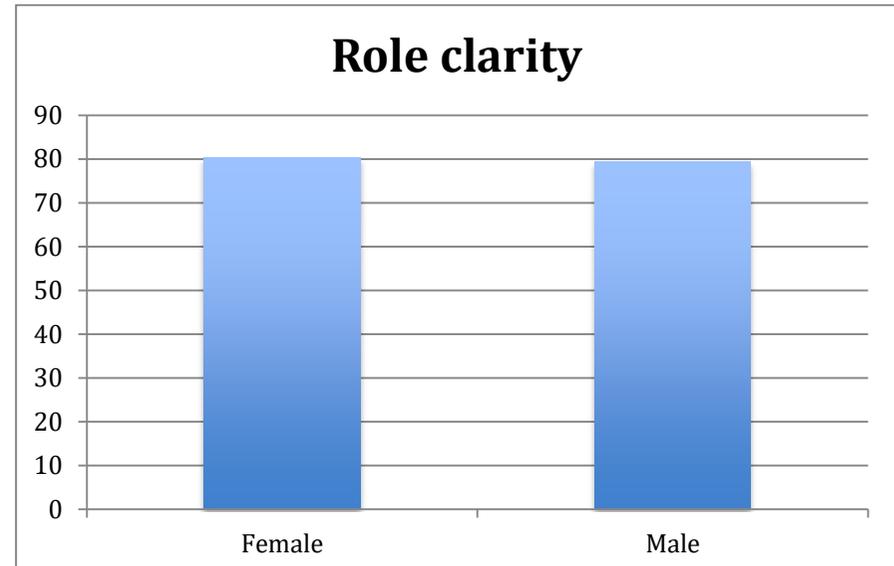
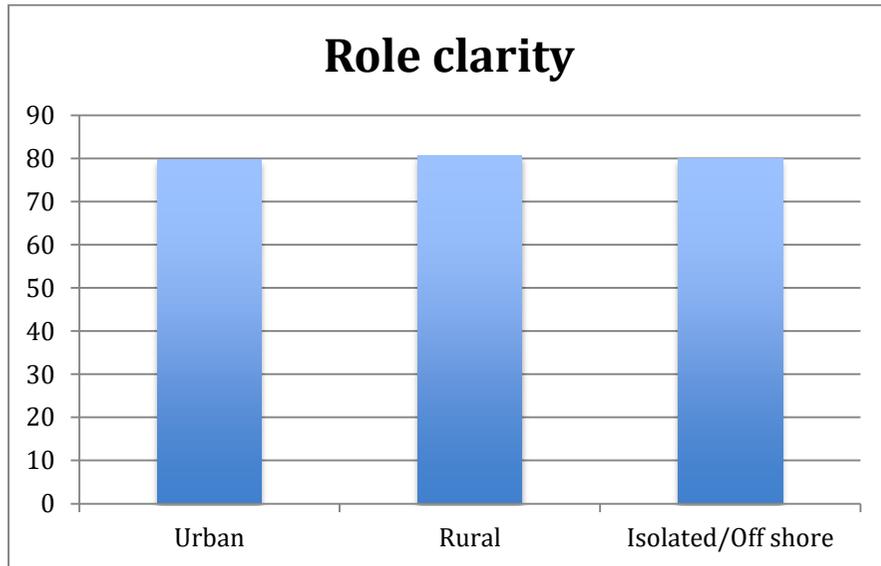
Predictability disaggregated by Geolocation, Role Gender and School Type



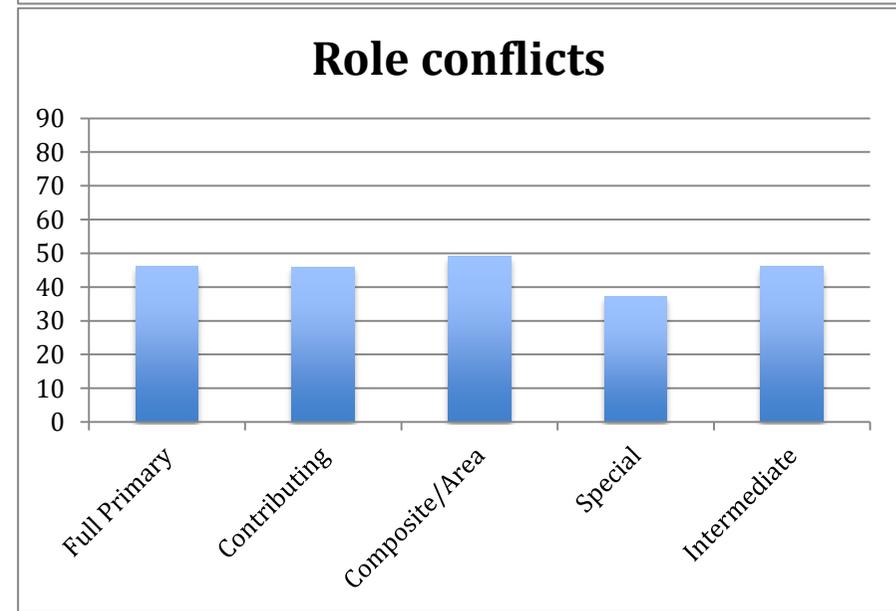
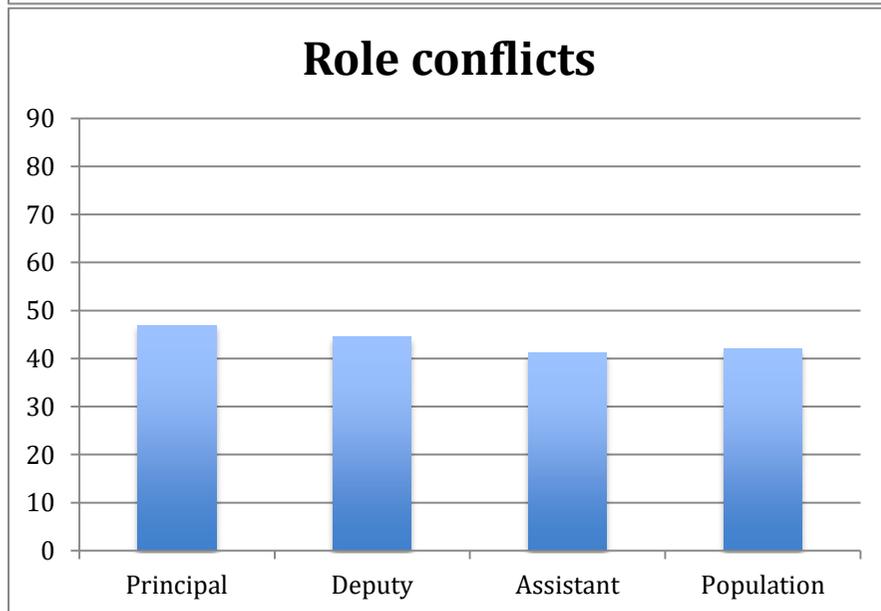
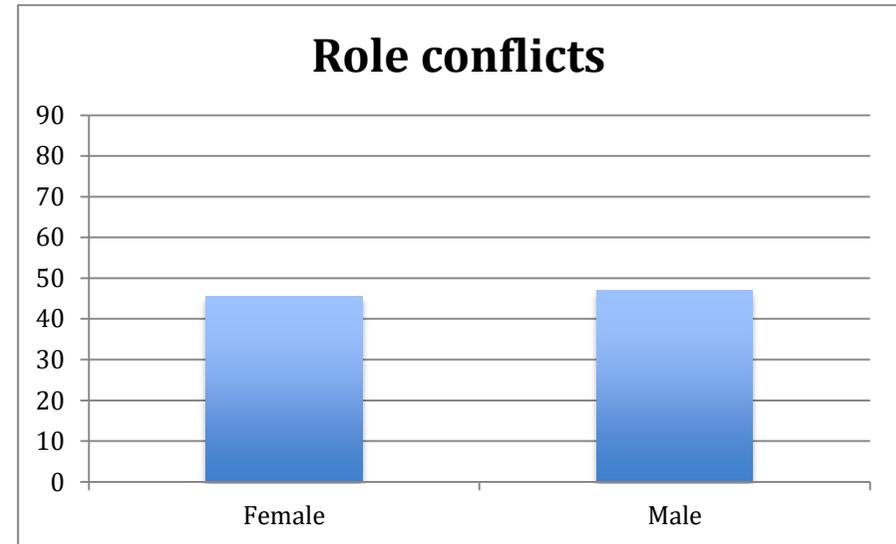
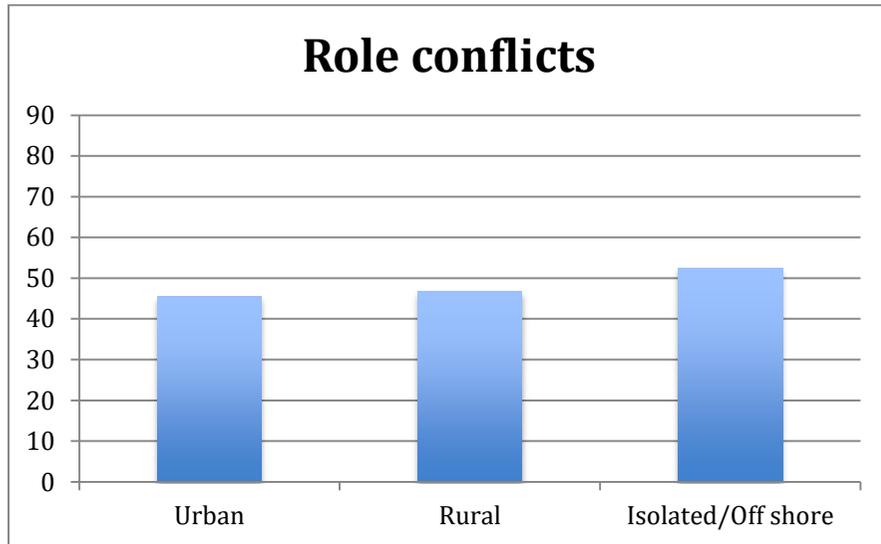
Recognition (Reward) disaggregated by Geolocation, Role Gender and School Type



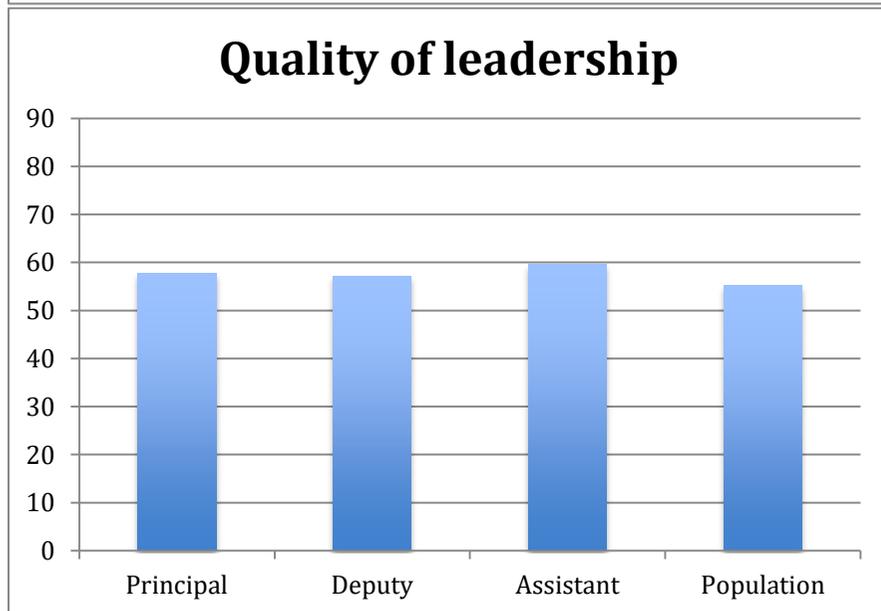
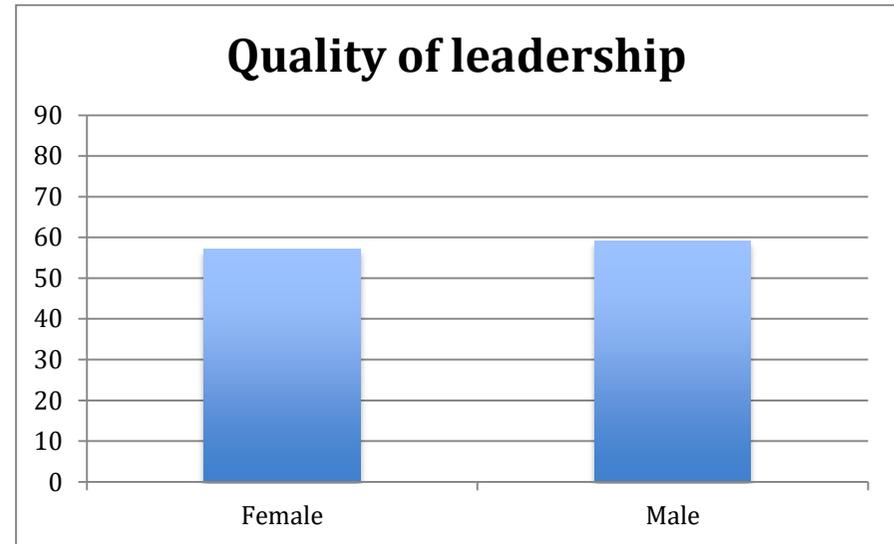
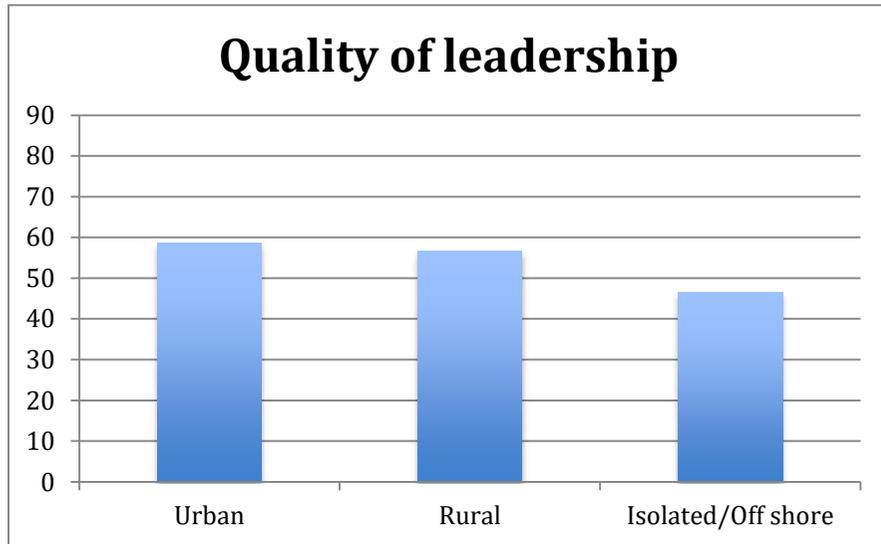
Role Clarity disaggregated by Geolocation, Role Gender and School Type



Role Conflicts disaggregated by Geolocation, Role Gender and School Type

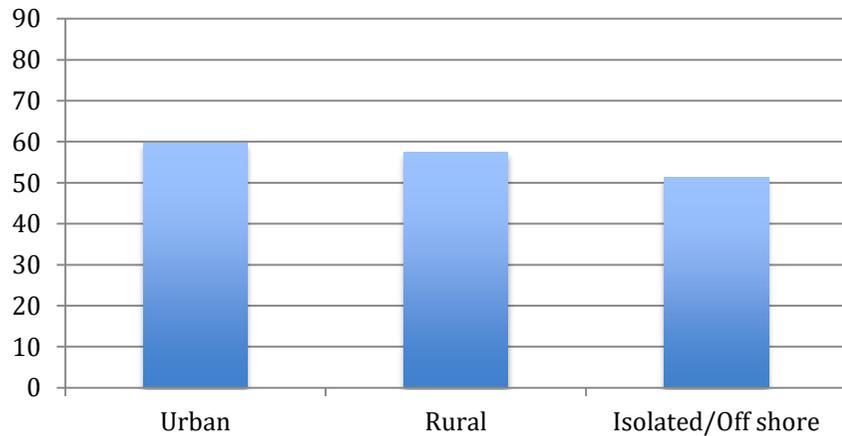


Quality of Leadership disaggregated by Geolocation, Role Gender and School Type

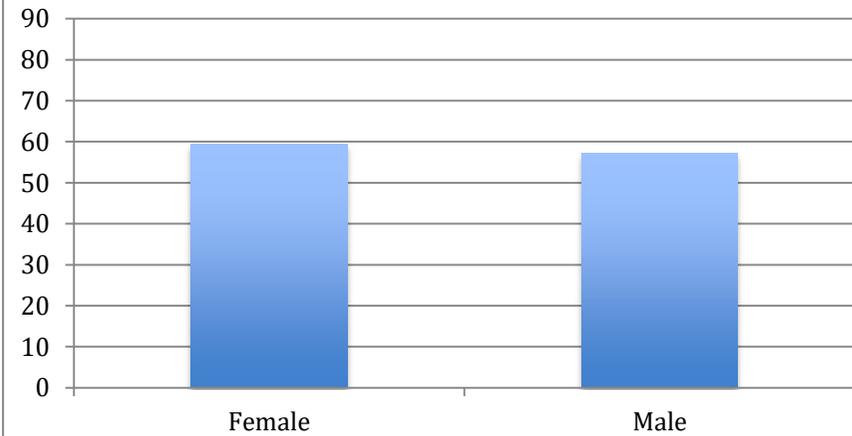


Social Support, Colleagues Inside School disaggregated by Geolocation, Role Gender and School Type

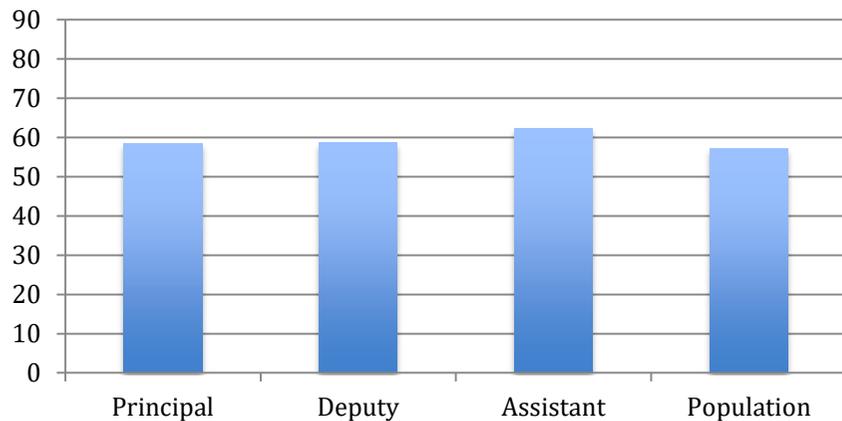
**Social support from colleagues:
Inside school**



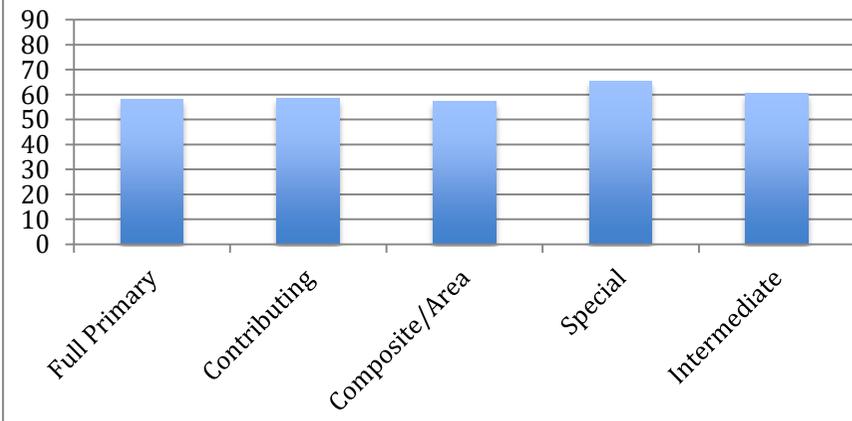
**Social support from colleagues:
Inside school**



**Social support from colleagues:
Inside school**

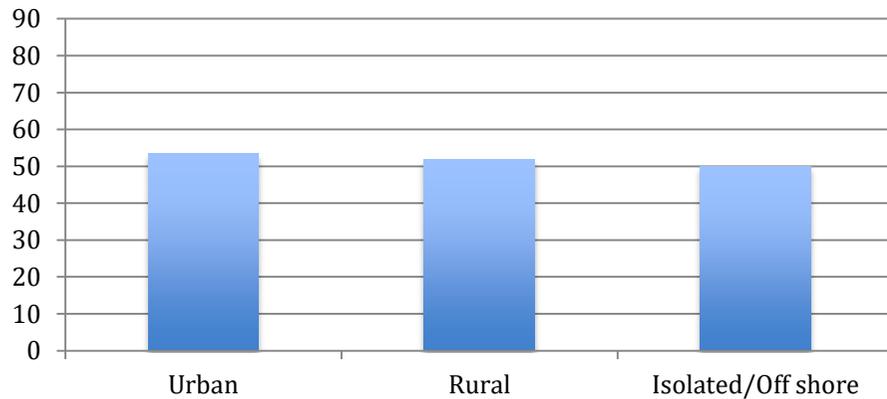


**Social support from colleagues:
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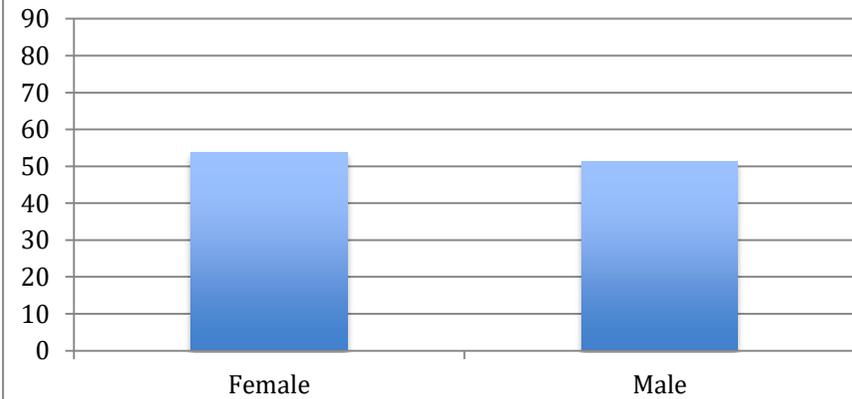


Social Support, Colleagues Outside School disaggregated by Geolocation, Role Gender and School Type

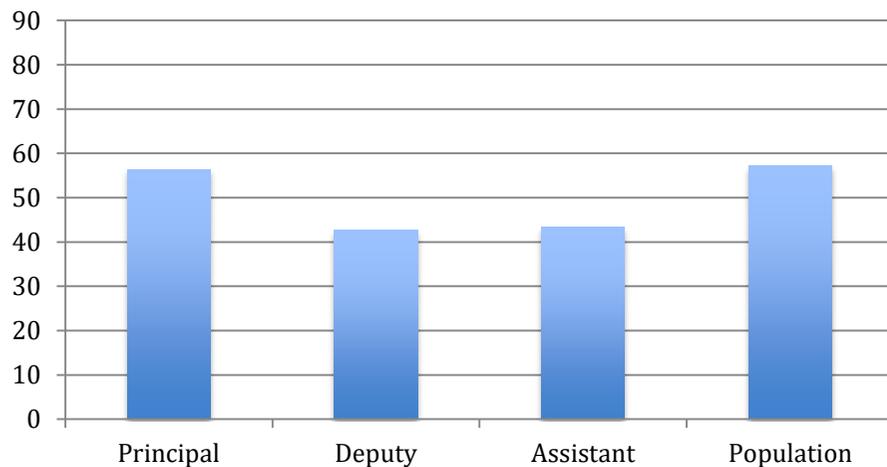
**Social Support from colleagues:
Outside school**



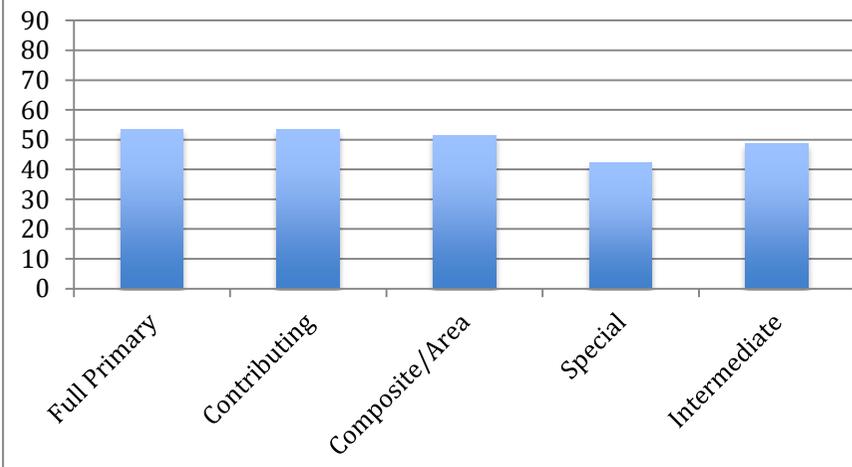
**Social support from colleagues:
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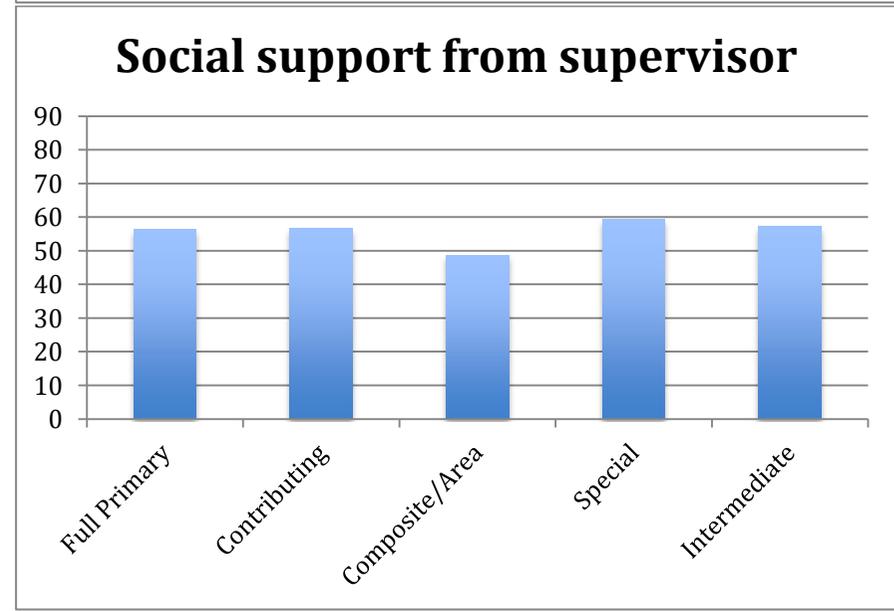
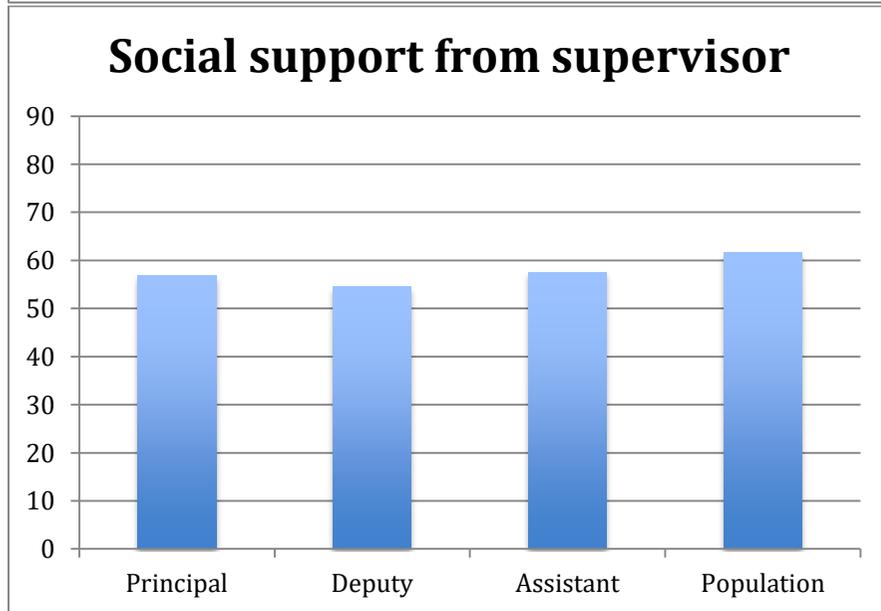
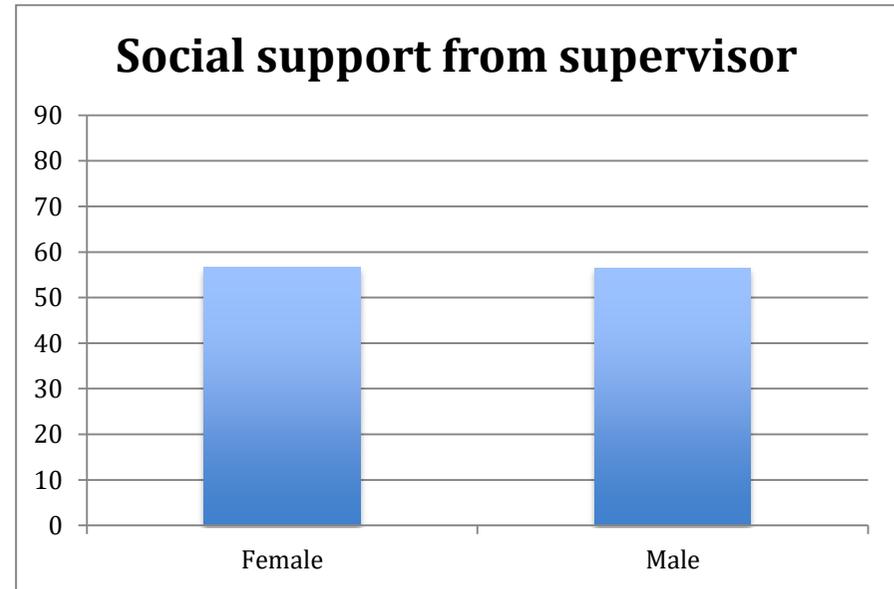
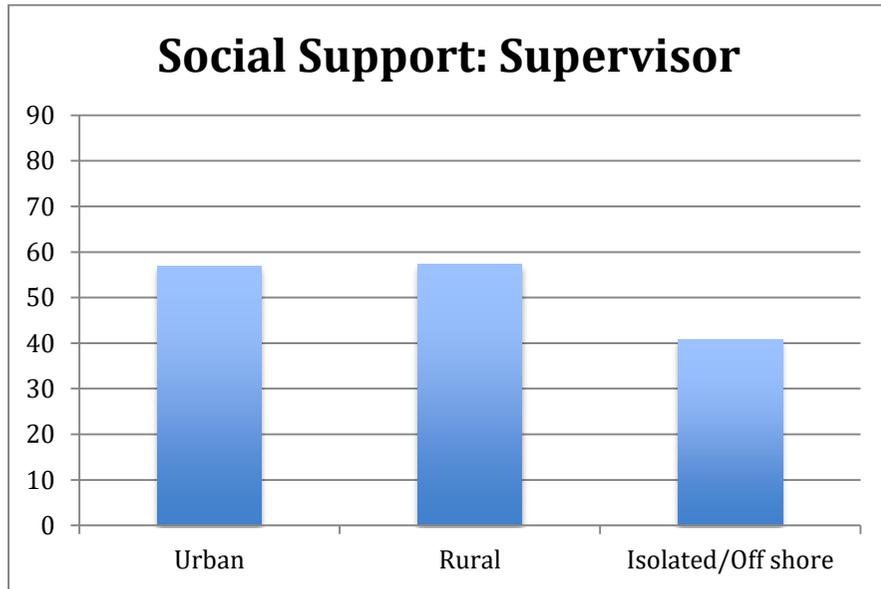
**Social support from colleagues:
Outside school**



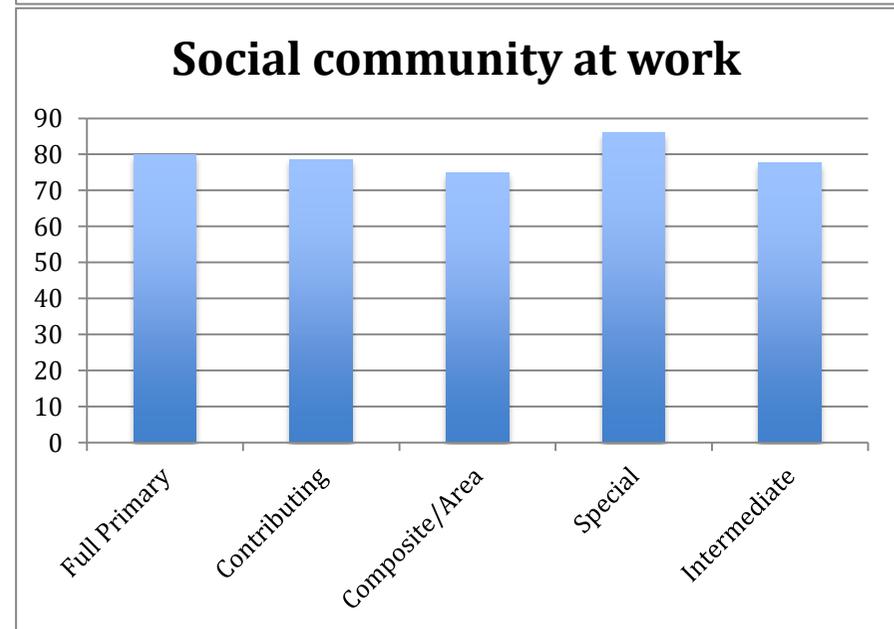
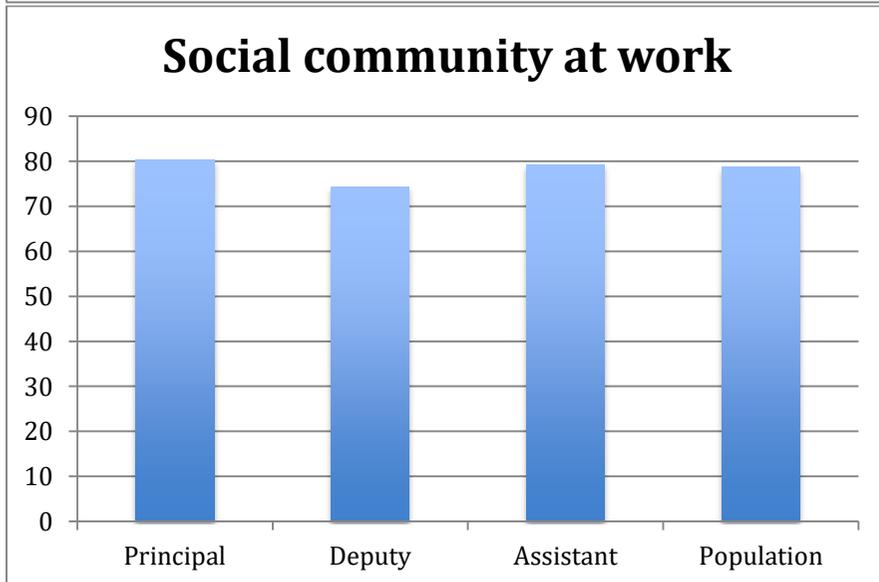
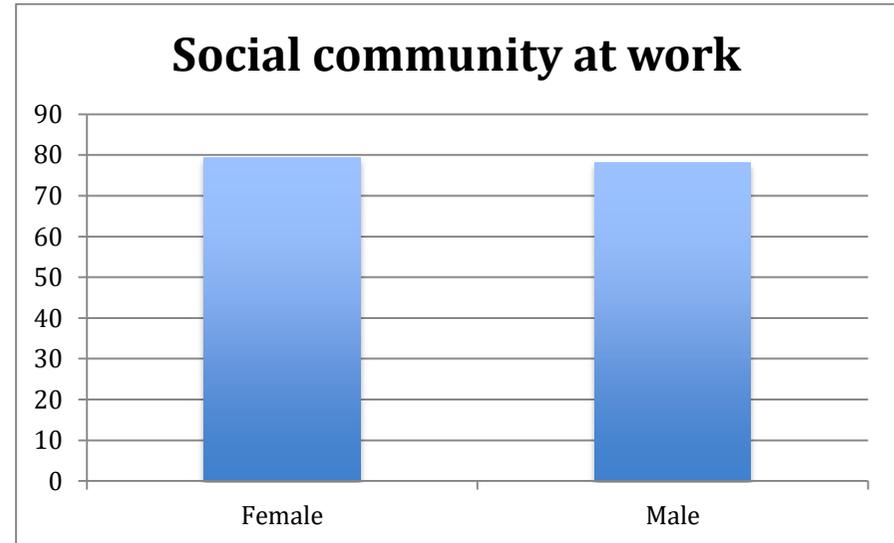
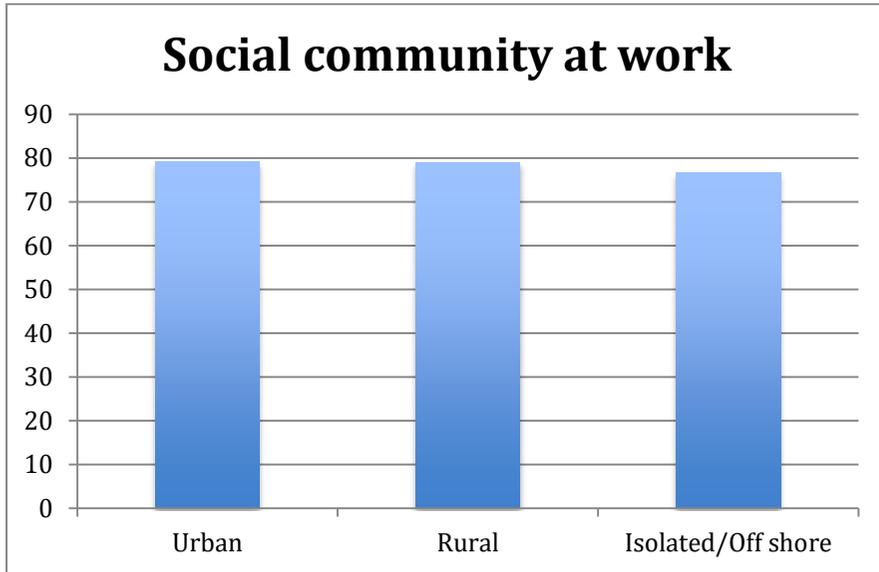
**Social support from colleagues:
Outside school**



Social Support from Supervisor disaggregated by Geolocation, Role Gender and School Type



Social Community at Work disaggregated by Geolocation, Role Gender and School Type



Work-individual Interface

Trends

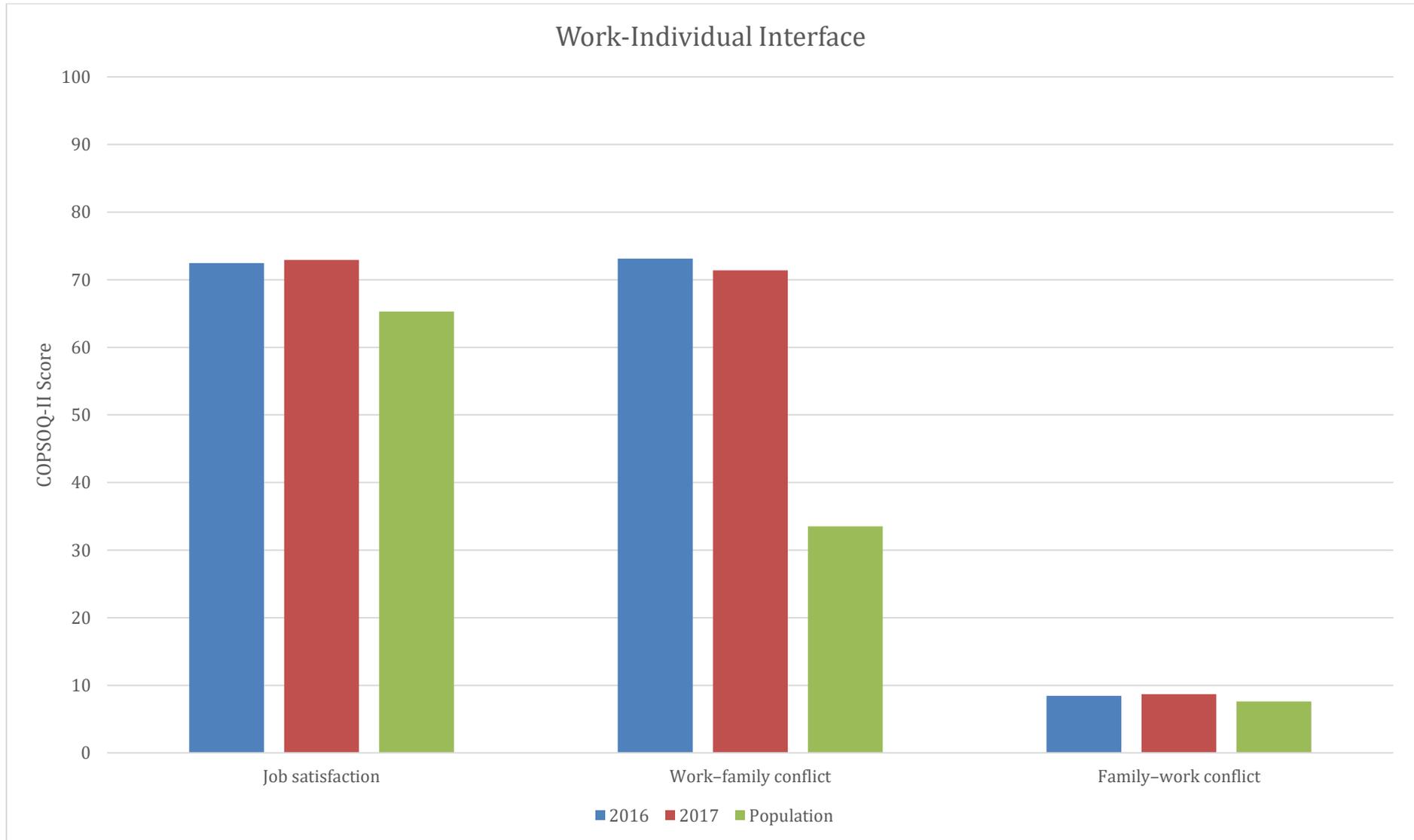


Figure 35. Work-individual interface trend data.

2017 Data in Detail

Subscales	Population		Critical Values		NZ		Location				Role		Gender		School Type			
	Mean	SD	Mean \pm SD*.5		ALL	Urban	Rural	Isolated/Off shore	Prim	Dep	Ass	F	M	Full Prim	Contrib	Comp Area	Special	Inter
			Low	High														
<i>Job satisfaction</i>	65.30	18.20	56.20	74.40	72.93	74.16	70.31	70.84	74.28	67.77	72.42	73.53	71.63	71.13	73.89	73.35	79.84	74.58
<i>Work-family conflict</i>	33.50	24.30	21.35	45.65	71.40	70.69	73.33	68.76	71.29	72.68	69.63	72.65	68.71	71.83	70.82	71.68	63.60	76.18
<i>Family-work conflict</i>	7.60	15.30	-0.05	15.25	8.70	8.81	8.36	10.83	8.98	8.17	5.55	6.71	12.98	8.57	7.90	10.00	11.40	13.15

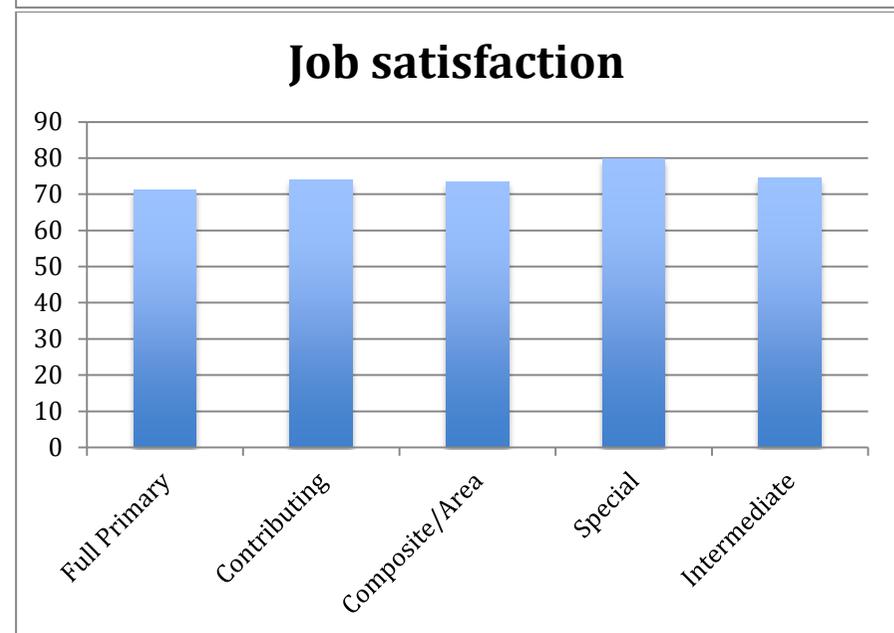
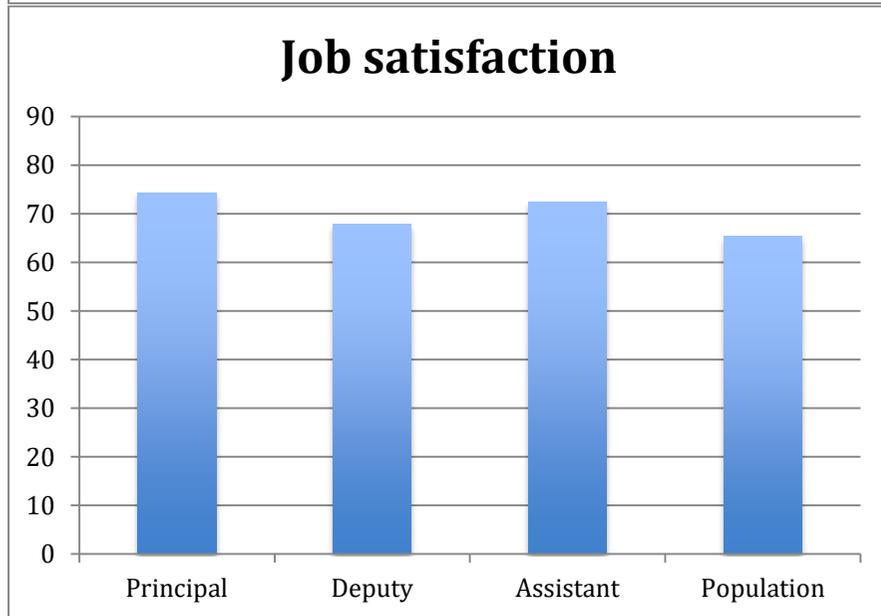
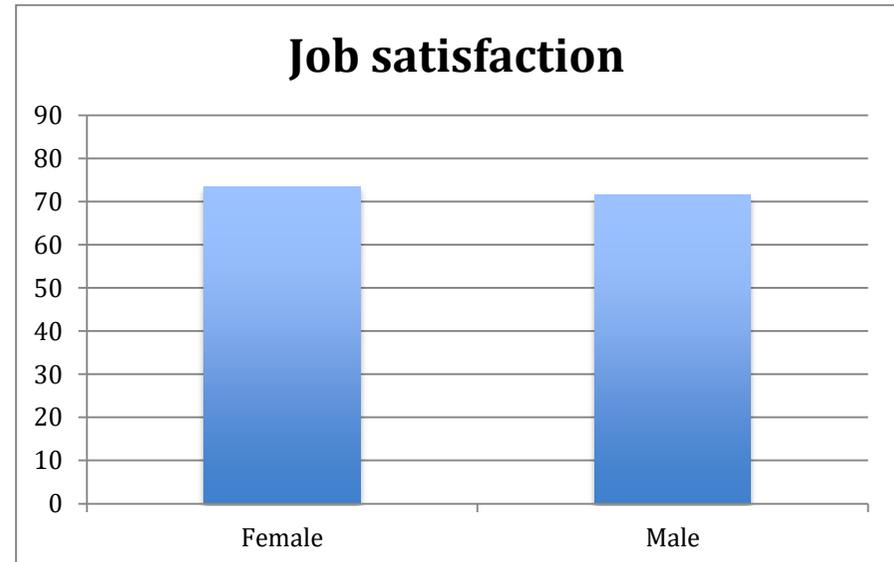
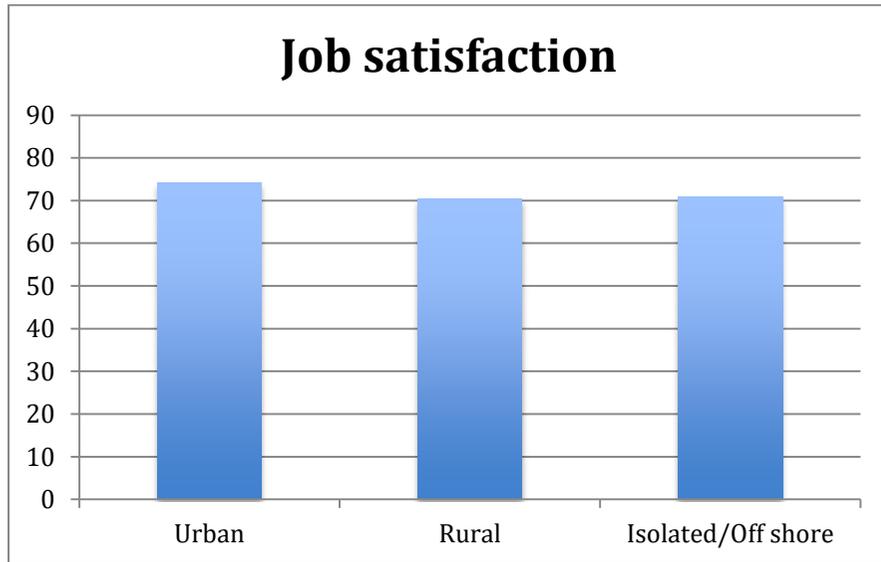
*Mean \pm .5SD

- **Job satisfaction** deals with principals' experience of satisfaction with various aspects of work.
- **Work-family conflict** deals with the possible consequences of work on family/personal life. The focus is on two areas, namely conflict regarding energy (mental and physical energy) and conflict regarding time.
- **Family-work conflict** deals with the possible consequences of family/personal life on work. The focus is on two areas, namely conflict regarding energy (mental and physical energy) and conflict regarding time.

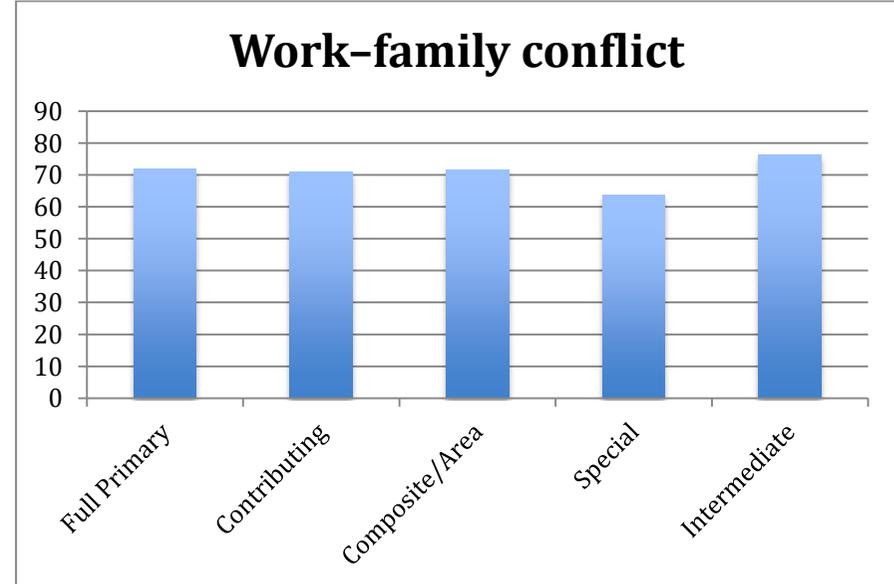
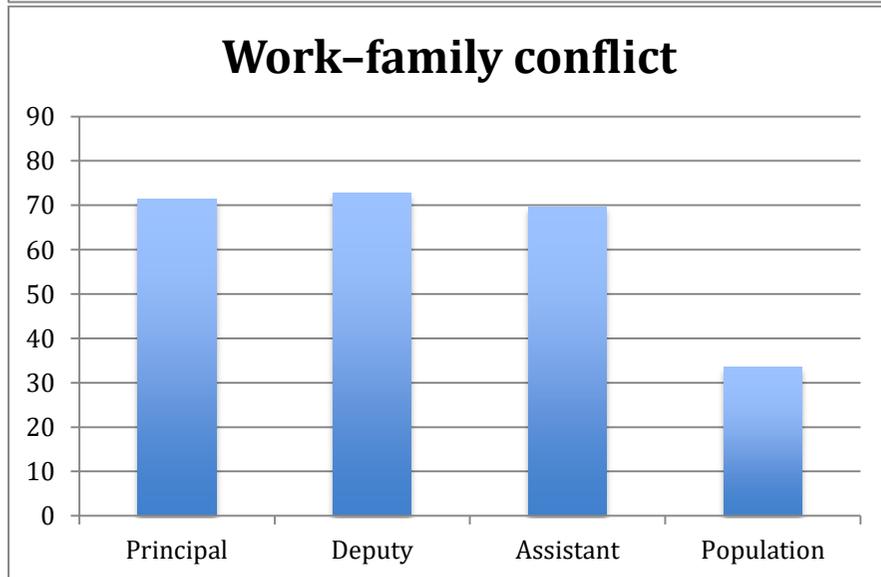
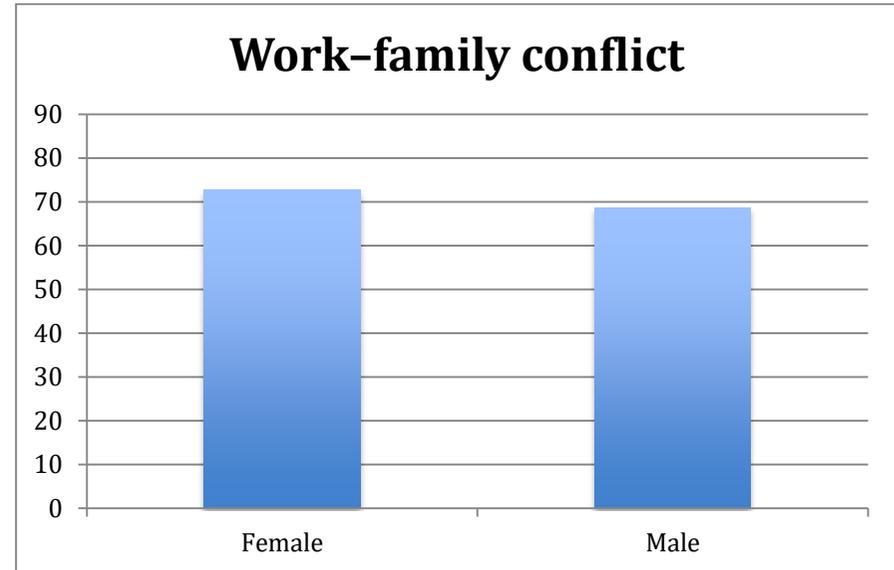
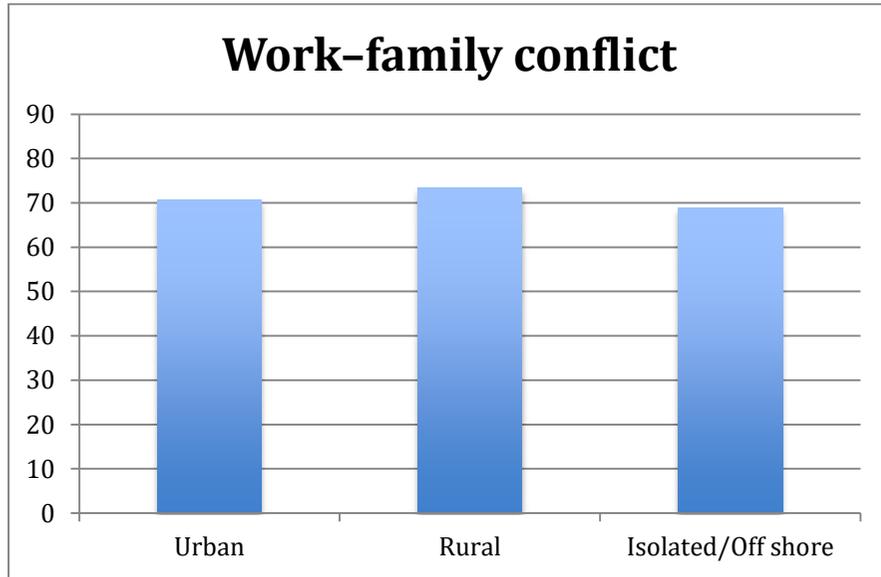
Results

- **Trends** New Zealand principals' results are very similar to their Australian and Irish colleagues.
- **Job satisfaction** Special school principals report the highest level of job satisfaction. Principals report significantly higher scores than deputies but not assistant principals.
- **Work-family conflict** is far too high, at 2.1 times the rate of the general population; down from 2.2 times in 2016. Every group score is well above one standard deviation higher than the general population rate. This result has serious implications for the long-term future of school leaders as their work is creating significant family stress. This finding should be cause considerable concern for policy makers, as it relates directly to the Quantitative Demands of the role. Females report statistically significantly higher scores than males.
- **Family-work conflict** School leaders average scores are at the general population levels. Males report statistically significantly higher scores than females.

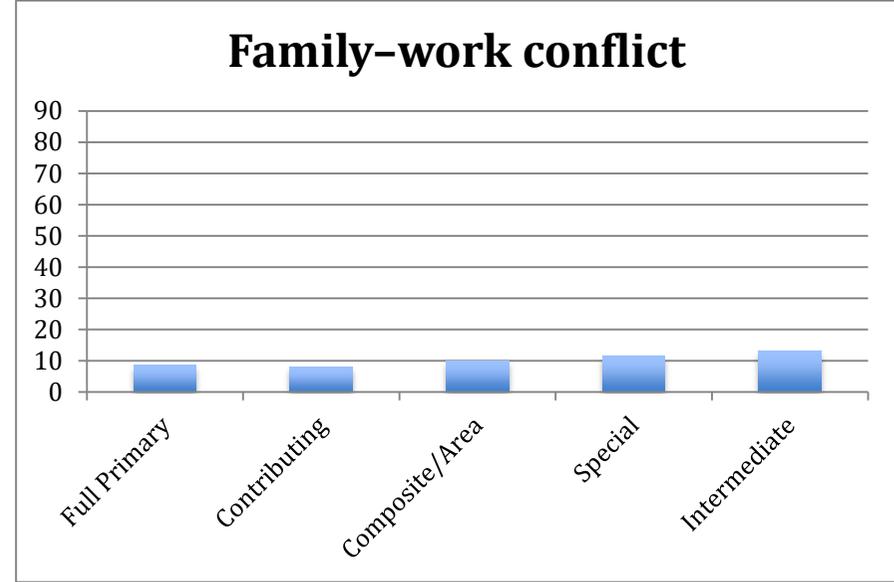
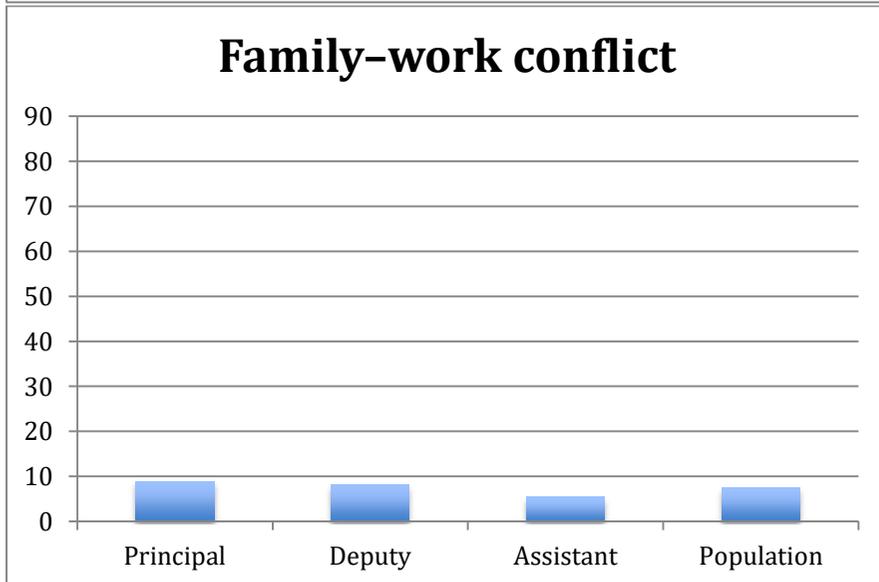
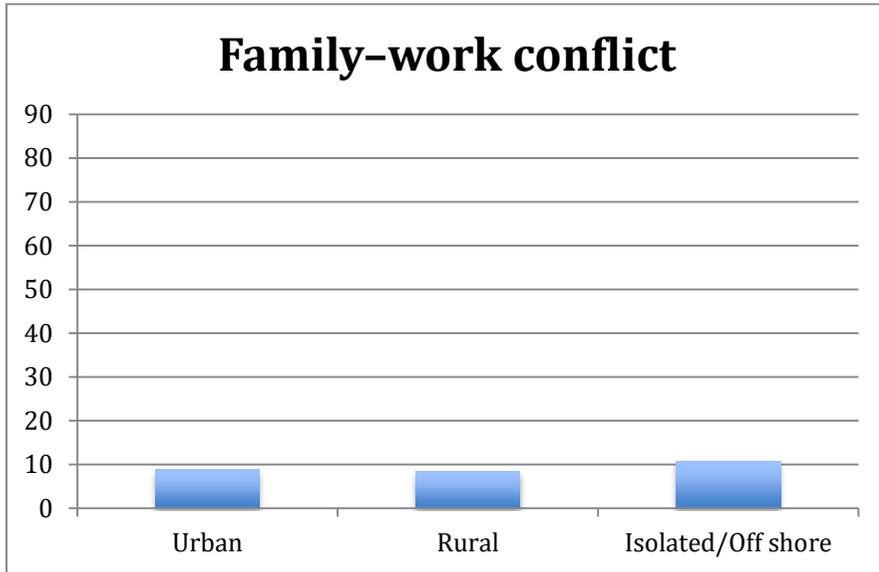
Job Satisfaction disaggregated by Geolocation, Role Gender and School Type



Work-Family Conflict disaggregated by Geolocation, Role Gender and School Type



Family-Work Conflict disaggregated by Geolocation, Role Gender and School Type



Values at the Workplace

Trends

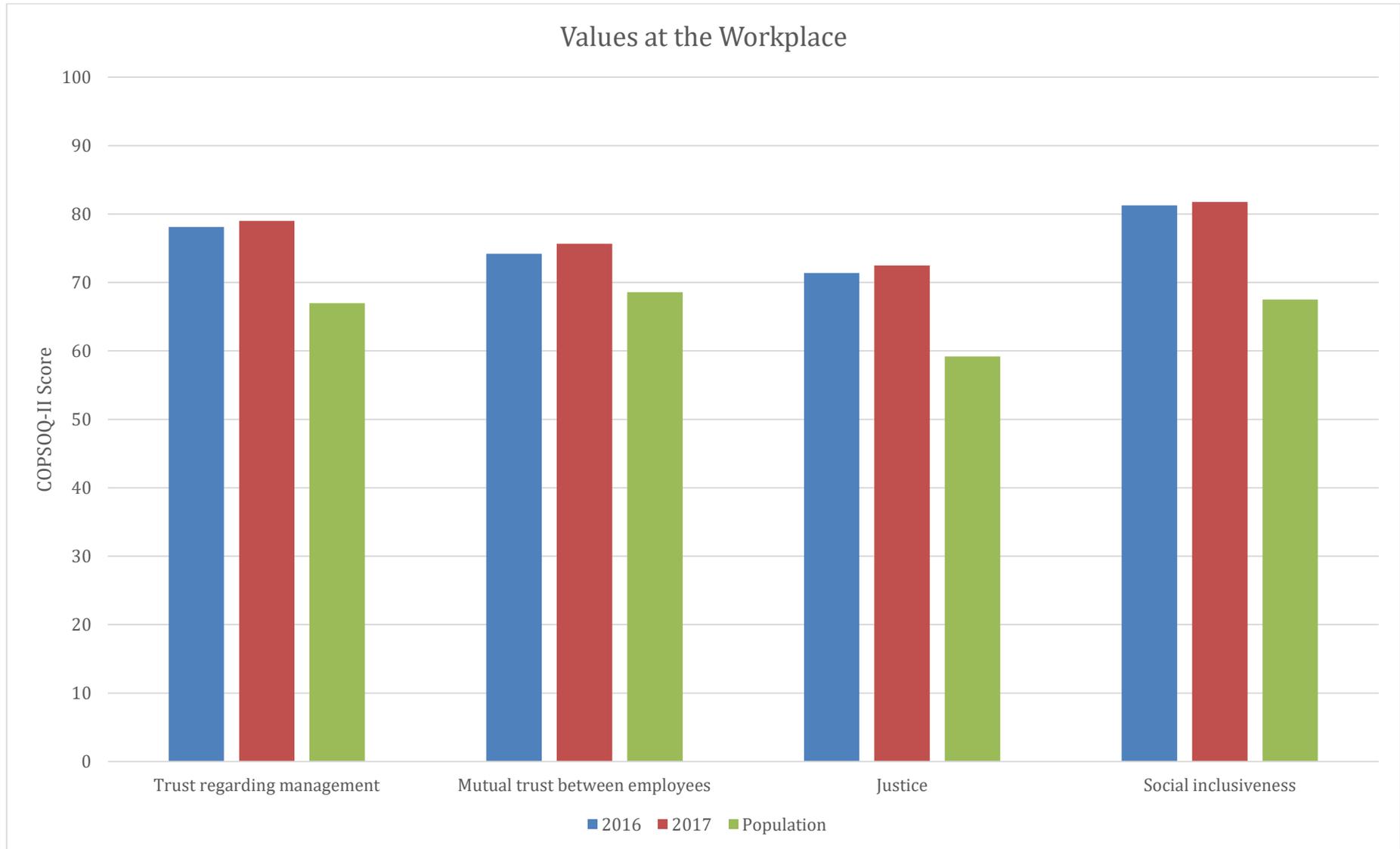


Figure 36. Values at the workplace trend data.

2017 Data in Detail

Subscales	Population		Critical Values		NZ		Location				Role			Gender		School Type			
	Mean	SD	Low	High	ALL	Urban	Rural	Isolated/Off shore	Role			Gender		Full Prim	Contrib	Comp Area	Special	Inter	
									Prin	Dep	Ass	F	M						
<i>Trust regarding management</i>	67.00	17.70	58.15	75.85	78.99	78.78	79.81	76.04	81.43	72.27	70.83	78.52	80.01	79.21	79.39	74.79	83.45	76.35	
<i>Mutual trust between employees</i>	68.60	16.90	60.15	77.05	75.65	74.79	77.96	75.00	78.46	67.33	70.31	75.70	75.54	76.38	76.68	70.05	75.52	69.87	
<i>Justice</i>	59.20	17.70	50.35	68.05	72.48	72.06	73.71	68.44	75.52	64.27	62.22	71.62	74.32	76.38	76.68	70.05	75.52	69.87	
<i>Social inclusiveness</i>	67.50	16.30	59.35	75.65	81.78	81.58	82.50	77.63	82.94	78.13	80.26	80.73	84.02	81.27	82.84	74.58	79.28	81.93	

*Mean \pm 5SD

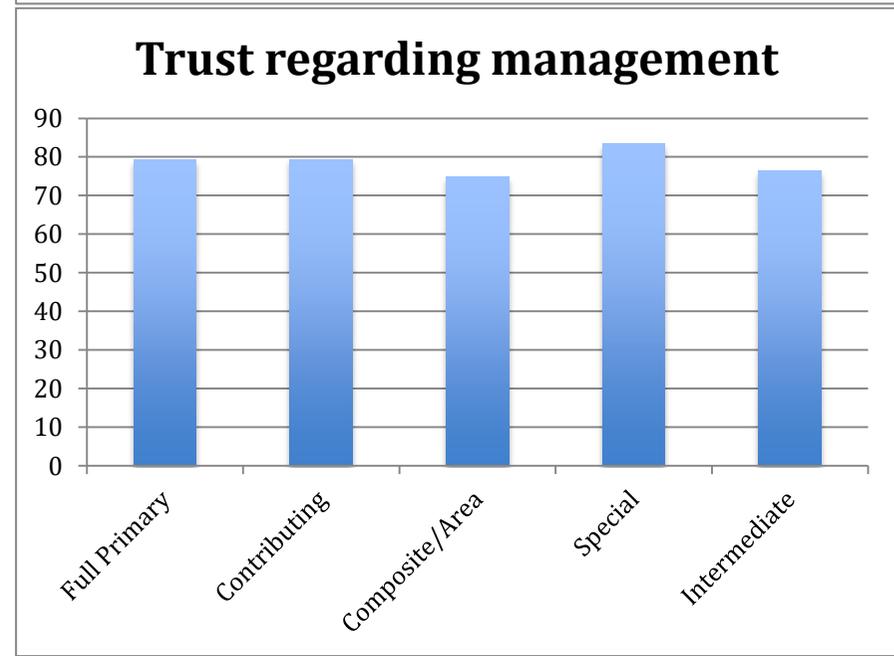
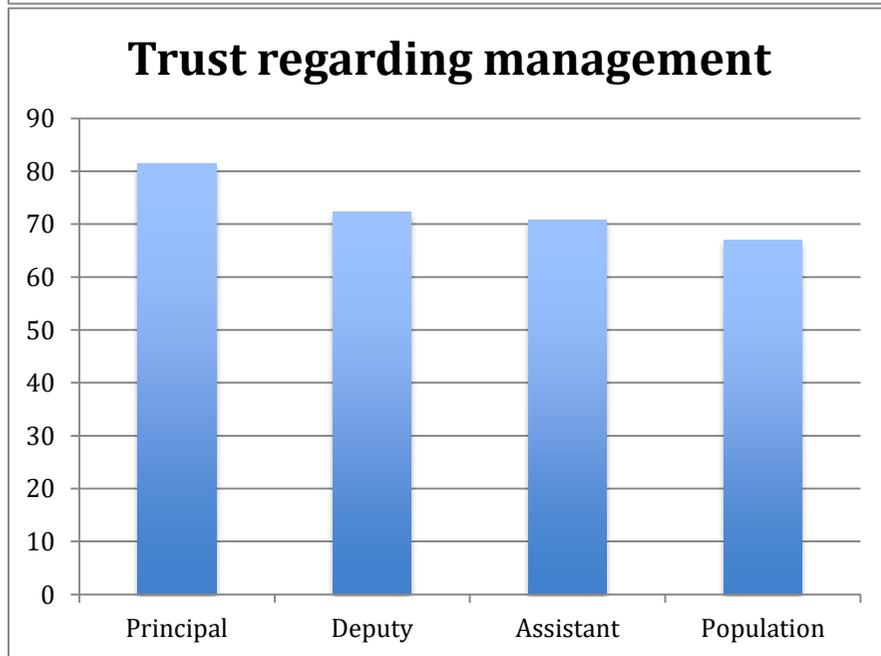
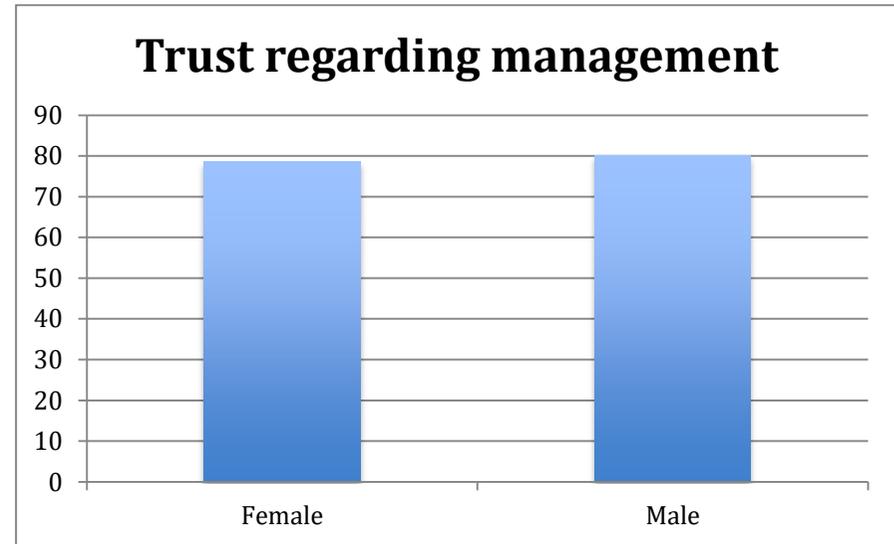
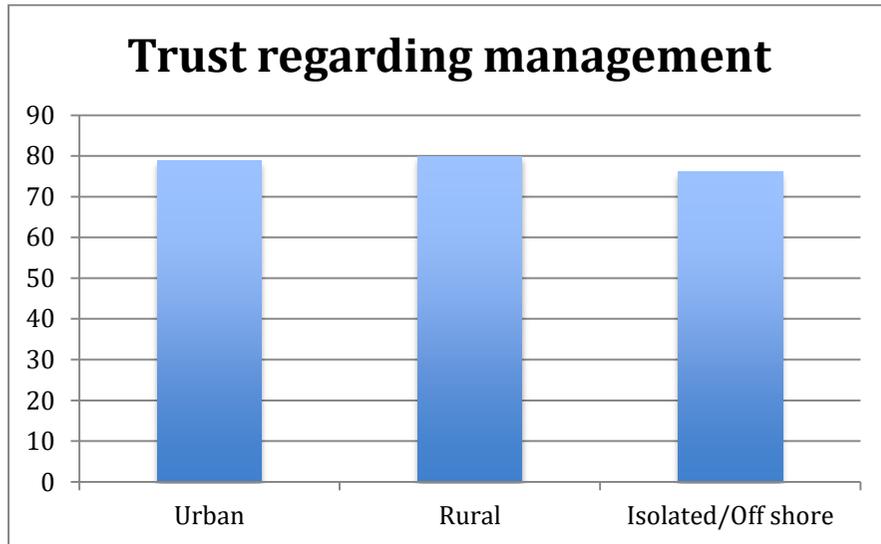
- **Trust regarding management (Vertical Trust)** deals with whether the employees can trust the management and vice versa. Vertical trust can be observed in the communication between the management and the employees.
- **Mutual Trust between Employees (Horizontal trust)** deals with whether the employees can trust each other in daily work or not. Trust can be observed in the communication in the workplace; e.g. if one freely can express attitudes and feelings without fear of negative reactions.
- **Justice** deals with whether workers are treated fairly. Four aspects are considered: First the distribution of tasks and recognition, second the process of sharing, third the handling of conflicts and fourth the handling of suggestions from the employees.
- **Social Inclusiveness** deals with another aspect of organizational justice: how fairly people are treated in the workplace in relation to their gender, race, age and ability.

Results

- **Trends** All scores reported by principals in New Zealand are very similar to their Australian and Irish colleagues, with many scores well above the critical high value indicating a more collaborative and just working environment than the general population. However, there may be a disconnection between Principals views and those of Deputies and Assistants.
- **Trust regarding management (Vertical Trust)** Principals report significantly higher scores than either deputies or assistants.
- **Mutual Trust between Employees (Horizontal trust)** Principals report significantly higher scores than deputies and assistant principals.
- **Justice** Principals report significantly higher scores than deputies and assistant principals. Males report statistically significantly higher scores than females.

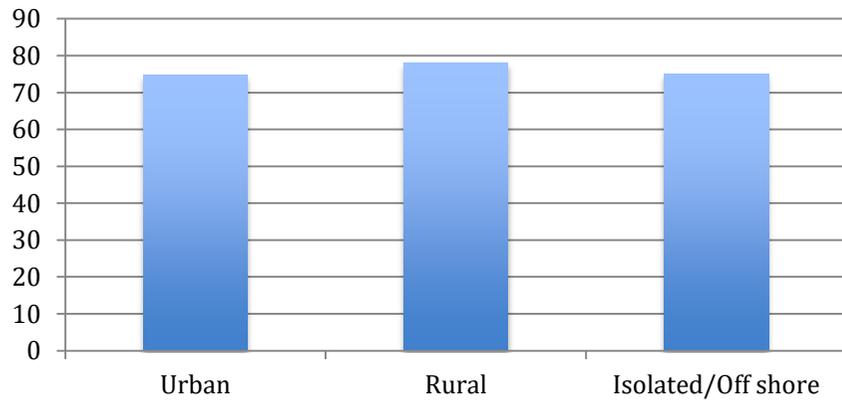
- **Social Inclusiveness** All groups report noticeably higher levels of Social Inclusiveness than the general population. This implies that on average schools remain noticeably more welcoming of differences than the norm. Principals report significantly higher scores than deputies but not assistant principals.

Trust regarding management disaggregated by Geolocation, Role Gender and School Type

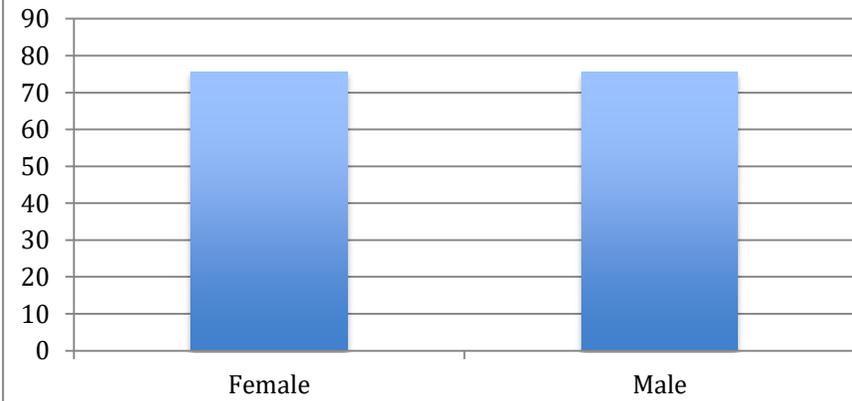


Mutual Trust between Employees disaggregated by Geolocation, Role Gender and School Type

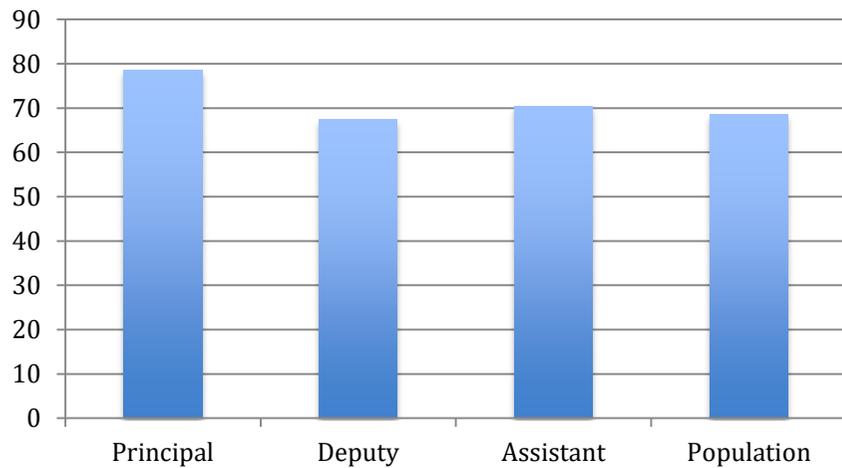
Mutual trust between employees



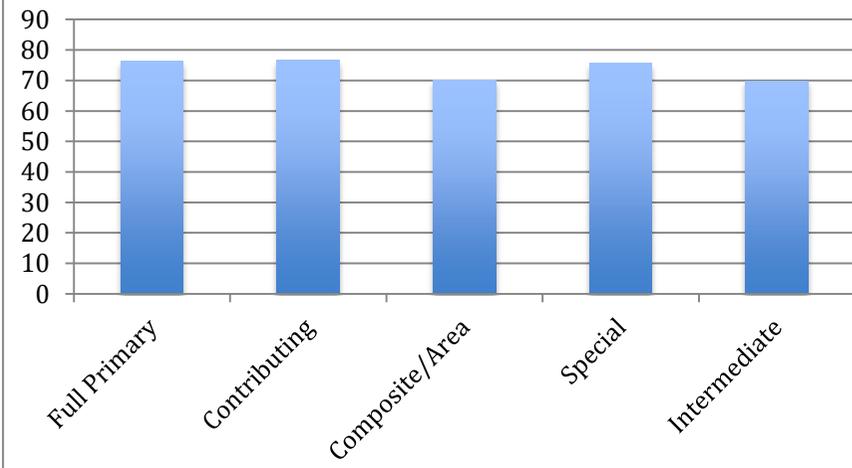
Mutual trust between employees



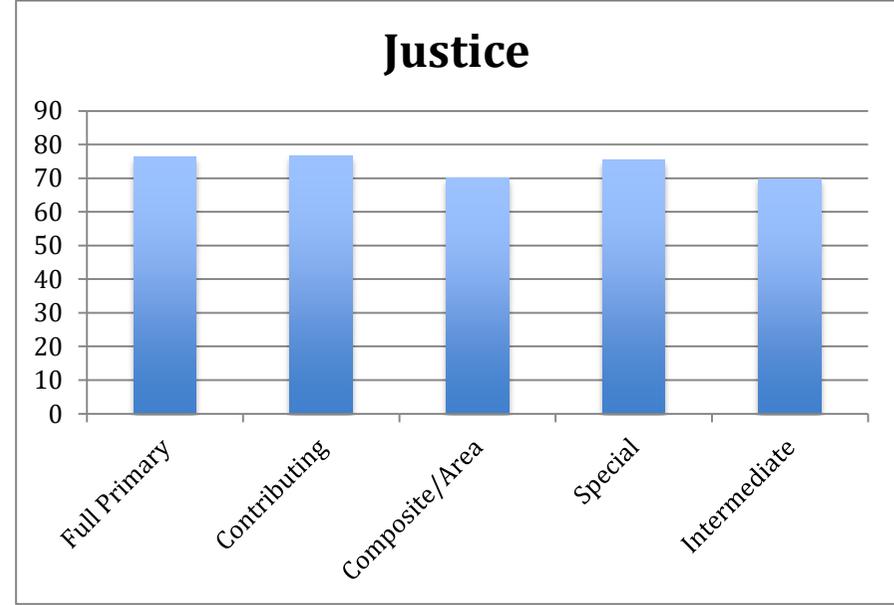
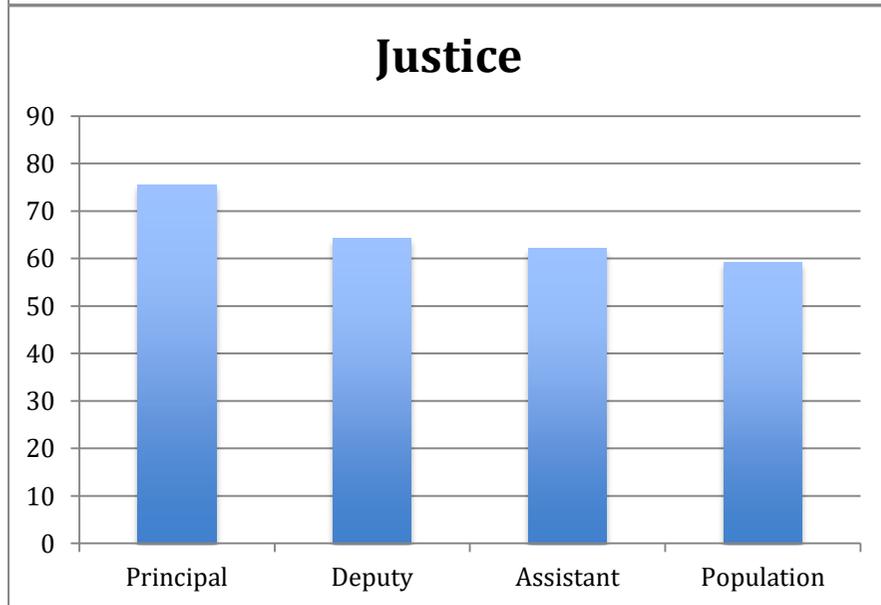
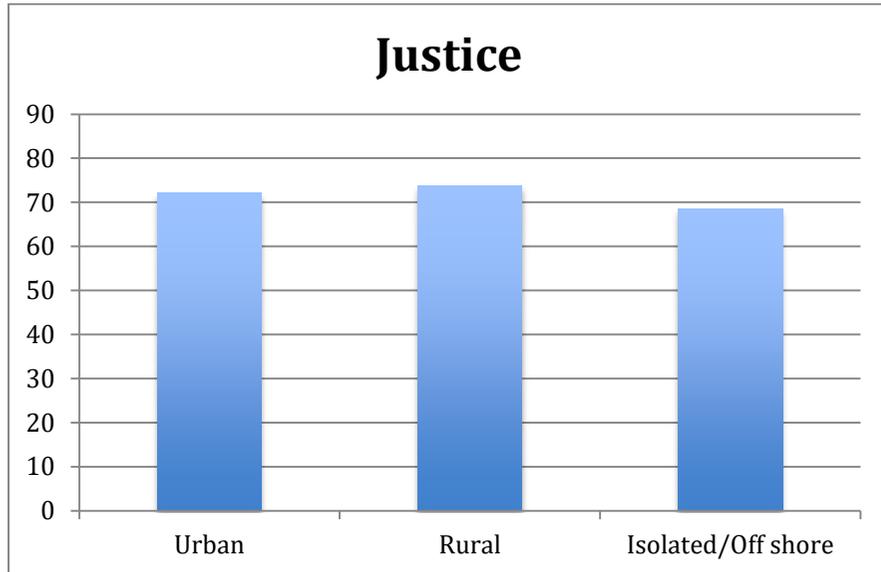
Mutual trust between employees



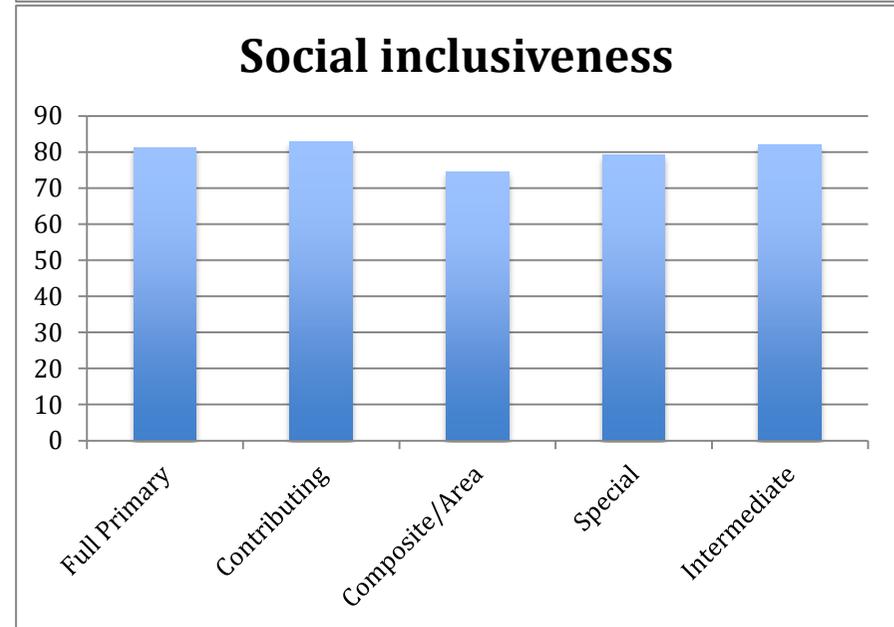
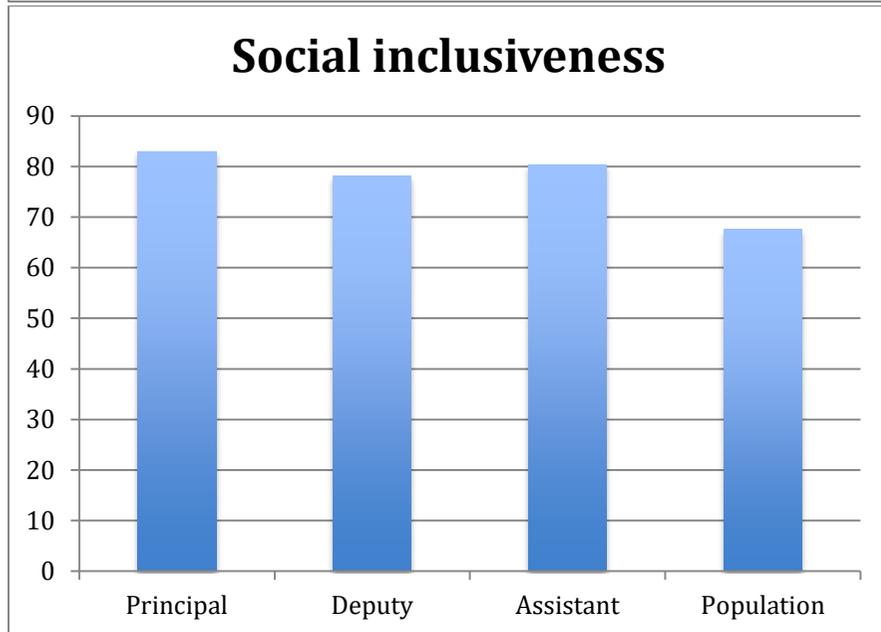
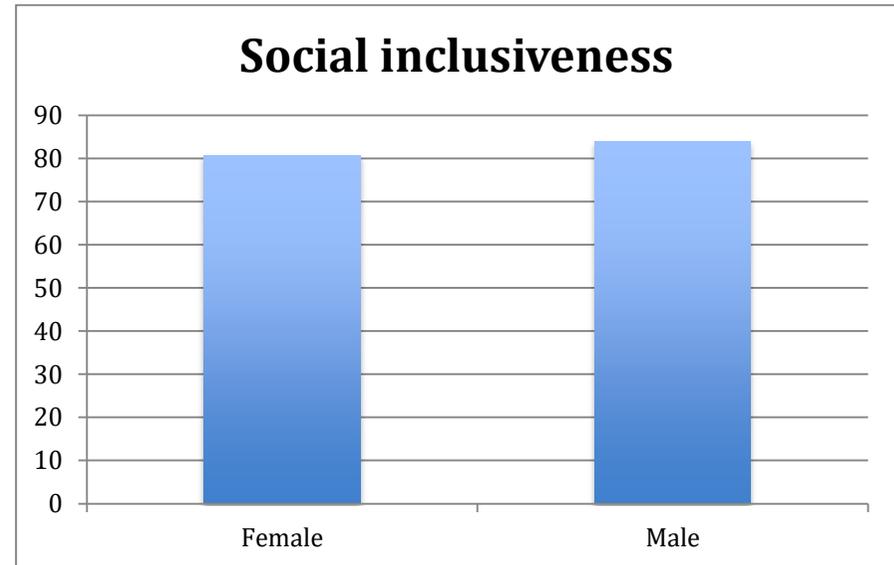
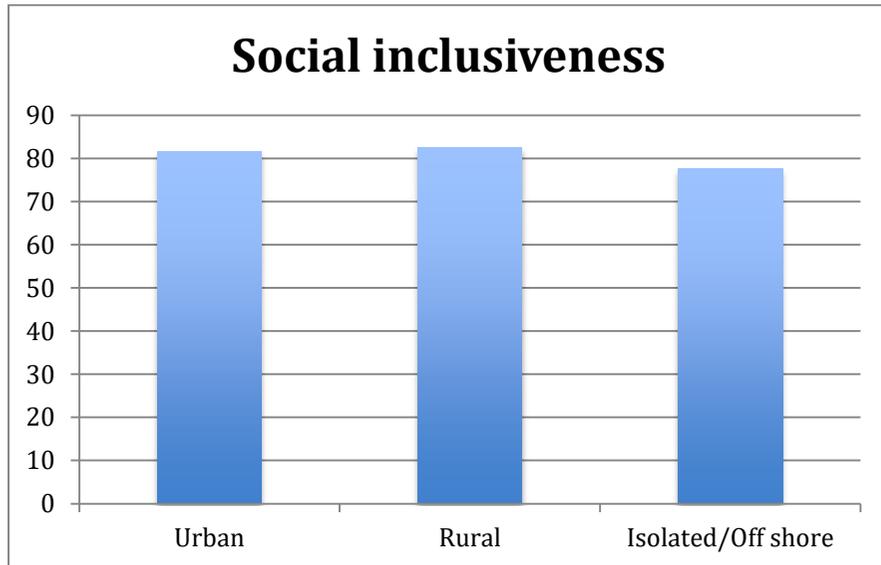
Mutual trust between employees



Justice disaggregated by Geolocation, Role Gender and School Type



Social Inclusiveness disaggregated by Geolocation, Role Gender and School Type



Health and Wellbeing

Trends

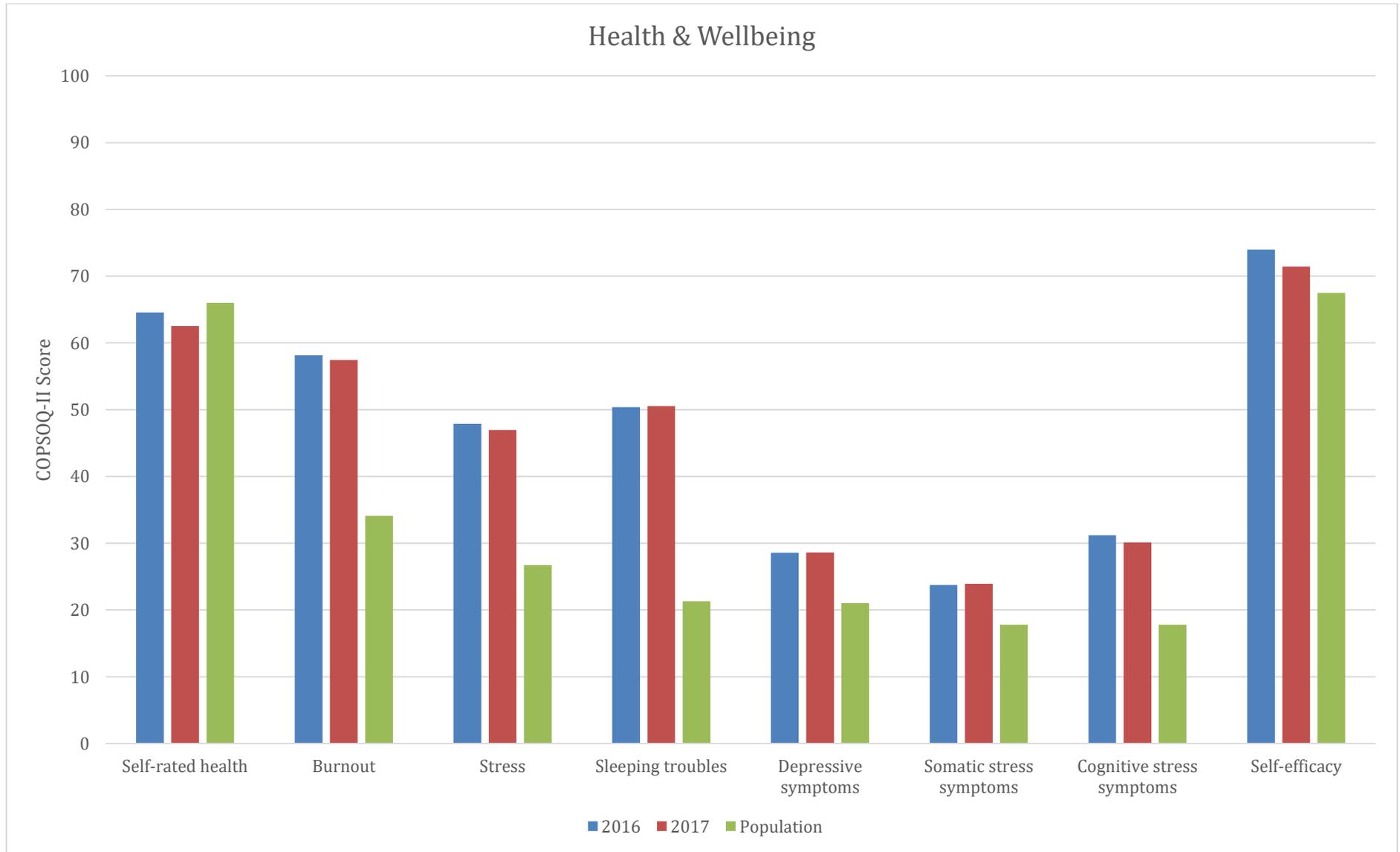


Figure 37. Health and wellbeing trend data.

2017 Data in Detail

Subscales	Population		Critical Values		NZ		Location				Role			Gender		School Type			
	Mean	SD	Mean \pm SD*.5		ALL	Urban	Rural	Isolated/Off shore	Prin	Dep	Ass	F	M	Full Prim	Contrib	Comp Area	Special	Inter	
			Low	High															
<i>Self-rated health</i>	66.00	20.90	55.55	76.45	62.52	63.49	60.66	55.95	61.30	66.27	63.59	64.04	59.27	60.06	63.94	60.71	75.00	64.83	
<i>Burnout</i>	34.10	18.20	25.00	43.20	57.42	56.31	59.81	58.93	57.13	59.71	53.67	57.80	56.60	58.61	57.15	51.49	47.37	57.42	
<i>Stress</i>	26.70	17.70	17.85	35.55	46.93	46.09	48.51	50.60	46.68	50.04	41.85	46.95	46.89	47.21	46.81	47.62	36.84	47.67	
<i>Sleeping troubles</i>	21.30	19.00	11.80	30.80	50.53	49.42	52.59	54.46	50.20	54.29	42.93	50.58	50.42	51.55	50.23	51.19	41.45	49.36	
<i>Depressive symptoms</i>	21.00	16.50	12.75	29.25	28.60	27.87	29.74	34.82	28.33	30.42	26.77	28.20	29.45	29.22	27.99	33.04	21.38	27.86	
<i>Somatic stress symptoms</i>	17.80	16.00	9.80	25.80	23.92	24.00	22.87	31.85	23.53	25.91	23.91	25.04	21.54	24.74	23.17	23.81	18.42	24.46	
<i>Cognitive stress symptoms</i>	17.80	15.70	9.95	25.65	30.13	29.67	30.58	37.20	30.27	30.00	30.57	29.76	30.92	30.65	29.42	31.85	27.63	30.71	
<i>Self-efficacy</i>	67.50	16.00	59.50	75.50	71.44	72.65	68.34	73.29	71.95	69.43	70.79	71.72	70.84	70.80	71.99	67.21	77.20	71.28	

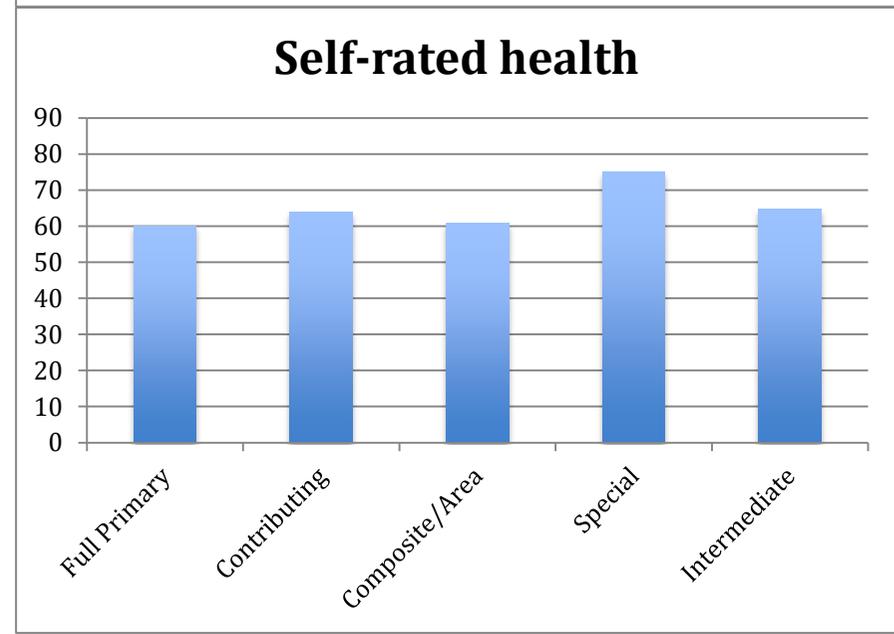
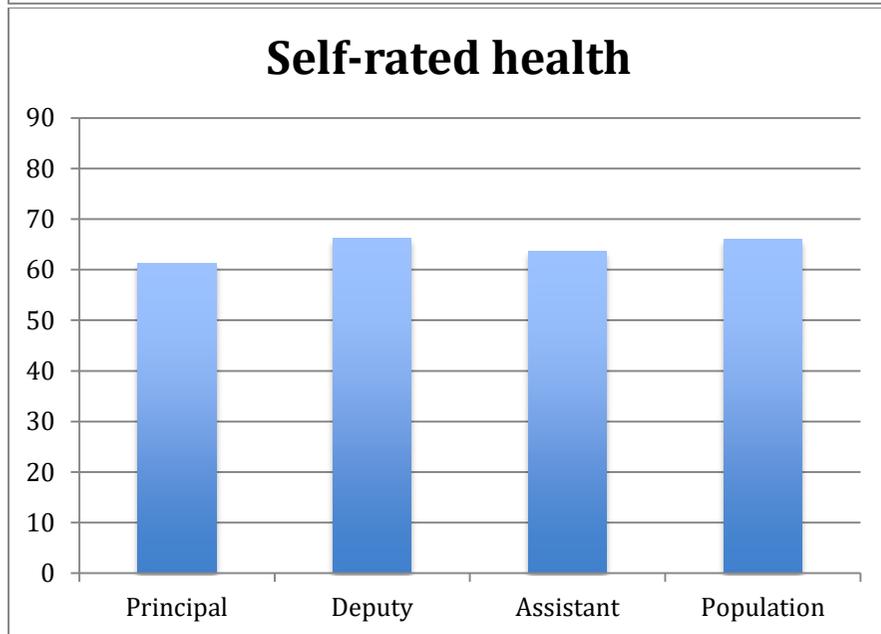
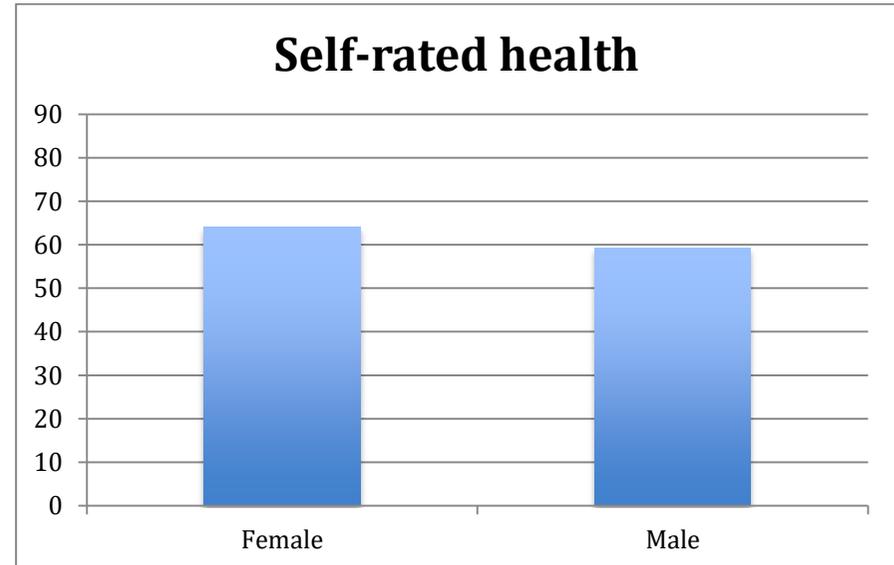
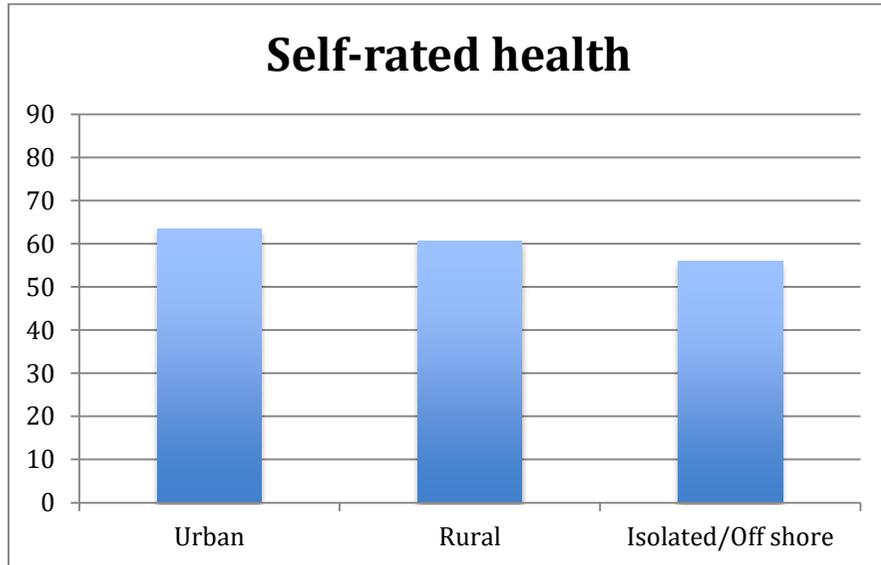
*Mean \pm .5SD

- **General health** is the person's assessment of her or his own general health. It is one global item, which has been used in numerous questionnaires, and has been shown to predict many different endpoints including mortality, cardiovascular diseases, hospitalizations, use of medicine, absence, and early retirement (Idler & Benyamini, 1997).
- **Burnout** concerns the degree of physical and mental fatigue/exhaustion of the employee.
- **Stress** is defined as a reaction of the individual, a combination of tension and unwillingness. As elevated stress levels over a longer period are detrimental to health, it is necessary to determine long-term, or chronic stress.
- **Sleeping troubles** deal with sleep length, determined by e.g. sleeping in, waking up, interruptions and of quality of sleep.
- **Somatic stress** is defined as a physical health indicator of a sustained stress reaction of the individual.
- **Cognitive stress** deals with cognitive indicators of a sustained stress reaction of the individual.
- **Depressive symptoms** cover various aspects, which together indicate depression.
- **Self-efficacy** is the extent of one's belief in one's own ability to complete tasks and reach goals. Here self-efficacy is understood as global self-efficacy not distinguishing between specific domains of life.

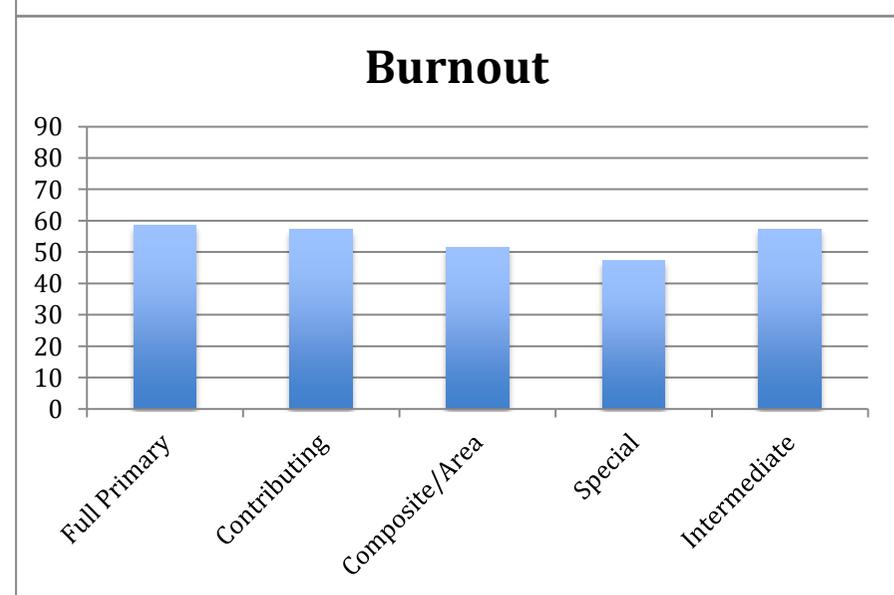
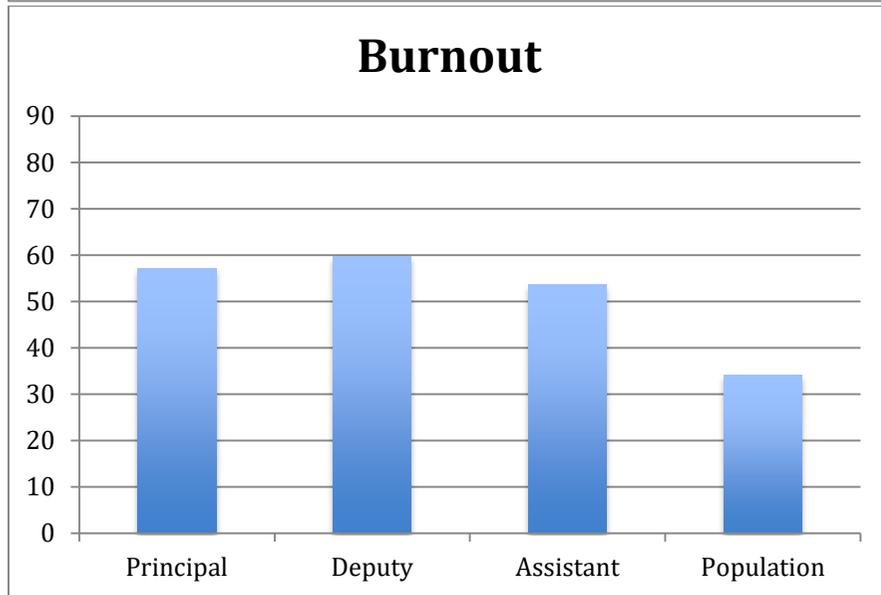
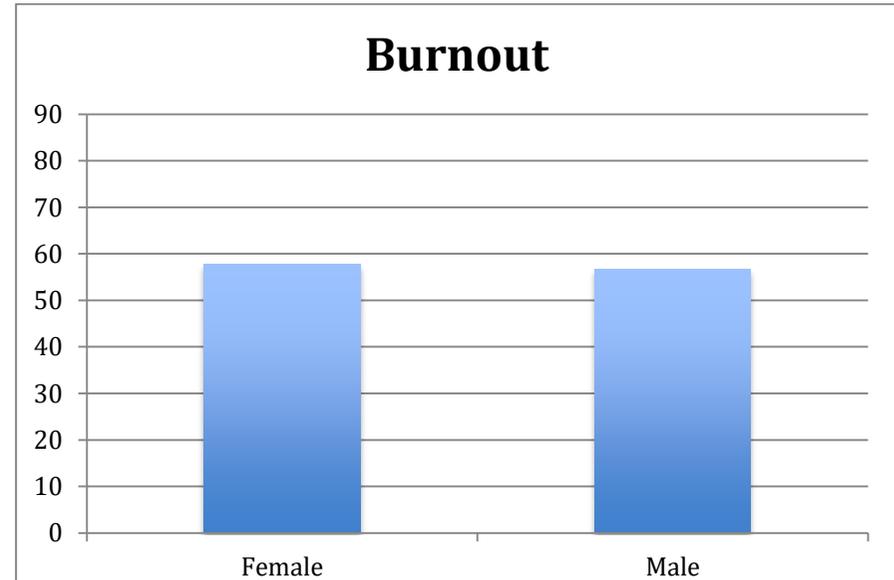
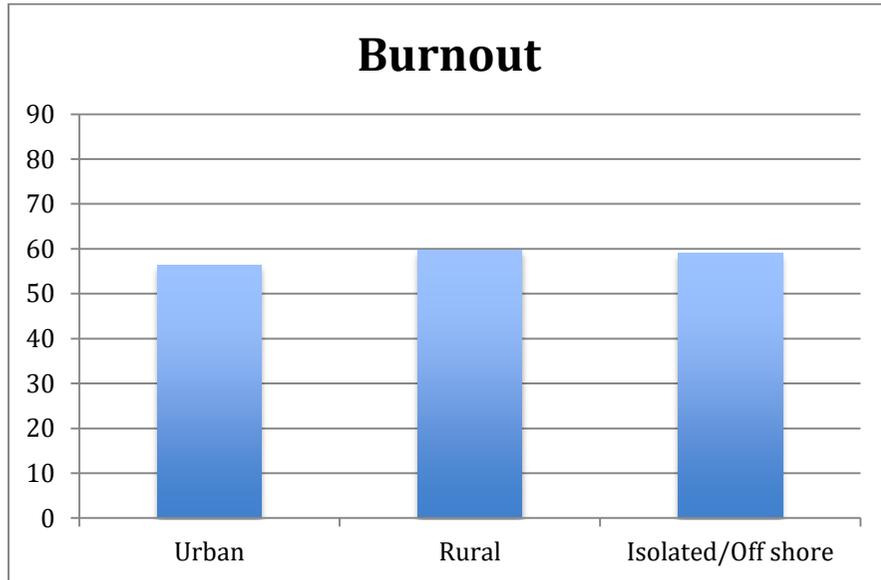
Results

- **Trends** New Zealand's principals' self-rated health is similar to the general population and Australian and Irish principals. This is despite the fact that school leaders have all the attributes of a work group that should exceed the average. They come from stable families, are in stable families, are well educated and well paid relative to the general population. Yet this is not reflected in their health scores.
- **General health** Females report statistically significantly higher scores than males.
- **Burnout** school leaders report 1.7 times the rate of burnout compared to the general population. Urban leaders and Assistant Principals report significantly lower rates of burnout.
- **Stress** is reported at 1.8 times the general population rate.
- **Sleeping troubles** is reported at 2.4 times the general population rate. Chronic sleep deprivation predicts a number of long-term health issues, including memory difficulties, obesity and depression. Urban leaders report significantly lower rates of sleeping difficulties. Females report statistically significantly higher scores than males.
- **Somatic stress** is reported at 1.4 times the general population rate. Females report statistically significantly higher scores than males.
- **Cognitive stress** school leaders report 1.7 times the rate of Cognitive Stress compared to the general population.
- **Depressive symptoms** are reported for school leaders at 1.4 times the rate of the general population.
- **Self-efficacy** school leaders report levels of self-efficacy similar to the general population. Rural leaders report significantly lower levels.

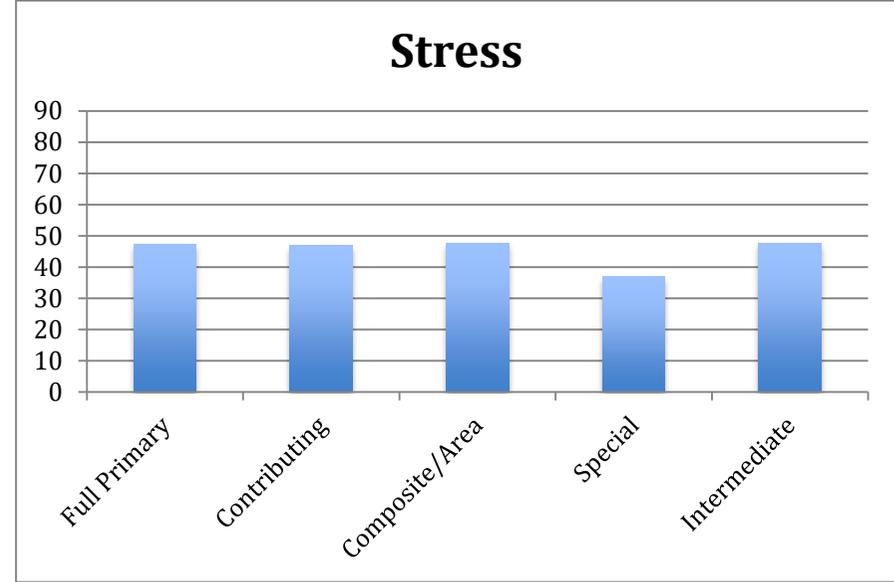
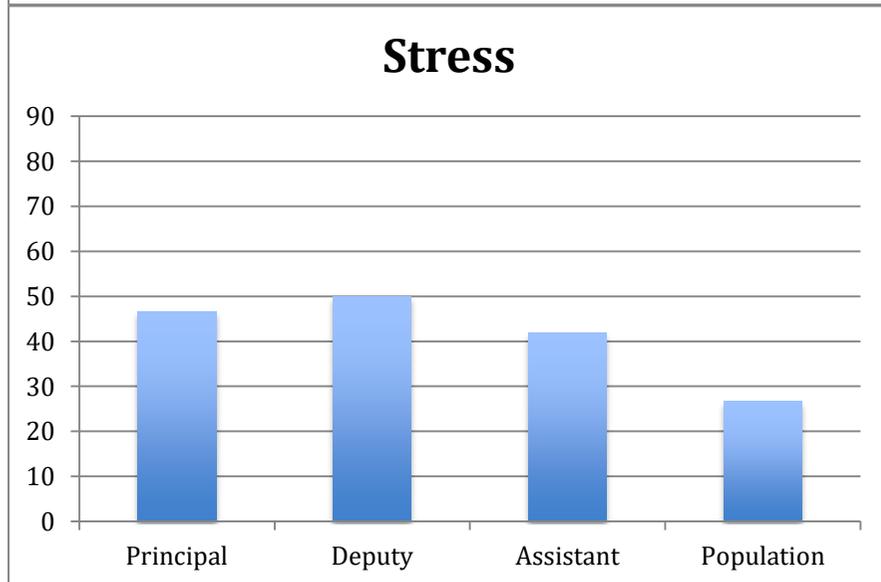
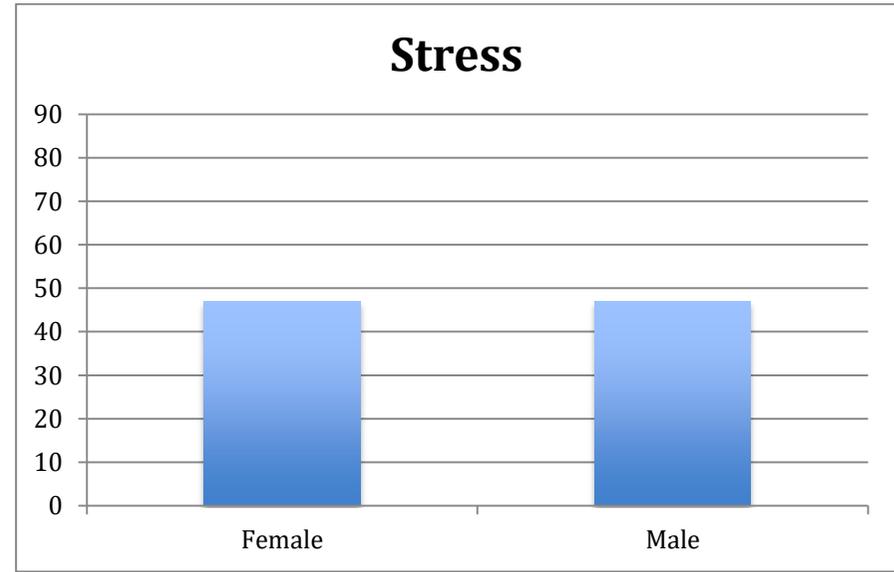
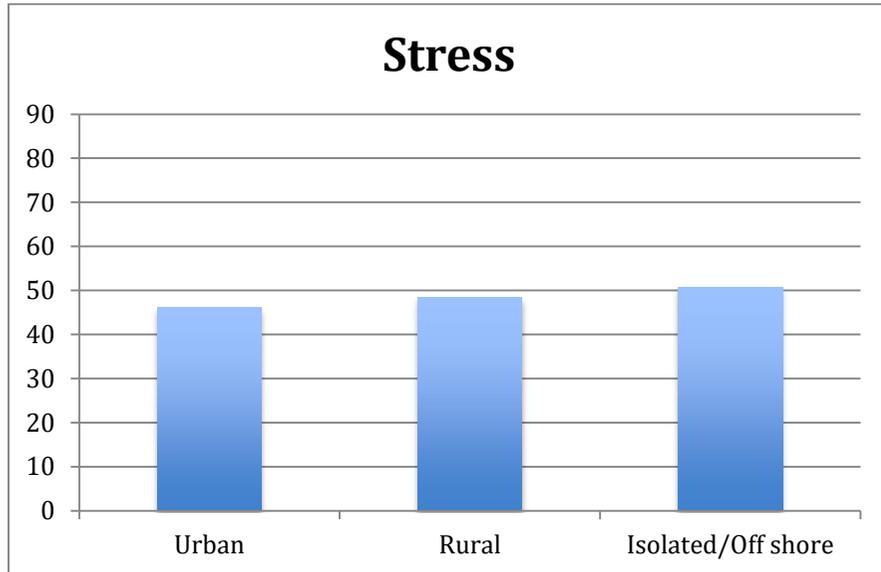
General Health disaggregated by Geolocation, Role Gender and School Type



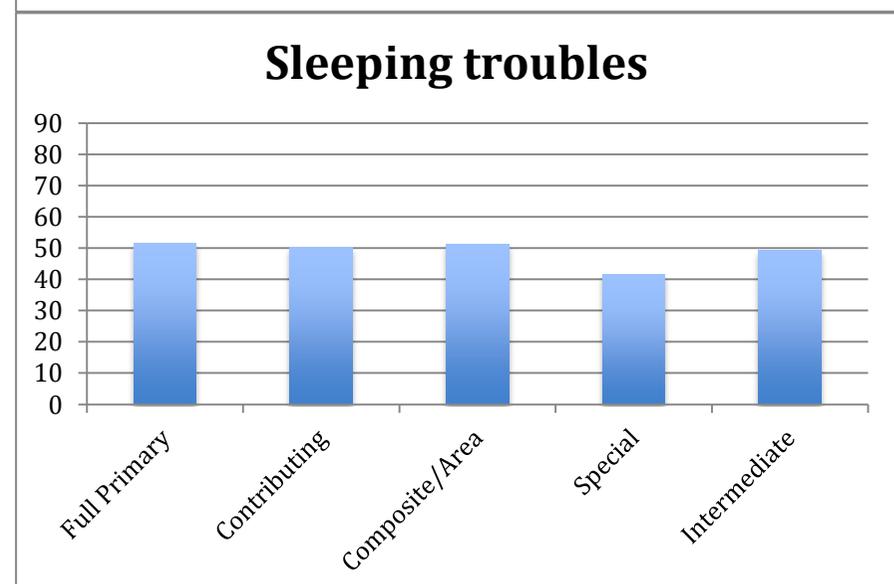
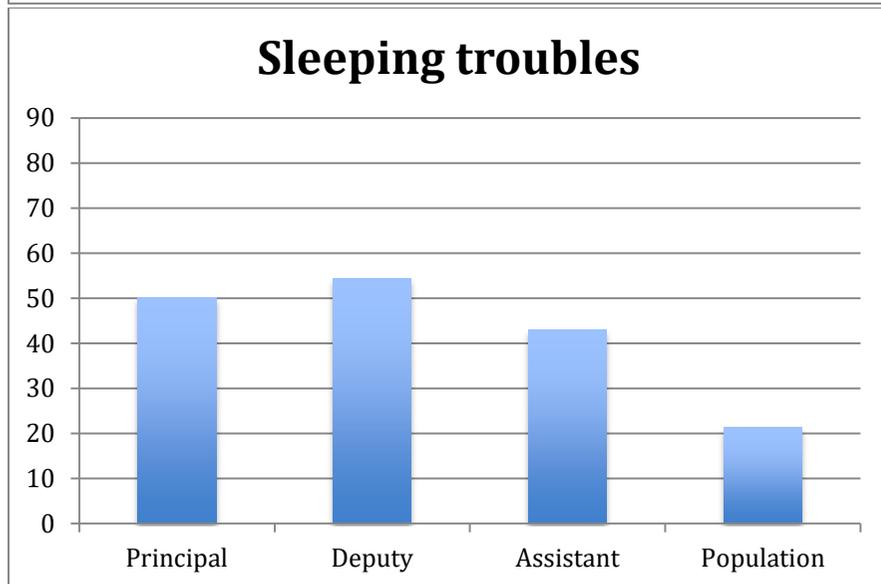
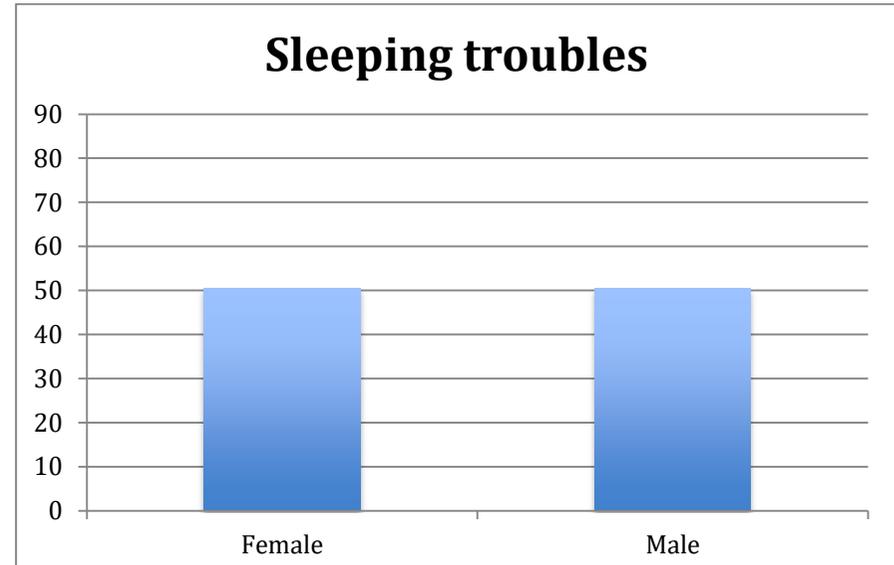
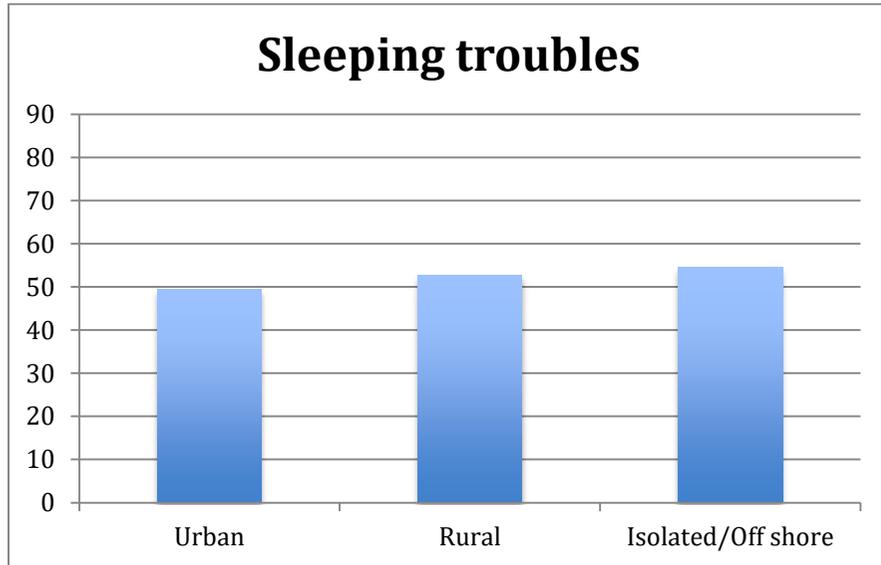
Burnout disaggregated by Geolocation, Role Gender and School Type



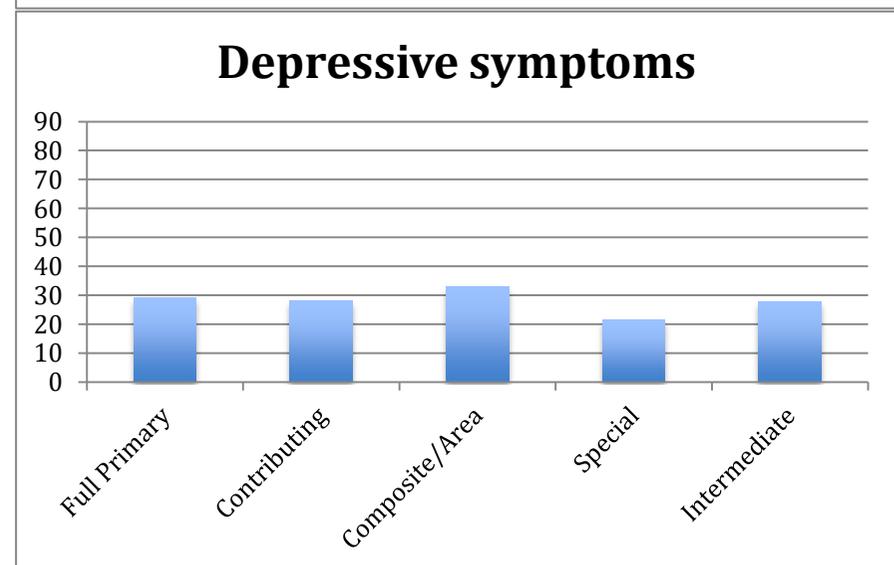
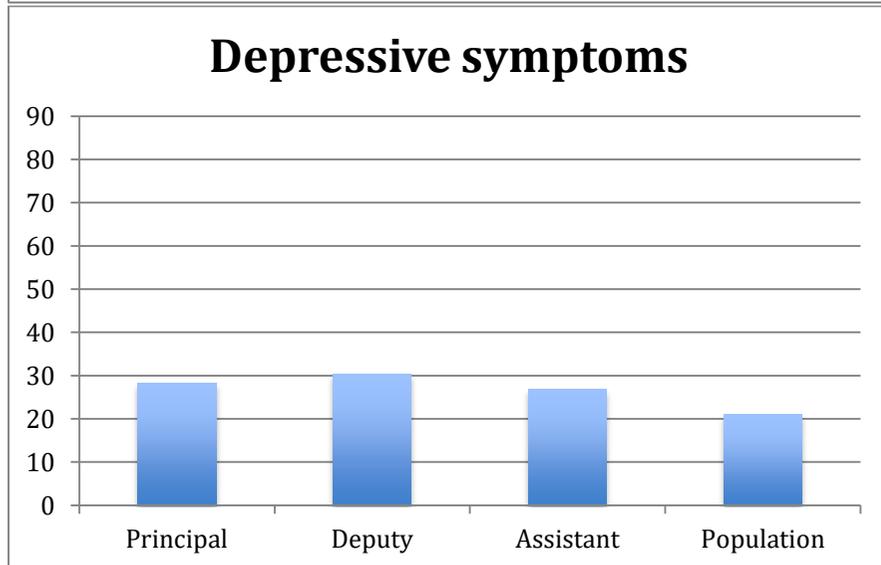
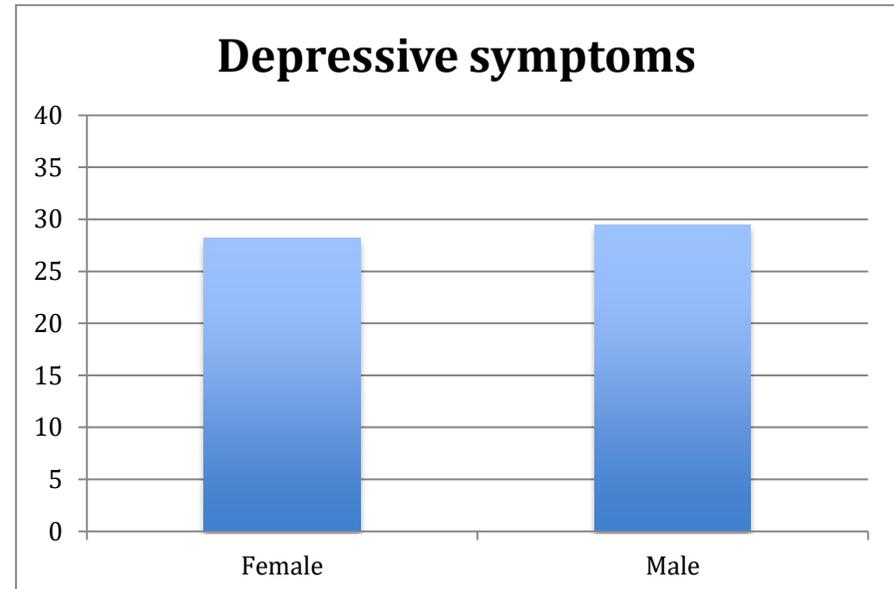
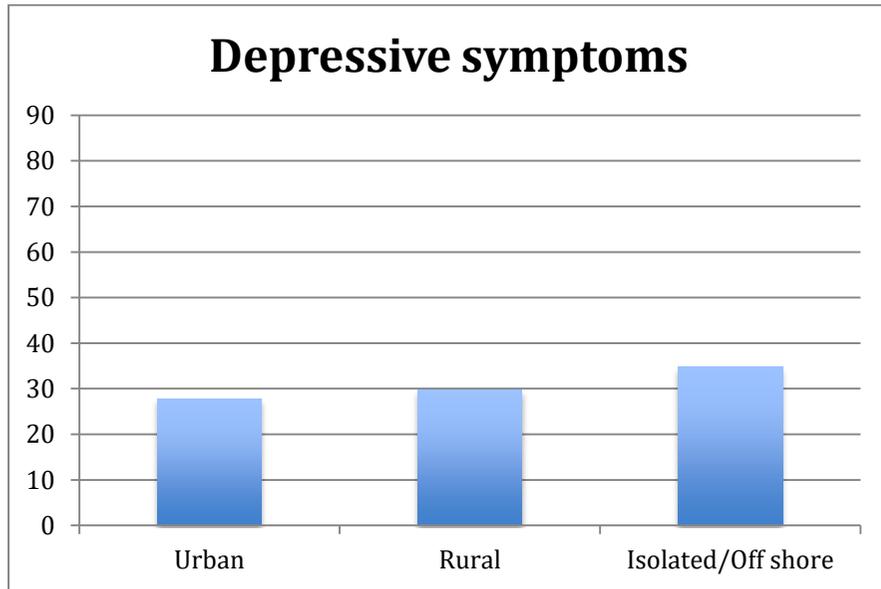
Stress disaggregated by Geolocation, Role Gender and School Type



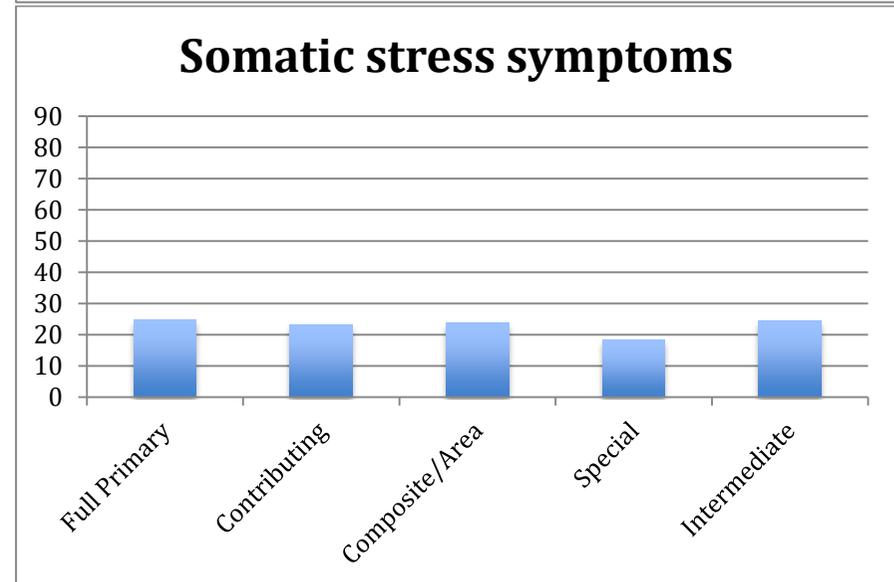
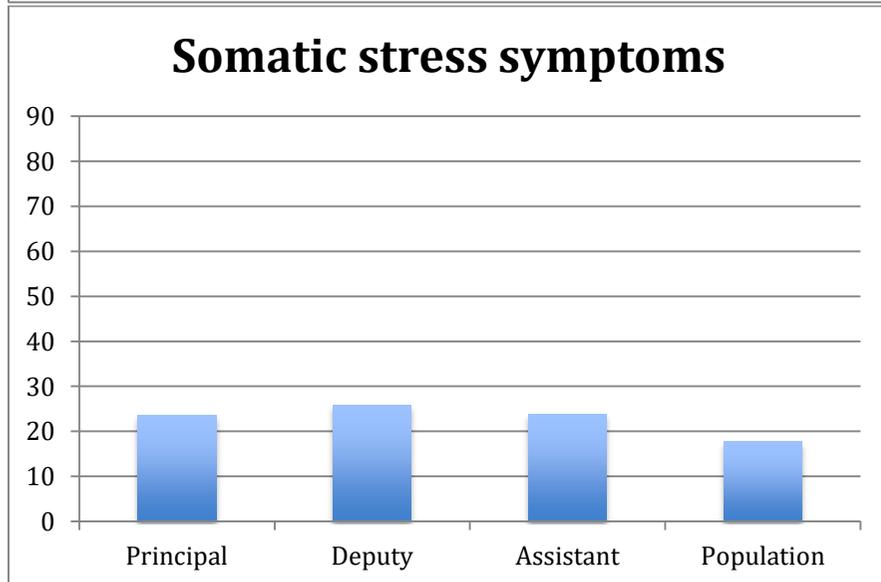
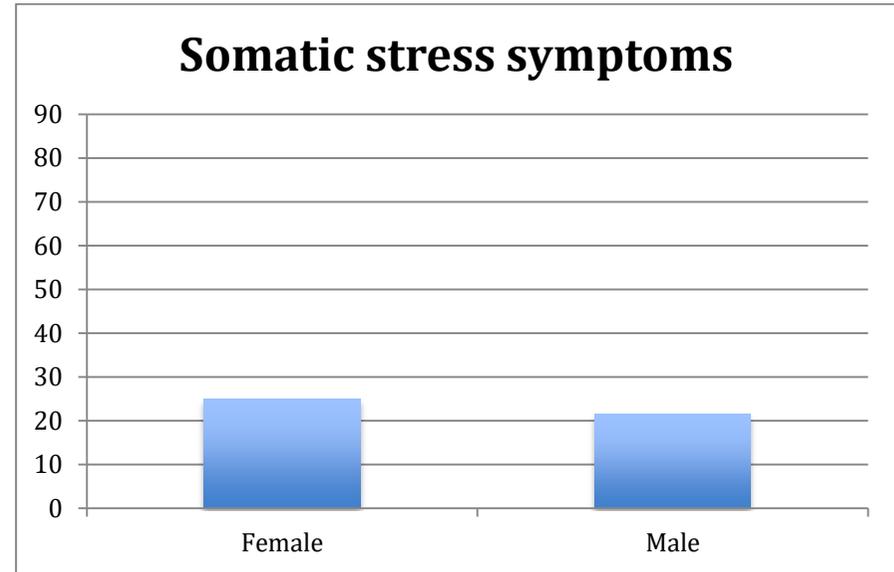
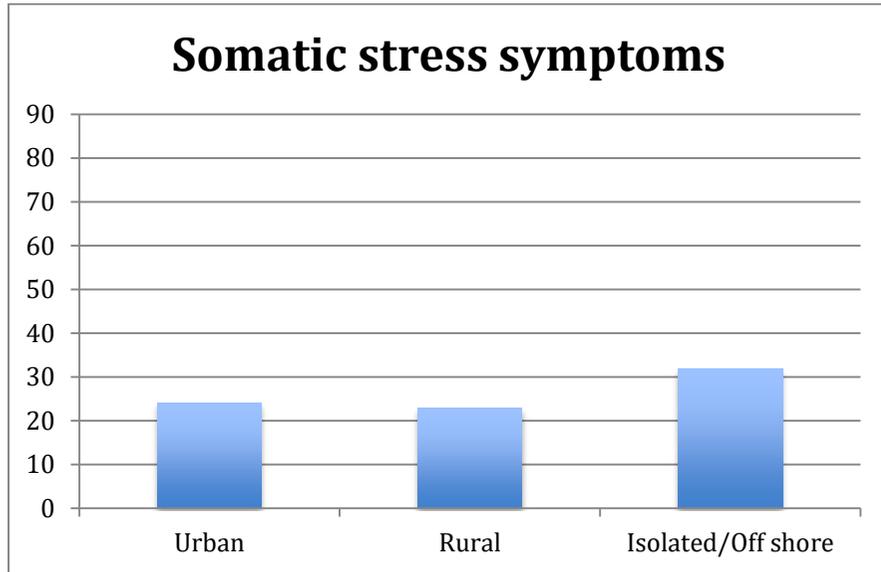
Sleeping Troubles disaggregated by Geolocation, Role Gender and School Type



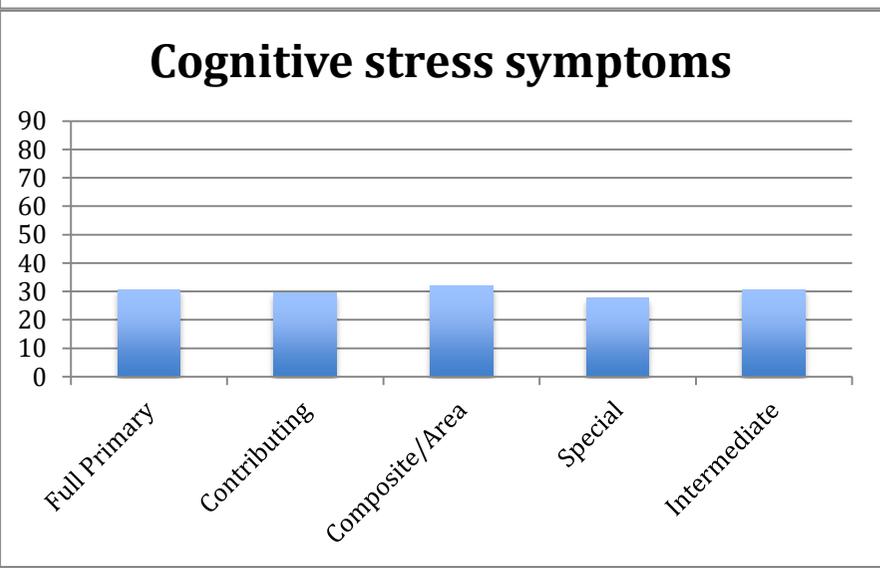
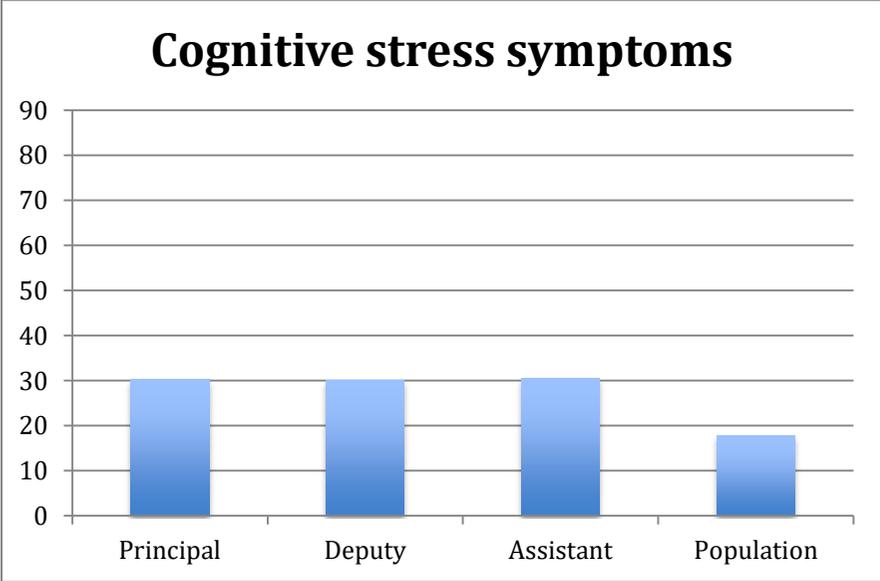
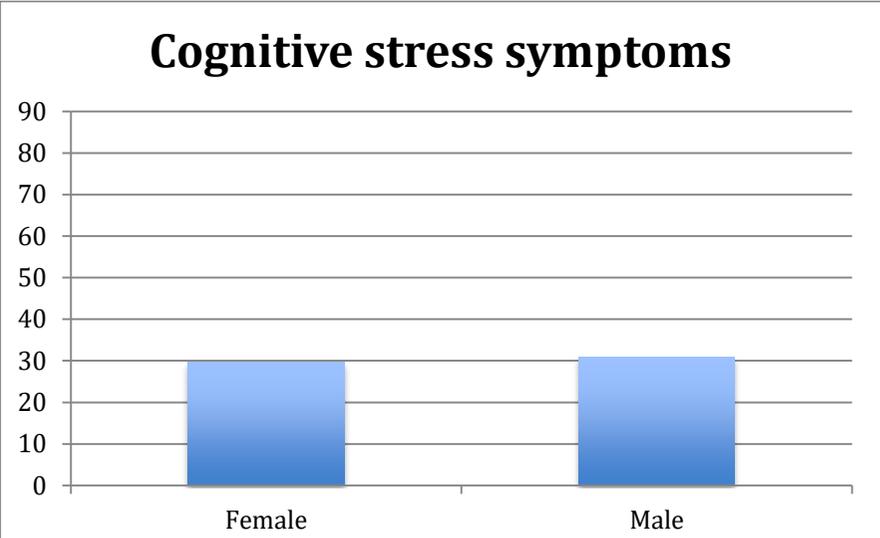
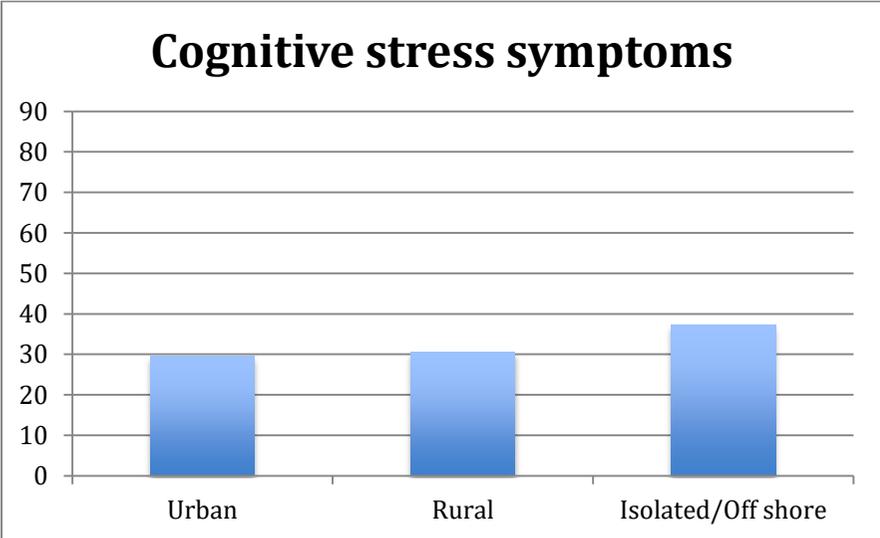
Depressive Symptoms disaggregated by Geolocation, Role Gender and School Type



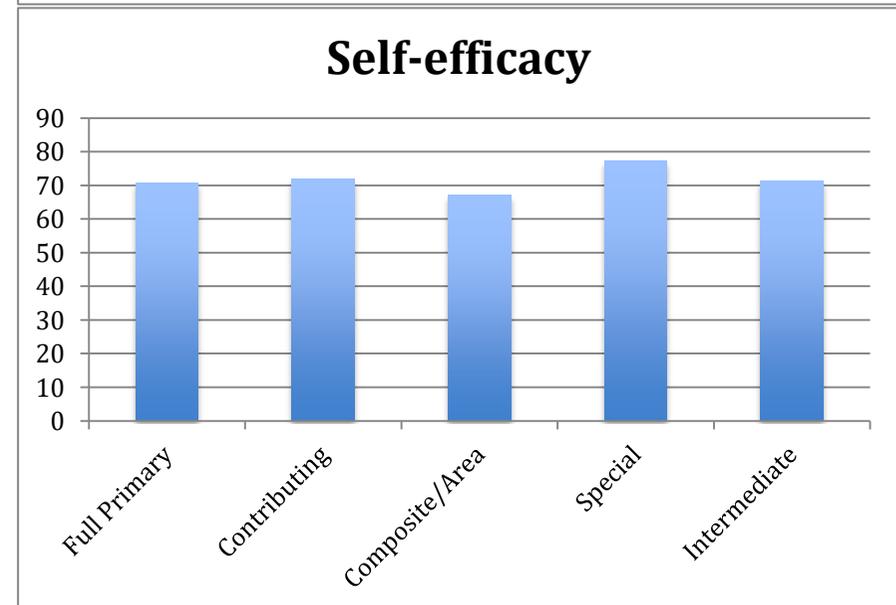
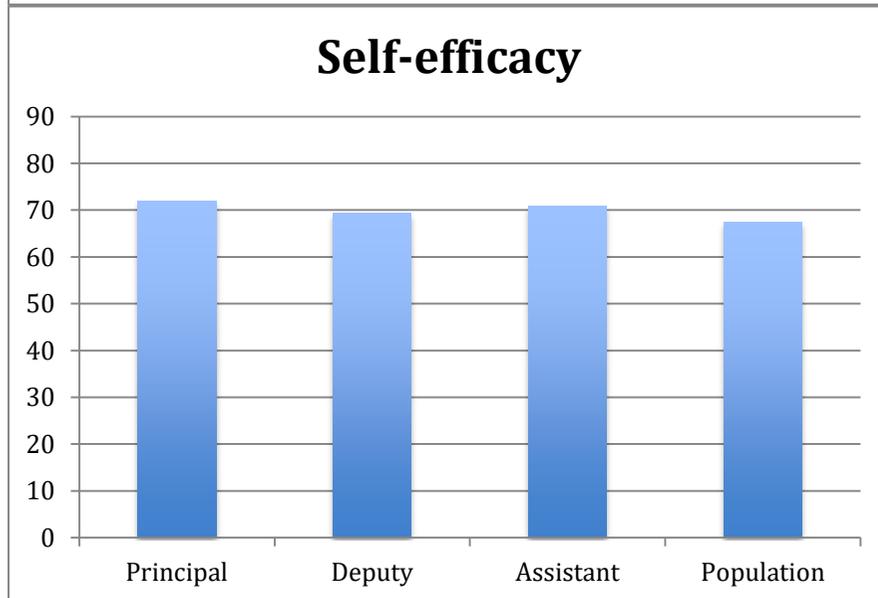
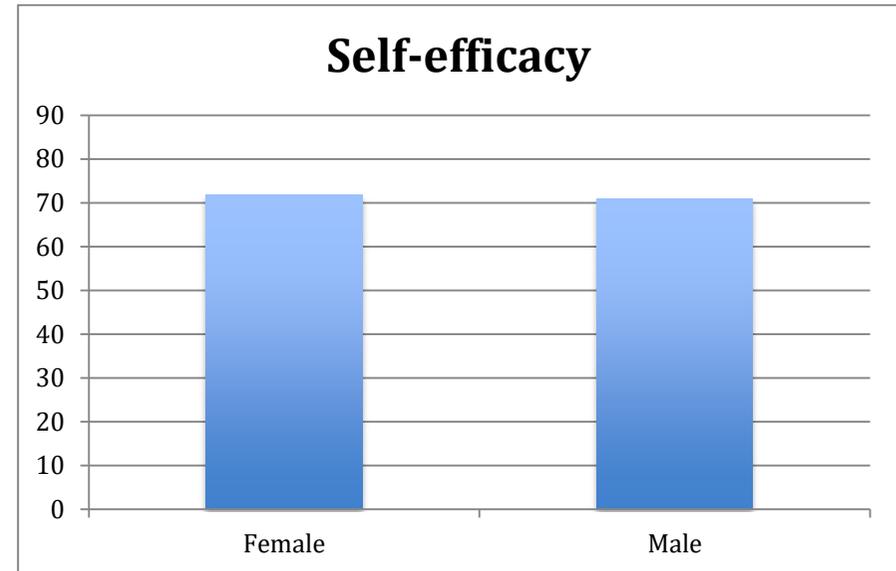
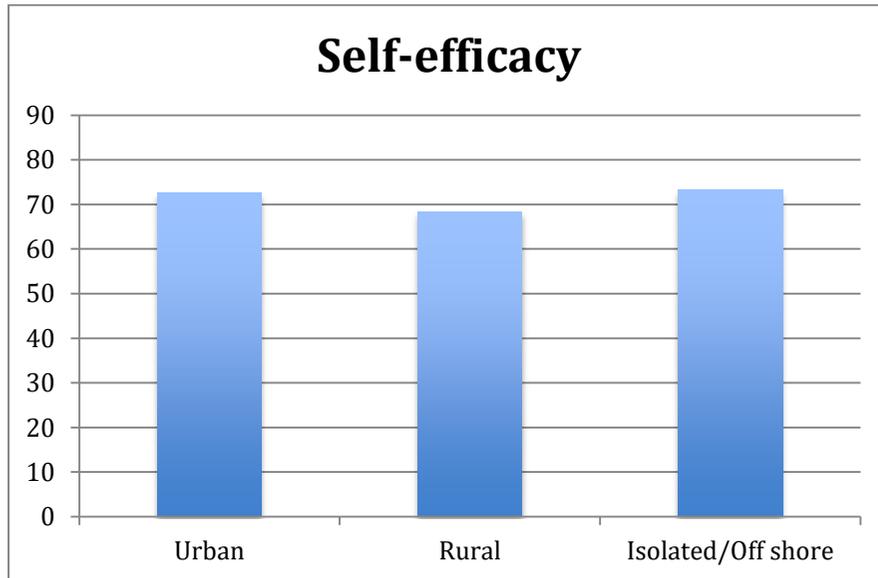
Somatic Stress disaggregated by Geolocation, Role Gender and School Type



Cognitive Stress disaggregated by Geolocation, Role Gender and School Type



Self-Efficacy disaggregated by Geolocation, Role Gender and School Type



Offensive Behaviour

Trends

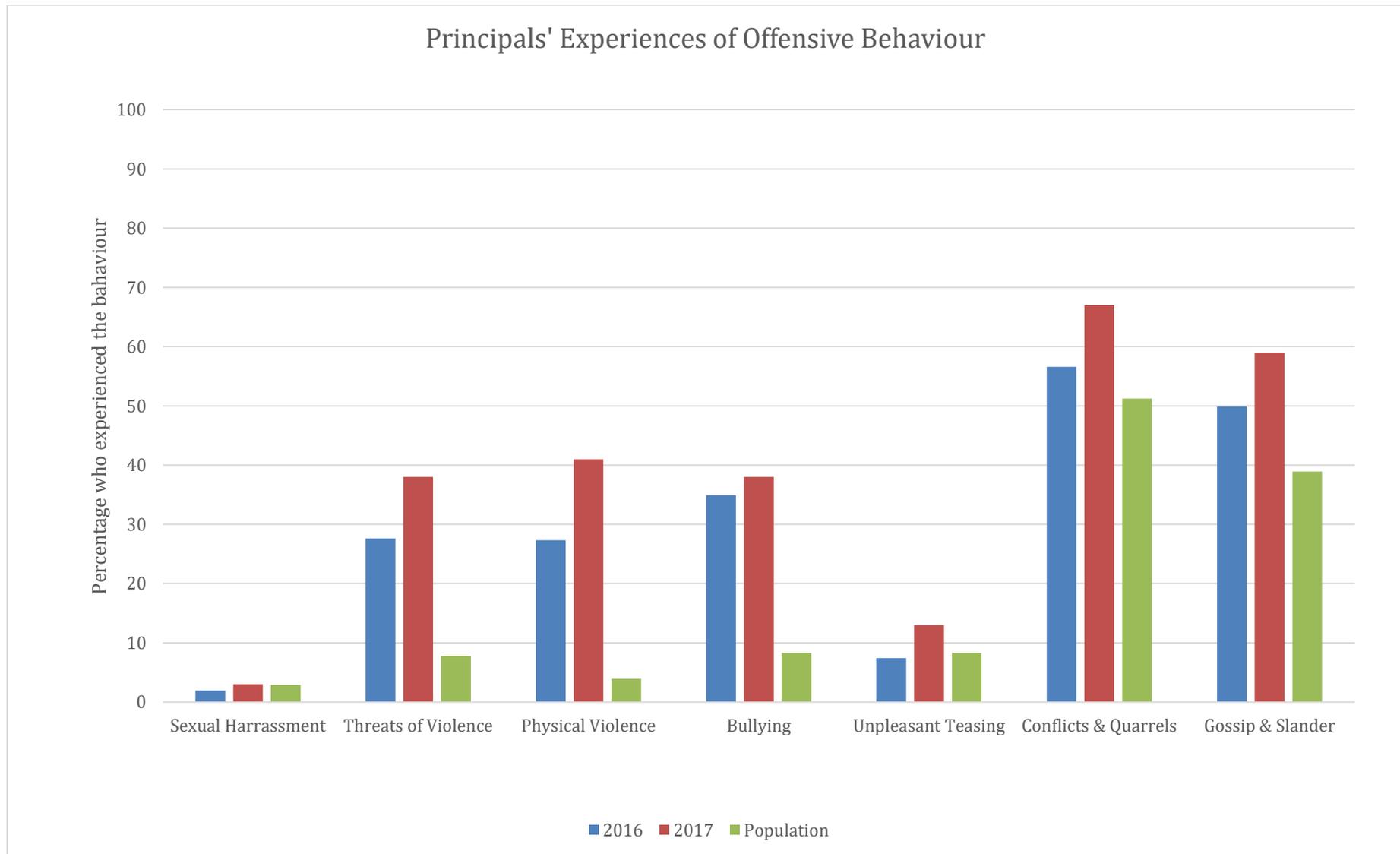


Figure 38. Experiences of offensive behavior trend data.

2017 Data in Detail

Subscales	Population		Critical Values		NZ	Location			Role			Gender		School Type				
	Mean	SD	Mean \pm SD*.5		ALL	Urban	Rural	Isolated/Off shore	Prim	Dep	Ass	F	M	Full Prim	Contrib	Comp Area	Special	Inter
			Low	High														
<i>Sexual Harrassment</i>	3%				3%	3%	2%	15%	3%	4%	4%	3%	4%	4%	2%	10%	0%	5%
<i>Threats of Violence</i>	8%				38%	43%	28%	30%	40%	37%	24%	40%	34%	34%	42%	45%	42%	35%
<i>Physical Violence</i>	4%				41%	51%	22%	15%	41%	43%	50%	43%	38%	31%	52%	30%	79%	32%
<i>Bullying</i>	8%				38%	39%	35%	35%	37%	41%	37%	43%	27%	44%	31%	55%	16%	44%
<i>Unpleasant Teasing</i>	8%				13%	13%	11%	25%	11%	16%	26%	15%	7%	15%	11%	10%	5%	11%
<i>Conflicts and Quarrels</i>	51%				67%	67%	65%	75%	67%	66%	72%	69%	61%	68%	66%	70%	53%	60%
<i>Gossip and Slander</i>	39%				59%	55%	67%	95%	61%	57%	54%	63%	53%	66%	53%	60%	42%	61%

Offensive behaviours cover on the one hand being subjected to negative acts such as bullying and threats of violence at the workplace and on the other hand conflicts between people at the workplace.

- **Sexual harassment** is if one has been subjected to this at the workplace.
- **Threats of violence** is if one has been subjected to this at the workplace.
- **Physical violence** is if one has been subjected to this act at the workplace.
- **Bullying** is if one has been subjected to this act at the workplace. Bullying is defined as being exposed repeatedly over a longer period to unpleasant or degrading treatment, and not being able to defend oneself against this treatment
- **Unpleasant teasing** is if one has been subjected to this at the workplace.
- **Conflicts and quarrels** are if one has been involved in such occurrences at the workplace.
- **Gossip and slander** is if one has been subjected to this at the workplace.

Results

- **Trends** The trends for the most serious offences are of deep concern.
- **Sexual harassment** remains low relative to the general population, but there is no acceptable prevalence for this behaviour.
- **Threats of violence** are occurring at 4.87 times the general population prevalence: up from 3.54.
- **Physical violence** is occurring at 10 times the general population prevalence. In 2016 it was 7 times the population rate.
- **Bullying** is occurring at 4.58 times the general population prevalence; up from 4.2 times in 2016.
- **Unpleasant teasing** is occurring at 1.57 times the general population prevalence; up from 0.9 times in 2016.

- **Conflicts and quarrels** is occurring at 1.31 times the general population prevalence; up from 0.96 times in 2016.
- **Gossip and slander** is occurring at 1.52 times the general population prevalence; up from 1.29 times in 2016.

The following pages graphically detail the disaggregated results.

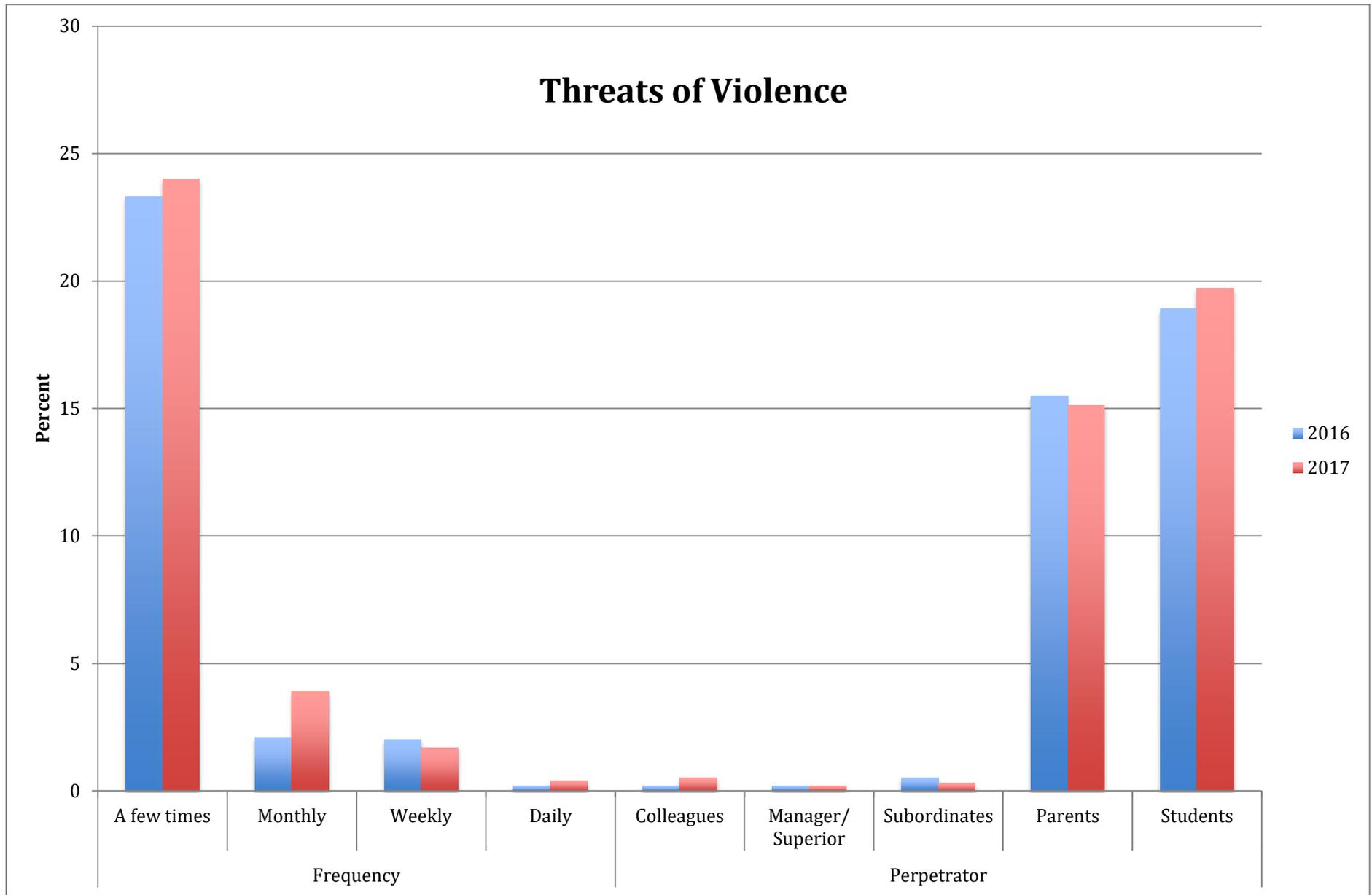


Figure 39. Threats of Violence frequency and perpetrators

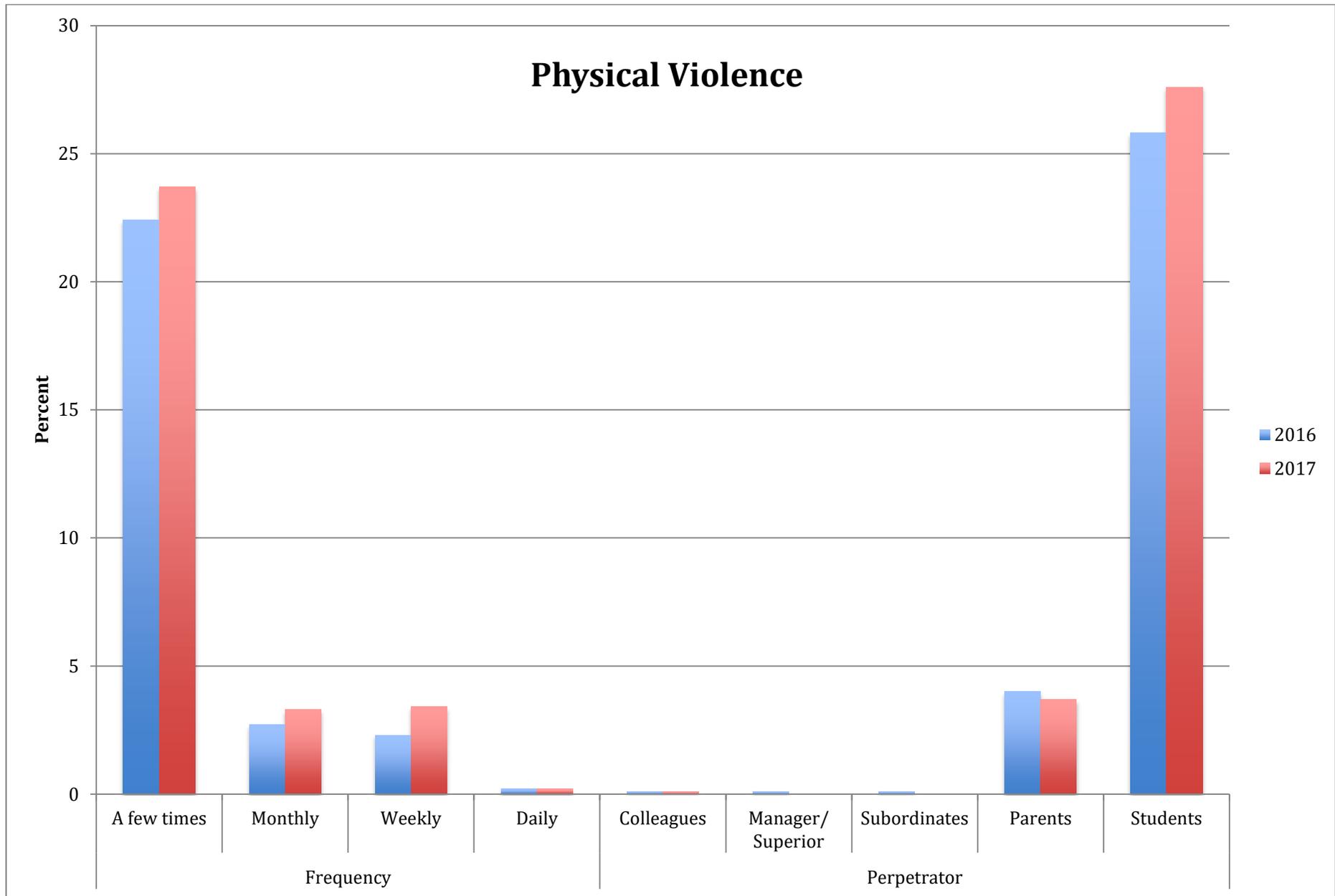


Figure 40. Physical Violence frequency and perpetrators.

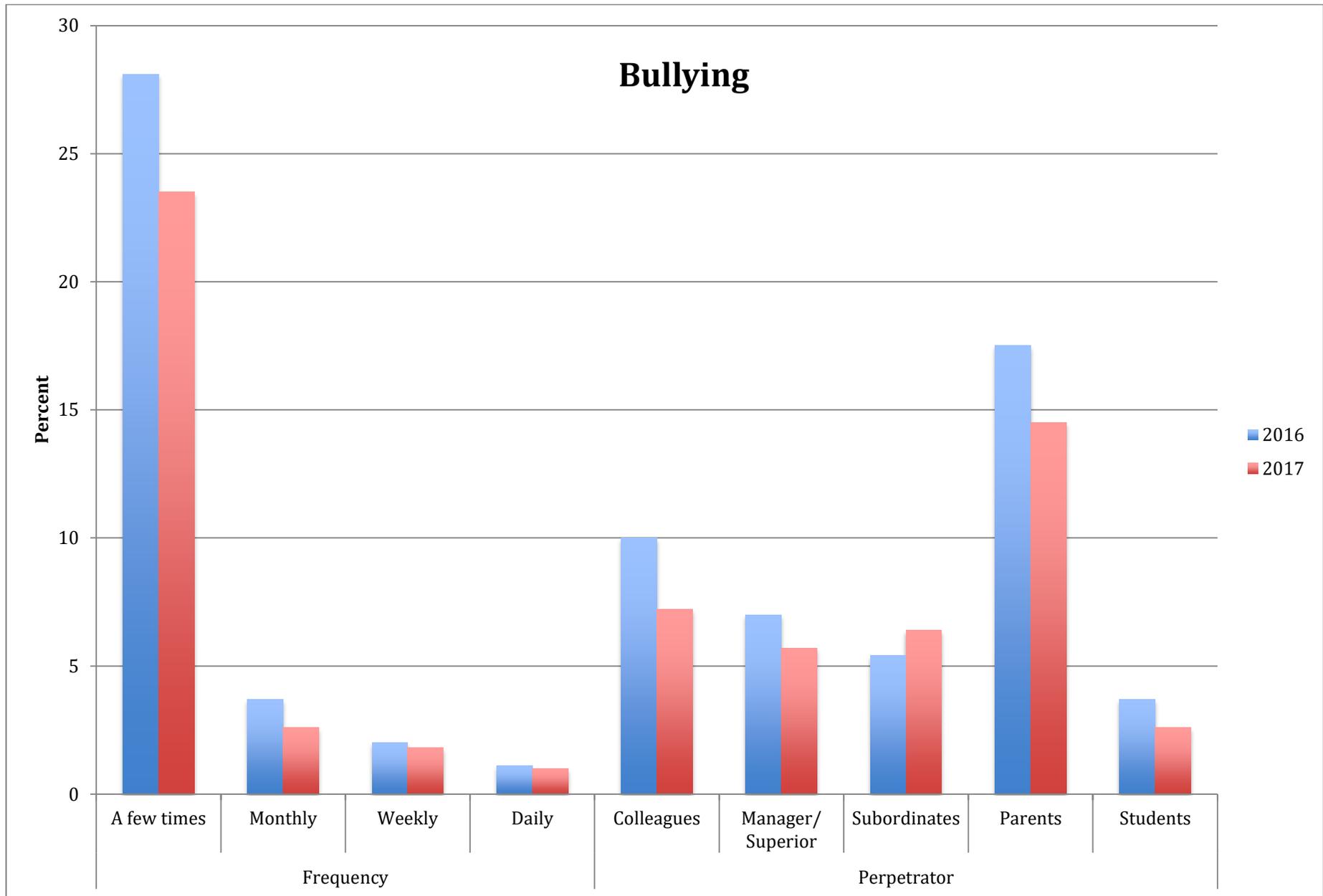
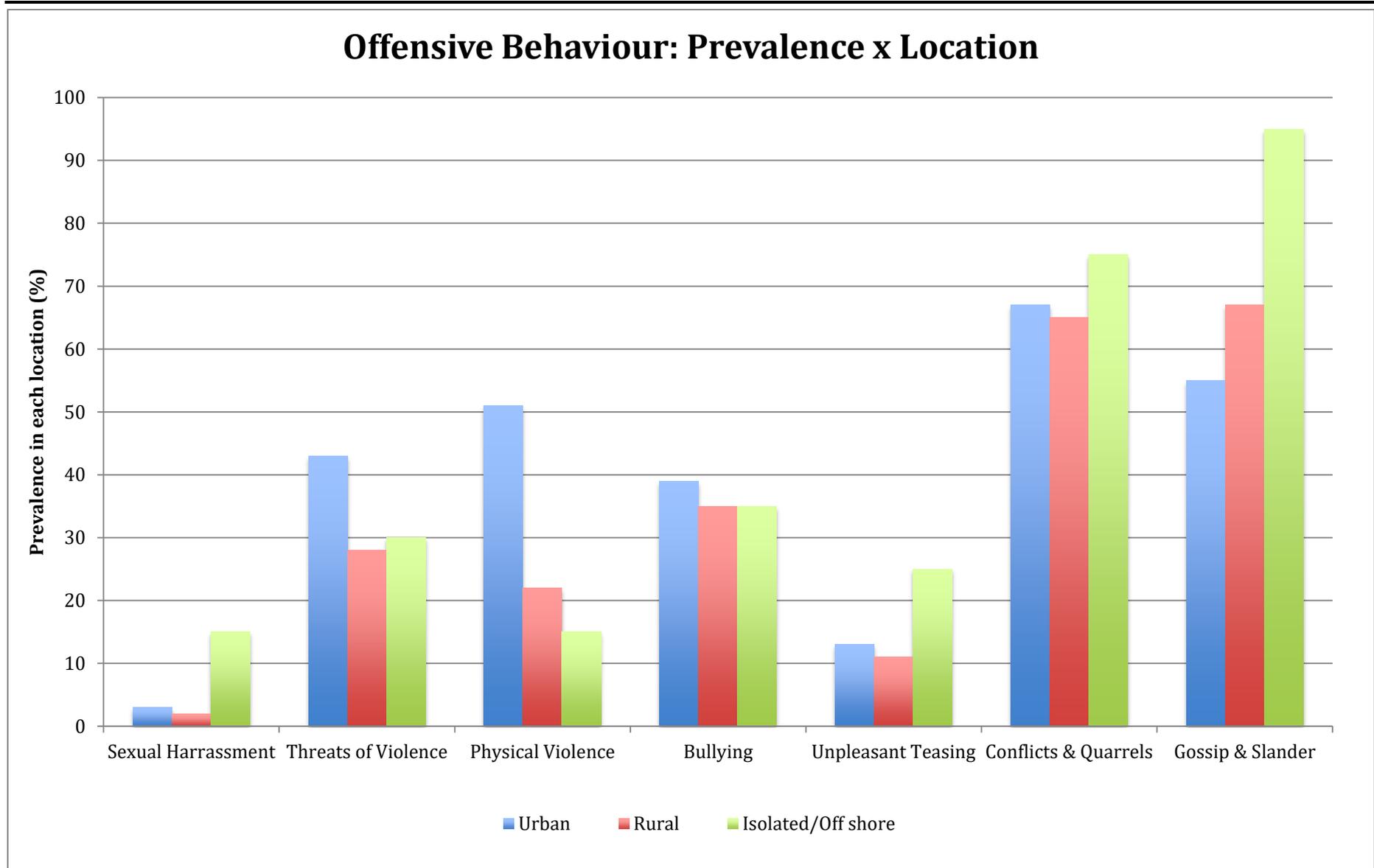
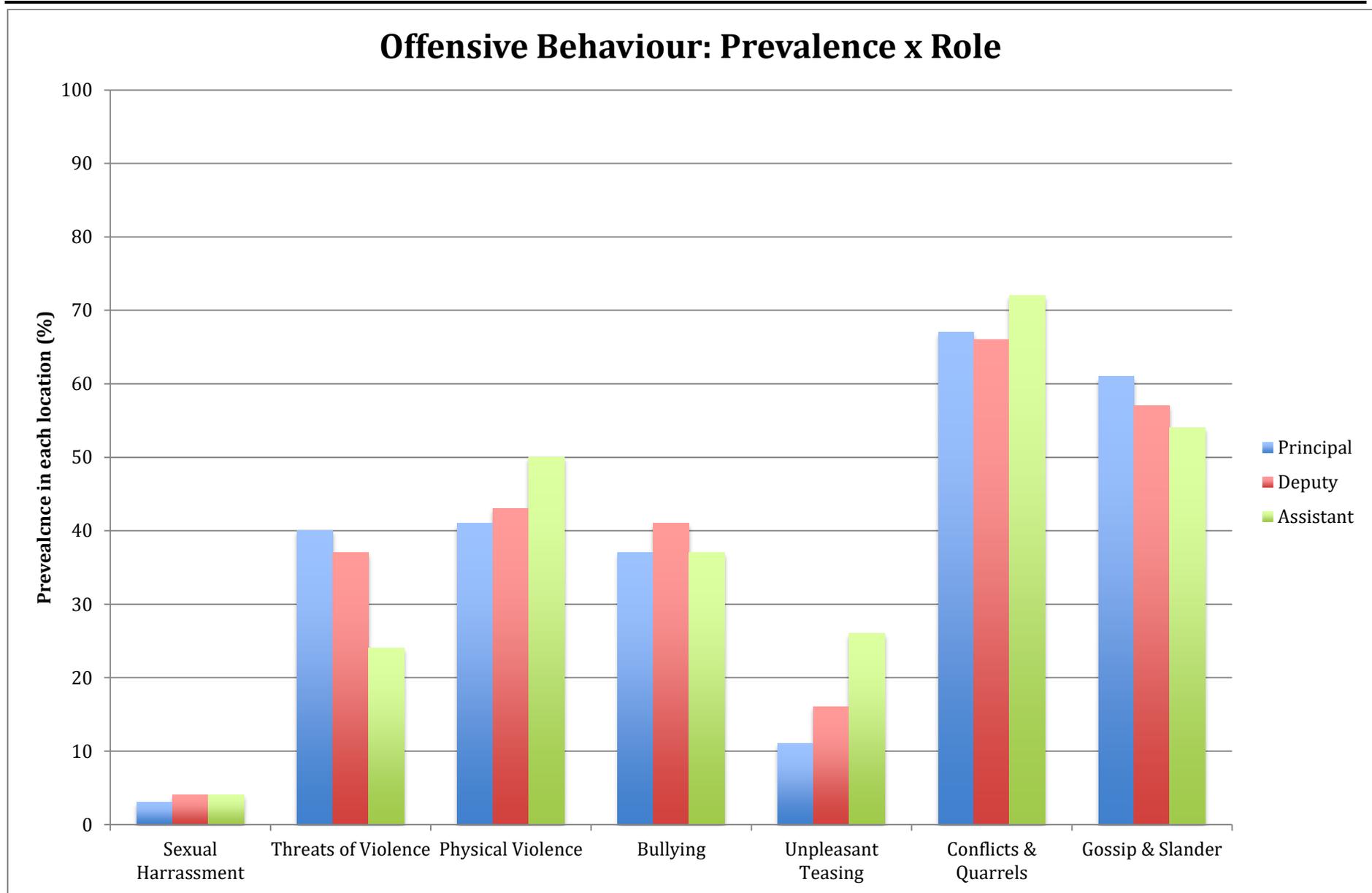


Figure 41. Bullying frequency and perpetrators

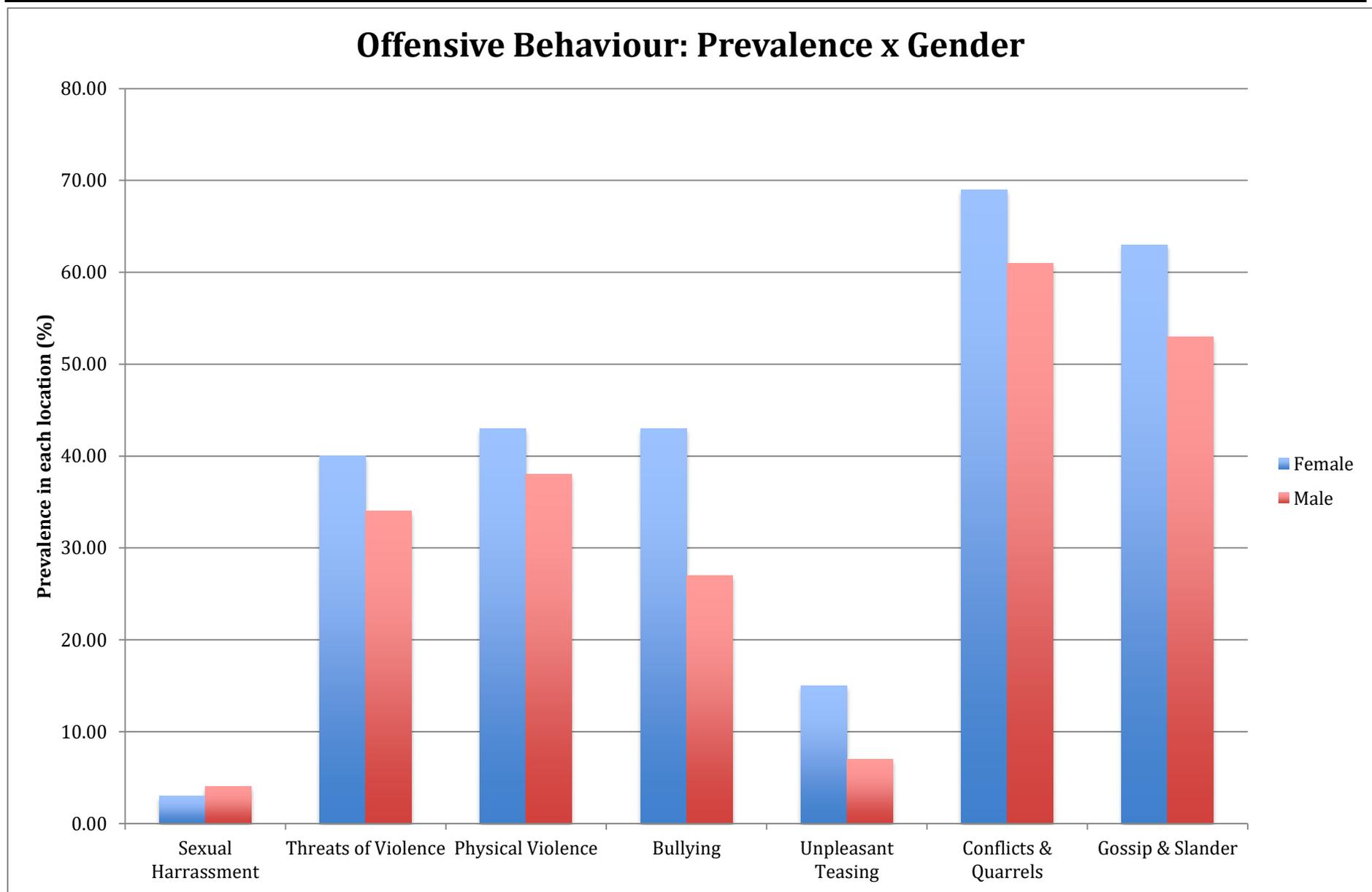
Offensive Behaviour: Prevalence disaggregated by Geolocation



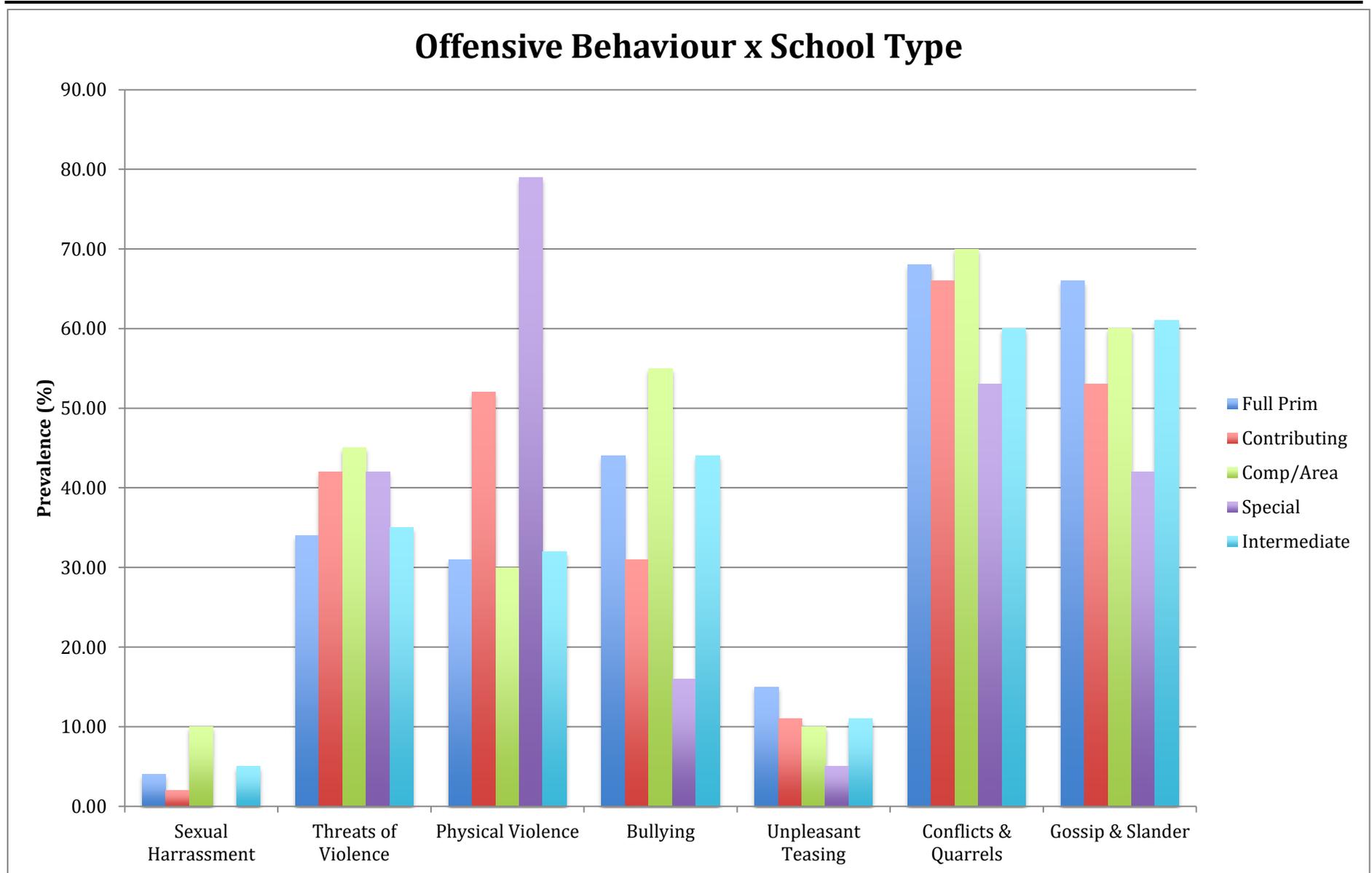
Offensive Behaviour: Prevalence disaggregated by Role



Offensive Behaviour: Prevalence disaggregated by Gender



Offensive Behaviour: Prevalence disaggregated by School Type



Interpretation of Offensive Behaviour Prevalence

Differences in prevalence by Geolocation

Urban settings are much more likely to experience threats of and actual violence than any other setting.

Differences in prevalence by Role

Assistant principals are more likely to experience actual physical violence than their leadership colleagues but less likely to experience threats. These scores suggest that the issue is much more complicated than a role difference, and is probably better analyzed qualitatively.

Differences in prevalence by Gender

Women are significantly more likely to experience all forms of offensive behavior than men. This needs to be addressed systemically.

Differences in prevalence by school type and decile group

Contributing/Area and Special schools have a much greater likelihood of violence than other school types. However, the lowest prevalence is ~1:3 leaders experiencing threats of and actual physical violence. This needs to be urgently addressed at a systemic level.

Discrimination

The 2016 survey brought issues of racial discrimination to light. The initial response to this information was that NZEI Te Riu Roa began working with partners Te Akatea and NZPF to develop a plan to address this issue in a constructive way, rather than just release the information into the public domain without time to develop plans, strategies protocols to address the issues. In 2017 additional questions were asked of participants who identified as Māori or Pasifika (N=71). These extra questions were not compulsory and a significant number of participants chose not to answer many of the additional questions. Where no numbers appear in the following table, this shows that no participants responded to that question. Some questions were only answered by as few as two participants. The following table lists the differing forms of discrimination suffered by Māori and Pasifika school leaders and where the source of the discrimination came from. Numbers reported are raw scores. The low response rate makes it difficult to interpret the extent and impact of racism in education. However, the fact that exists in such large numbers (29% of all Māori and Pasifika respondents experienced it (2016 N=75; 2017 N=89)) it is clearly a significant issue in education and one which needs to be grappled with systemically. As stated above, this work has begun.

Table 44. Discrimination toward Māori and Pasifika school leaders disaggregated by type of behavior and perpetrator.

<i>Have you ever experienced discrimination on the basis of race in the form of comments or actions by of the following:</i>	Type of Discrimination						
	<i>Perpetrator</i>	Official/ formal public statement	Unofficial/ informal/ public statement (including gossip)	Direct comment made to you	Comments made referring to Māori that cause offence	Action (eg denying access to resources, or support)	Other
<i>Other employees working in the same kura/school as you who are at the same or senior place in the leadership/management structure</i>	1	7	5	10	1		49
<i>Person(s) with managerial or employer responsibility for you (eg for Principals, the Board and APs and DPs, the principal)</i>	2	9	8	10	3	1	47
<i>Principals of other schools/kura</i>	1	10	10	18	4	2	38
<i>Employees of other kura/schools in leadership/management positions</i>	2	14	9	24	3	2	33
<i>Other employees working in the same school/kura as you who are at the in a lower position in the leadership/management structure (including not in it at all)</i>	1	10	11	21	3	1	39

<i>Have you ever experienced discrimination on the basis of race in the form of comments or actions by of the following:</i>	Type of Discrimination						
	Official/ formal public statement	Unofficial/ informal public statement (including gossip)	Direct comment made to you	Comments made referring to Māori that cause offence	Action (eg denying access to resources, or support)	Other	Not applicable
<i>Perpetrator</i>							
<i>Members of your Community of Learning/Kahui Ako leadership group</i>	1	6	6	9	2	1	53
<i>Participants in your Community of Learning/Kahui Ako not in the leadership group</i>	1	3	3	6	1	1	58
<i>Members of your principals association (within the context of Principals' Association activity)</i>	2	6	8	13	6	2	48
<i>Members of your union (within the context of union activity)</i>		2	4	4	3		59
<i>Representatives of the Ministry of Education</i>	2	1	3	6	5	2	54
<i>Representatives of other government agencies, eg ERO</i>	2	5	7	8	4	2	51
<i>Representatives of businesses/contractors working with your kura/school</i>		7	12	15	2		42

<i>Have you ever experienced discrimination on the basis of race in the form of comments or actions by of the following: Perpetrator</i>	Type of Discrimination						
	Official/ formal public statement	Unofficial/ informal/ public statement (including gossip)	Direct comment made to you	Comments made referring to Māori that cause offence	Action (eg denying access to resources, or support)	Other	Not applicable
<i>Representatives of community organisations working with your school/kura</i>	2	6	7	16	2	1	44
<i>Comments referring to race made by an appraiser</i>	1	1	2	3	1	3	57
<i>Official board actions (including written reports)</i>	1	2	2	2	1	1	44
<i>Members of the school community (parents, whanau)</i>	2	17	22	27	4	2	27
<i>Members of the wider community</i>	3	16	17	29	6	3	26

Passion

The dualistic model of passion scale developed by Vallerand (2015) proposes two distinct types of passion:

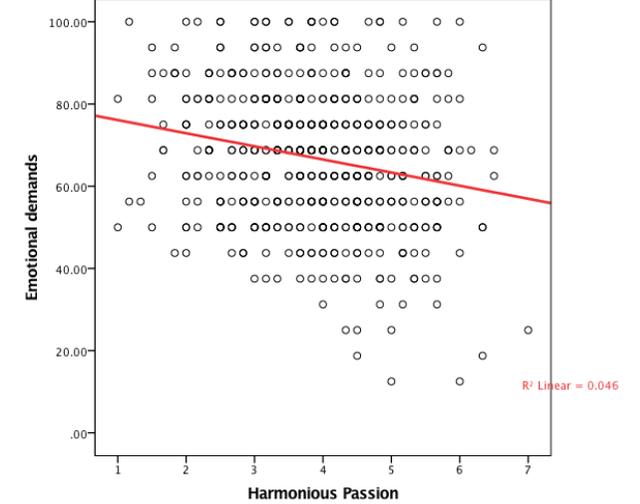
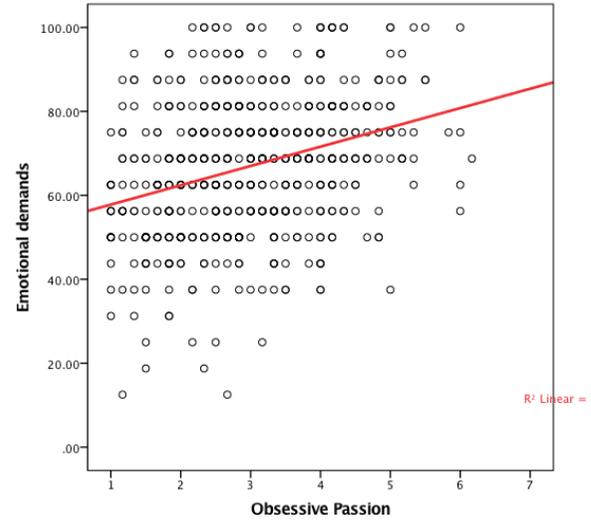
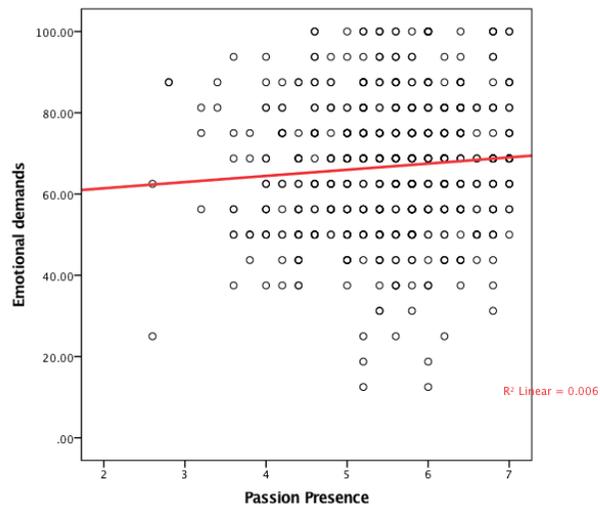
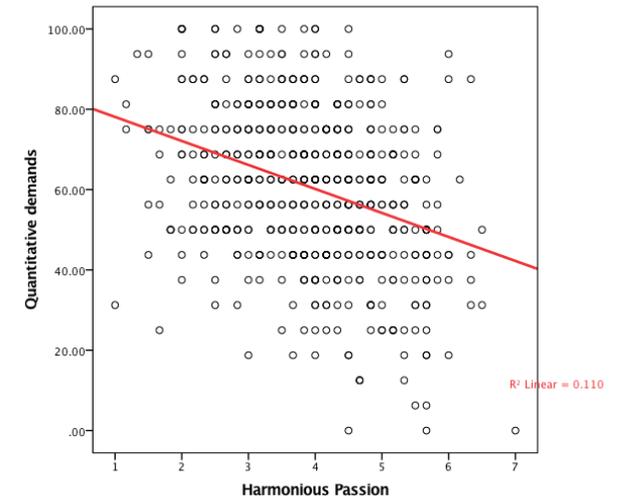
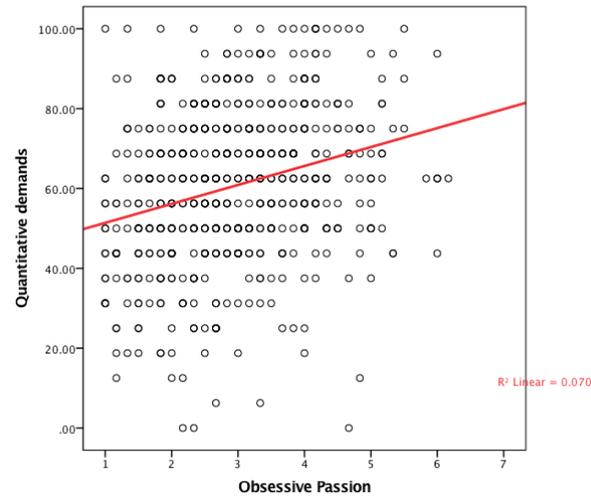
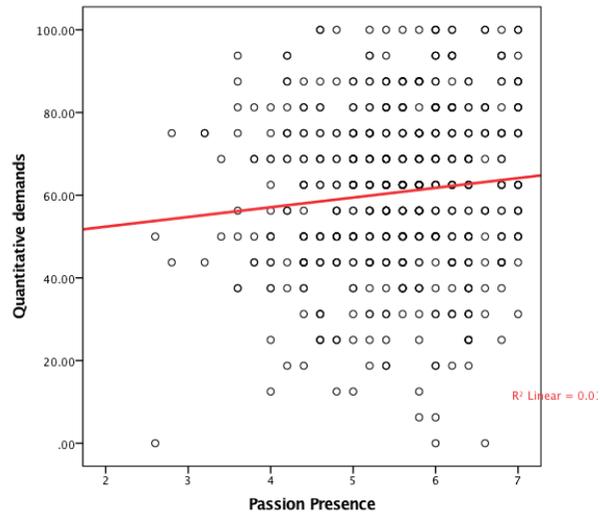
- *Harmonious Passion* – a strong desire to freely engage in activity resulting from autonomous internalization of the passion into the person’s identity; willingly accepted as important.
- *Obsessive Passion (OP)* – an uncontrollable urge to partake in the passion resulting from controlled internalization into one’s identity. This process originates from intrapersonal and/or interpersonal pressure because particular contingencies are attached to the passion, such as feelings of social acceptance, and can overwhelm other aspects of the person’s life.

Table 45. Passion subscale scores

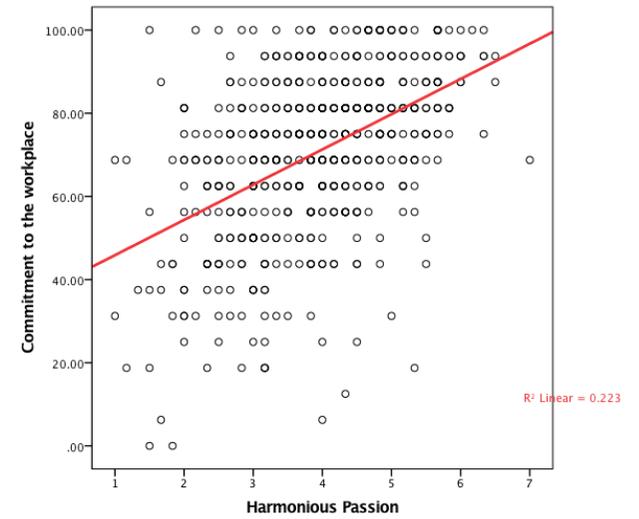
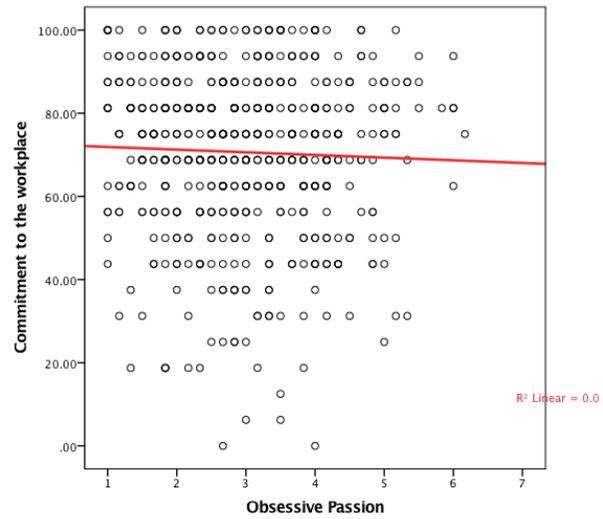
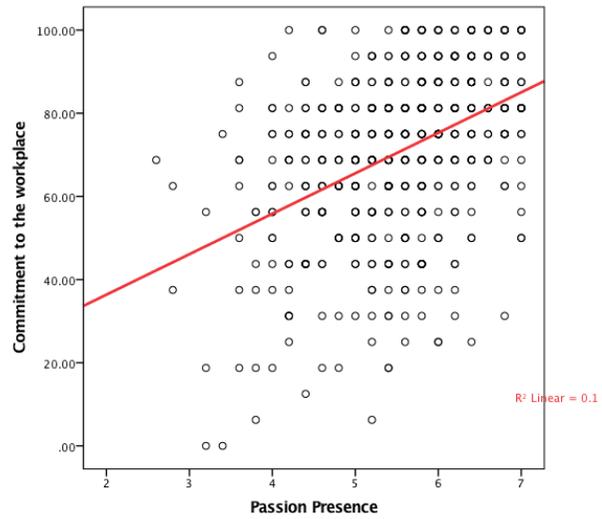
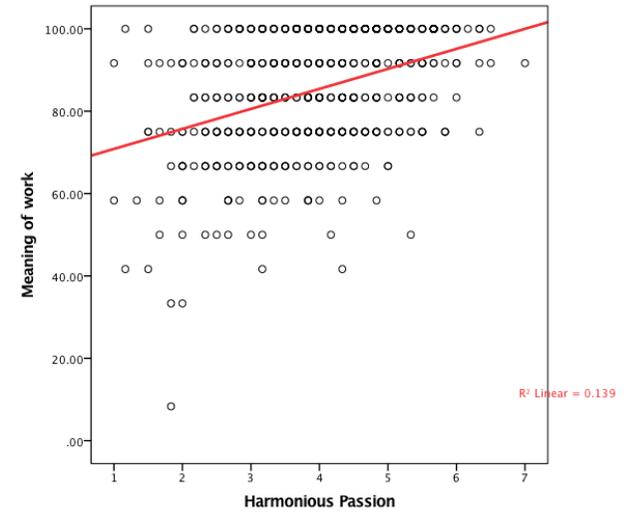
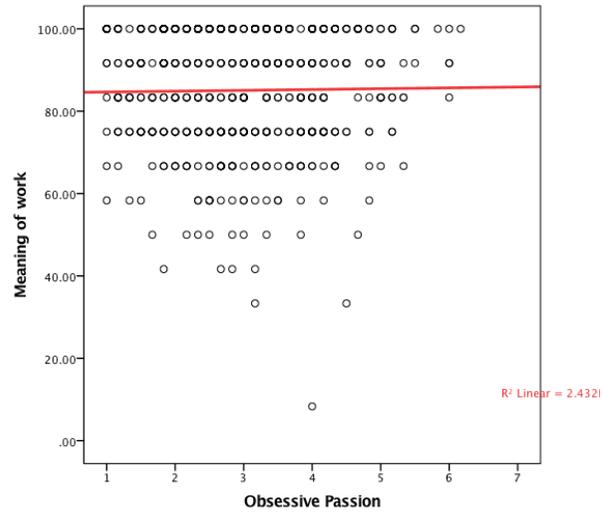
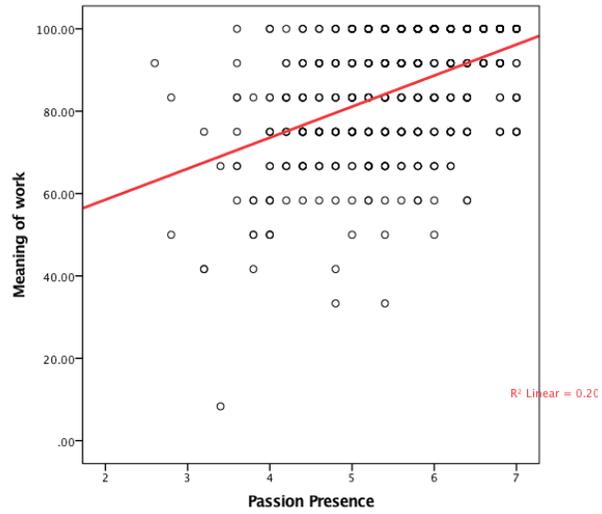
Passion	2016	2017
Presence	5.49	5.43
Obsessive	2.95	2.88
Harmonious	3.91	3.84

Results are promising with regard to the effect of harmonious passion on job demands. Harmonious passion appears to be a good resource. Graphs showing the relationships with other domains are represented from the 2016 report. They are virtually identical in 2017.

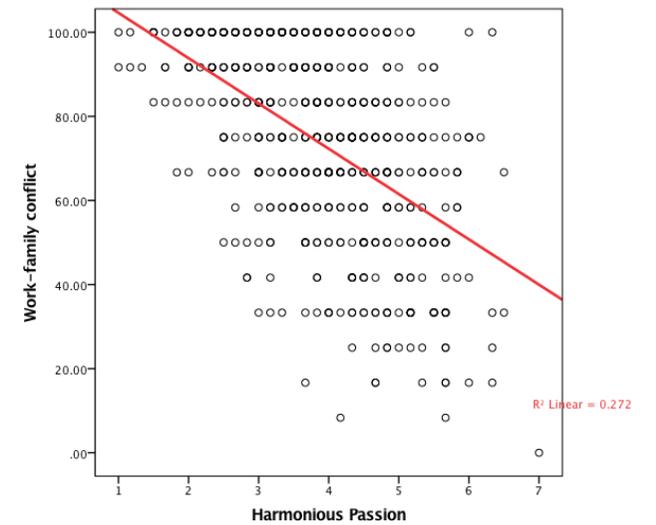
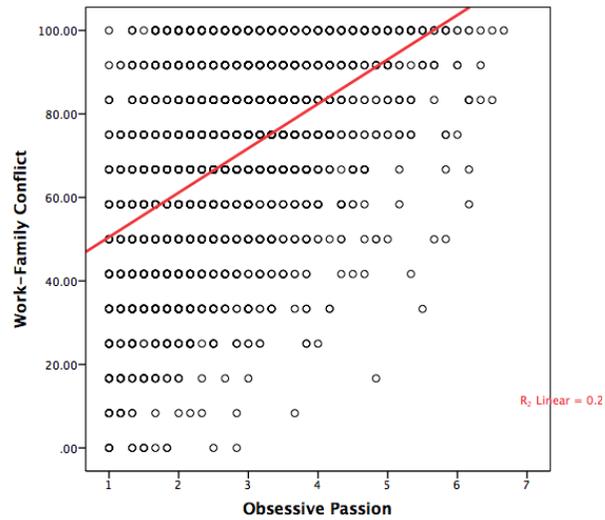
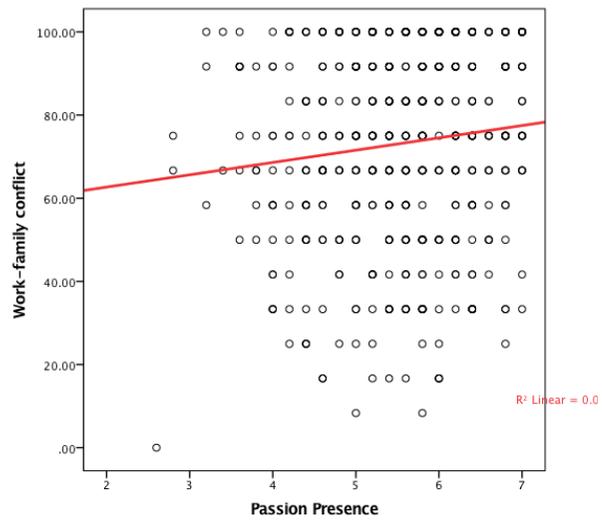
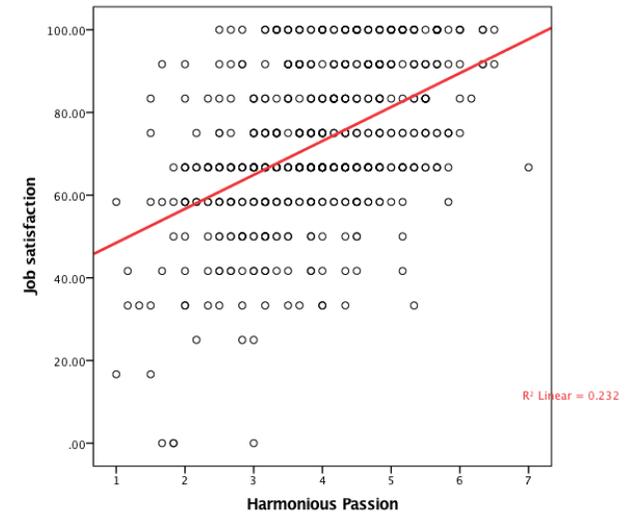
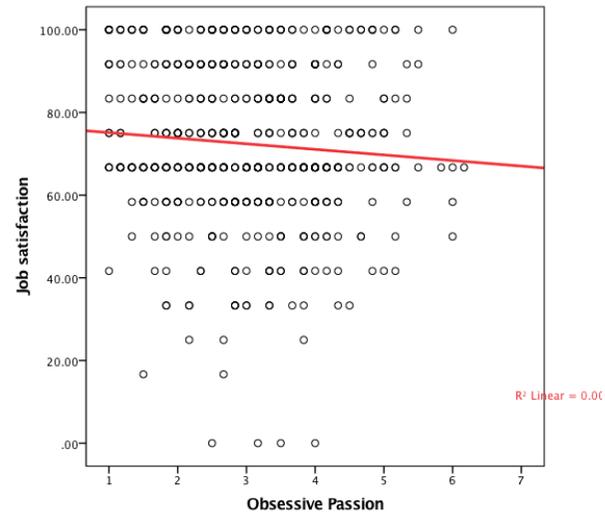
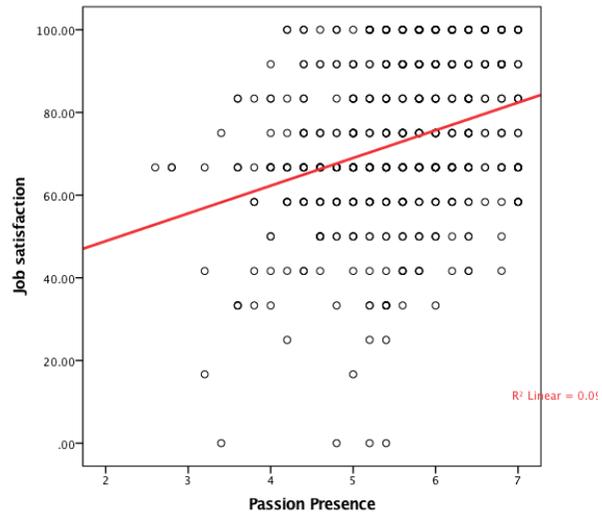
Correlations between, Passion, General Health and Wellbeing Job Demands and Resources and Quality of Life



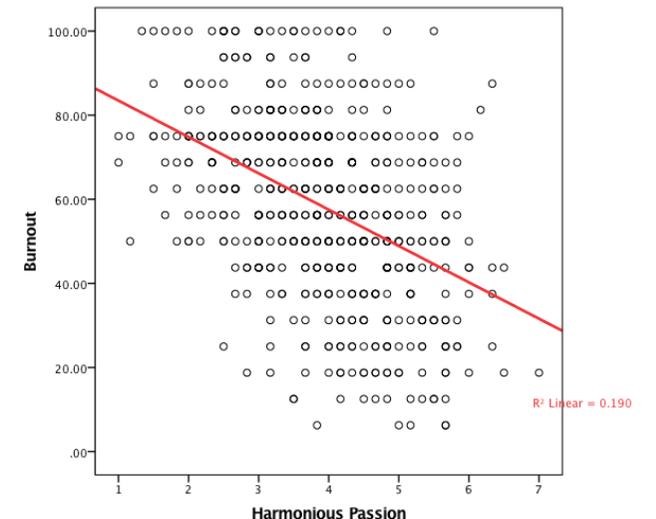
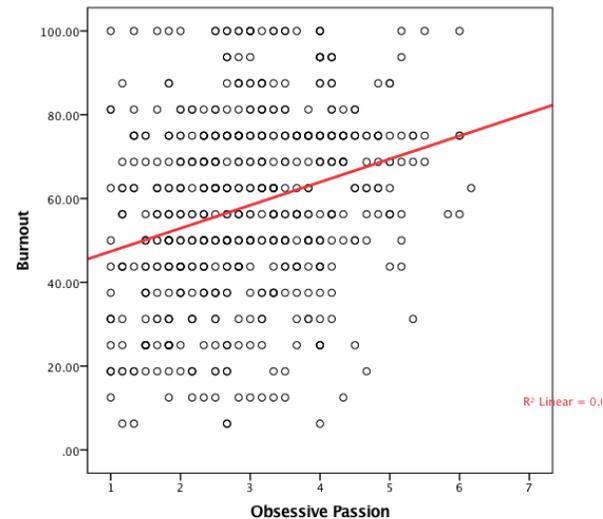
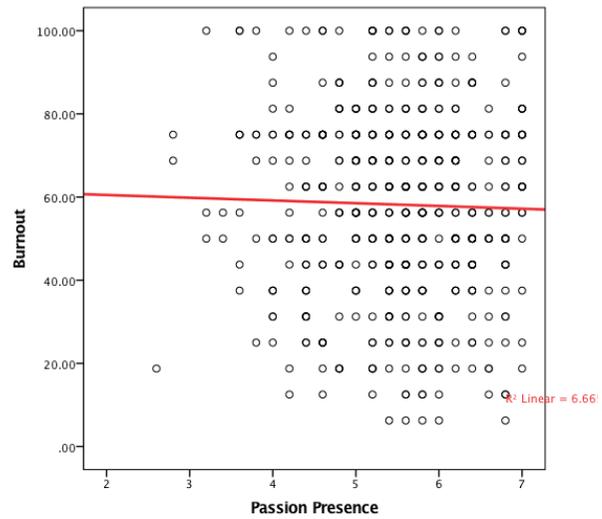
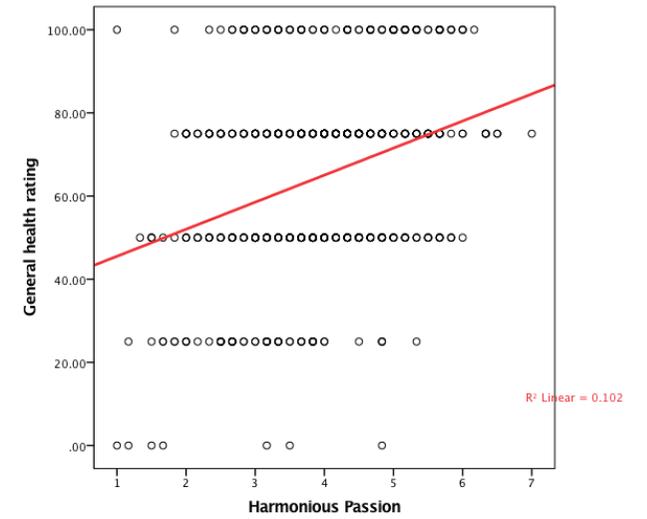
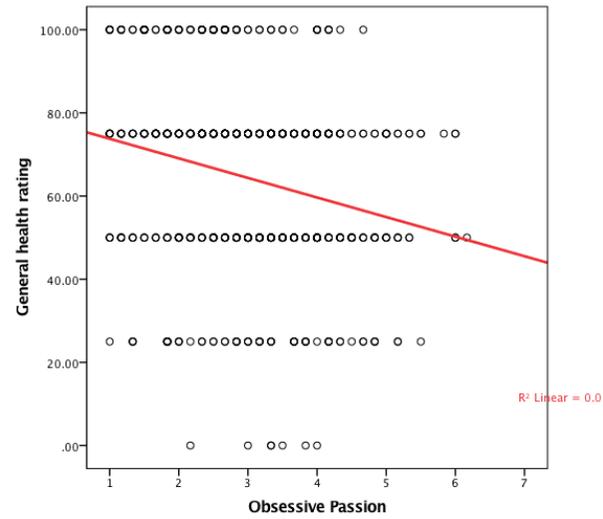
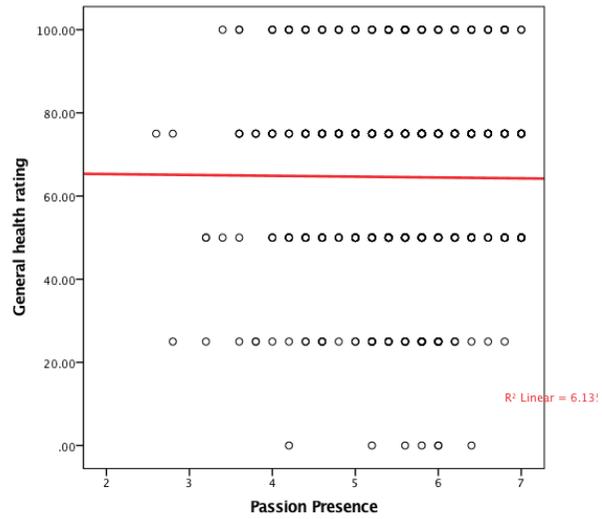
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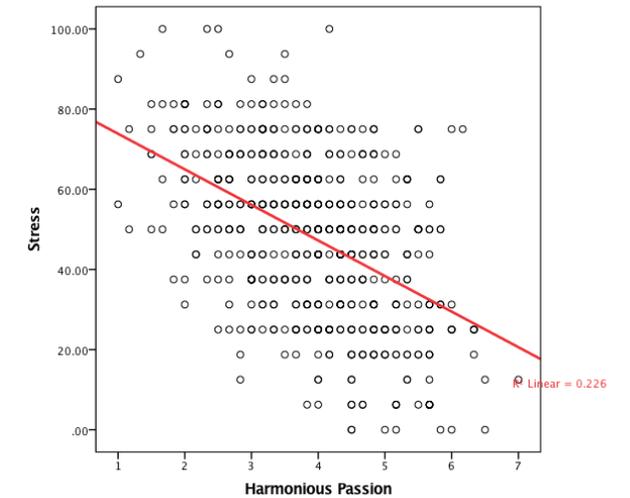
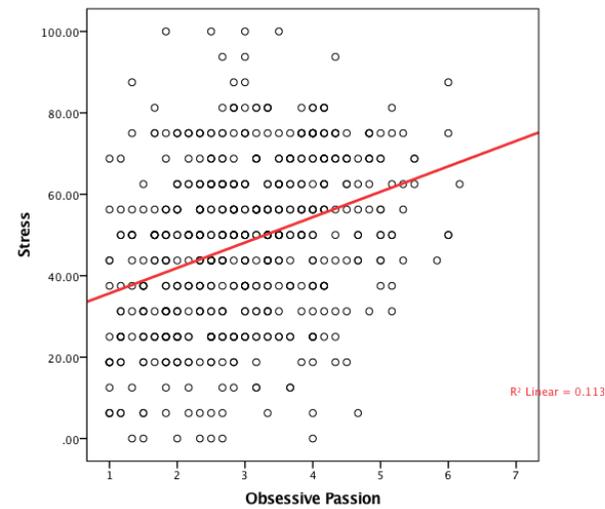
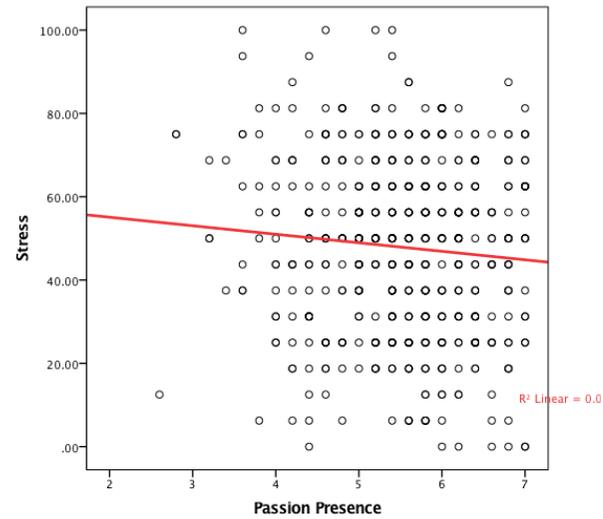
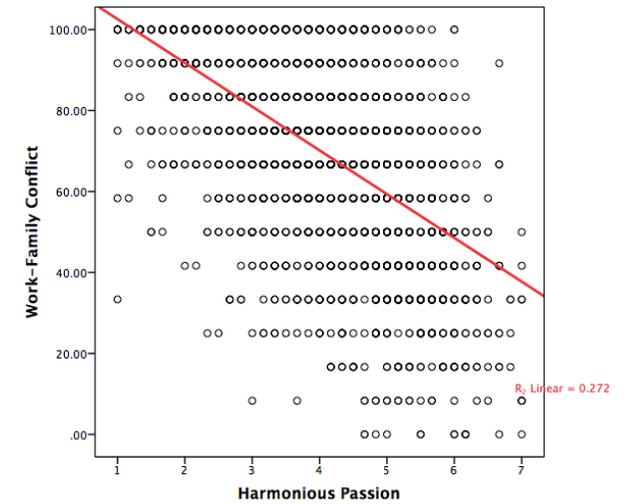
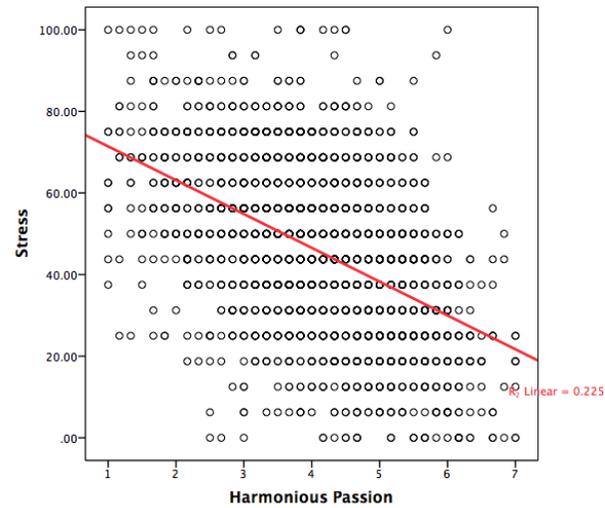
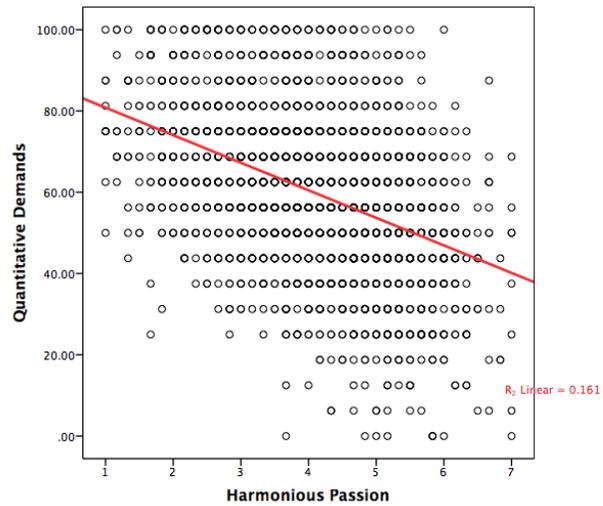
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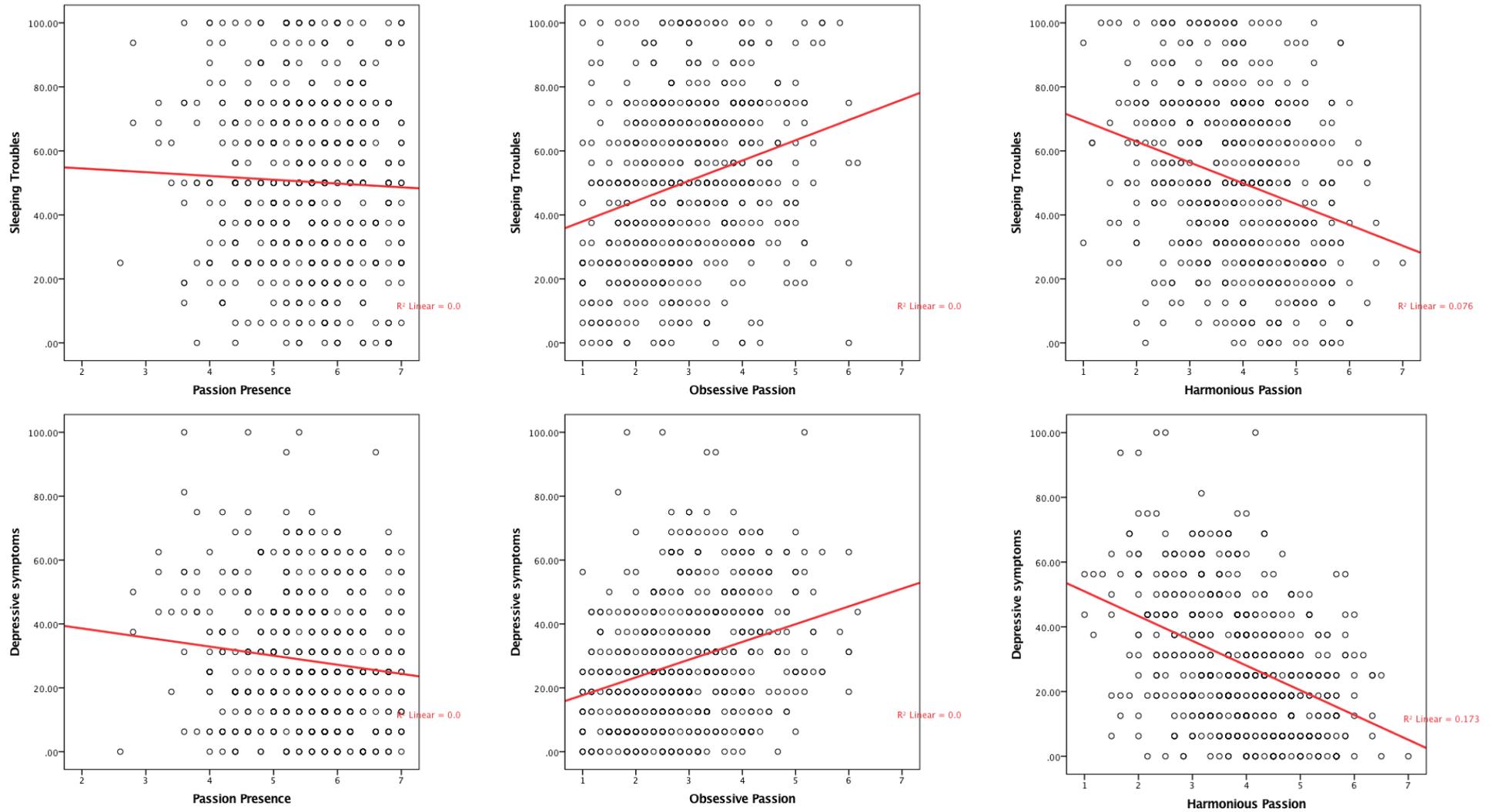
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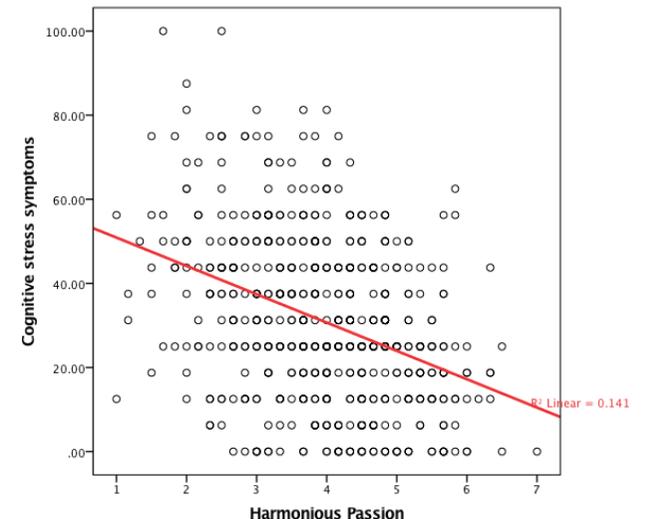
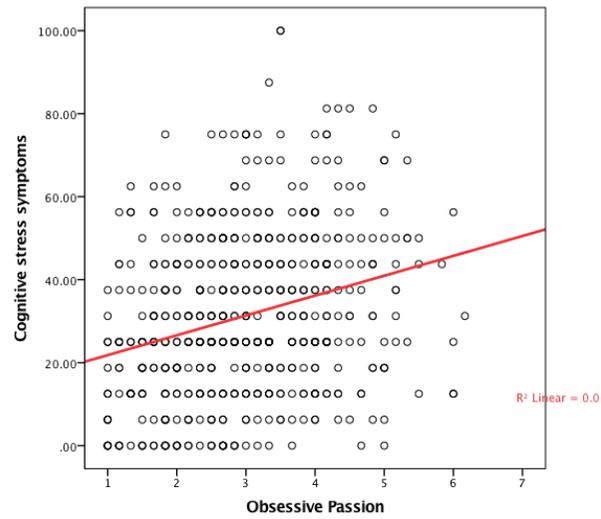
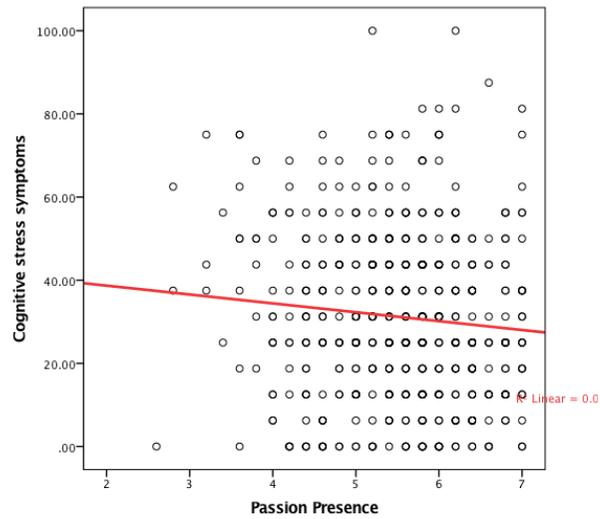
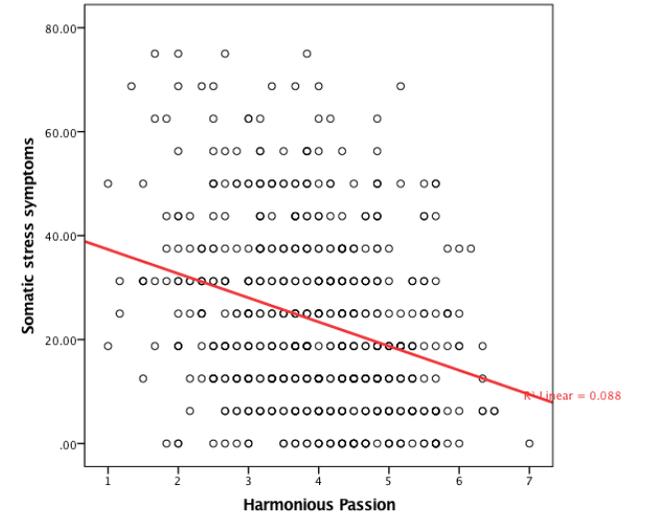
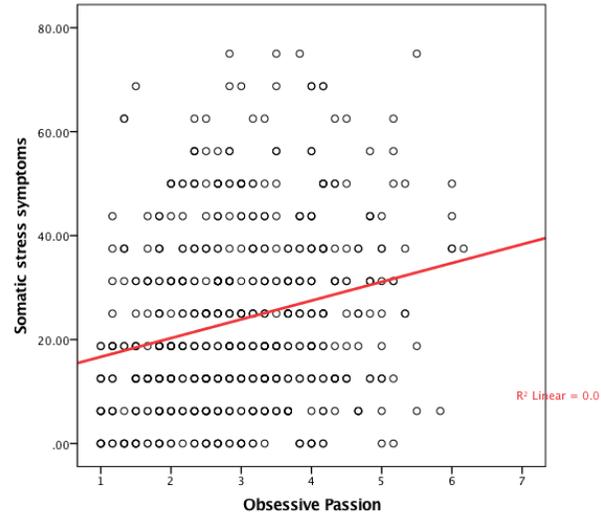
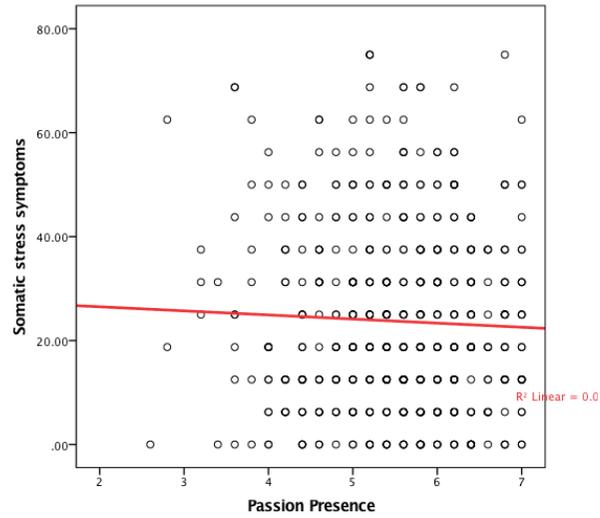
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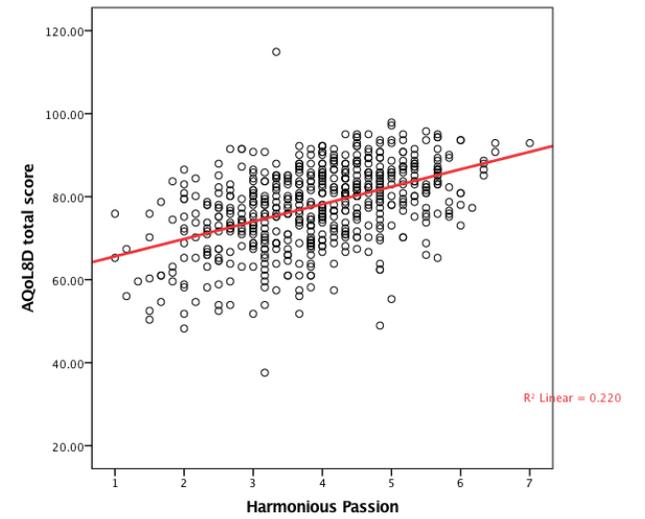
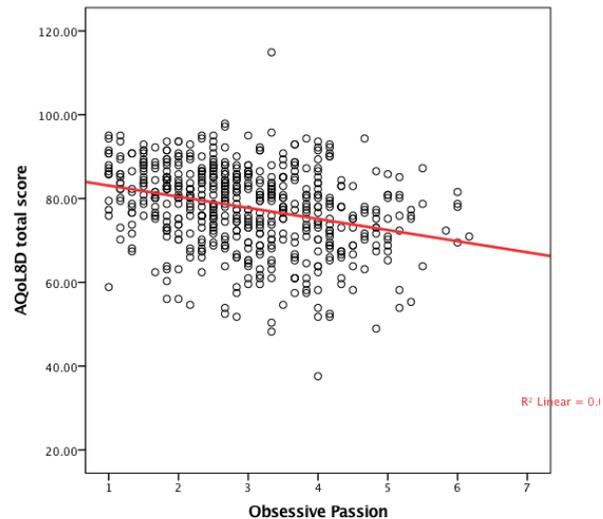
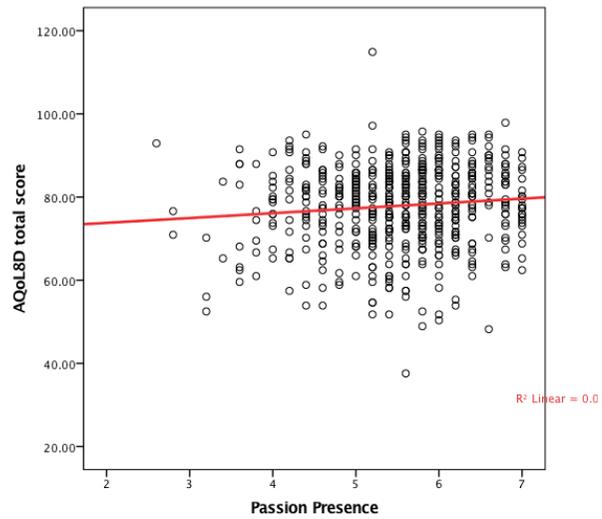
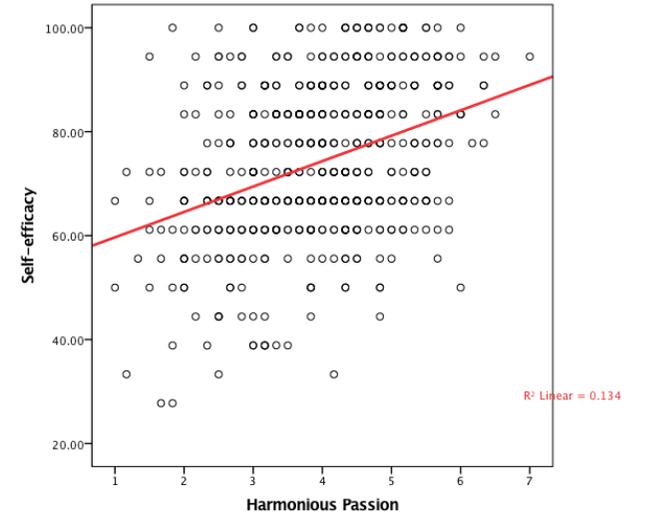
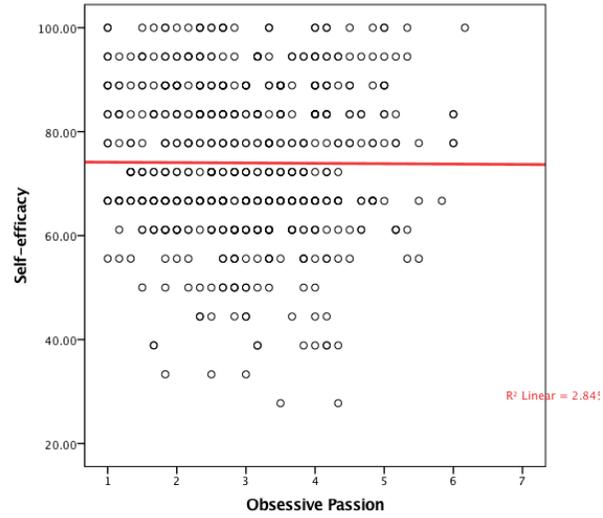
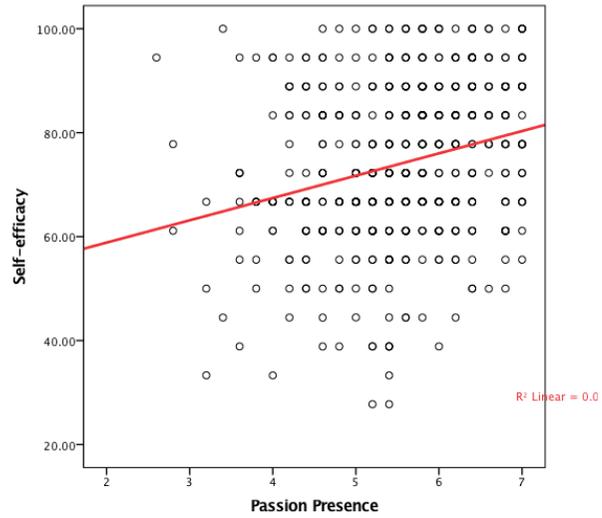
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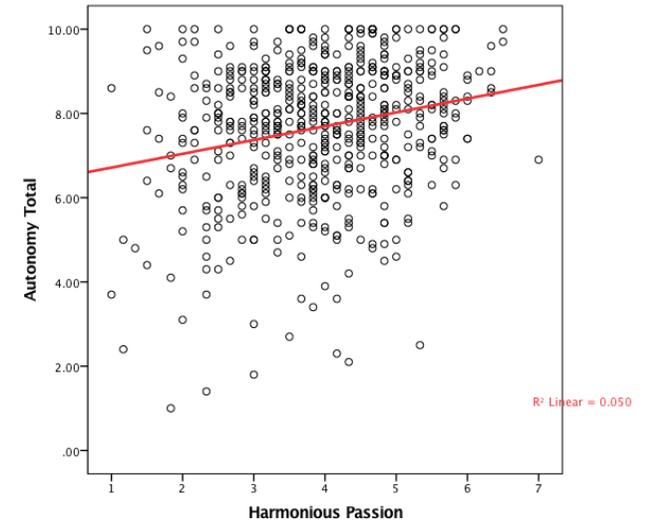
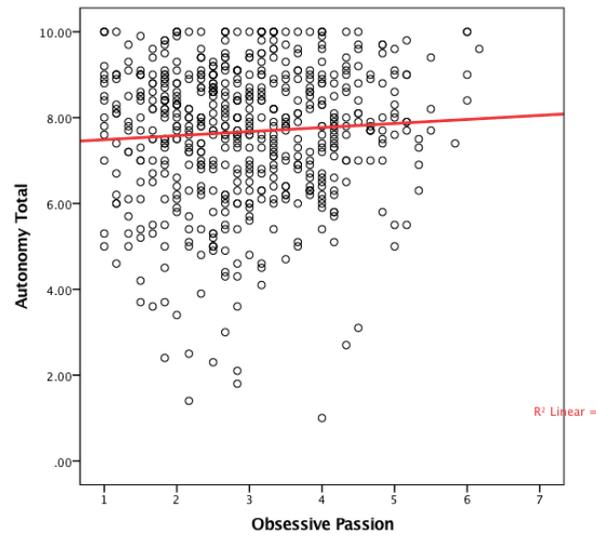
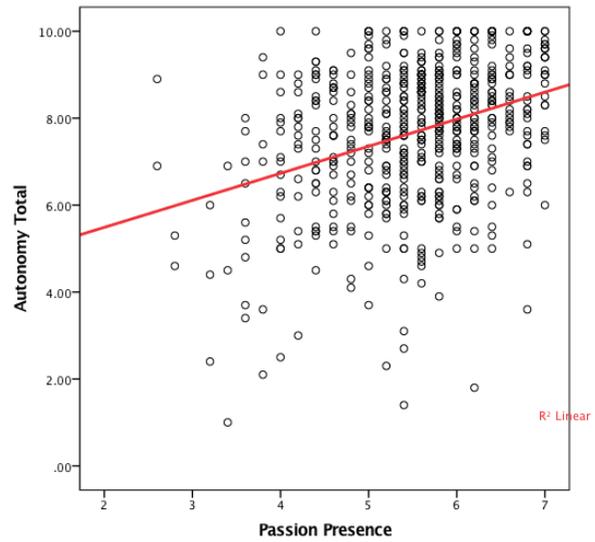
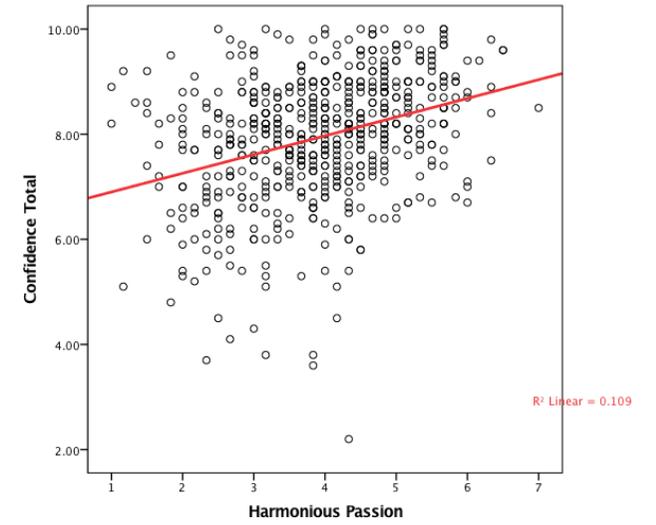
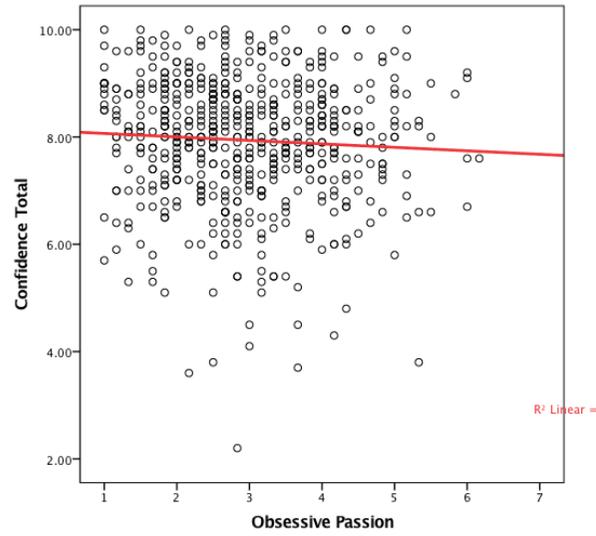
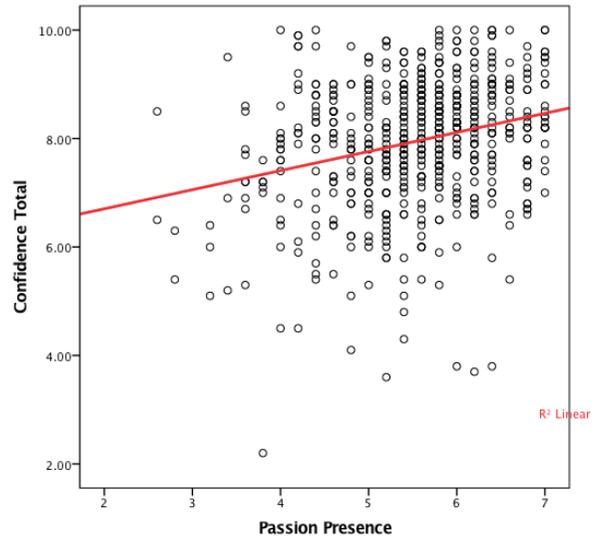
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Social Capital

Introduction

The following pages report on the construction of the metascale Social Capital. This has been constructed from the COPSOQ-II scales Trust in Management (also known as Vertical Trust), Social Community at Work (also known as Horizontal Trust) and Justice. Together they represent the level of Social Capital in each school. The Cronbach alpha reported for the whole scale is .88 suggesting the scale is robust. Results for this metascale are reported in the same way as the previous scales.

2017 Data in Detail

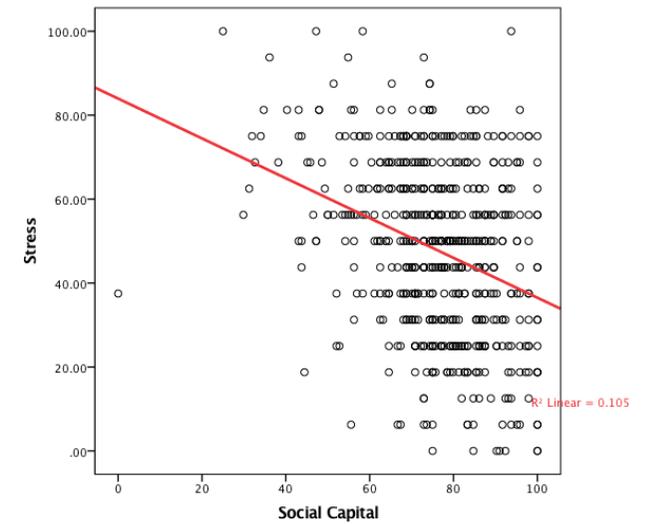
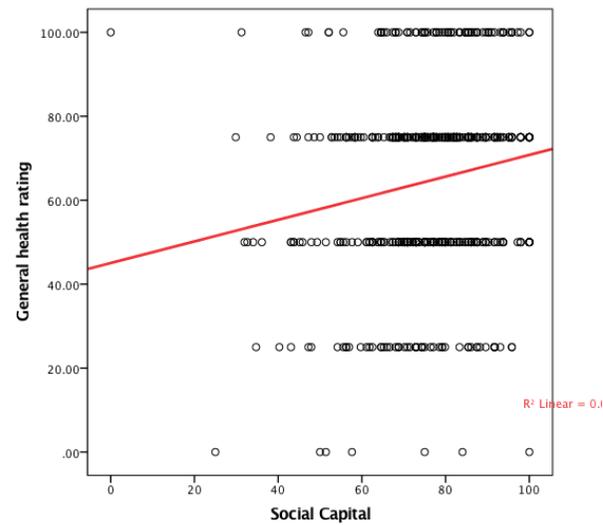
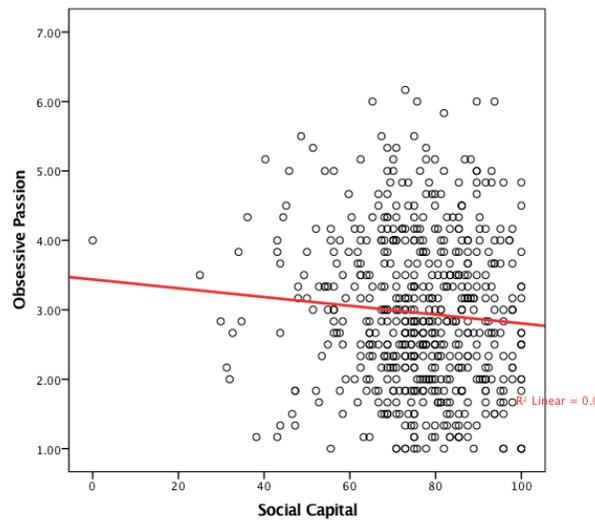
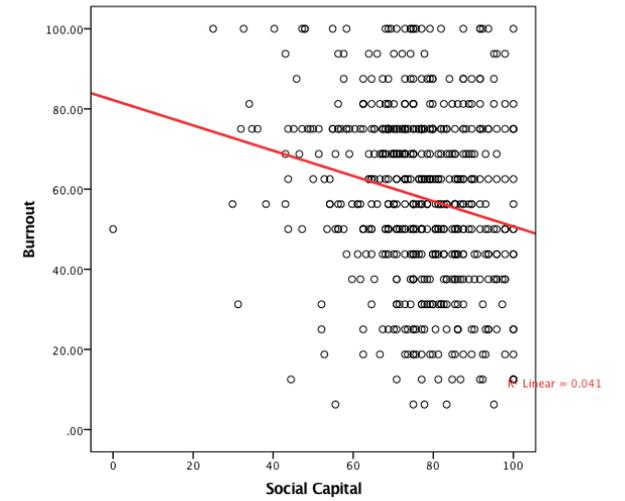
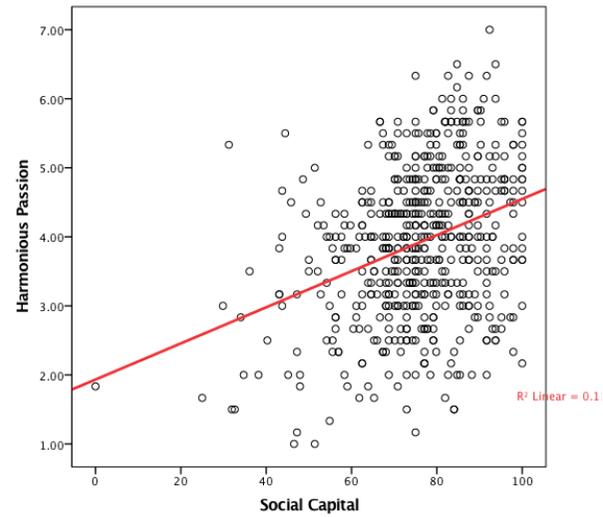
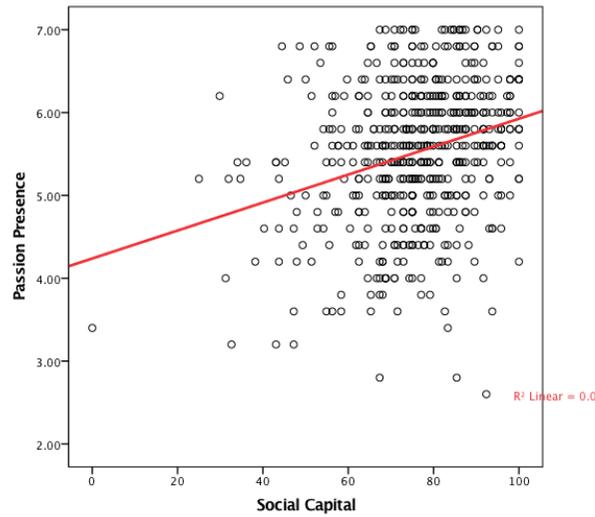
Subscales	NZ													
	Location				Role			Gender		School Type				
	ALL	Urban	Rural	Isolated/Off shore	Prin	Dep	Ass	F	M	Full Prim	Contrib	Comp Area	Special	Inter
<i>Passion Presence</i>	5.43	5.43	5.45	5.62	5.49	5.27	5.44	5.53	5.20	5.42	5.44	5.33	5.55	5.47
<i>Obsessive Passion</i>	2.88	2.83	2.99	3.29	2.92	2.85	2.68	2.95	2.73	2.92	2.84	2.99	2.67	2.99
<i>Harmonious Passion</i>	3.84	3.90	3.76	3.76	3.85	3.79	3.99	3.85	3.84	3.83	3.84	3.64	4.23	3.84

- **Geolocation** No significant differences exist.
- **Role** Principals perceive significantly higher levels of social capital than either deputies or assistants.
- **Gender** No significant differences exist.
- **School Type** No significant differences exist.

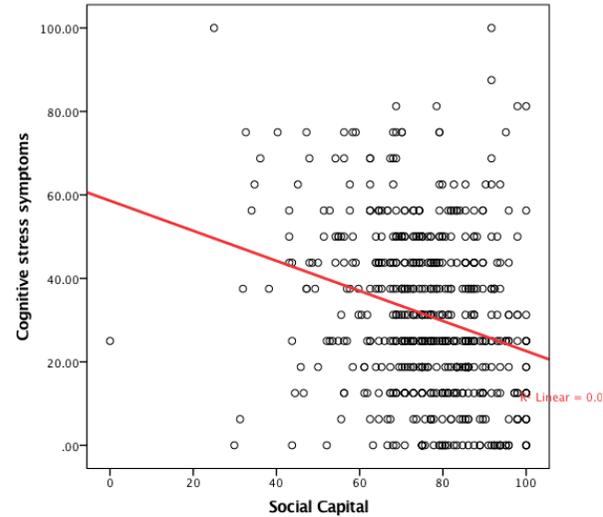
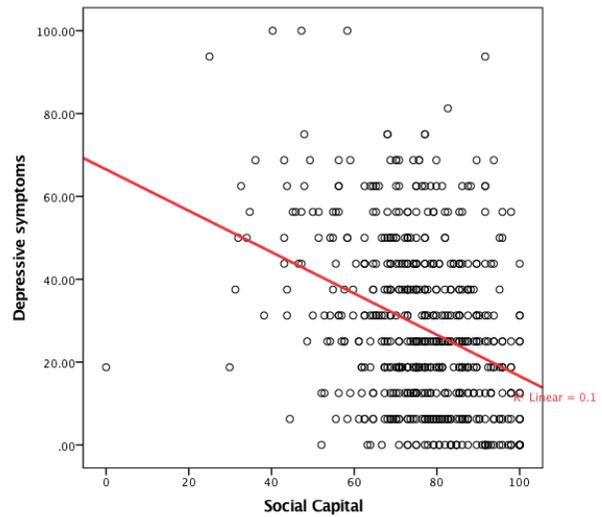
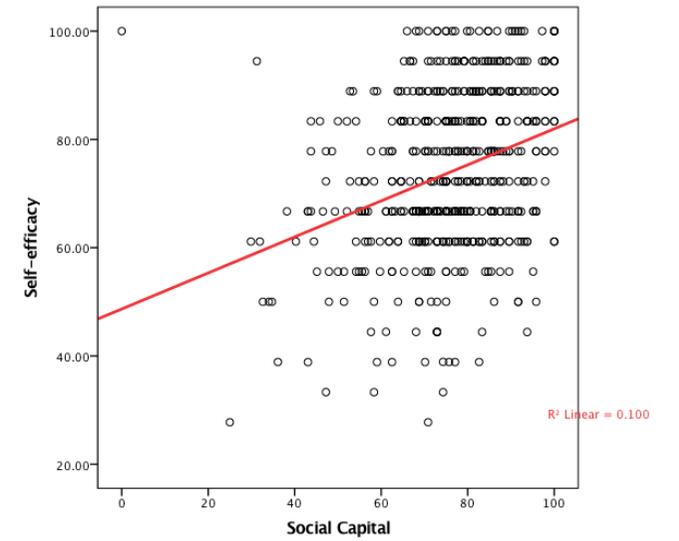
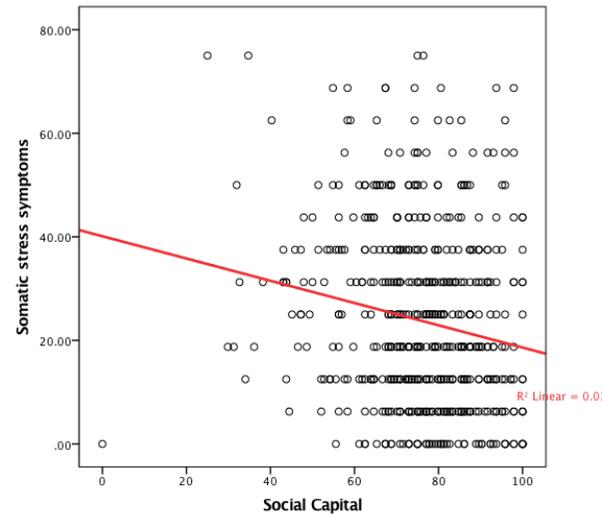
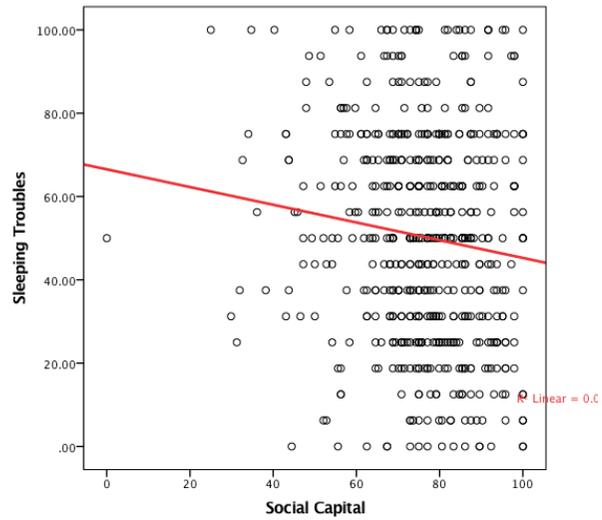
The most interesting findings here relate to the spread of results across schools and the correlations with both positive and negative aspects of worklife. Social capital is correlated with increased perceptions job satisfaction, general health, confidence, autonomy, increased hours at work during term time, decreased hours at work during holidays and harmonious passion. Social capital is also correlated with decreased perceptions of quantitative and emotional demands, work-family conflict, stress, burnout, cognitive and somatic stress symptoms, sleeping difficulties and depressive symptoms.

The social capital results are consistent with both the Australian and Irish results, and a great deal of literature from both inside and outside the education sector. The clear message from these results is for investment in people at all levels of the system. Building social capital will enhance all school functioning and produce a healthier, and happier workforce. The ultimate beneficiaries of such policies will be New Zealand's children.

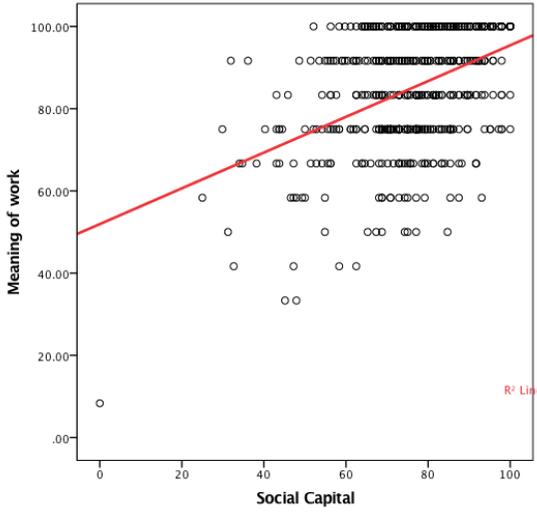
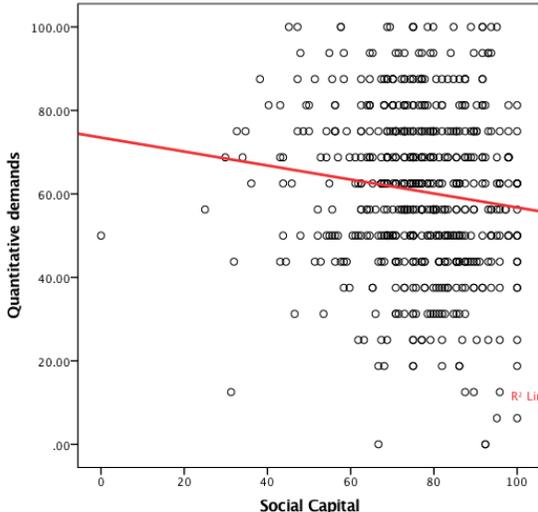
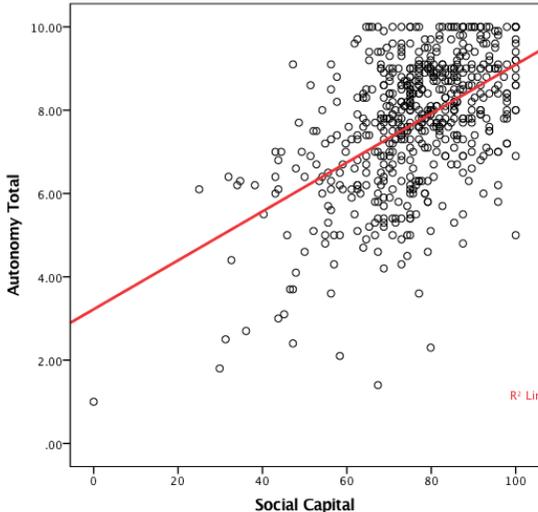
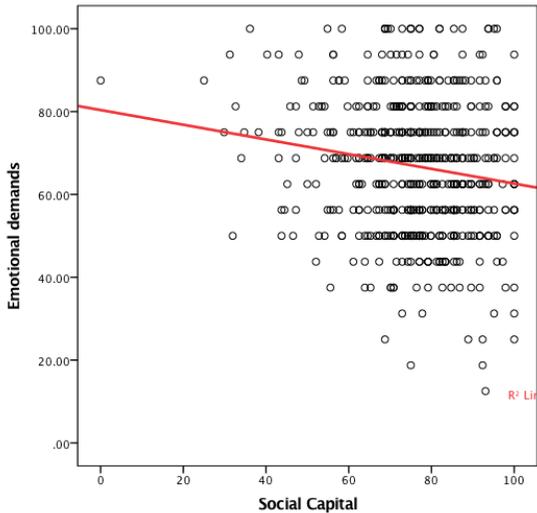
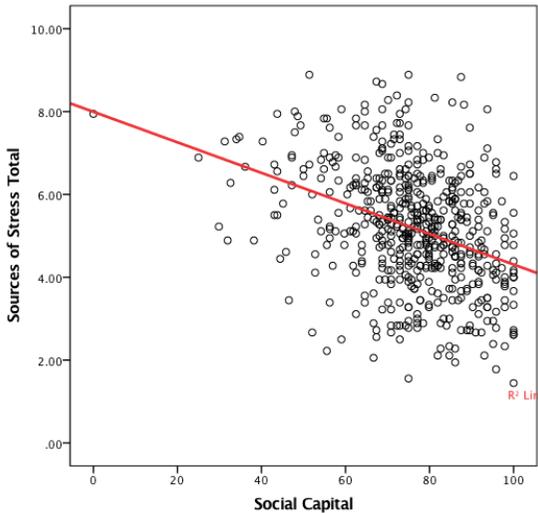
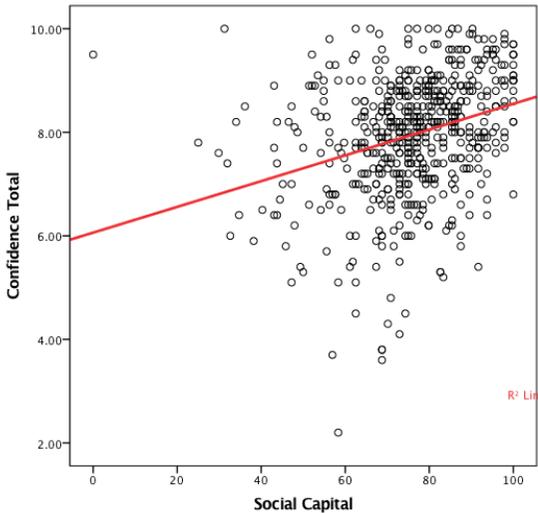
Correlations between Social Capital, Passion General Health and Wellbeing



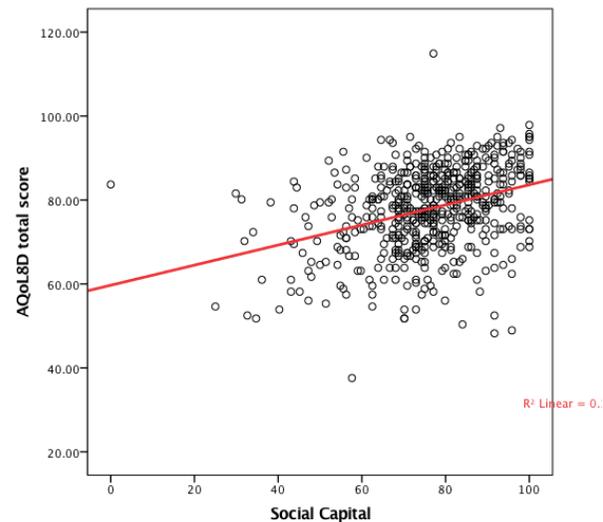
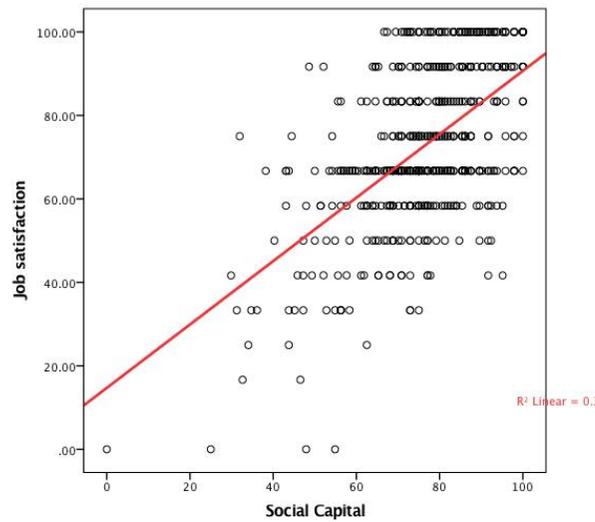
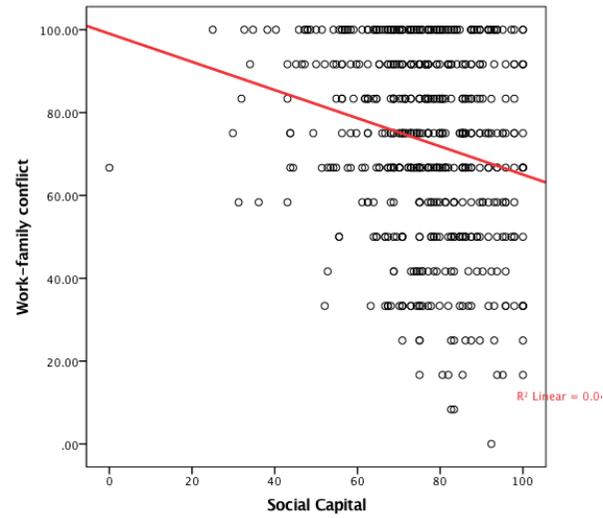
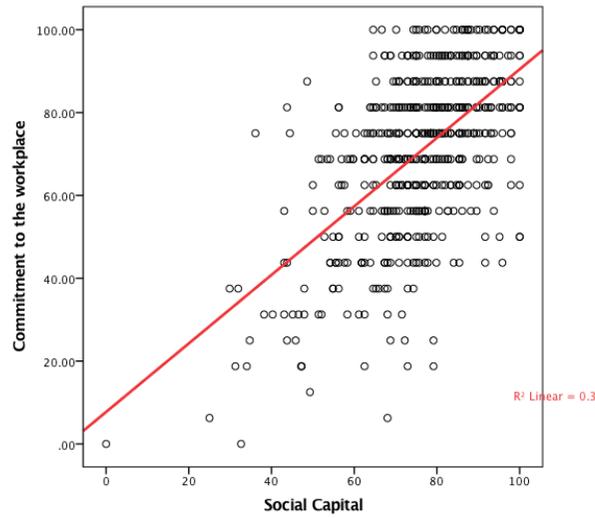
Correlations between Social Capital, Passion General Health and Wellbeing



Correlations between Social Capital, Confidence, Autonomy and Job Demands and Resources



Correlations between Social Capital, Confidence, Autonomy, Job Demands and Resources and Quality of Life.



Composite Psychosocial Risk

From the outset of this project one aim of the survey was to produce an immediate alert to individuals reporting signs of too much stress. We call these Red Flag emails. The bad news is that following the publication of a new study into occupational risks by Adrienne Stauder and colleagues (2017), we realized that we have been underestimating individuals' risk. So, this year the trigger for a Red Flag was more sensitive. If you received a red flag email this year but not last year and feel that your job has not changed that much, the trigger sensitivity is probably the reason you now have one. The new generation of the email is a composite psychosocial risk score (CPRS) that has been added to the previous triggers (Thoughts of self-harm and/or quality of life score at or below two standard deviations from the average score for principals).

Our construction of the CPRS replicated and built on the Stauder et al. (2017) study. They used the medium version of COPSOQ-II questionnaire (Pejtersen, Kristensen, Borg, & Bjorner, 2010) to develop the composite risk measure. As we had already obtained six waves of data from principals in Australia using the full length COPSOQ-II questionnaire, we were able to add four additional risk factors to the composite measure. In constructing the CPRS, variables are categorised as either "strain", "resource" or "outcome". Psychosocial risk at work is positively associated with scores on strain scales and negatively associated with scores on resource scales.

The CPRS is essentially a trigger threshold mechanism that reduces scores for each strain and resource variable to "High Risk" vs "Not High Risk". For variables where lower scores indicate better working conditions (generally, but not always strain variables) a score of $\geq 75/100$ is the threshold for concern, and coded high risk. On the other hand, where lower scores indicate worse working conditions (all resource and two strain variables) a score of $\leq 25/100$ is the threshold for concern, and also coded high risk. The composite psychosocial risk score (CPRS) is a simple summing of the high risk codes for each individual school leader, with higher scores representing increasing risk. This list of strain and resource scales are listed in the following table and figures along with the cumulative risk categories 2011-2017.

Table 46. Strain, Resource and Outcome scales

No	Strain Scales	Resource Scales
1	High Quantitative Demands	Low Influence
2	High Work Pace	Low Possibilities for Development
3	Low Cognitive Demands	Low Variation
4	High Emotional Demands	Low Meaning of Work
5	High Demand for Hiding Emotions	Low Commitment to the Workplace
6	Low Job Predictability	Low Rewards
7	Low Role Clarity	Low Quality of Leadership
8	High Roll Conflicts	Low Collegial Support
9	High Job Insecurity	Low Supervisor Support
10	Sexual Harassment*	Low Social Community at Work
11	Threats of Violence*	Low Trust in Management
12	Physical Violence*	Low Mutual Trust Between Employees
13	Bullying*	Low Justice
14		Low Social Inclusion

Table 47. Composite Psychosocial Risk Score (CPRS) for school leaders 2011-2016 compared with population scores for 18 employment categories reported by Stauder and Colleagues (2017).

Risk Level	High Risk	% of School Leaders**		Population ^{II}
	Categories*	2016	2017	
No Risk	0	3.7	5.6	13.5
Low	1-2	28.8	29	29.5
Moderate	3-6	54.7	53.5	32.7
High	7-10	11.1	10	16.1
Very High	>10	1.7	1.9	8.1

* Number of stressors where an individual's score is in the very high range (>75/100) for strain variables and/or the very low range (<25/100) for resource (support) variables.

** Participants include principals and deputy/assistant principals.

^{II} Taken from Stauder, et al (2017, (N=13,104) disaggregated for 18 employment categories including a global education cohort (n=1063)).

The cumulative risk from work stressors increases the chances of experiencing psychological and/or physical symptoms of poor health (high stress, high burnout, sleeping troubles and poor health). Table 3 and Figure 6 (below) outlines the relationship.

Table 48. Increase in risk of developing physical or psychological symptoms as a result of psychological stressors at work (adapted from Stauder, et al. (2017)).

Risk Level	Stressors	Explanation of Risk
None	0	
Low	1-2	Compared to the no-stress group 3 x more likely to experience high stress 8 x more likely to experience burnout 2 x more likely to experience poor health 2 x more likely to experience sleeping problems
Moderate	3-6	Compared to the no-stress group, you are 8 x more likely to experience high stress 9 x more likely to experience burnout 4 x more likely to experience poor health 4 x more likely to experience sleeping problems
High	7-10	Compared to the no-stress group, you are 21 x more likely to experience high stress 21 x more likely to experience burnout 6 x more likely to experience poor health 8 x more likely to experience sleeping problems
Very High	>10	Compared to the no-stress group, you are 56 x more likely to experience high stress 59 x more likely to experience burnout 10 x more likely to experience poor health 13 x more likely to experience sleeping problems

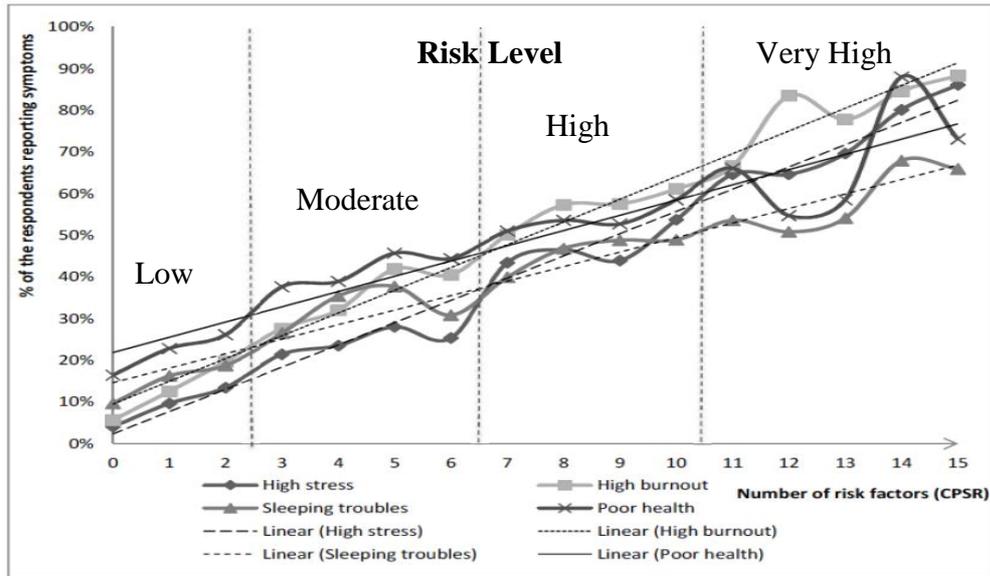


Figure 12. Increase in risk of developing physical or psychological symptoms as a result of psychological stressors at work (adapted from Stauder, et al. (2017)).

This year Red Flag emails were automatically generated for individuals whose CPRS fell into the High or Very High category, along with those who reported low quality of life or thoughts of self-harm, which had been the two triggers used last year.

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