PRINCIPAL
HEALTH & WELLBEING SURVEY

The Australian Principal Occupational Health, Safety and Wellbeing Survey

2017 Data

Philip Riley

TEACHERS HEALTH
We're for teachers

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Association *of* Heads of Independent Schools of Australia

NEW SOUTH WALES
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From 2016 as a result of the ARC grant we now have a dedicated research team of world-renowned experts in the field, and two new PhD candidates began with us in 2017. For Web development and report construction thanks go to Jason Cleeland. A big thank you also goes to the members of the project consultative committee, who each contributed many hours of thought, travel for meetings and invaluable questions along with discussion. It is a much better product for their efforts. Finally, I am indebted to Australia's school principals who give up their valuable time each year to participate in the survey. The research rests on their good will and generosity.

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Disclaimer: The recommendations in the report represent the opinion of the author alone and are not necessarily endorsed by the Consultative Committee.

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Executive Summary & Recommendations

Background

The survey has run nationally every year since 2011 in response to growing concern about principals' occupational health, safety and wellbeing. Since the project began, approximately 50% of Australia's 10,000 principals have taken part. Many have completed multiple surveys. The full background information is available in both short and long form at: www.principalhealth.org/au/reports.

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. Principals and deputy/assistant principals' health and wellbeing in differing school types, levels and size 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

Each survey participant received a comprehensive, individual report from his/her own survey responses. The report is an interactive secure webpage allowing participants to compare their scores on 45 separate dimensions with the general population, other principals and themselves over time. The other form of feedback is a red flag indicator that has been programmed to be automatically triggered by the survey system if a participant reported either consideration of self-harm in the week preceding completing the survey, or if their combined answers to the quality of life questions add to a total score that falls two Standard Deviations below the mean score for principals. A 'red flag' email is then generated and sent to the participant outlining his or her individual result and includes a list of support services available in the local area. This is done anonymously so participants can choose what course of action to take.

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 Irish Principals and Deputy Principals Health and Wellbeing Survey* and *The New Zealand Principals Health and Wellbeing Survey*. The Irish and New Zealand surveys were conducted using the same protocols as the Australian survey, which has run annually in Australia. The reports for these surveys are available at http://www.principalhealth.org.

The Survey

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 MySchool Website (ACARA) and *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 two widely used 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:* Jan Hyld Pejtersen, et al., 2010). This year we also measured individual levels of *passion* (its presence, or absence, and harmonious vs obsessional) as it links to both job demands and resources (Trepanier, Fernet, Austin, Forest & Vallerand, 2014; Vallerand, 2015). Alcohol use was measured using *The Alcohol Use Disorders Identification Test* (*AUDIT*: Babour et al., 2001), developed for the World Health Organization. In 2016 two new scales were added to the survey instrument (The Positive and Negative Affect Scale (PANAS: Watson, Clark, and Tellegen, 1988), and the short form of the Basic Psychological Needs at Work Scale (BPNWS: Deci & Ryan, 2004; Van den Broeck, Ferris, Chang, & Rosen, 2016). In 2017 the Job Crafting Scale (Tims, Bakker & Derks, 2011) was added. 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.

Innovation

The principals and deputy/assistant principals who complete the survey receive interactive feedback through a dedicated secure website, affording them instant health and wellbeing checkups tailored to their specific work context. In future iterations of the survey it is hoped to incorporate feedback to individuals using like-group comparisons. The instant benefit to individuals has increased both participation rates and the veracity of the information they submit.

Research Questions

The specific research questions guiding the initial survey remain:

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, Suburban, Large Town, Rural, Remote); Type (Primary, Secondary, Special, Early Childhood,); Background (Family of Origin, School Education); Person Factors (Gender, Family of Origin and 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?

Impact

The impact of the research in the wider community is highlighted by the mainstream media coverage: >1,200 TV, Radio, Print and on-line reports appearing between July 2013 – December 2014, reaching an audience of ~10,000,000 people (~50% of the Australian population). The "real world impact" is evidenced by changes to political parties' policies. Better support for school principals became Green Party policy in 2013, and was named first priority by incoming Victorian education minister Merlino in December 2014. The research has been debated in the Tasmanian parliament (28.5.2015) and the WA Parliament (23.10.2015), a significant real world impact. In 2016 under the new enterprise bargaining agreement for South Australian principals the SA government allocated .05 FTE to be spent on principal health and wellbeing, at the principal's discretion! This is a significant step in both acknowledging the problems that have been identified in the research, and directing resources toward tackling it. The autonomy afforded to principals in the freedom to identify the most efficacious way to allocate this valuable resource is a strong vote of confidence in SA principals by their employer.

Summary of impact

Year-on-year increase in participation (2011–2017) 2049–5580 participants. Individual feedback has been welcomed and prompted some positive behavioural change (e.g., not letting work interfere so much with family life).

The increase in media coverage has been spectacular (2013: 160 unique insertions reaching ~2.1 million Australians. 2014: >1,200 insertions reaching >10 million, 2015 725 media insertions reaching 9.1 million Australians), raising awareness of the issues and alerting politicians to the importance of the issues to the community. In 2014 and 2015 there were over 50 minutes of prime time TV, and many hours of talk back radio focused on the report.

There is growing interest in replicating the research from a number of jurisdictions. Currently the survey has run for the second year in Ireland (www.principalhealth.org/ie) and in New Zealand (www.principalhealth.org/nz). There is particularly strong interest from the International Confederation of Principals in conducting the research in multiple countries. These studies will help enormously with the analysis phase for the Australian survey. We will be able to disentangle cultural and cross cultural issues from "the human condition" variables, and compare education policies and policy enactment in various settings to determine the best, evidence based approaches to address the issues that arise both from within and across contexts.

Perhaps the most important direct impact has been the reaction by the Teachers Health Fund. Since the release of the 2014 report they have reduced waiting time for new members wishing to access psychological services from 12 to 2 months and added rebates to tele-psychological services, making distance from capital cities less of a burden.

Australia's School Principals: A 7-year Longitudinal Snapshot

- Response Rate
    a. Over the seven years of the survey to date, responses have been collected from 5580 school leaders. This represents approximately ~50% of all principals in the country with 20-28% completing the survey each year. In 2017, 2,789 participants completed the survey.
    b. It is impossible to calculate the response rate of assistants/deputies. They are not in all schools, and many schools have more than one.
    c. Raw numbers suggest a good proportion of those eligible to take part did.
- Participants (Longitudinal: 5,580; 2017 N=2,789)
    a. 70% Principals; 28% Deputies/Assistants; 0.1%Teaching Principals; 0.5% Acting Principals; 0.6% Directors of Early Childhood settings; 0.4% not currently principals
    b. 58% Primary; 27% Secondary; 14% Kinder/Primary – Year 12; 1% Early Childhood
    c. 58% Female; 42% Male
    d. Average age 55.22 years: Age range 26 – 81 years
    e. 74.2% Government; 14.1% Catholic; 11.2% Independent
    f. 2017 participation

Table 1. 2017 Participation Details: Gender x Sector

Gender	***Female***		***Male***		***Total***
Sector	***N***	***%***	***N***	***%***	***N***
Government	1290	61.6	801	38.4	2152.6
Catholic	205	50.9	197	49.1	502
Independent	146	53.9	125	46.1	371
Total	1641		1123		2764

Table 2. 2017 Participation Details: Role x Sector

Sector	***Government***		***Catholic***		***Independent***	
Role	***N***	***%***	***N***	***%***	***N***	***%***
Principal	1495	71.7	363	90.5	153	57.1
Deputy/Assistant	560	26.9	37	9.2	109	40.7

Table 3. 2017 Participation Details: School Type x Sector

Sector	***Government***		***Catholic***		***Independent***	
School Type	***N***	***%***	***N***	***%***	***N***	***%***
Primary	1155	55.5	305	76.1	97	36.2
Secondary	608	29.2	71	17.7	36	13.4
KP-12	256	12.3	20	5	117	43.7
Early Childhood	63	3	5	1.2	18	6.7
Total	2082		401		268	

- State

Table 4. Longitudinal participant numbers (*N*) and percentage proportion of the total

State	*N*	*% of Sample*
NT	163	3.0
NSW	1217	22.5
VIC	1599	29.6
QLD	966	17.9
SA	520	9.6
WA	684	12.7
TAS	138	2.6
ACT	119	2.2

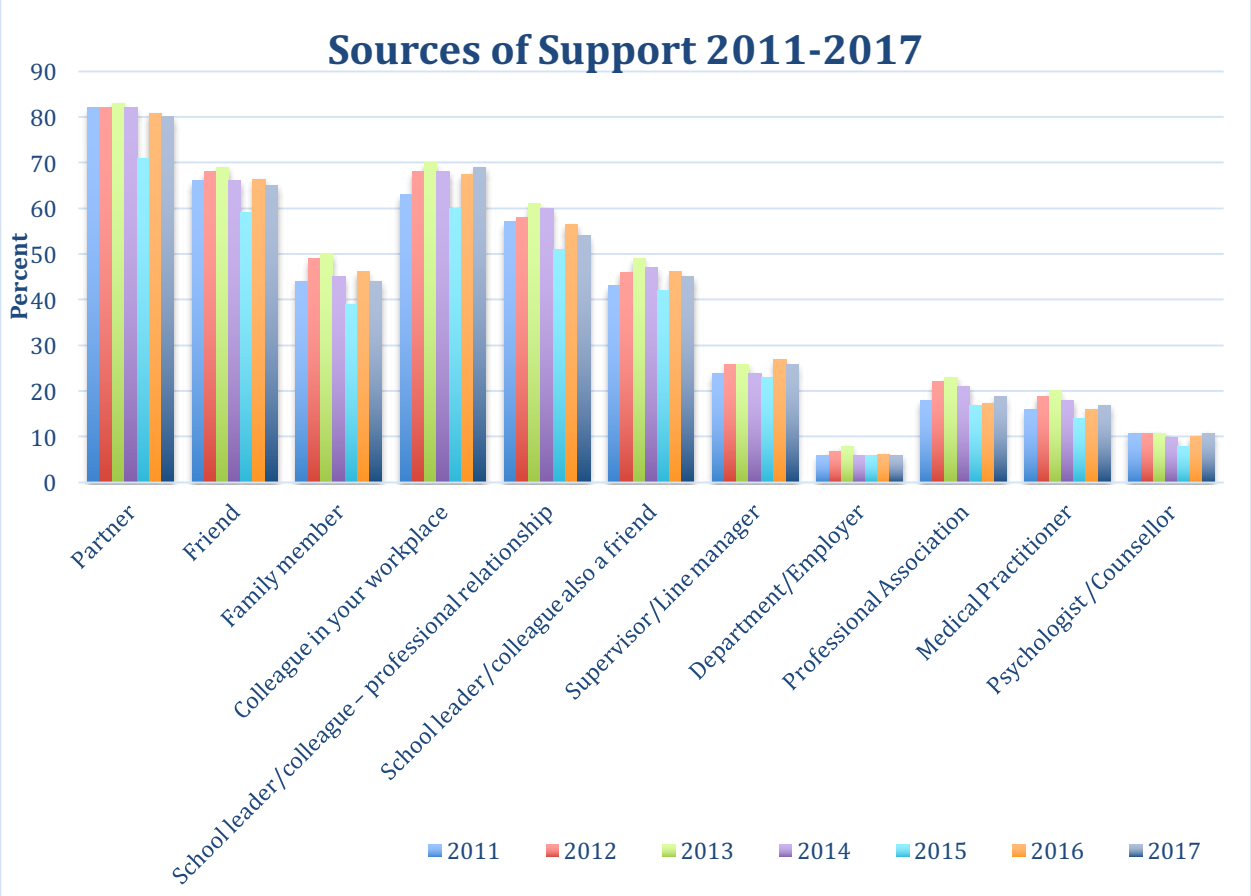
- Geolocation figures will be provided again once we receive that data from ACARA
- Experience
    a. The average level of experience has dropped during the life of the survey as many principals begin retirement. Years in current role have dropped from 5.2 to 3.8. Years in leadership have increased from 12.2 years to 14.62 (SD 7.6), while time in teaching before taking up the leadership role has dropped from 12.4 to 11.5 (SD 6.9).
- Average Working Hours
    a. Average working hours have remained stable over the 6 years of the survey. They remain too high for a healthy lifestyle to be maintained.
    b. On average, 53% of principals worked upwards of 56 hours per week during term with ~27% working upwards of 61-65 hours per week.
    c. During school holidays, ~31% work upwards of 25 hours per week.

    The US Department of Health and Human Services found the costs of working too much include:
        i. Working >10 hours a day led to a 60% increased risk of cardiovascular disease
        ii. 10% of those working 50–60 hours a week report relationship problems, and 30% for those working more than 60 hours.
        iii. Working >40 hours per week is associated with
            1. increased alcohol and tobacco consumption
            2. unhealthy weight gain in men
            3. depression in women
        iv. Little productive work occurs after 50 hours per week.
        v. In white collar jobs, productivity declines by as much as 25% when workers put in 60 hours or more.
        vi. Working >60 hours per week led to 23% higher injury hazard rate (Caruso, Hitchcock, Dick, Russo, & Schmit, 2004).
- Salary
    a. Annual salaries ranged from <$50,000 - >$160,000 per annum. Average salary has risen from ~$108,000 -$131,000 per annum during the past 7 years with a disproportionate number of women consistently in lower paid roles during the last 6 years. On average women earn ~$5,000 less per annum than their male colleagues.
- Personal achievement and values
    a. In 2016 two new scales were added to the survey instrument (The Positive and Negative Affect Scale (PANAS: Watson, Clark, and Tellegen, 1988), and the short form of the Basic Psychological Needs at Work Scale (BPNWS: Deci &

Ryan, 2004; Van den Broeck, Ferris, Chang, & Rosen, 2016). As in 2016, participants reported significantly higher satisfaction levels for autonomy support, relatedness to others and competency than the general population on the BPNWS and were located on the 77th percentile for Positive Affect and 74th percentile on the Negative Affect subscales of the PANAS in both years.

b. The importance of personal achievement has increased over the life of the survey from 3.95 – 4.33/5.
c. The importance of personal relationships with family and friends has remained stable (4.7/5) and clearly the most important value for the participants of all listed.
d. Participants report significantly higher job satisfaction than the general population.

- Personal supports and challenges
  a. ~86% were in a partner relationship in 2011. This fell to 83.5% in 2016. It now sits at 83.1%. However,
     i. The numbers of principals who report their partner as "their greatest source of support" dropped from 84% in 2011 to 71% in 2015 but rebounded to 81% in 2016 and remained stable (80%) in 2017.
     ii. Most sources of support rebounded in 2016 after declining in 2015 (see Figure 1).



- **Figure 1. Sources of Support 2011-2017**

     i. The number of partners who work in education has also dropped from 41.6% in 2011 to 39% in 2017.
  b. Approximately half the participants have children living at home (53.5%).

c. The number of participants who have a family member with a long-term health condition has increased from ~25% in 2011 to ~32% in 2016 and remained the same in 2017, with serious impact on the family declining to 17% of affected families.
d. ~42% volunteer their time for community support outside of their role, and a slightly higher number are active members of formal community or sporting associations.
e. ~ Regular spiritual practice has fluctuated between 26-35% of participants. In 2017 it is the lowest since the survey began (25.9%)

- Personal background
    a. Participants come from stable backgrounds ~84% were living with their mother and father at age 14, with a further 4% in blended families
    b. Just over 40% of participants now have a Masters degree or above, mostly in formal leadership courses, up from 30% in 2011. In 2011 ~75% of those completing formal leadership courses believed the course helped them to better cope with the demands of the job. This declined to 60% in 2016 and rose to 63.3% in 2017.
- Health
    a. There are large differences in self-reported health maintenance that have remained relatively stable across the 7-year period: levels of exercise (Range 1-10, Mean ~5.38); diet (Range 1-10, Mean ~6.43); and, weight control (Range 1-10, Mean ~5.35).
    b. In 2011 ~49% of participants were taking prescription medication for a diagnosed condition. This had dropped to ~40% by 2016, but rose again to 49% in 2017.
    c. Most maintain a healthy alcohol intake, and do not use it or prescription medication to manage stress.
    d. Self-rated health, a single item in the survey, has been shown in numerous studies to accurately predict long term health outcomes, including mortality, cardiovascular diseases, hospitalizations, use of medicine, absence, and early retirement (Idler, & Benyamini, 1997). Participants' self-ratings have fallen slightly during the survey period and remain at ~10% below the population average.
    e. Principals experience high levels of job demands (1.5 times the general population) emotional demands (1.7 times) and emotional labour (1.7 times) being the highest demands when compared to the general population. This is correlated with higher levels of burnout (1.6 times higher), stress symptoms (1.7 times higher), difficulty sleeping (2.2 times higher), cognitive stress (1.5 times higher), somatic symptoms (1.3 times higher), and, depressive symptoms (1.3 times higher).
    f. 'Red flag' responses have been recalculated this year following the publication of an important paper on composite psychosocial risk (Stauder, et. al., 2017): 2.9% reported feelings of self-harm sometimes, often or all the time; 21.9% reported significantly low scores on quality of life; and, 21.8% returned a composite psychosocial risk score in the high or very high risk category. Until 2017 it was thought that the relative risk of the role remained stable at 9-10% of respondents. However, the publication of the new protocols suggests this was an underestimation of risk and that the true figure has been stable at ~20% of the sample for all years. This new information is a serious concern for the profession as a whole.

- Sources of Stress
    a. The two greatest sources of stress that have remained consistently high (~8/10) over the length of the survey have been
        i. Sheer Quantity of Work, and
        ii. Lack of Time to Focus on Teaching and Learning
    b. The worrying trend over time has been the increase in stress caused by
        i. Mental Health Issues of Students (5.5-6.5/10),
        ii. Mental Health Issues of Staff (5.2-6/10: see Figure 2).
- Offensive Behaviour
    a. Principals and deputy/assistant principals experience far higher prevalence of offensive behaviour at work each year than the general population.
    b. The prevalence rate for Threats of Violence is extremely high (in 2011, 38% of participants had been threatened. This rose to 44% by 2017; close to 1 in 2 principals receiving a threat).
    c. Actual Physical Violence prevalence has risen from ~27% in 2011 to ~34% in 2016; 1 in 3 principals (now 8.4 times the rate of the general population, up from 7 times in 2011).
    d. Adult-adult bullying has risen from ~34-36% (4.1-4.5 times higher than the general population); threats of violence (increased from 4.9-5.5 times higher).
    e. The prevalence rates vary from state to state with concerning upward trends reported for Victoria, Queensland and the ACT (see Figures 2-5). Only South Australia has consistently gone against this trend, and seen a fall in threats of violence during the survey period.
- Wellbeing
    a. Despite having many predictive attributes for high scores on health and wellbeing, collectively principals and deputy/assistant principals score below the general population average.
    b. All negative measures are higher than the general population (burnout-1.6 times the population; stress-1.7 times; sleeping troubles-2.2 times; depressive symptoms-1.3 times; somatic stress symptoms-1.3 times; cognitive stress symptoms-1.6 times). The differences are detailed in the full report.

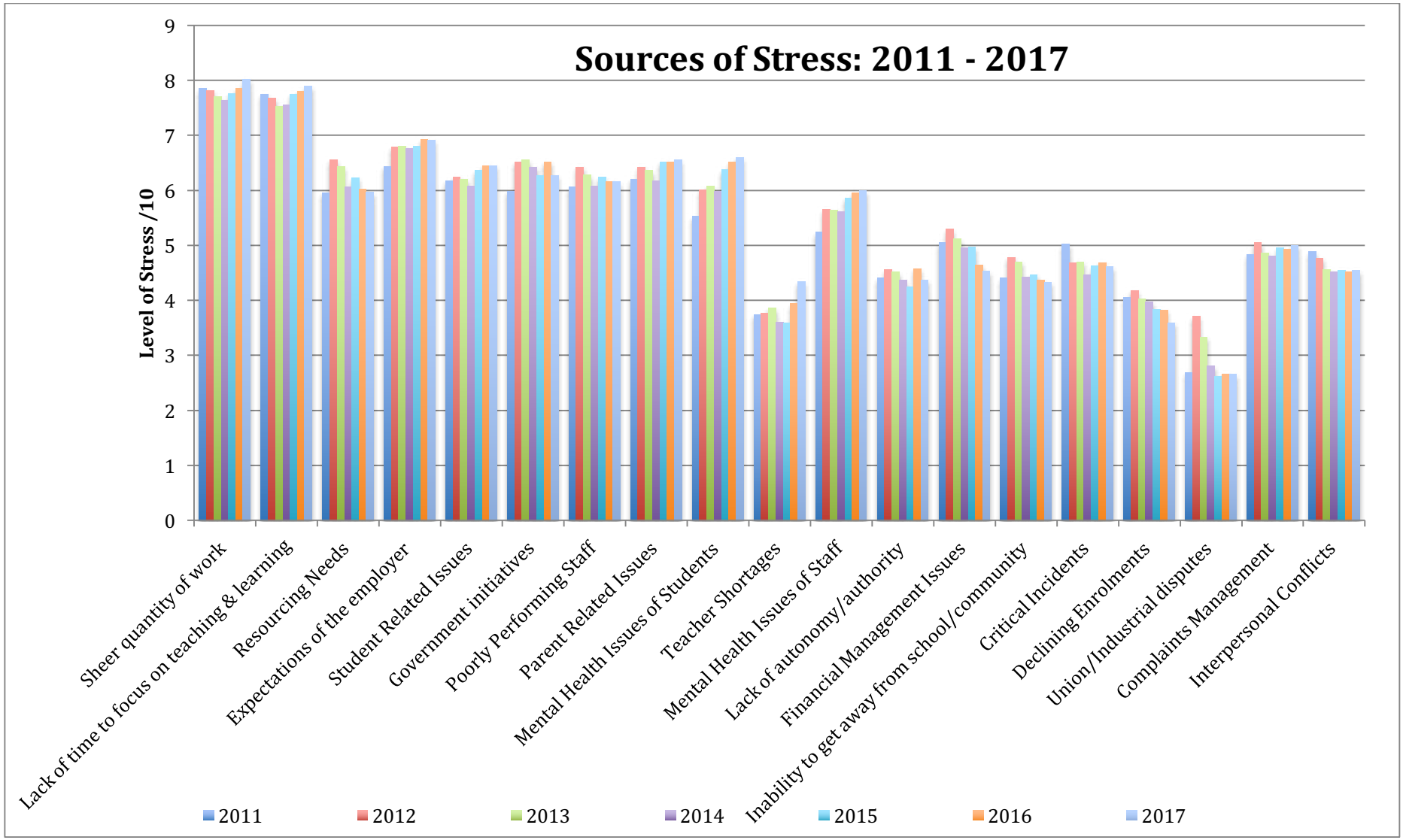


Figure 2. Sources of Stress 2011-2017.

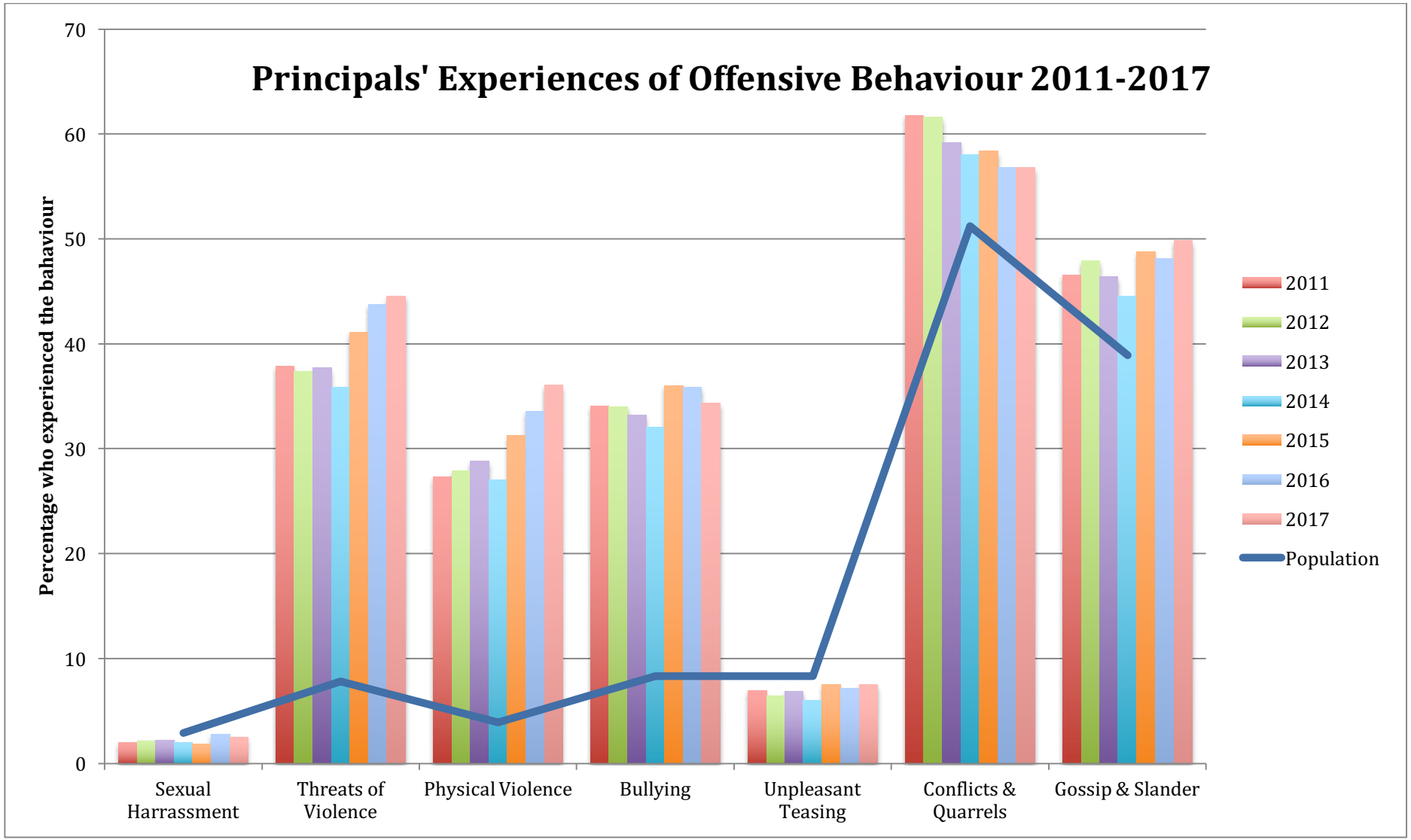


Figure 3. Participants' experiences of offensive behaviour at the workplace in 2017

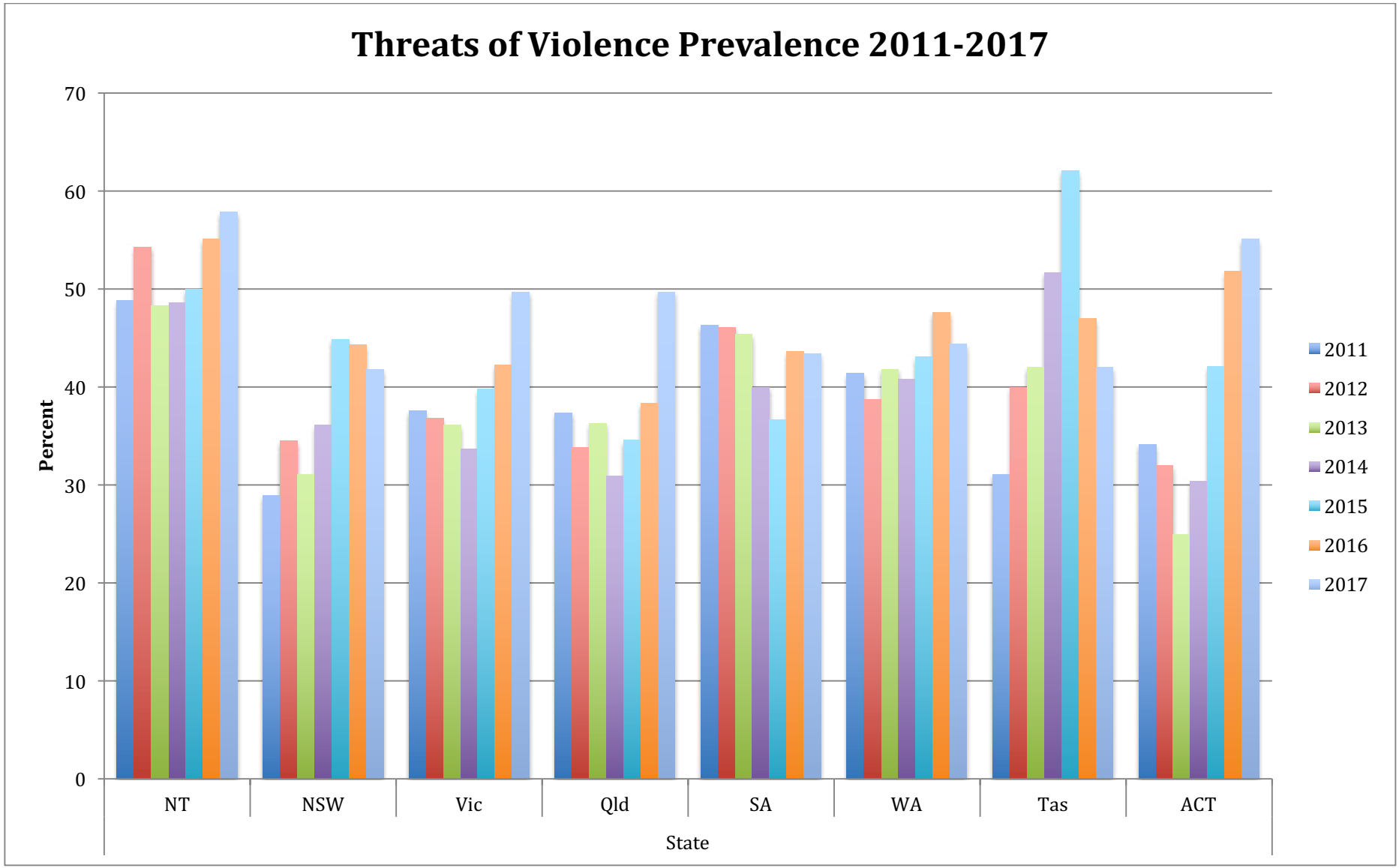


Figure 4. Threats of Violence Prevalence 2011-2017

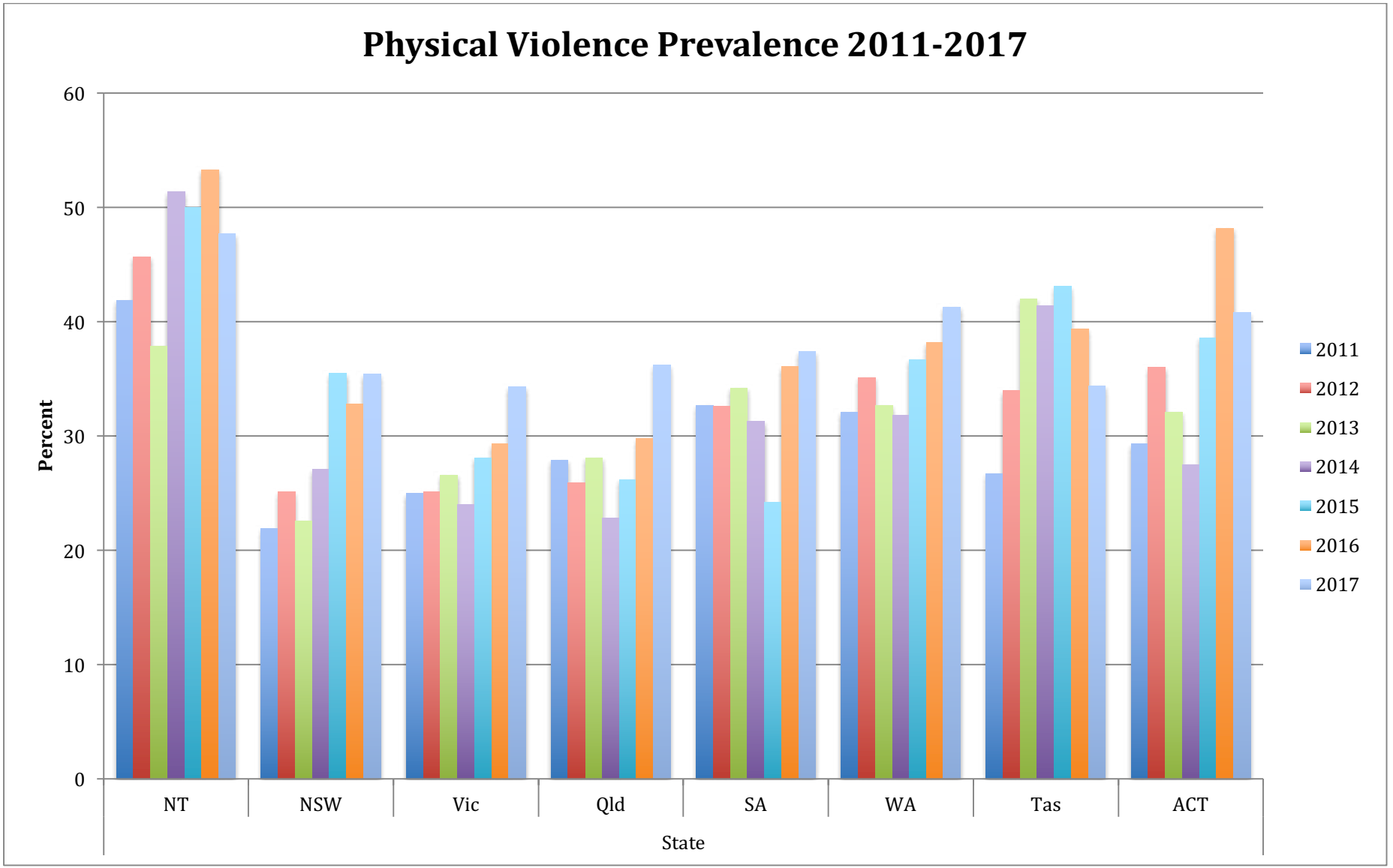


Figure 5. Physical Violence Prevalence 2011-2017

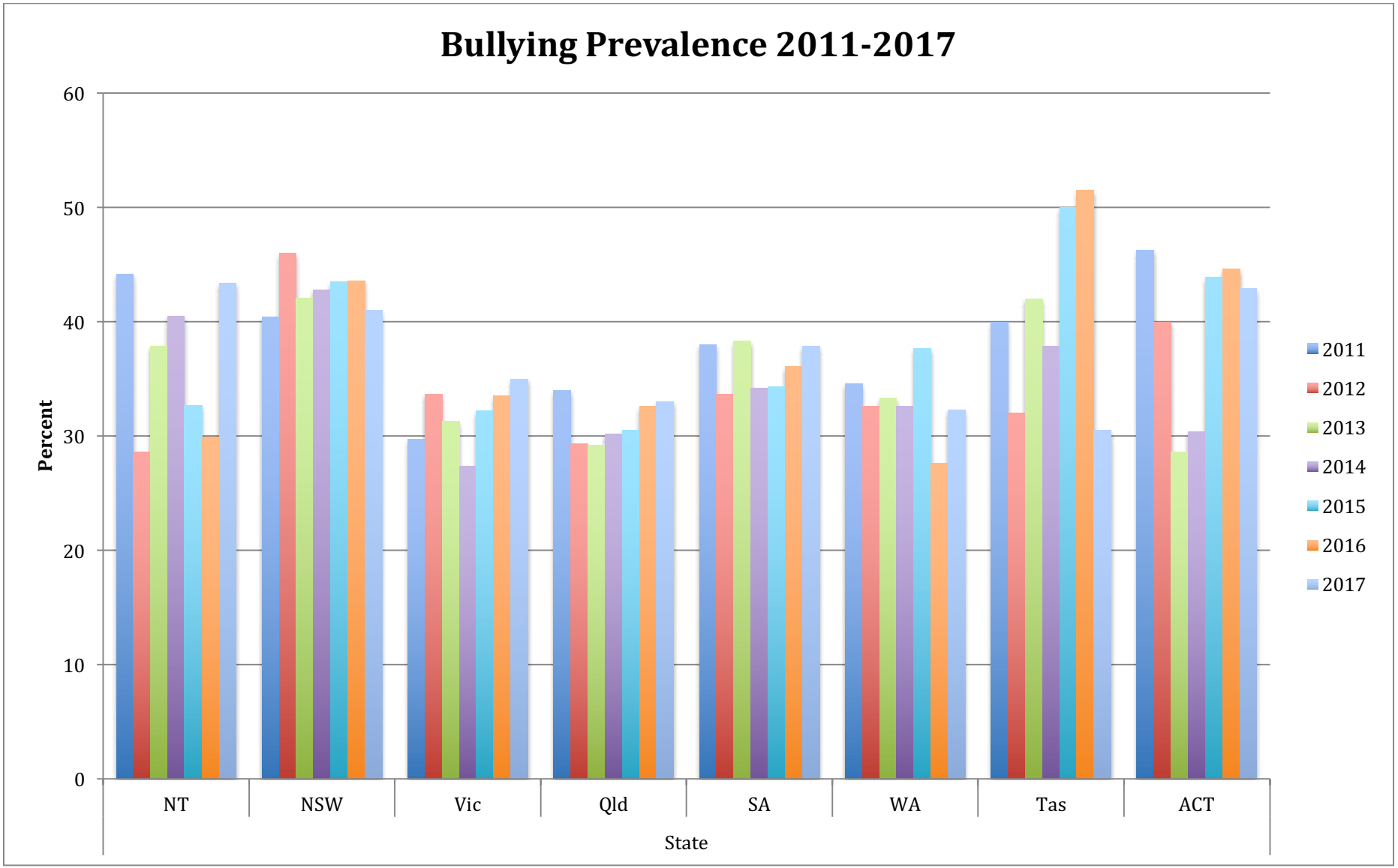


Figure 6. Bullying Prevalence 2011-2017

- Social Capital

  Social capital is a constructed meta-scale from three 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 as perceived by the principal or deputy. The results for this measure are both positive and negative. There is significant variation in social capital around the country. The average score for all schools is reported for each year in Table 2.

  a. Participants reporting high levels of social capital also report lower levels of job demands and increased levels of job resources. This is a significant finding consistent with research in other industries and points to how we can find solutions to the current decrements in principal health. However, it is concerning that the overall levels of social capital have diminished over the last five years.

Table 5. Social Capital Values 2011-2016

	Mean	SD	Min	Max
2011	76.23	12.73	7.64	100
2012	75.48	13.60	2.78	100
2013	75.68	13.28	9.72	100
2014	72.73	14.21	5.56	100
2015	73.78	13.44	13.89	100
2016	73.31	14.30	0	100
2017	72.83	14.28	9.03	100

  b. The spread of results show that there are many schools doing well on this important measure of school health, with a principal who is confident, relatively autonomous and satisfied with the role. However, there are also too many schools with very low levels of social capital.
  c. Social capital is unrelated to the school ICSEA score[1]. This information needs much further investigation, which will be carried out in the near future and further explication of this aspect of social capital is likely to prove fruitful.
  d. Social capital is correlated with increased perceptions of job satisfaction, general health, confidence, autonomy and harmonious passion.
  e. 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.

- Passion
  a. The dualistic model of passion scale was added to the survey in 2015. Vallerand (2015) proposes two distinct types of passion:
     i. *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.

[1] The Index of Community Socio-Educational Advantage (ICSEA) was created by the Australian Curriculum, Assessment and Reporting Authority (ACARA) specifically to enable fair comparisons of National Assessment Program – Literacy and Numeracy (NAPLAN) test achievement by students in schools across Australia (http://www.acara.edu.au/verve/_resources/About_icsea_2014.pdf).

ii. *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.

b. Most principals describe themselves as passionate educators, so it will be crucial to determine whether this represents risk or protection as related to school setting. Indeed, research in education settings in other countries (Trépanier, Fernet, Austin, Forest & Vallerand, 2014) has shown that increasing demands in the absence of sufficient resources leads to obsessive passion, which, in turn, leads to burnout and undermines work engagement. Conversely, resources in the absence of demands, facilitates harmonious passion, which, in turn, prevents burnout and facilitates work engagement. The results for this measure in 2015 are in line with previous studies and significantly correlated both positively and negatively with the Job Demands and Resources.
c. ~90% of participants report being passionate (M=5.46, SD=0.96). Harmonious passion (M=4.0, SD=1.17) was more common than Obsessive passion (M=2.73, SD=1.06).
d. The combination of social capital and passion may provide significant new areas for combating the increasing demands of the role. Examples of the relationships between job demands, outcomes, social capital and the dualistic model of passion are represented at the end of the full report.

Recommendations

The recommendations remain unchanged from 2016 as the working conditions of school leaders on which they were derived have remained stable or deteriorated slightly during the previous 12 months.

Context

The recommendations are designed to help the many stakeholders who are responsible for the quality of education in Australia. And, there is much to be done if we are to achieve our potential as a nation. They are the same recommendations published last year, as the situation across the country continues to trend in the same direction. The recommendations for the 2015 report, re-stated here were framed in such a way that all stakeholders are provided with potential action items. These are clustered under headings of responsible bodies: Government, Employers, Community, Schools, Individuals and the Research community. If we improve the working conditions for principals and teachers we also improve the learning conditions for students, as the two are inseparable (Leithwood, 2006). The recommendations are addressed to each stakeholder group, because many of the issues identified during the last six years represent issues for the nation, not just schools. Therefore, we must all be involved if we are to build on the positive factors and diminish the entrenched problems. There are particular challenges to the occupational health, safety and wellbeing of principals and deputies/assistants which result from contextual and geographical determinates, but most relate to more general occupational conditions found across the country in every state and school sector.

The recommendations were developed in response to trends identified over the six waves of data collection and build on the 2014 recommendations, which have been recast as strategies under the recommendations. Some of the strategies are beginning to be implemented in various jurisdictions. In light of these developments, the current recommendations extend to the aspirational. They are provocative, and some, perhaps many experts would say unachievable.

The recommendations are based on the best available evidence from both Australia and internationally. As recommendations, they will not be easily adopted, and will need coordinated and staged implementation. However, the hope in presenting them this way is that they will begin a full and frank national conversation about what we want for our future as a nation. Today's children are tomorrow's nation builders. We owe it to them and ourselves to give them the best opportunities we can. Countless studies show the transformative nature of education. If we, as a nation, are serious about the key role of education in the growth and development of this country, then as custodians of the future we ignore the powerful evidence contained in this, and many other reports at our peril. The results of this project demonstrate that the educational milieu has shifted over recent times and we now need to reassess the foundations upon which we build our education systems for maximum national benefit.

We can learn a great deal from how Finland, a country now admired for its educational outcomes, coped with a similar cross-roads moment in their history. At a time of economic difficulty ~40 years ago, they took a powerful and radical decision to invest in their people: the most important resource any country has. The major policy shift Finland collectively decided upon was to depoliticize education. Since then they have had 20 changes of government, but education was not a political issue and did not feature much in election rhetoric. Then, steadily, Finland became one of the best education systems in the world. It took a long time. It will take time in Australia too. Education systems are simply too complex for quick fixes.

Since Finland ascended to the top of the PISA table at the turn of this century, researchers from many other countries have been trying to find the 'secret' of their success. Local academics, who know Finland from the inside as well as education systems worldwide, such as Pasi Sahlberg, suggest that Finland's educational success, along with most other countries at the top of the table, is due in large part to forces outside education directly: equity, collaboration, creativity, trust-based responsibility, professionalism and equity. This was confirmed by large studies carried out by the OECD. The "highest performing education systems are those that combine excellence with equity" (OECD, 2013). Sahlberg (2015) has also identified the forces that impede school system improvement: competition, standardization, test-based accountability, de-professionalization and school choice. These forces are all on the increase in Australia, and in many other countries (Sellar & Lingard, 2014), in the absence of evidence of long-term positive effect.

> Sahlberg's (2015) "*Finnish Lessons* … portrays an alternate universe, one that respects educators and enables them to do their best work, one that recognizes that society has an obligation to ensure the health and well-being of

> children. Sahlberg knew that the Finnish story stood in sharp contrast with what was happening in the United States and other countries" Diane Ravich (2015, Foreword, para 8).

If Australia were to adopt a similarly courageous decision to the one Finland took five decades ago, and use the best minds in the country to develop, elaborate and evaluate effective, context-derived, educational policy in a cycle of continuous improvement we could expect to achieve similar national gains. However, Australia's mix of 3- and 4-year political cycles that intersect across states, territories and nationally does not lend itself to the development of long-term solutions or long-term evaluation and promulgation of best practice, so we must start with the fundamentals. If we do not, we are simply deluding ourselves that we can effect significant change.

Short-term political cycles coupled with heavily politicized educational standpoints from major parties, has led to slogans rather than policy and short-term interventions open to further politicization and polemic. This is no surprise. Politicians are experts in politics not education. For Australian education to progress, we need the healthy clash of ideas in a complex discussion where experts and communities share the common goal of making schools the best places for our children; giving them the best opportunities in life. This would also provide the nation with sustainable, social and therefore economic benefit. Depoliticizing education would allow conversations aimed at building cases for change with highest quality evidence drawn from many sources and not driven by short-term political advantage. As the Finns realized, education is far too important for that.

The evidence from this report and many other studies carried out by the research community demonstrate that the successful ingredients to a continuously improving system that are abundant in Finland are generally diminishing in Australia, not growing. However, the good news from this project is that this is not universally true. The social capital data in particular show that many Australian schools, from all sectors, states and territories, right around the country have been able to thrive despite the issues outlined in the main report. We need to learn from these schools and rapidly mobilize the knowledge so that the others can adopt and adapt their schools with the new knowledge. It appears we are currently enclosed in a system that nobody wants. Equally important is that no one group is to blame for getting us in this situation. However, we are all responsible for the continuation of this system because we are co-creating it every day. In light of the evidence reported in this year's summary and taking previous years' evidence into account, Australia would do well to have a national conversation about the best way forward. The recommendations are offered in the spirit of seeding that debate.

15 Recommendations, based on 6 Foundations, and 4 Strategies

In light of the comments above, and offered in the spirit of a national conversation starter, the following recommendations are offered in the form of what can be done, and who can do it.

Foundations

The recommendations rest on six foundations:

1. No single stakeholder group is responsible for the state of education in Australia, nor do they hold the power to effect much change to the system on their own.
2. Many issues impacting negatively on the education system are entrenched in the wider Australian culture.
3. Taking a long-term, rather than short-term focus is essential for significant improvement in the system.
4. Taking a holistic inquiry approach to both the successes and failures in the Australian education system is also essential. We can learn a great deal from both if we do not limit our gaze, or look for quick fixes.
5. De-politicising education at the macro- and micro-political levels will promote equity, continuity and transparency. For example the politicisation of the Gonski report, universally agreed by educators to provide a sensible and equitable way forward in education, should have set the conditions for a decade of educational development. Instead, it is suffering the fate of many educationally sensible reforms in Australia and its potential is being diminished. This becomes demotivating to educators. It is an example of the 'moral harassment' suffered by educators (Burens, 2015).
6. Australian education needs a change of mindset: moving beyond sectorised thinking. The problems and the solutions are very similar in all sectors so the differences between the sectors are more superficial than substantive. The variation in social capital inside schools demonstrates that simple resourcing, while important, is not going to fix intractable issues. A change of mindset is also needed.

This change of fundamentals in Australian education systems might be difficult, particularly point 5, but together they hold the greatest chance of long-term success, and there is strong international evidence to support it.

Recommendations

What Governments can do

1. *Adopt a whole of government approach to education*. This would mean the federal government, states and territories combining to oversee a single education budget in a managerial way. All school funding should be transparent so that anyone, at any level of the system can confidently know how much money they will have at their disposal so budgeting can be long term. The role of government should be to fairly set the global amount, not specify the detail of how it is to be spent. That should be the role of specialist education bureaucrats working collaboratively across jurisdictions. The current mixed jurisdiction model is antiquated, complex, obscure and difficult to traverse. Australia needs bipartisan and cross-jurisdictional agreement regarding school funding and a transparent mechanism that is simple to understand. This may be seen as a naïve recommendation, but the demolition of the Gonski funding model also had a significant symbolic as well as financial impact on schools. When everyone knows things will change significantly whenever governments do, it is demotivating for the educators. We need highly motivated educators, if we are to have the best school system possible.
2. *Stop looking for short-term quick fixes* and concentrate on getting a better grip of the fundamentals (collaboration, creativity, trust-based responsibility,

professionalism and equity). These conditions underpin the whole of society not simply schools.

What employers can do

3. *Take the moral choice* of reducing job demands, or increase resources to cope with increased demands. Better still, do both. This will help to increase the level of social capital in schools.
4. *Trust rather than rule educators*. Leave the mechanisms for producing the best educators to the educators. This will also increase social capital. Long term increases in social capital helped Finland become the world leader.

What the Professional Associations and Unions can do

5. *Collaborate and speak with one voice*. Peak bodies and stakeholder groups can discuss their differences in camera and then speak with one voice publically about the standing of the profession to Government and the community. The sheer weight of numbers they collectively represent would mean they would be carefully listened to. Currently the system is atomised into Primary and Secondary Associations x 3 sectors x 9 states and territories + 2 unions. While each of these bodies has important functions and close connections with their membership, which is essential for the building and maintenance of social capital, their united voice on the big picture issues that are common to all principals while we live in a politicized education system is diminished. In Finland there is one union, which advocates for everyone.

What the community can do

6. *Support your local school*. Even if your child does not attend the local school it is an important part of your community. So support it whenever and however you can. Schools and communities thrive when they work together. The high variance in social capital across the country is powerful evidence of both its benefit and the risks associated with its absence. So the recommendation to the community is if you value your school and want it to be the best it can be for children, offer to help make it happen.
7. *Stop the offensive behaviour*. This is beyond debate. It simply must stop. The real issue is how to achieve this outcome. The steadily increasing levels of offensive behaviour across the country in schools of all types should give us pause. But this is not just occurring in schools, with increases noted in all frontline professions and domestic violence rates that we should be nationally ashamed about. Australia needs to have an adult conversation about the root causes of this and set about addressing them at every level of society.

What schools can do

8. *Increase internal social capital*. This is best achieved by studying those schools that have achieved high levels already in spite of the current conditions. Rapid dissemination of how they have achieved this will contribute to significant improvement in schools with low levels of social capital. But each school needs to do this in relation to their resources and particular contexts. This also intersects with Recommendation 7.

What individual educators can do

9. *Increase personal capital (social, human and decisional)*. At the individual level this means increasing possibilities for development and exerting influence over the work based on sound values and moral judgements.
10. *Respectfully speak back* when faced with "moral harassment", which is an occupational threat.
11. Ensure your *passions are harmonious*. This means to be in control of them. For example, love your work but do not let it dominate your life (become obsessive about it). A way to determine if passion is harmonious rather than obsessive is to monitor energy levels. Harmonious passion energises, so you feel better after engaging in your passion than when you began. Harmonious passion "… leads to a pervasive level of self-growth", while obsessive passion has "corrosive effects" (Vallerand, 2015, p.334).
12. *Take responsibility for your personal work-life balance*. Only you can know what is reasonable for your long-term health and wellbeing. It is therefore incumbent on all of us to find and maintain a healthy balance. This cannot be done for you from outside and is too important to be left in other's control.

What the research community can do

13. There is a need to *provide better longitudinal evidence* of the differential impact of all the forces that come to bear on education. Researchers need to be careful that they are not contributing to the problem by conducting short-term research without appropriate follow up studies that have been carefully designed to tease out the long-term implications of short-term interventions. An example of the deficiencies of short-term research relates to dieting. Many diets are successful in the short-term. However, the long-term outcome is often weight gain. Educational interventions that work in the short term but lead to worse outcomes long-term are not picked up with short-term cross-sectional research. The process and true benefit of education is longitudinal. Students are in the system for over a decade, and the benefits are life-long. Therefore we need well-designed longitudinal research, well translated for principals and teachers so that the most efficacious policies, processes and procedures are most widely adopted. This takes time and the considered and coordinated efforts of a number of people in the field working together toward better long-term outcomes.
14. Adopt the *EMU* methodology (Ryan, 2015) to rapidly identify *Exemplars* of best practice, accurately and fully *Measure* the determinants of success, and *Utilize* the knowledge in the most efficacious way. This may involve determining thresholds to identify school communities that will require more resources than they currently have available to arrest the diminishing returns and reset back to a positive trajectory. This would allow the targeted use of resources, and create the greatest return on investment for employers and government.
15. *Look for thresholds* that may be the key to administering limited resources. The variance in social capital suggests that while there are many examples of best practice from which we can and should learn, the paucity in a small percentage of schools suggests that there may be thresholds below which a school does not have the internal resources to rapidly utilize new knowledge about best practice and would benefit from outside support. If researchers can identify robust thresholds, this would enable the concentration of resources around those who needed them most, and not waste them on diffuse, but unnecessary distribution.

Principals, deputy/assistant principals and teachers are Australia's nation builders. They need to be well resourced, not just logistically, but also symbolically, emotionally, and intellectually. The Finnish experience suggests that if we too can make courageous decisions about our national future we will then make it happen. It is time we began the conversation in earnest.

Strategies

The strategies are designed to help policy makers, (including: government; employer groups; professional associations; unions; school boards and governors) improve both working conditions for the paid work force and learning conditions for students, as the two are inseparable (Leithwood, 2006). They 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, they relate to more general occupational conditions found across the country in every state and school sector. Strategies 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.

Strategy 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 adult-to-adult bullying, threats of, and actual physical violence in schools is urgently required. Given that this report reflects six years of consistent results drawn from approximately half of all principals in the country, the need to address these issues is important. If subsequent waves of data collection show similar patterns of increasing offensive behaviour, we are likely to see violence at 10 times the population rate by 2019/20.

The population figures used for comparisons are drawn from a number of large population studies conducted in Europe. 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). The research presented in this report suggests the problem is system-wide and therefore a system-wide approach is also needed: ideally a whole of government approach.

Strategy A: Improving the wellbeing of principals and deputy/assistant principals through Professional Support

Principals and deputy/assistant principals mostly learn how to deal with the demanding emotional aspects of the role on the job, rather than through systematic preparation. In other professions, such as psychology and social work, where highly charged emotional interactions occur, high levels of professional support and debriefing are standard procedure. This is not so in education. As a result, the average principals' and deputy/assistant principals' wellbeing survey scores are lower than the average citizen. However, there is a lot of variation and distinct differences between the principals and deputy/assistant principals who appear to be

coping well with the complexity of the role and those who are not. Professional support is a strong predictor of coping with the stresses of the role (job demands). Therefore, policies need to be developed that address this issue directly. In the 21st Century, 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 (Riley & Langan-Fox, 2013).

The evidence from the cluster analysis in the 2011 report and the findings of this survey clearly 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.

- 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.

Strategy B. Professional Learning

Systematic attention needs to be paid to the professional learning of principals and deputy/assistant principals, as targeted professional support. There is a considerable need for skill development in the emotional aspects of the leadership role outlined in Strategy 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.

Targeted professional learning is likely to make principals and deputy/assistant principals feel better supported than they currently report. Provision of ongoing professional learning is likely to assist all principals and deputy/assistant principals in two ways. First, by skill improvement and secondly through the benefits of increased perceptions of support outlined in Strategy A.

Strategy 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 average hours spent at work by principals and deputies/assistants ranges between 51-60 hours per week during term time and 25-30 hours per week during gazetted holiday periods. Too many participants in the survey are working too many hours and it is taking a toll on their greatest support group; their families. Work-Family conflict occurs at approximately double the rate for the population generally. The amount of emotional labour expected of principals and deputies/assistants is 1.7-times that of the population. 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.

Strategy D: Address Bullying and Violence

There is an urgent need to establish an independent authority to investigate three types of offensive behavior identified as consistently occurring in schools:

- adult-adult bullying
- threats of violence and,
- actual violence

The authority should be independent from all stakeholder groups in schools and government. Specifically, the task force authority should have powers to interview teachers, parents and students, to investigate:

- differences in the occupational risk of the different types of principals and deputy/assistant principals, to determine 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. Therefore, the investment in such a taskforce may prove to be the least expensive option in relation to this issue. The cost to mental health is high. Price Waterhouse Coopers have recently conducted a Return on Investment for addressing mental health in the workplace. 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. So, addressing the problem in schools is also a good investment for the future of the nation.

Summary

Principals, deputy/assistant principals and teachers deal daily with parents' greatest hopes and deepest fears: the lives and potential futures of their children. While this is recognized in the law of *loco parentis,* the emotional consequences remain under-researched (Hargreaves, 2013; Woolfolk Hoy, 2013). This means high levels of emotion are attached to many aspects of school functioning, and principals and deputy/assistant principals have to learn how to deal with this on the job, rather than through systematic preparation. This can be particularly difficult for principals and deputy/assistant principals who must communicate the way education policy is both developed and practiced to teachers, parents and students, sometimes in emotionally charged situations. The difficulties between the adult stakeholders in schools that have been consistently reported in every year of the survey need to be acknowledged and dealt with on a more systematic basis. Systematic attention also needs to be paid to the professional learning of principals and deputy/assistant principals, and presumably teachers, in the emotional aspects of their roles and the emotional investment of parents in their children, which may underlie the high rate of violence and threats principals and deputy/assistant principals are experiencing. 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 appears to be urgently needed.

Technical Report 2017 Data

The following pages report the 2017 data in detail. The report is broken up by section. Section 1 covers the dimensions of the Copenhagen Psychosocial Questionnaire and uses the population figures from the original work (Pejtersen, Kristensen, Borg, & Bjorner, 2010). Section 2 covers Sources of Stress. Section 3 covers Sources of Support. Sections 4 (Social Capital) and Section 5 (Dualistic Model of Passion) reports preliminary findings on the relationships between these two new important additions to the survey and different aspects of Job Demands and Resources theory on which the survey is largely built (Bakker, & Demerouti, 2014).

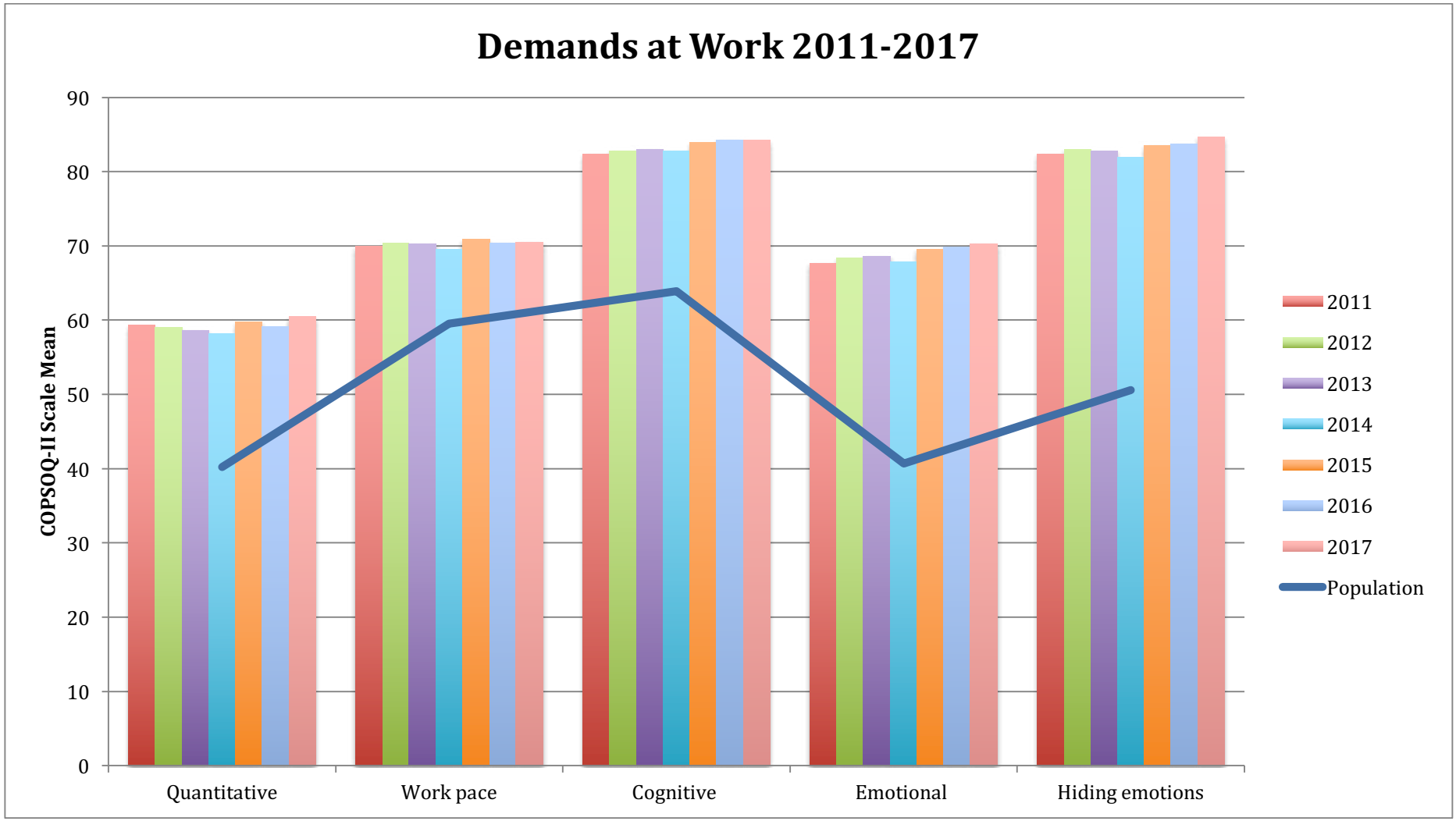
For each dimension the scores are presented as trends over time first. Then the 2017 data is reported in a table to facilitate easy comparisons on one page and then each subscale is represented graphically by State, Sector, Level, Role, and in comparison with population norms.

The data reported here are descriptive in nature. More detailed statistical analyses will follow in and further reports will become available as the work progresses.

1. Copenhagen PsychoSocial Questionnaire – II

Demands at work

Trend data 2011 – 2017



2017 Data in Detail

Subscales	Population		Critical Value*		All	Gov	Cat	Ind	Gender		Role		Govt		Catholic		Independent	
	M	*SD*	Low	High					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Quantitative demands	40.20	20.50	29.95	50.45	60.48	62.11	58.51	56.65	62.42	59.04	61.43	59.82	61.53	60.76	58.58	55.00	57.75	58.80
Work pace	59.50	19.10	49.95	69.05	70.51	71.42	67.76	71.12	72.48	68.48	70.55	71.88	71.02	71.68	67.35	69.33	71.52	70.99
Cognitive demands	63.90	18.70	54.55	73.25	84.22	84.92	84.24	80.75	85.34	83.04	85.37	81.73	85.01	84.40	84.07	83.38	80.85	78.01
Emotional demands	40.70	24.30	28.55	52.85	70.29	71.17	72.23	66.10	71.84	69.31	71.91	67.76	71.36	69.13	72.45	69.63	66.77	65.51
Demands for hiding emotions	50.60	20.80	40.20	61.00	84.60	85.19	85.67	80.93	85.50	83.88	85.53	83.03	85.45	84.63	86.27	83.67	81.75	79.01

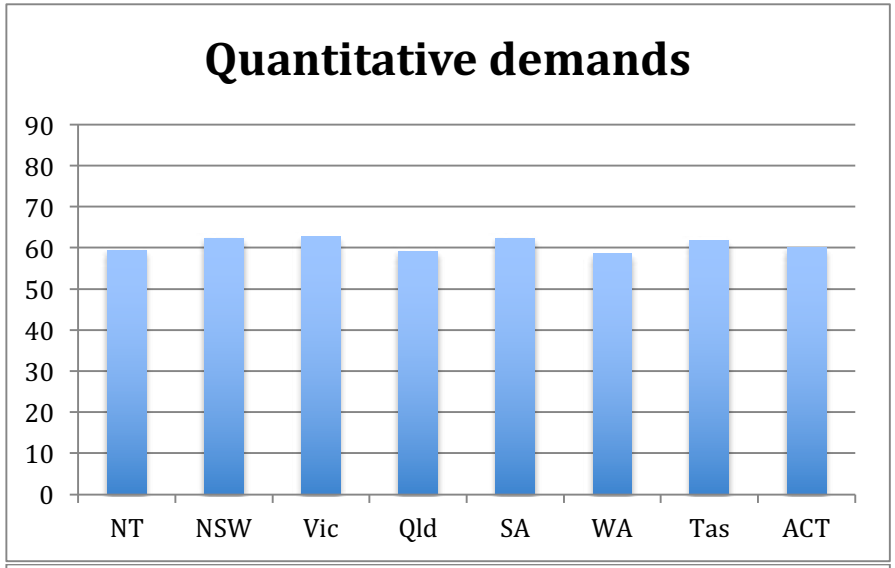
*Mean ±.5SD

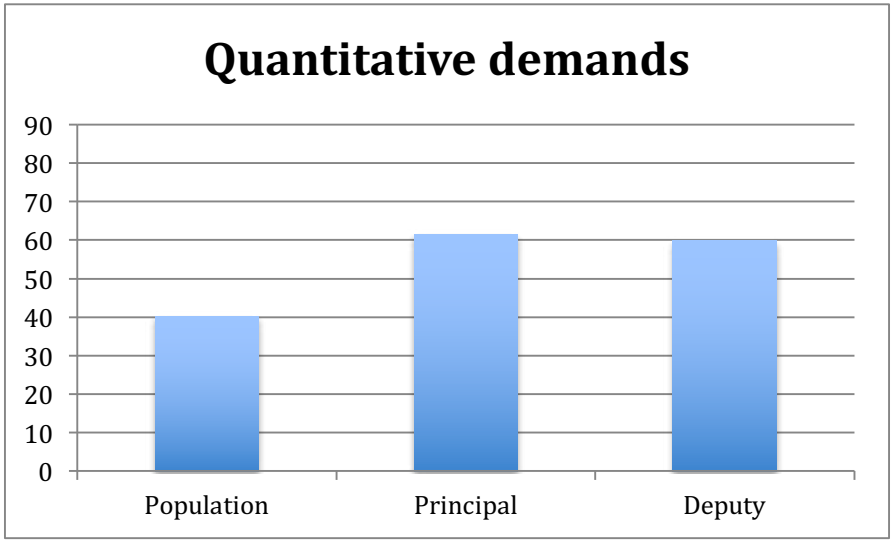
- **Quantitative demands** deal with how much one has to achieve in one's work. They can be assessed as an incongruity between the number of tasks and the time available to perform the tasks in a satisfactory manner.
- **Work pace** deals with the speed at which tasks have to be performed. It is a measure 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.

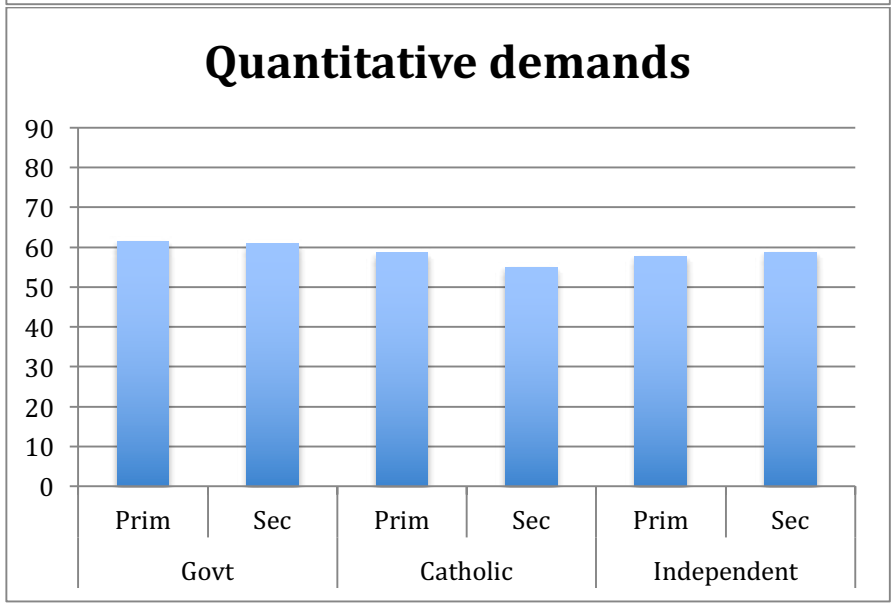
Results

- **Trends** All demands have remained relatively constant for the previous 7 years at rates well above the general population, with emotional demands and demands for hiding emotions approaching double the population rate. All are above the critical high score.
- **Quantitative demands** No significant differences were reported for any of the comparison groups except South Australia.
- **Work pace** Catholic primary school leaders', Independent secondary school leaders' and males generally, were below the critical high value for this scale. All other scores exceeded this cut off.
- **Cognitive demands** All groups exceeded the critical high score indicating that the role provides significantly higher levels of cognitive demands than the general population. This is a positive finding.
- **Emotional demands** All groups exceeded the critical high score by at least half a standard deviation, confirming the role is highly emotionally charged in all states, sectors and school types.
- **Demands for hiding emotions** All groups exceeded the critical high score by at least half a standard deviation, confirming the role requires a great deal of skill in dealing with one's own and others emotions in all states, sectors and school types.

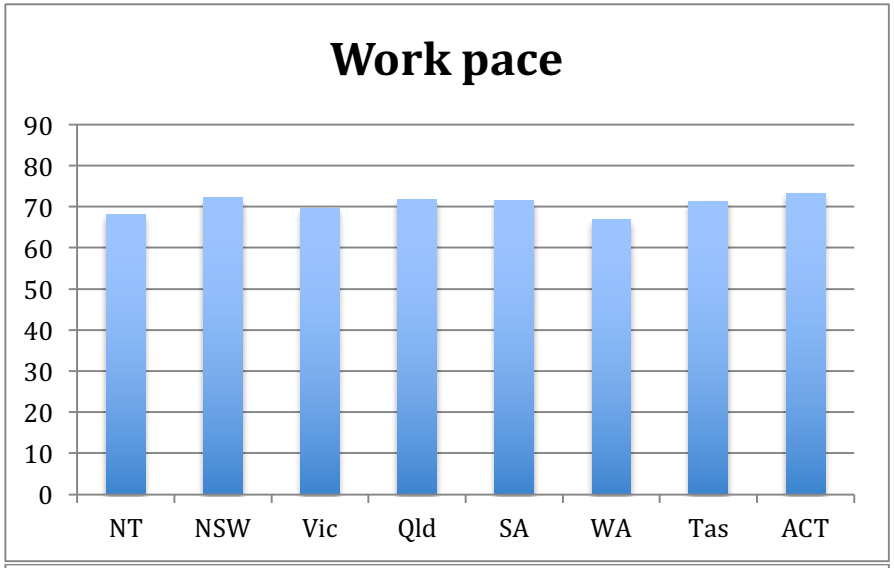
Quantitative Demands disaggregated by State, Sector, Level, Role and compared with the General Population

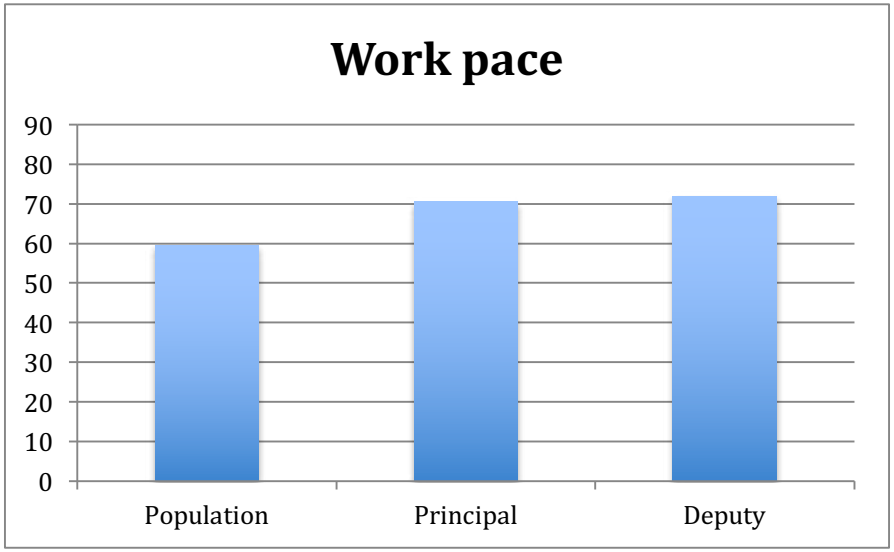


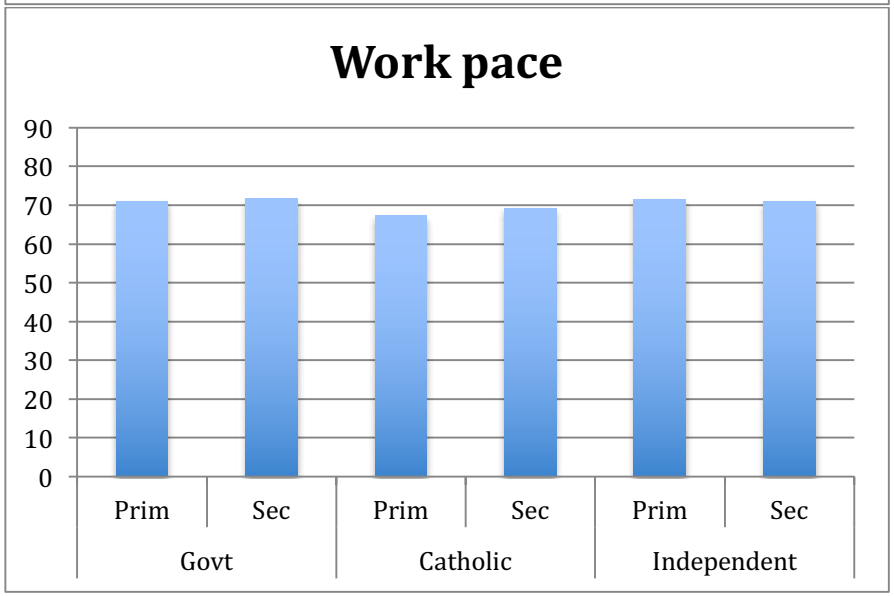




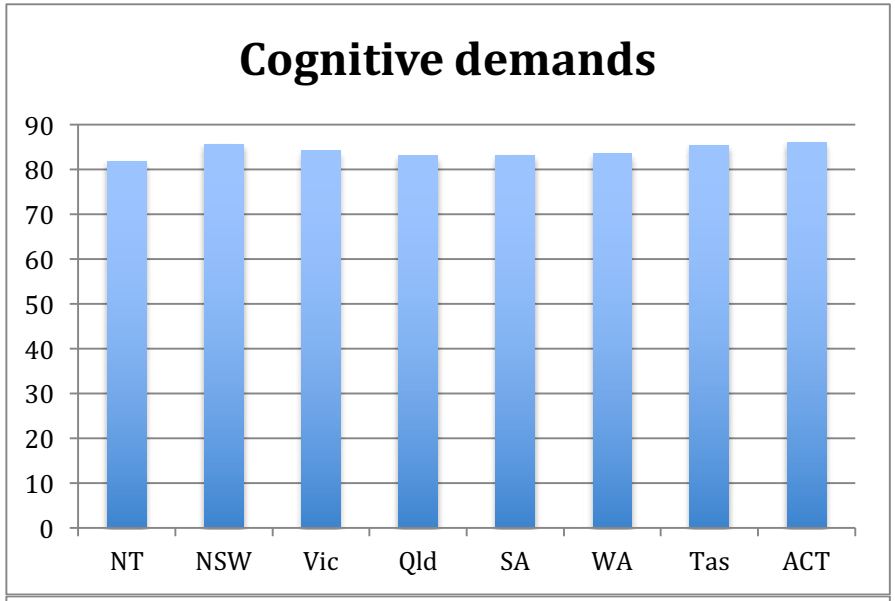
Work Pace disaggregated by State, Sector, Level, Role and compared with the General Population

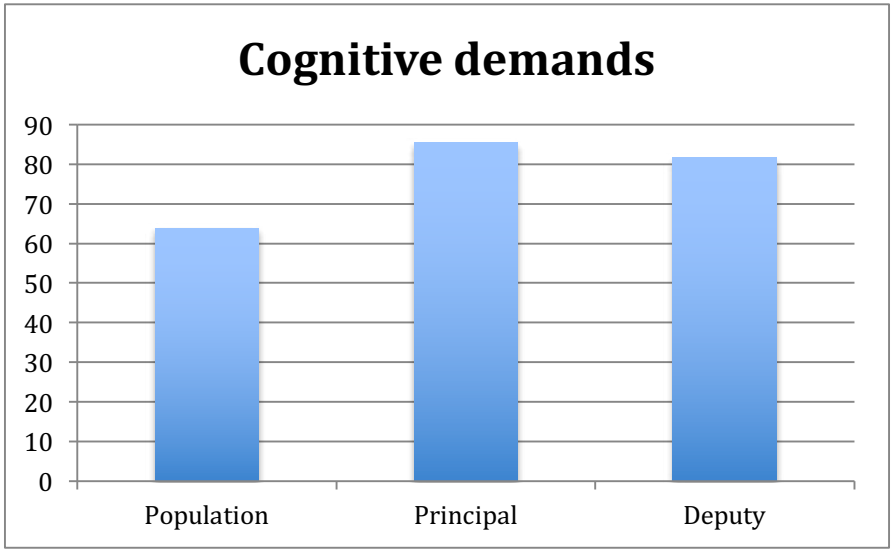


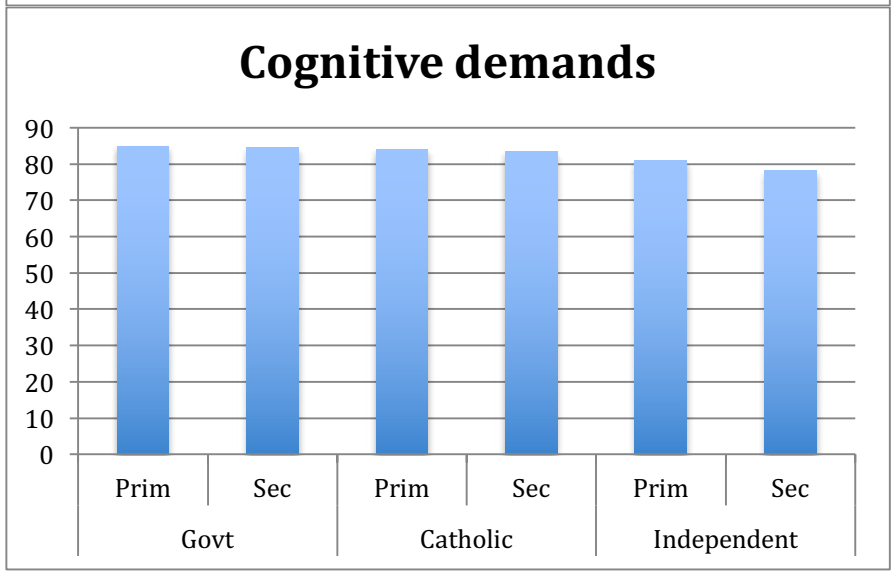




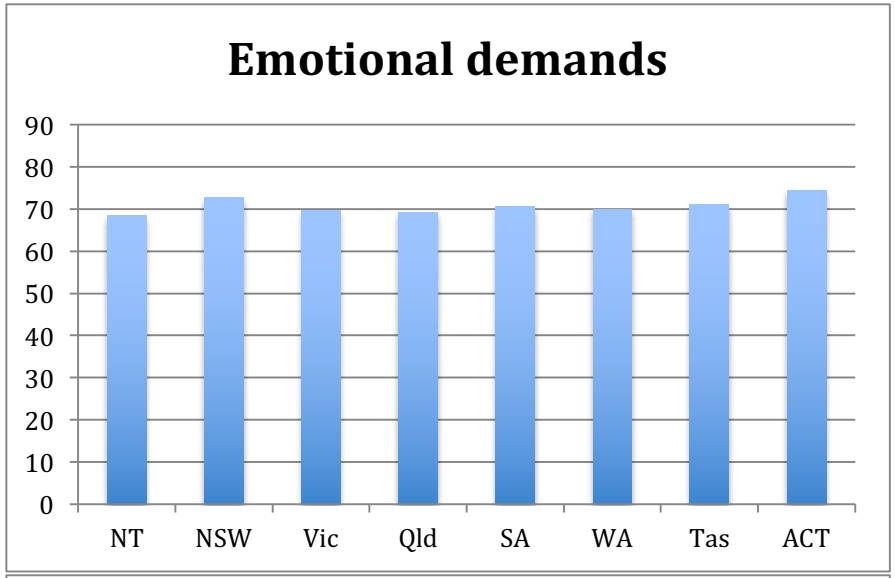
Cognitive Demands disaggregated by State, Sector, Level, Role and compared with the General Population

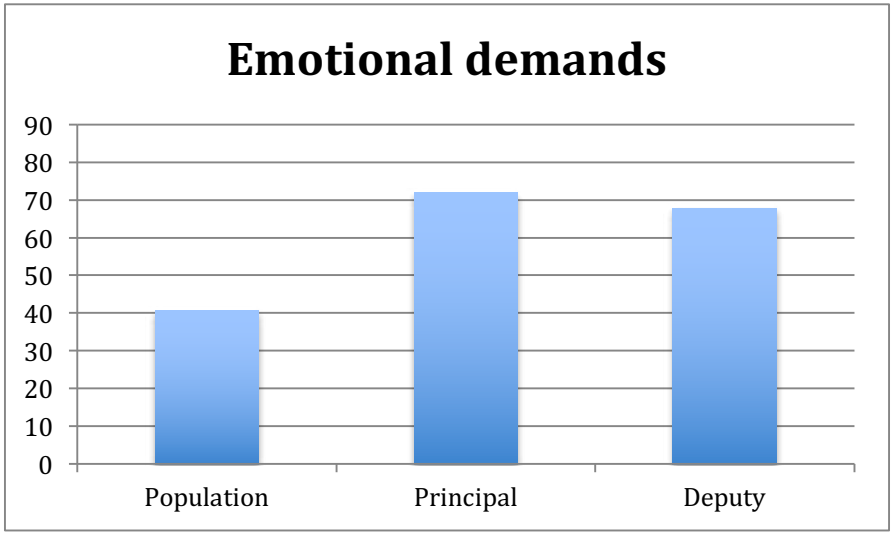


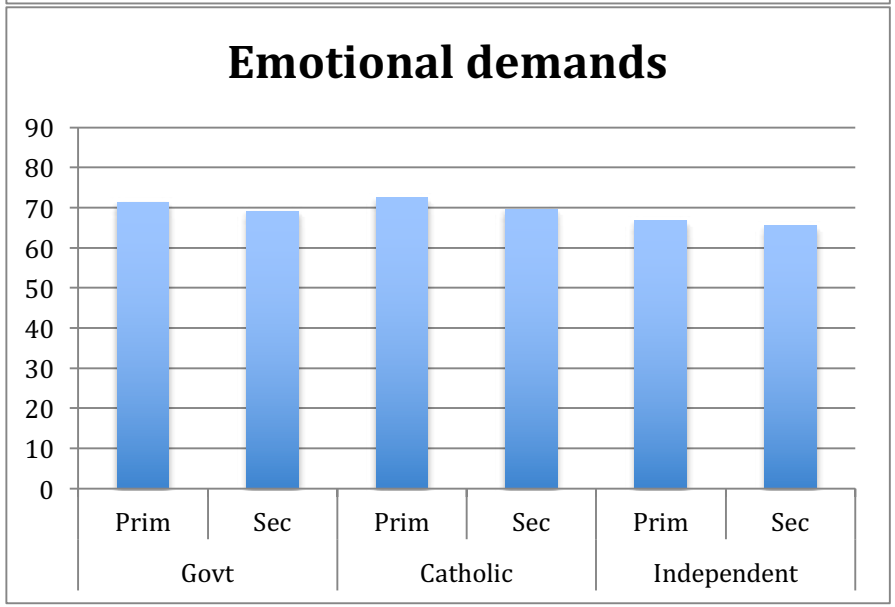




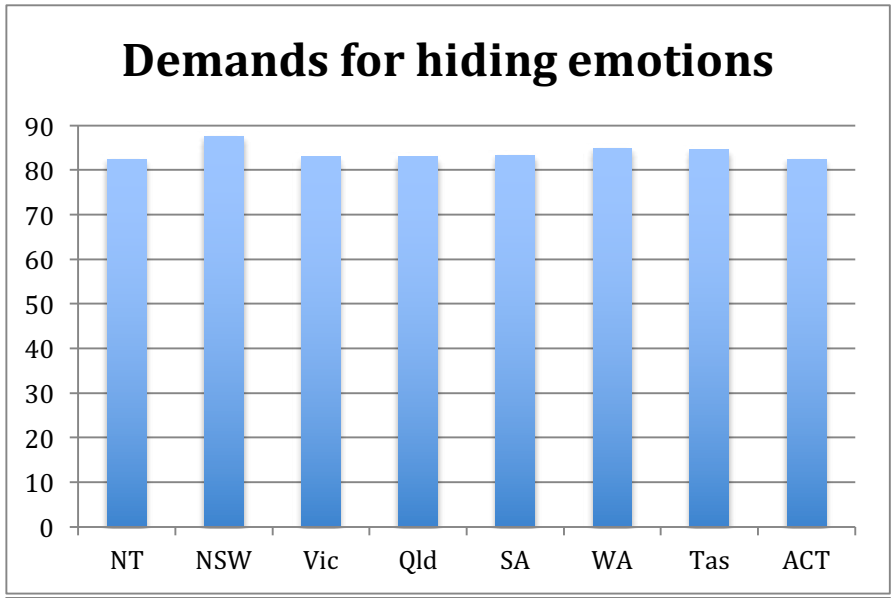
Emotional Demands disaggregated by State, Sector, Level, Role and compared with the General Population

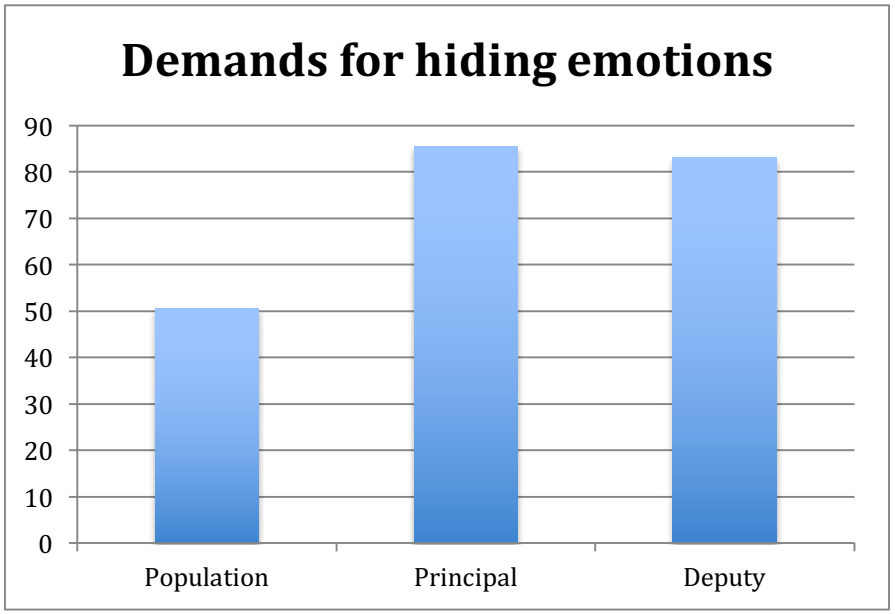


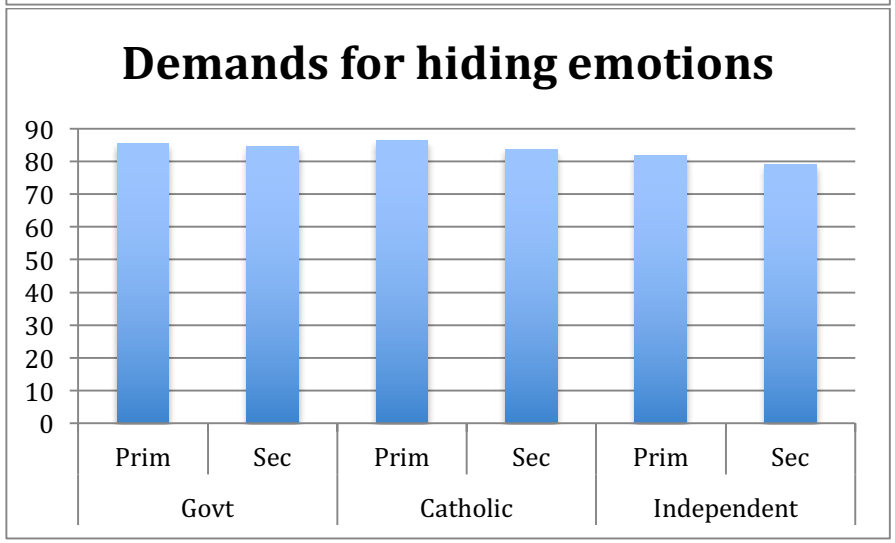




Demands for Hiding Emotions disaggregated by State, Sector, Level, Role and compared with the General Population

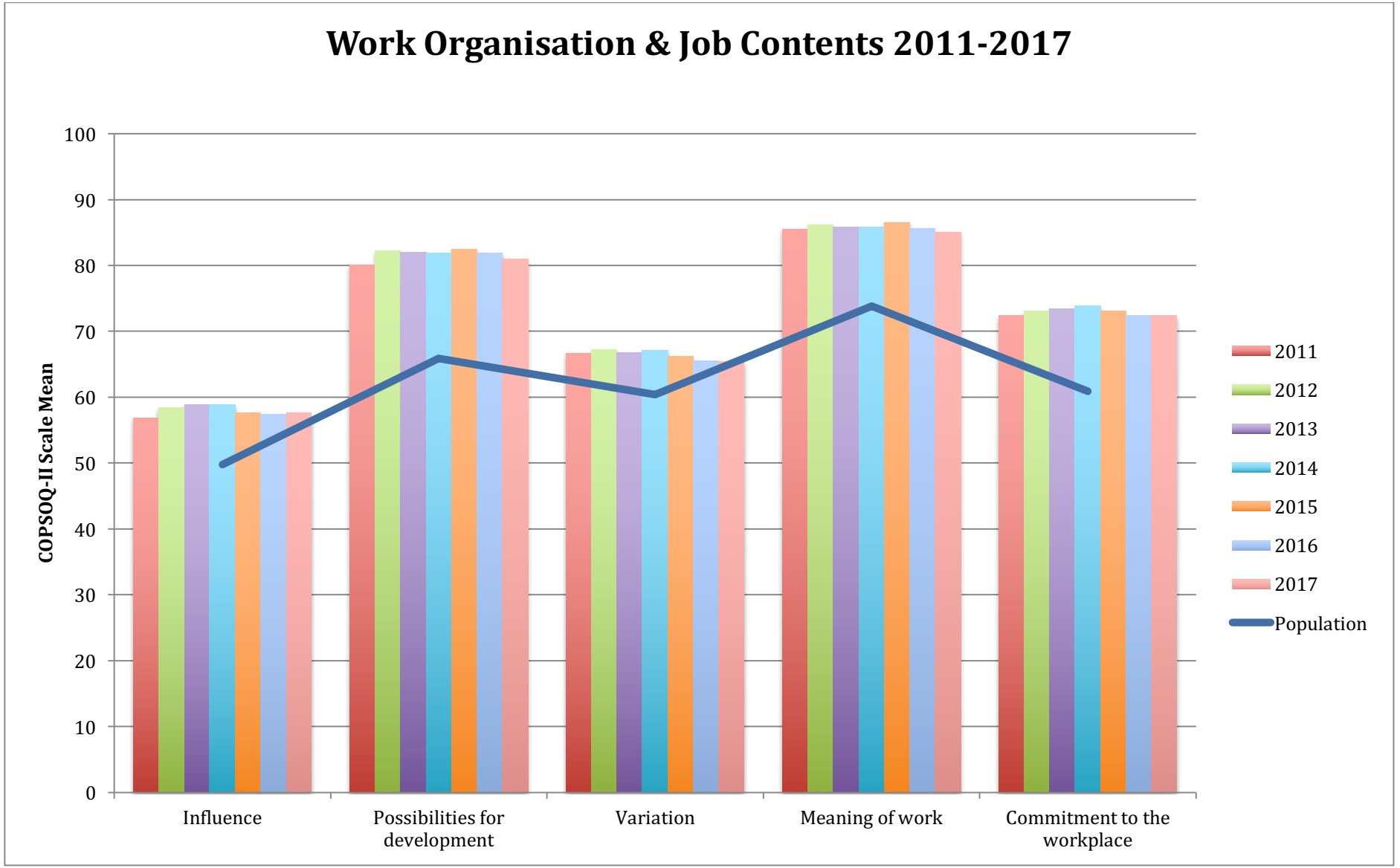






Work Organisation and Job Contents

Trend data 2011 – 2017



2017 Data in detail

Subscales	Population		Critical Value*		All	Gov	Cat	Ind	Gender		Role		Govt		Catholic		Independent	
	M	*SD*	Low	High					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Influence	49.80	21.20	39.20	60.40	57.60	55.43	61.49	64.06	56.22	58.53	58.62	52.95	56.49	54.72	61.14	63.00	61.87	61.34
Possibilities for development	65.90	17.60	57.10	74.70	80.97	80.19	83.17	83.40	82.35	78.84	82.43	76.55	81.64	77.36	82.35	85.63	80.78	80.56
Variation	60.40	21.40	49.70	71.10	65.43	64.87	67.76	66.90	66.45	64.06	66.70	62.04	65.46	62.79	66.27	72.75	64.08	65.28
Meaning of work	73.80	15.80	65.90	81.70	85.06	84.38	86.09	87.13	86.11	83.11	86.47	80.40	86.05	81.33	84.52	90.83	84.49	88.46
Commitment to the workplace	60.90	20.40	50.70	71.10	72.36	71.49	70.94	75.82	73.06	70.04	73.20	67.64	71.64	71.61	69.85	76.75	73.02	78.37

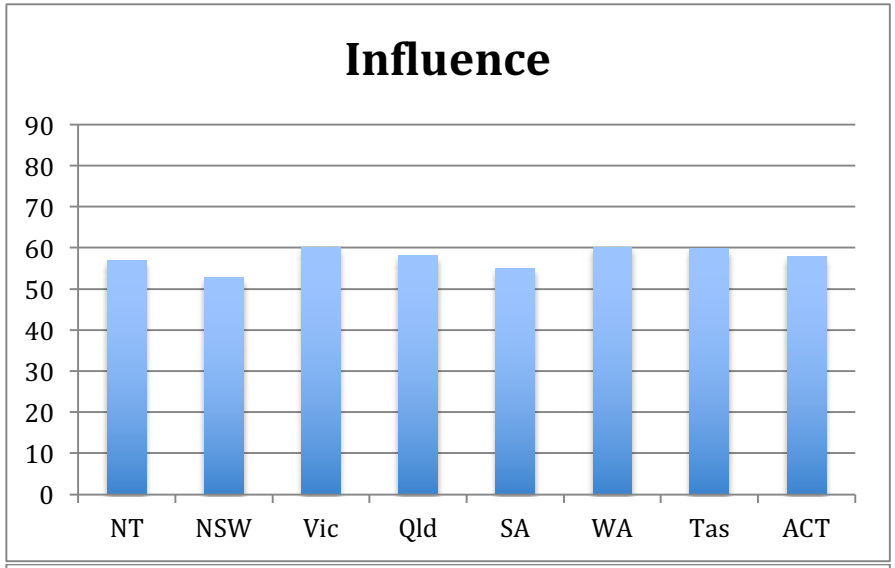
*Mean ±.5SD

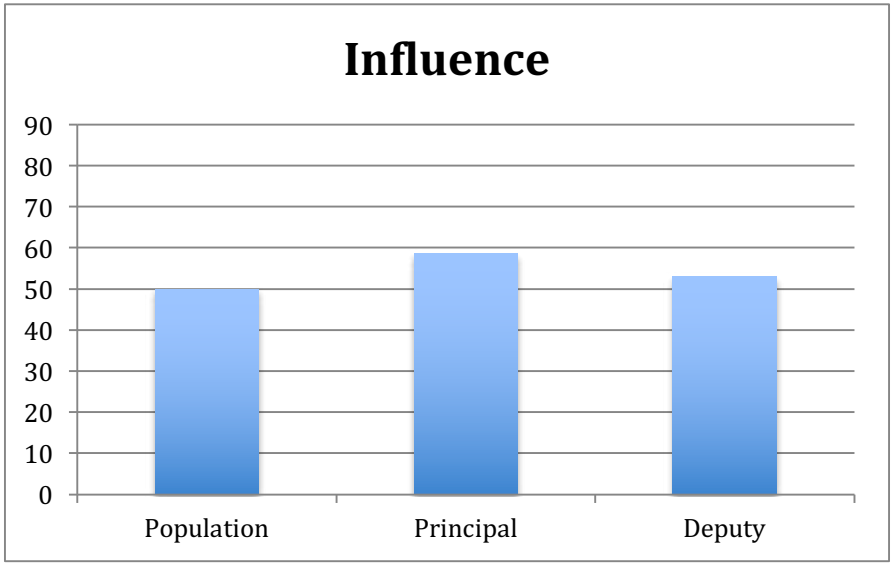
- **Influence at work** deals with the degree to which the employee can influence aspects of work itself, ranging from planning of work to the order of tasks.
- **Possibilities for Development** assesses if the tasks are challenging for the employee and if the tasks provide opportunities for learning 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.

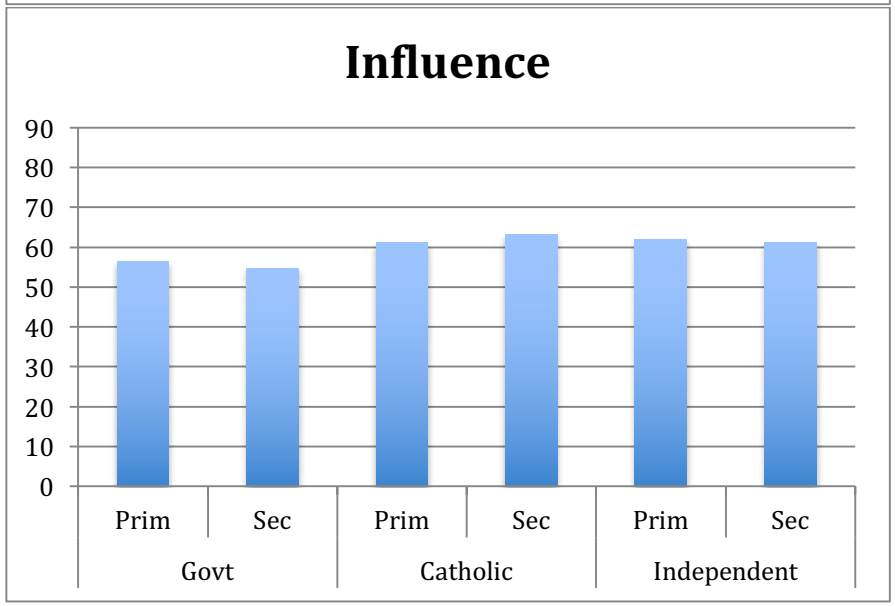
Results

- **Trends** Work organisation and job contents have remained relatively constant for the previous 7 years.
- **Influence at work** Catholic and Independent school principals and deputies average scores were just above the critical high score indicating noticeably more influence than the general population.
- **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.
- **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.
- **Commitment to the Workplace** Male principals were the only group not to exceed the critical high score. However, they fell short by ~1 point suggesting that all participants are noticeably more committed to their workplaces than the general population.

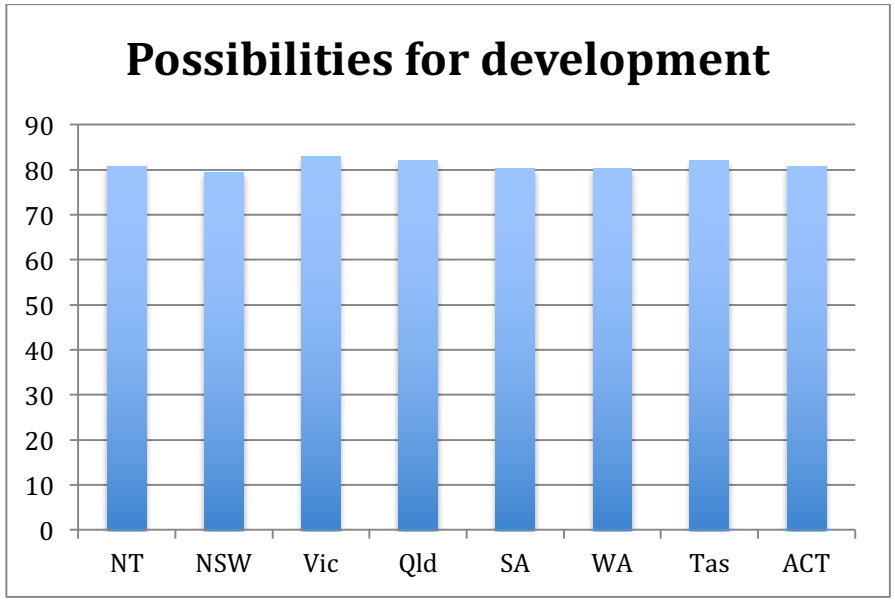
Influence disaggregated by State, Sector, Level, Role and compared with the General Population

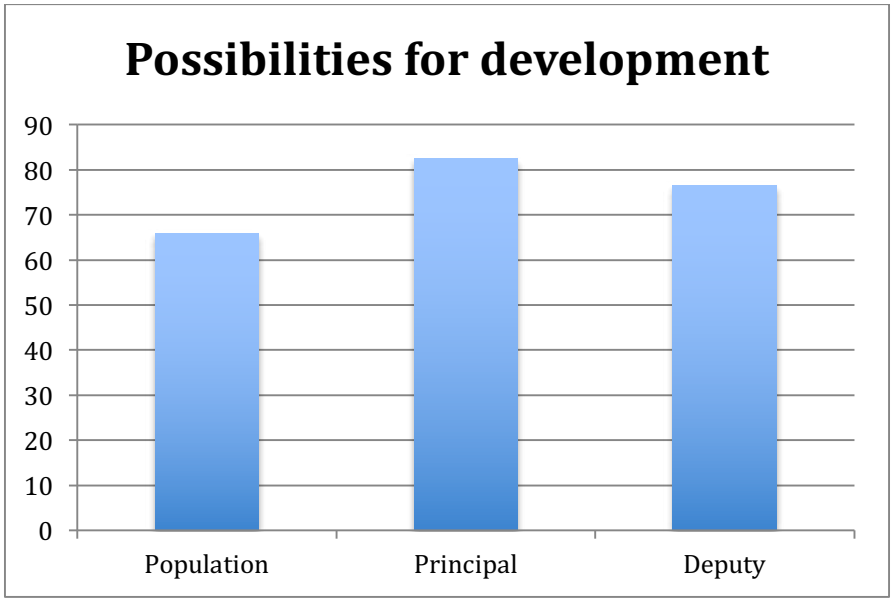


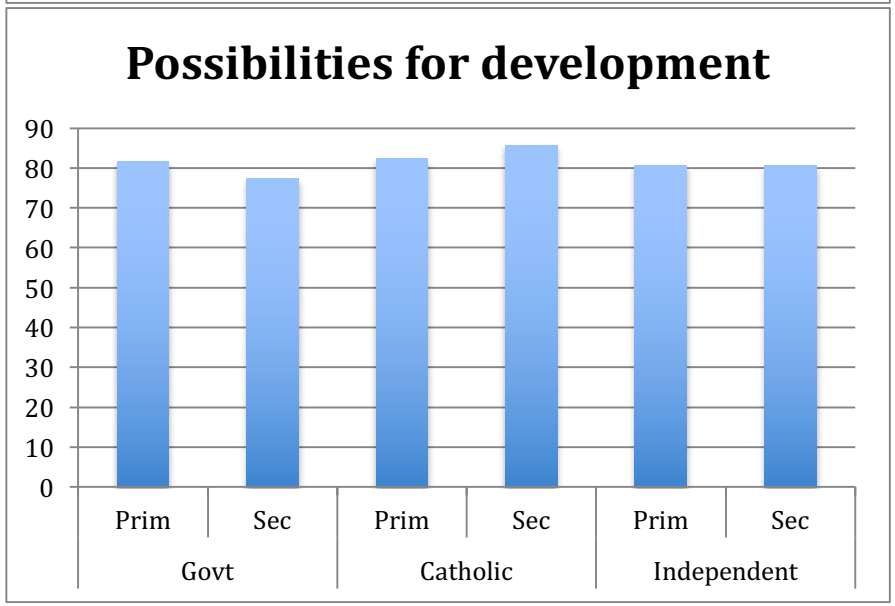




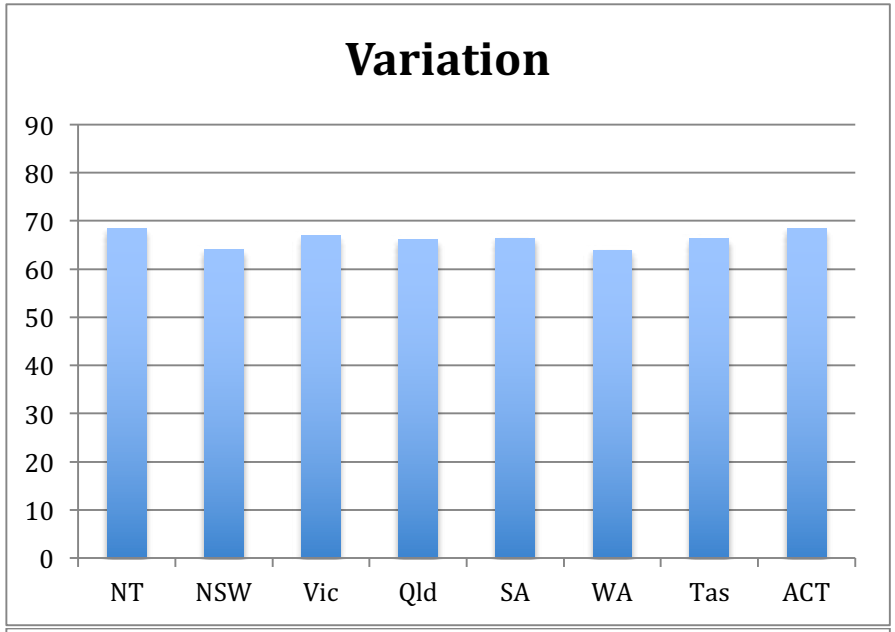
Possibilities for Development disaggregated by State, Sector, Level, Role and compared with the General Population

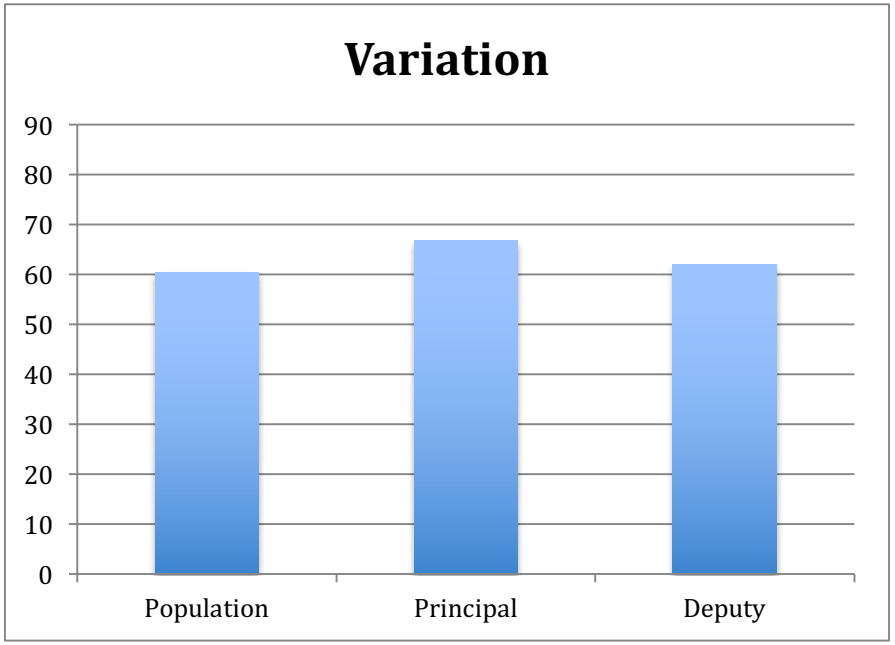


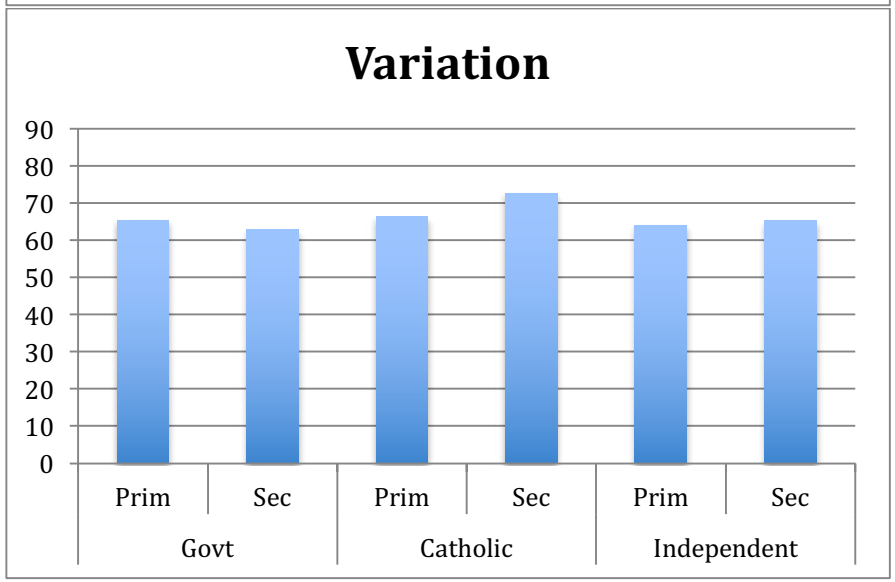




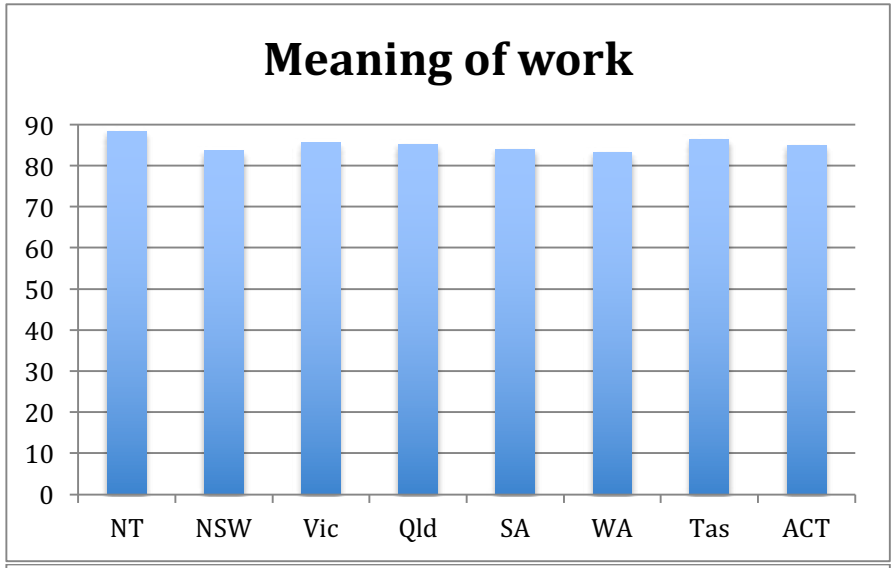
Variation disaggregated by State, Sector, Level, Role and compared with the General Population

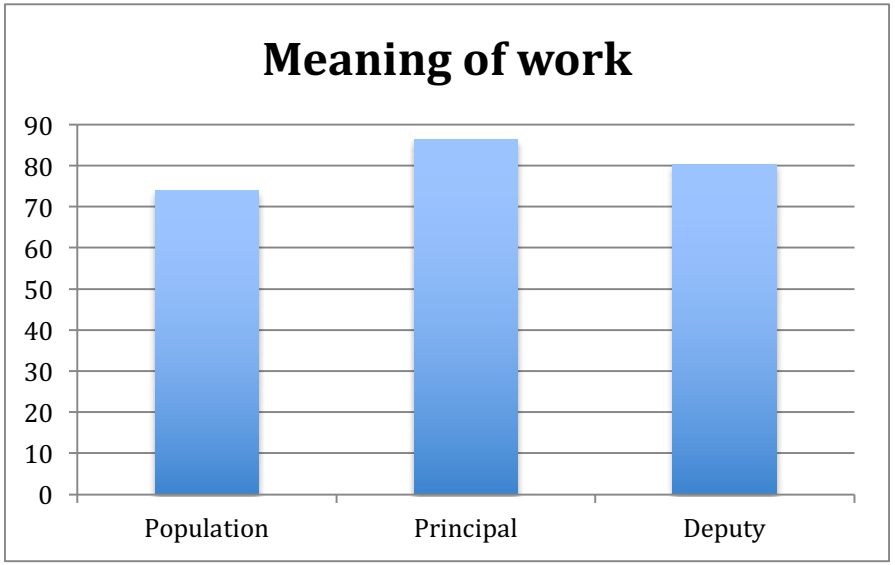


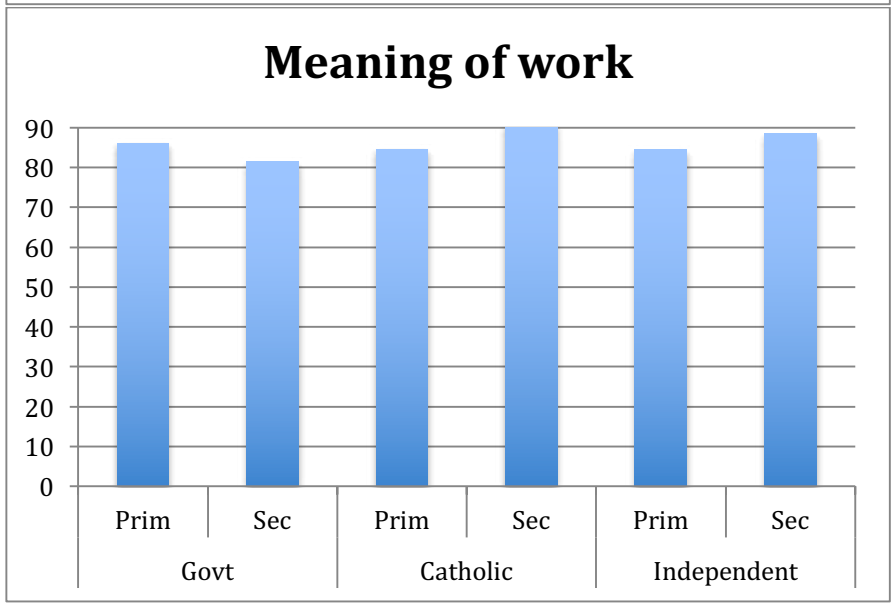




Meaning of Work disaggregated by State, Sector, Level, Role and compared with the General Population







Commitment to the workplace
90
80
70
60
50
40
30
20
10
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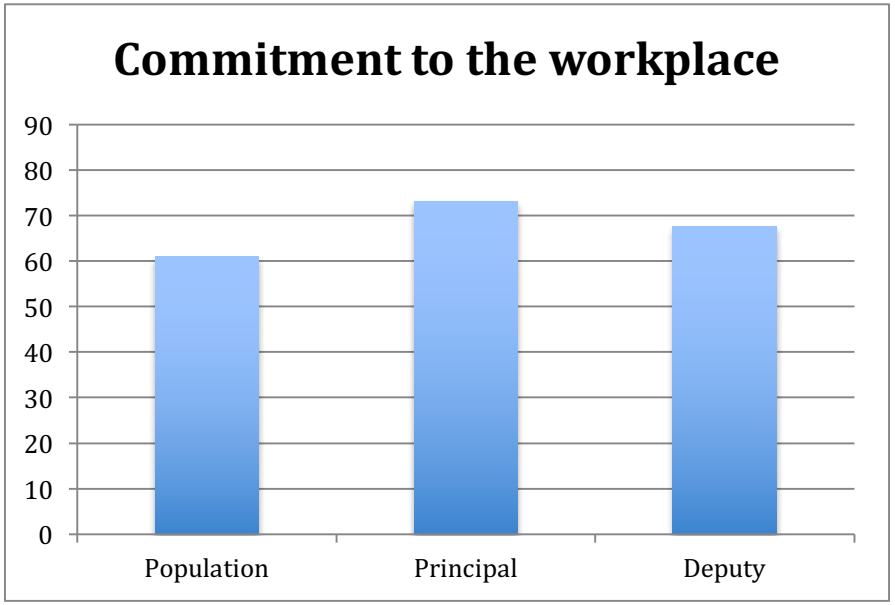
NSW
Vic
Qld
SA
WA
Tas
ACT


Commitment to the workplace
90
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70
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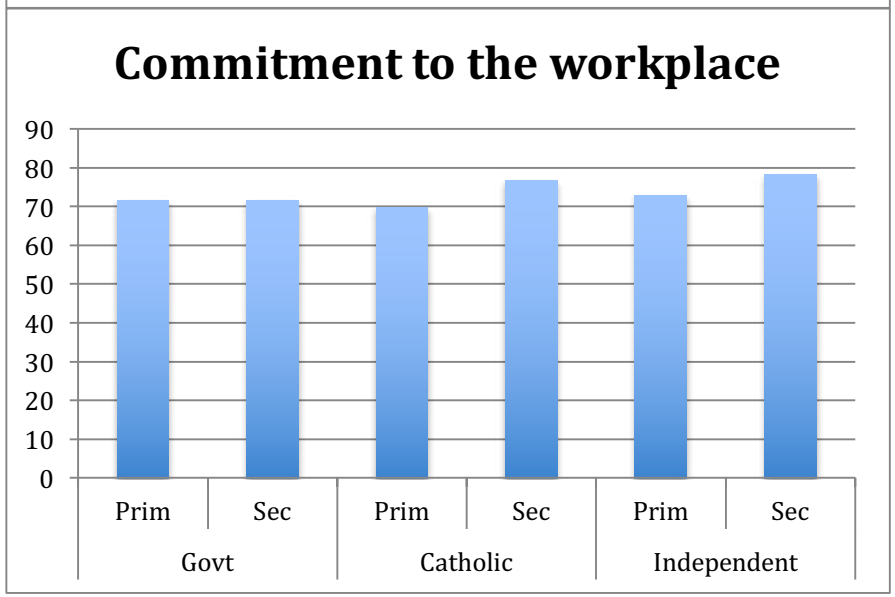
50
40
30
20
10
0
Population
Principal
Deputy


Commitment to the workplace
90
80
70
60
50
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0
Prim
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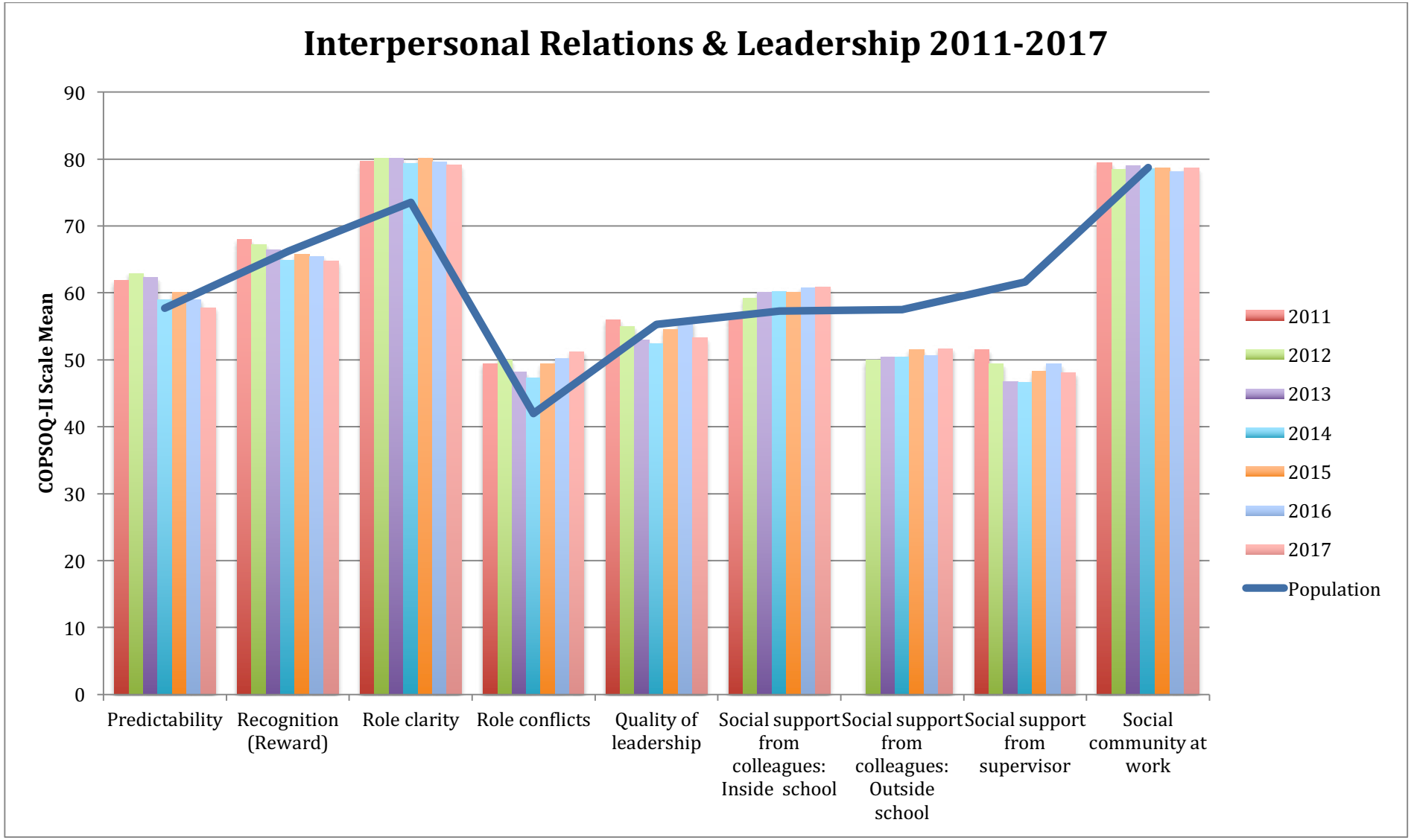
Prim
Sec
Prim
Sec
Govt
Catholic
Independent

Interpersonal Relations & Leadership

Trend data 2011 – 2017



2017 Data in Detail

Subscales	Population		Critical Value*		All	Gov	Cat	Ind	Gender		Role		Govt		Catholic		Independent	
	M	*SD*	Low	High					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Predictability	57.70	20.90	47.25	68.15	57.80	55.68	60.48	69.40	57.38	58.21	56.51	61.37	55.52	56.58	59.79	65.00	62.97	71.00
Recognition (Reward)	66.20	19.90	56.25	76.15	64.74	63.02	67.11	75.18	64.74	64.94	62.53	71.63	61.79	66.38	65.56	75.08	73.84	75.00
Role clarity	73.50	16.40	65.30	81.70	79.10	78.12	80.60	79.24	79.23	77.64	80.48	73.18	80.40	76.42	79.62	84.50	76.48	77.33
Role conflicts	42.00	16.60	33.70	50.30	51.25	52.90	51.84	44.07	51.24	52.82	53.58	46.97	52.16	53.57	51.58	47.63	42.23	43.25
Quality of leadership	55.30	21.10	44.75	65.85	53.30	53.27	50.87	57.69	54.06	52.31	50.28	61.95	52.27	54.50	50.08	57.70	57.89	61.42
Social support: colleagues Inside school	57.30	19.70	47.45	67.15	60.90	60.85	60.45	59.55	62.14	58.48	61.69	57.47	62.03	58.57	60.52	60.50	58.65	57.67
Social support: colleagues Outside school	57.30	19.70	47.45	67.15	51.68	51.25	52.80	49.18	53.30	48.28	53.93	43.25	53.24	49.01	54.37	50.83	48.08	44.67
Social support from supervisor	61.60	22.40	50.40	72.80	48.00	47.51	48.40	53.36	48.83	47.26	45.56	55.88	45.63	50.64	48.72	52.04	55.19	49.64
Social community at work	78.70	18.90	69.25	88.15	78.68	78.09	77.68	79.57	79.01	76.95	79.08	75.35	79.74	76.41	77.51	78.83	79.00	79.17

*Mean ±.5SD

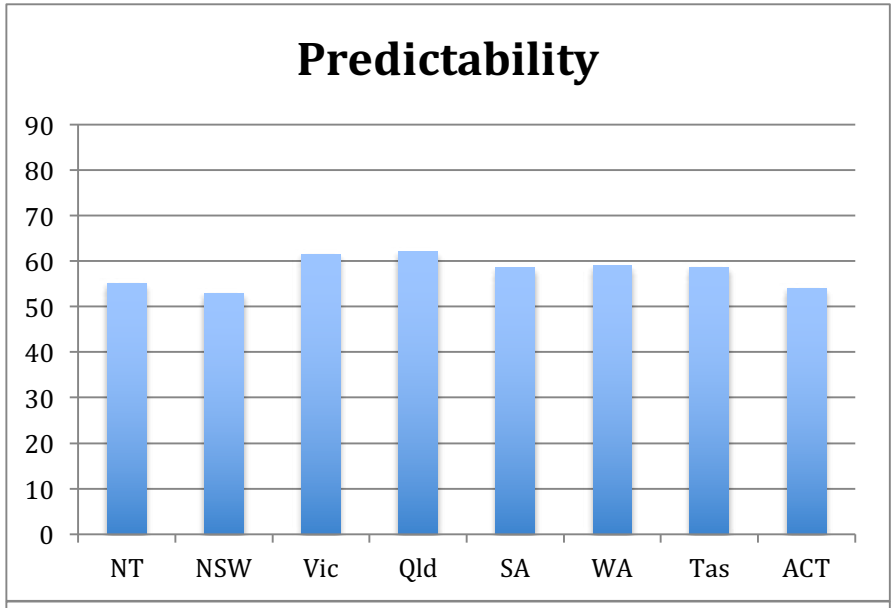
- **Predictability** deals with the means to avoid uncertainty and insecurity. This is achieved if employees receive the relevant information at the right time.
- **Recognition (Reward)** deals with the recognition by the management of your effort at work.
- **Role Clarity** deals with the employee's 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 employee's relations are good and if they work well together.

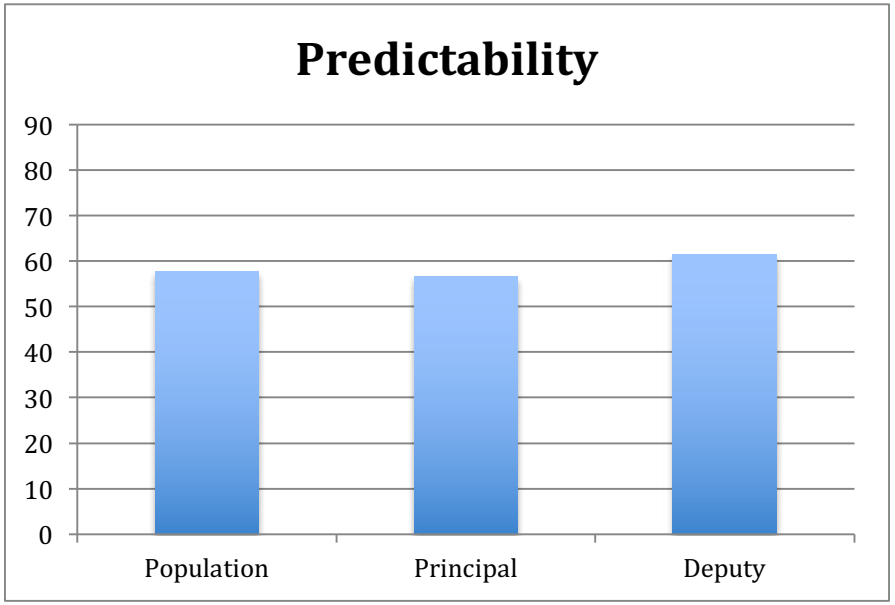
Results

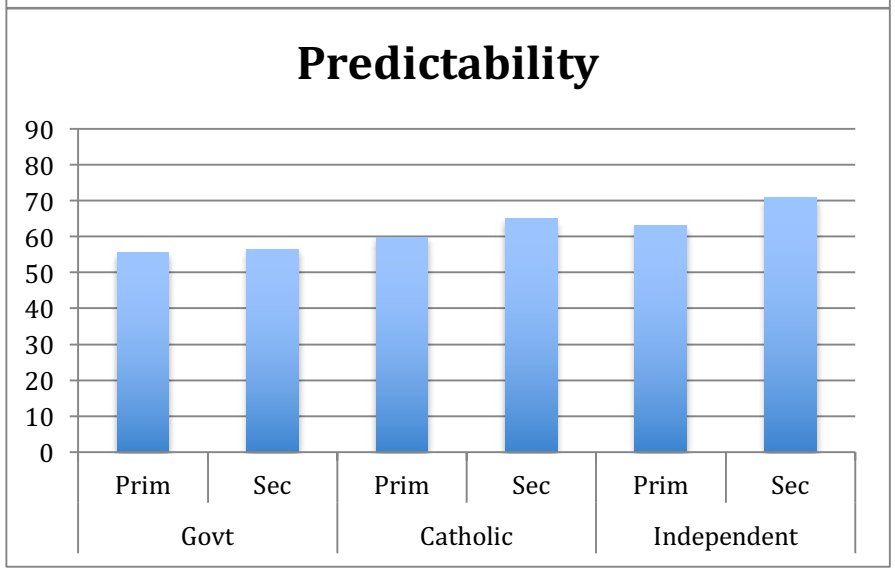
- **Trends** Predictability and Recognition (Reward) has been trending down over the last 7 years, as has Social Support from Supervisors and Quality of Leadership. However, Social Support from Colleagues Inside School has trended up on average. All other scales have remained steady over time.
- **Predictability** No group reported average scores above the critical high score suggesting no difference in work predictability than the general population.
- **Recognition (Reward)** Only Independent principals reported average scores above the critical high score suggesting noticeably higher levels of recognition than the general population.
- **Role Clarity** Government secondary school leaders along with Catholic and Independent principals report noticeably higher scores than the general population.

- **Role Conflicts** The groups who report on average noticeably higher levels of role conflict than the general population are: Males but not Females; Principals but not Deputies; and, Independent Primary and Secondary school leaders.
- **Quality of Leadership** No group reported the quality of leadership (that they report to) as being noticeably different from the general population. However, there were some significant differences within groups. The ACT and Western Australia report lower perceived quality of leadership than the other states and principals report much lower perceived quality of their leaders than their deputies do, suggesting that on average the quality of principal leadership throughout the country exceeds that of their up-line managers.
- **Social support from colleagues** inside and outside the school is reported at levels very close to the general population.
- **Social community at work** is also reported at levels very close to the general population.

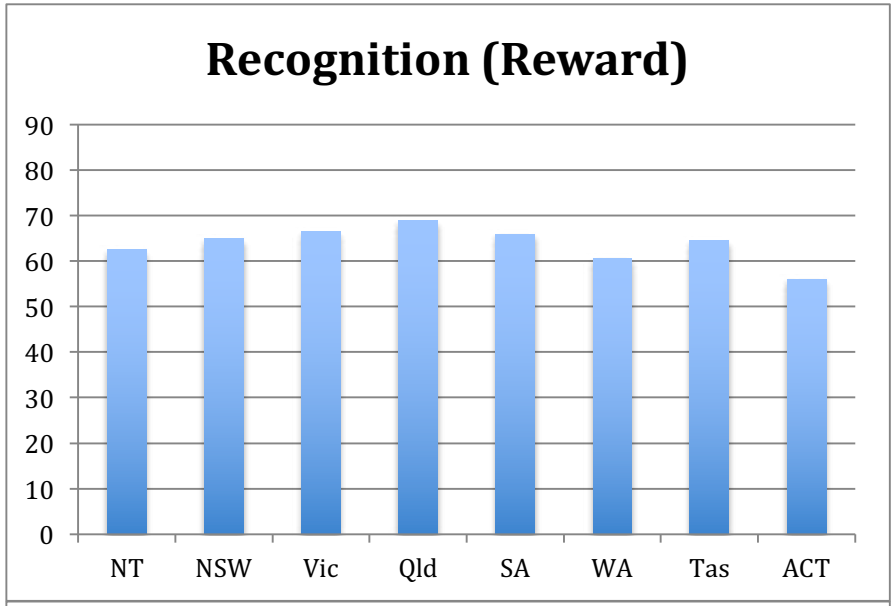
Predictability disaggregated by State, Sector, Level, Role and compared with the General Population

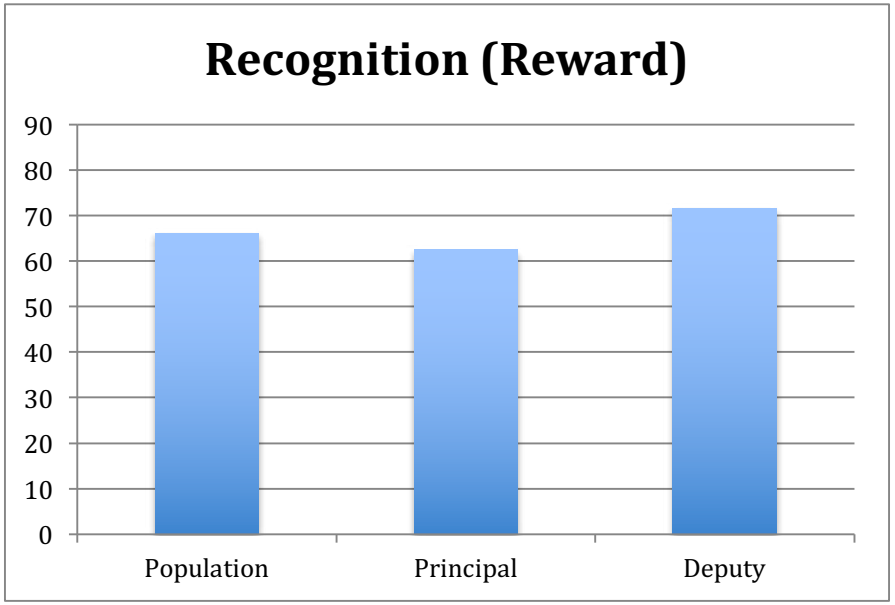


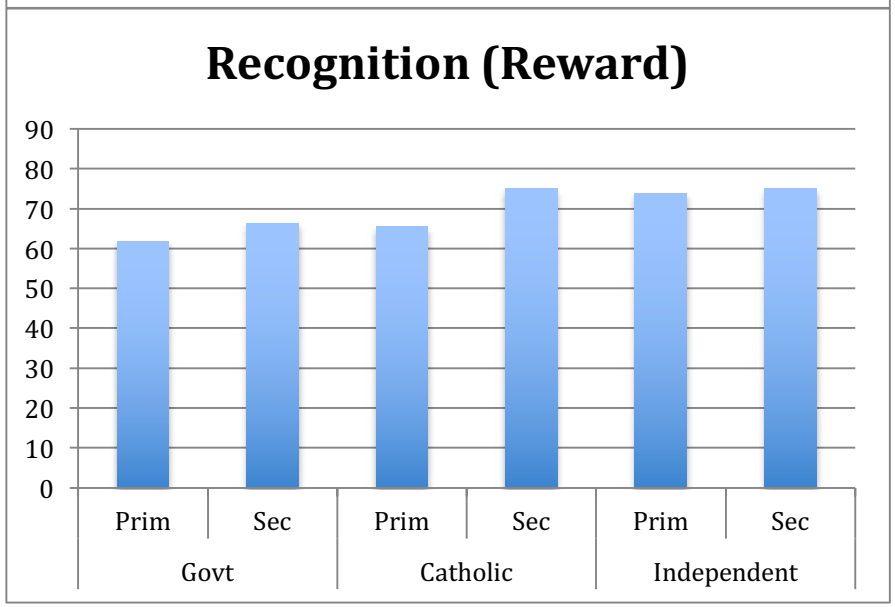


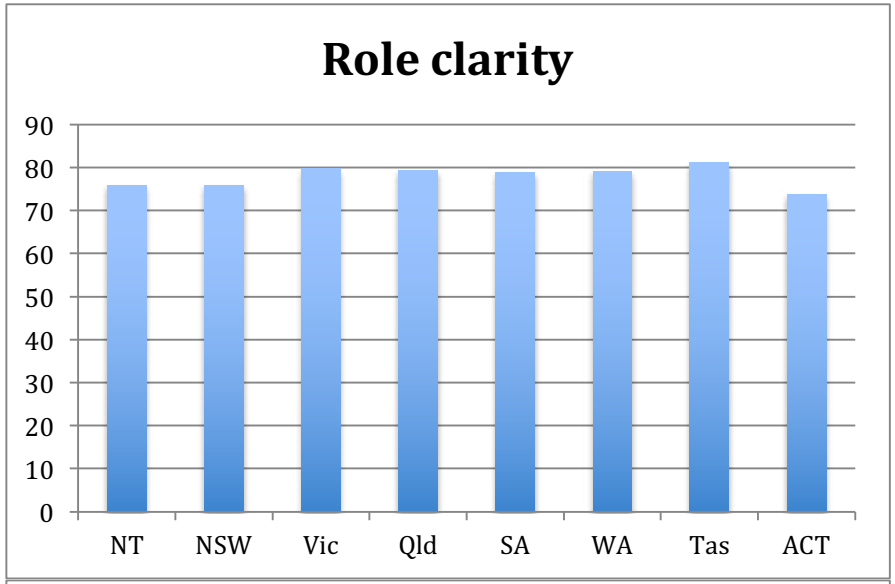


Recognition (Reward) disaggregated by State, Sector, Level, Role and compared with the General Population








Role clarity
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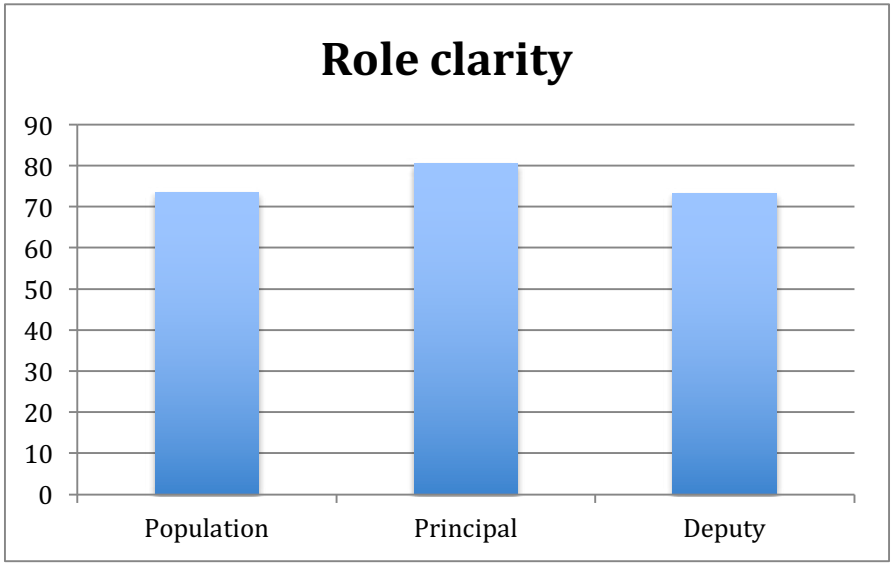
80
70
60
50
40
30
20
10
0
NT
NSW
Vic
Qld
SA
WA
Tas
ACT


Role clarity
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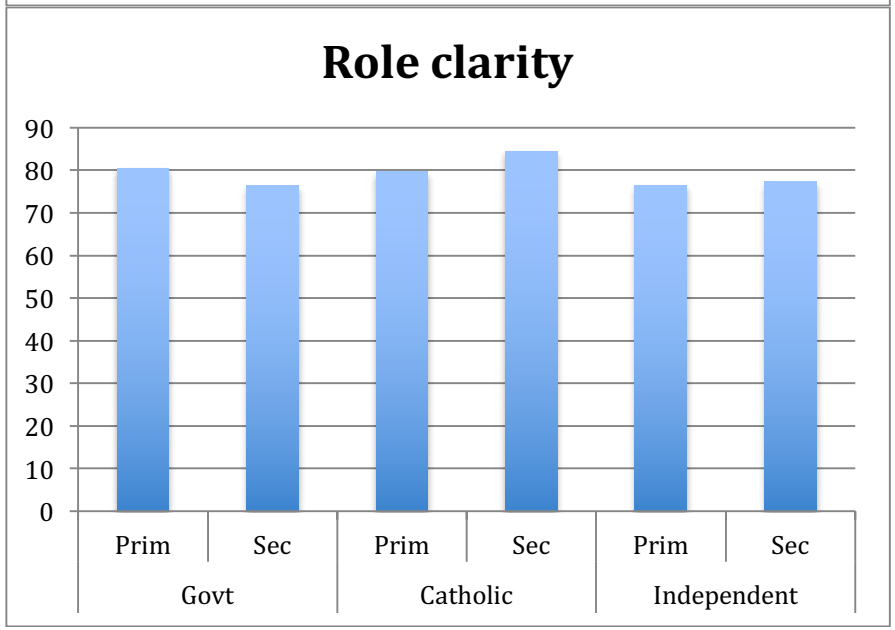
80
70
60
50
40
30
20
10
0
Population
Principal
Deputy


Role clarity
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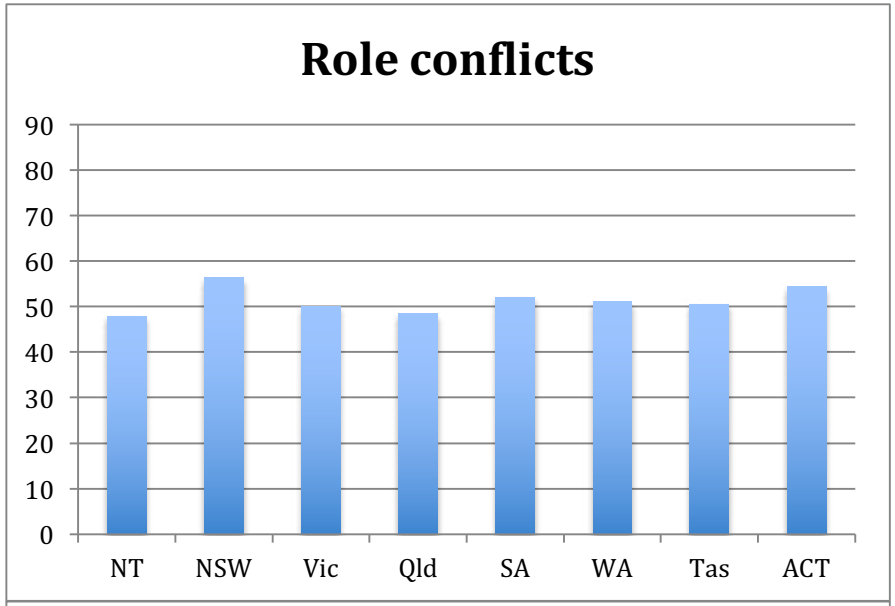
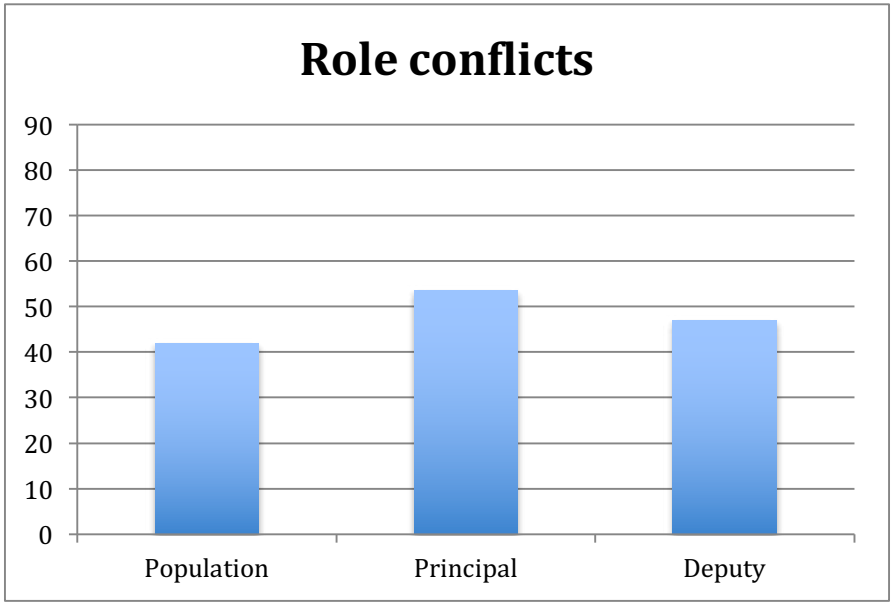
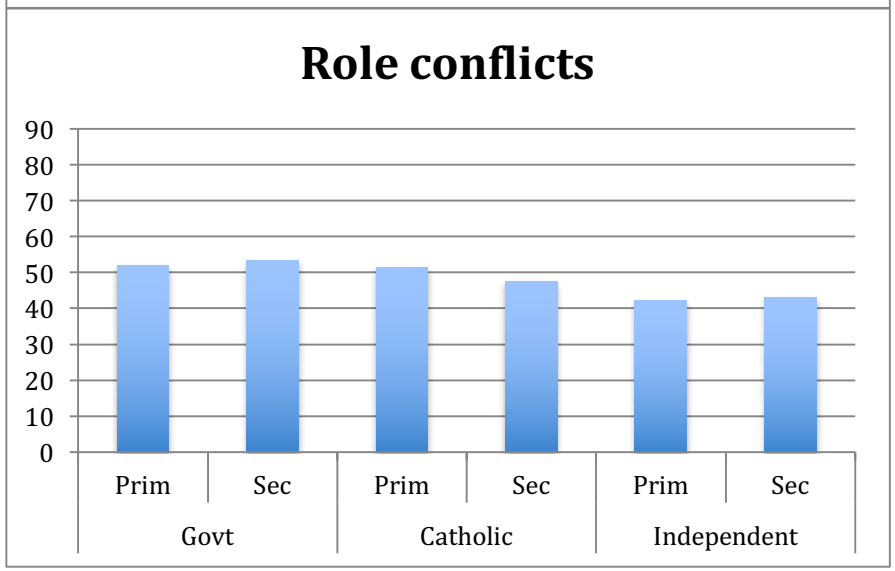
70
60
50
40
30
20
10
0
Prim
Sec
Prim
Sec
Prim
Sec
Govt
Catholic
Independent

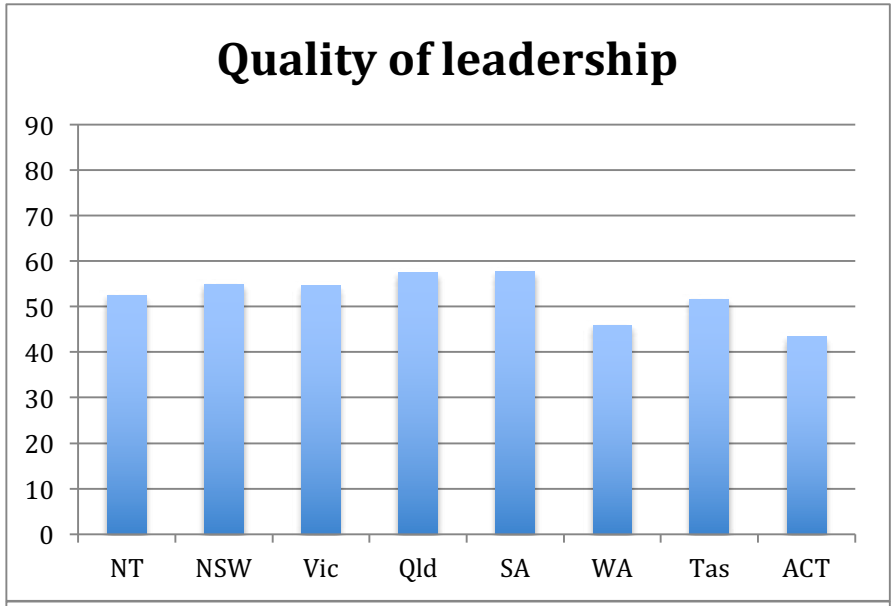
Role Conflicts disaggregated by State, Sector, Level, Role and compared with the General Population

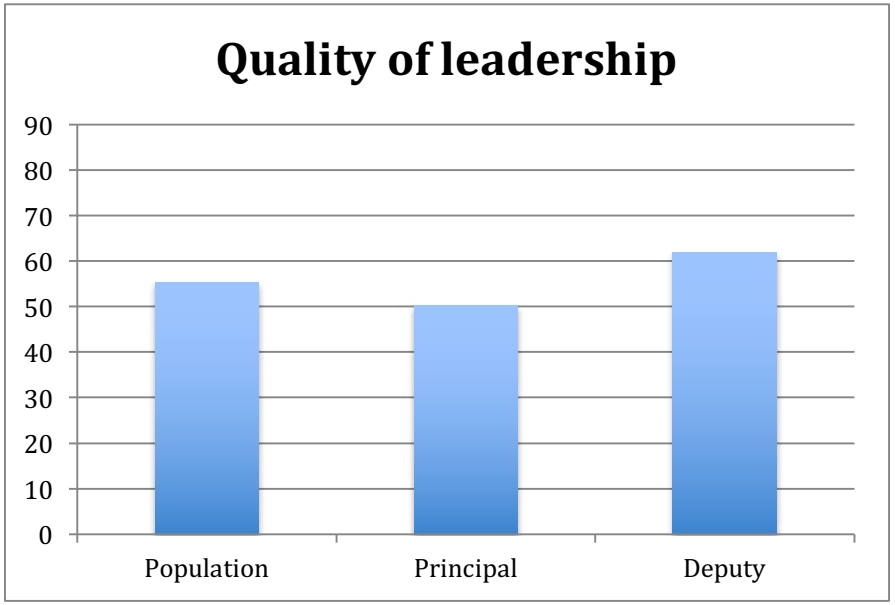


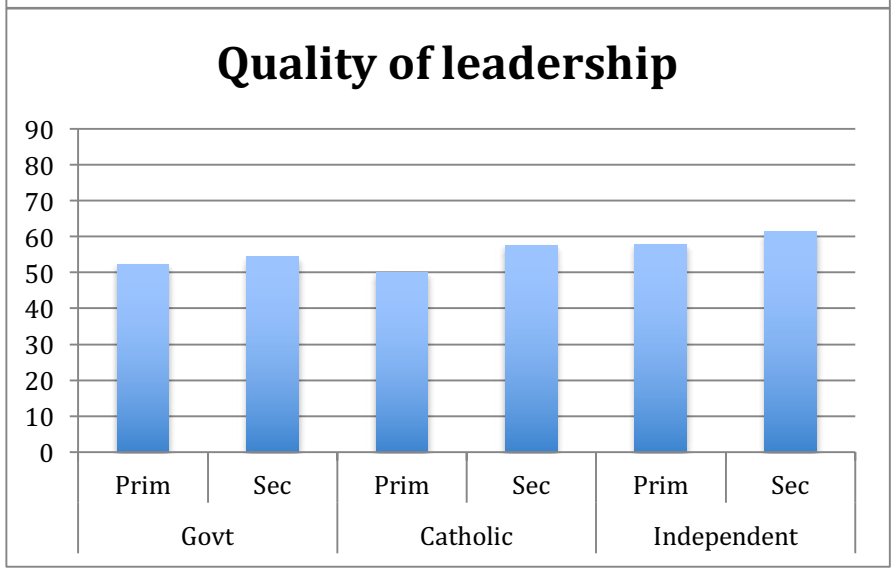




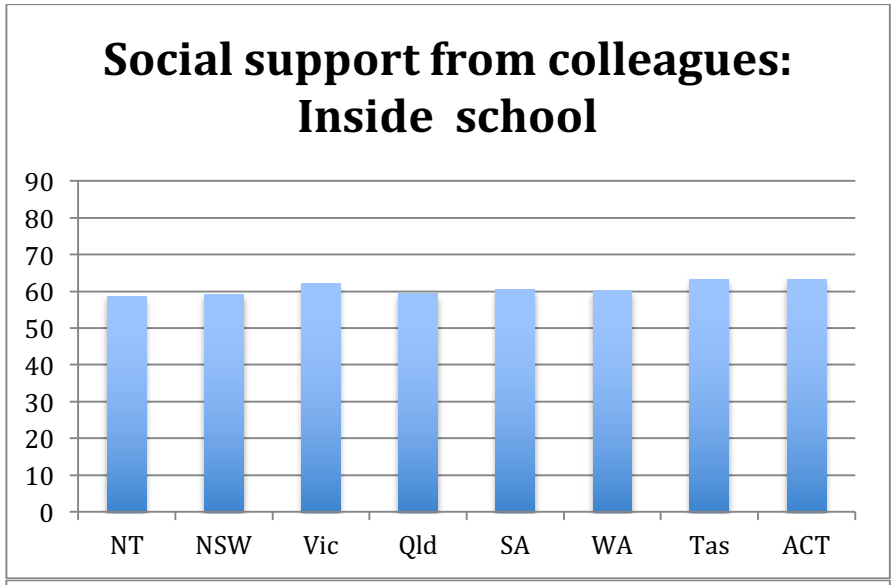
Quality of Leadership disaggregated by State, Sector, Level, Role and compared with the General Population

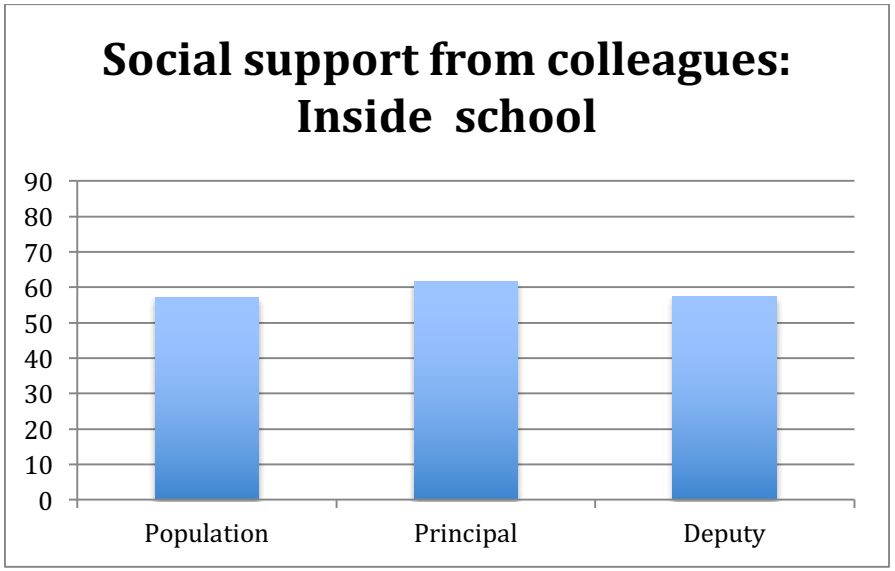


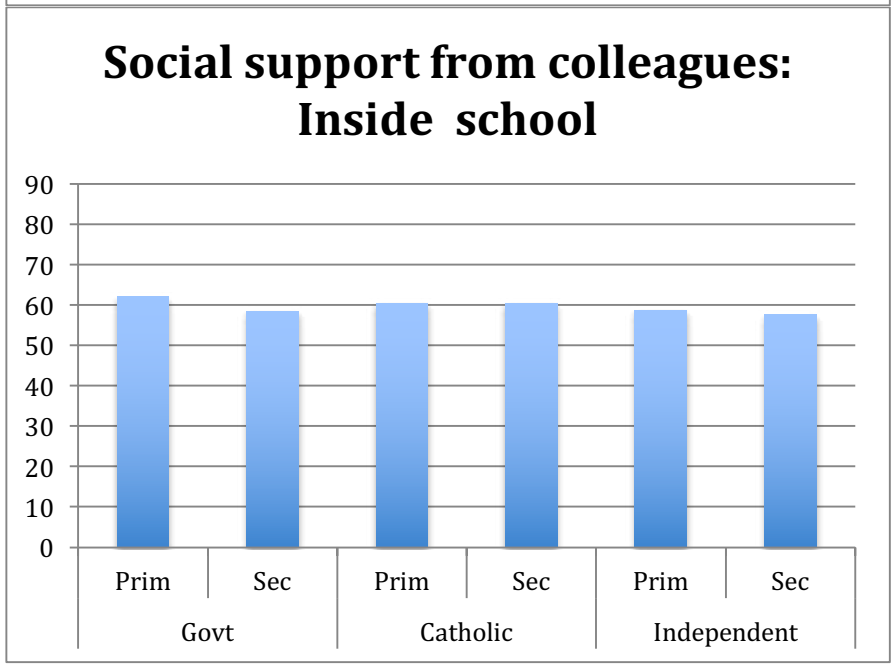




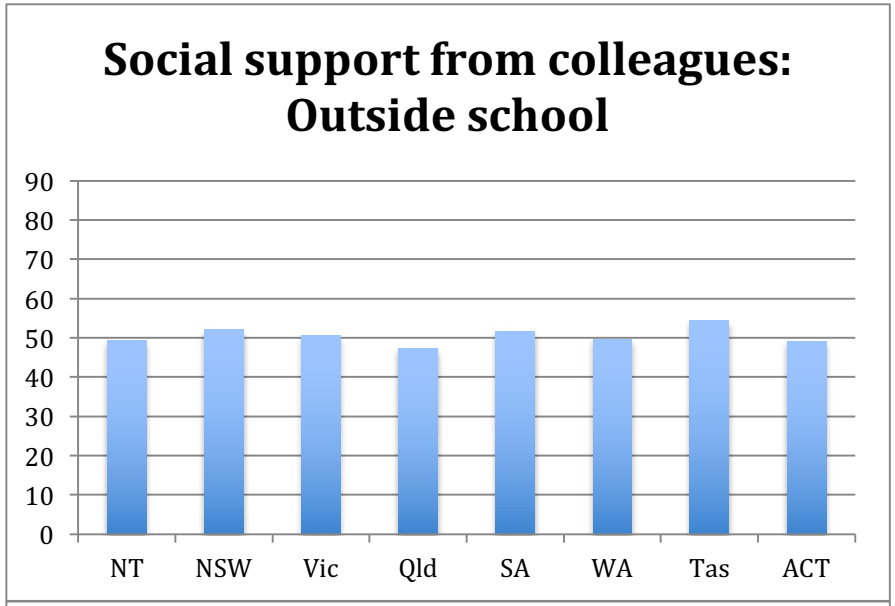
Social Support, Colleagues Inside School disaggregated by State, Sector, Level, Role and compared with the General Population

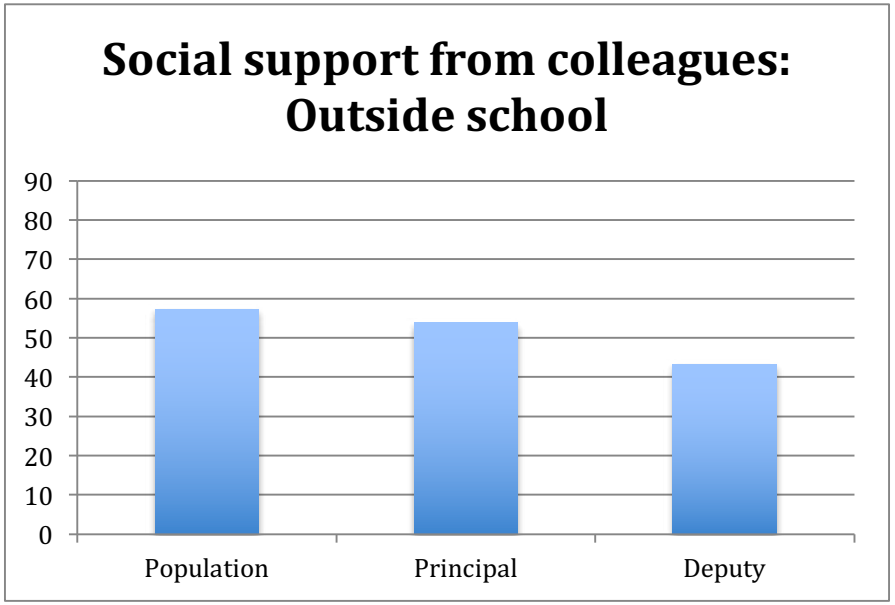


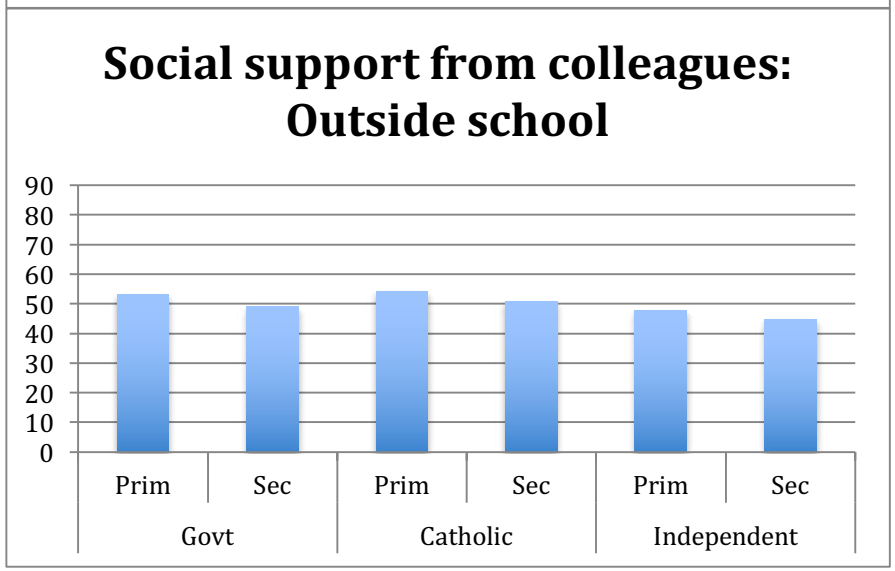




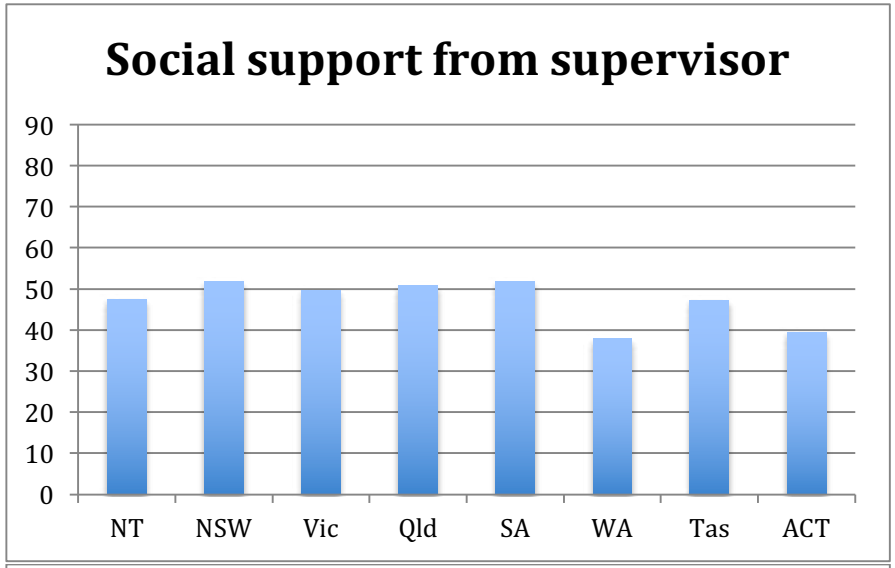
Social Support, Colleagues Outside School disaggregated by State, Sector, Level, Role and compared with the General Population

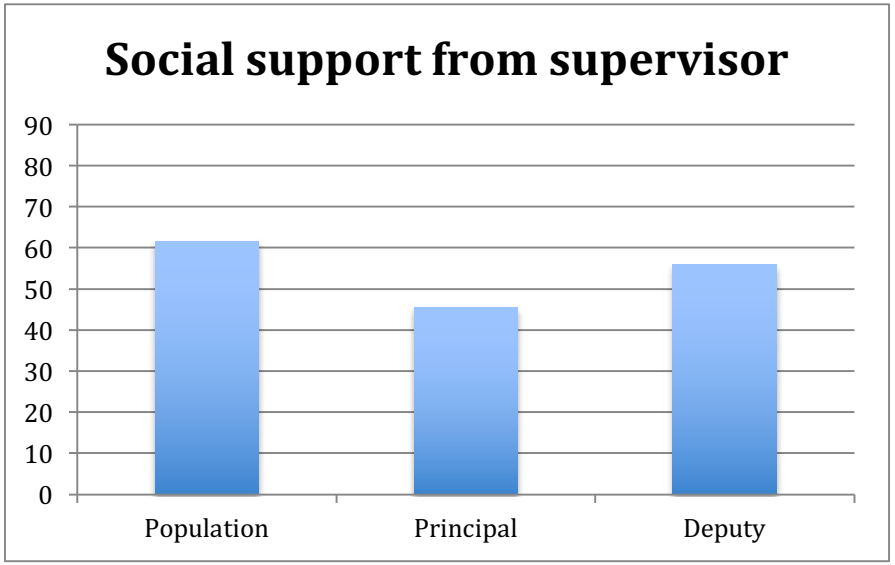


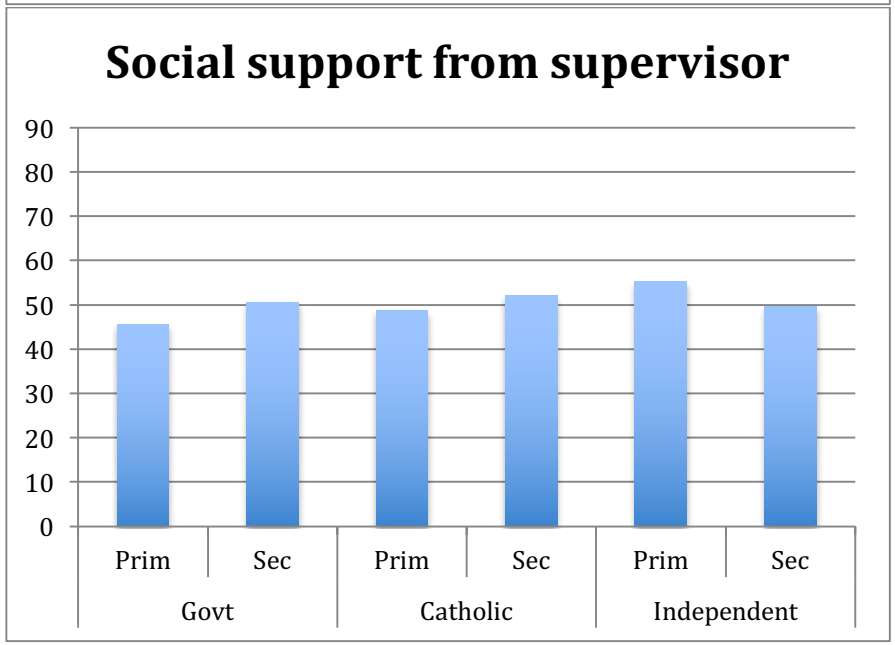




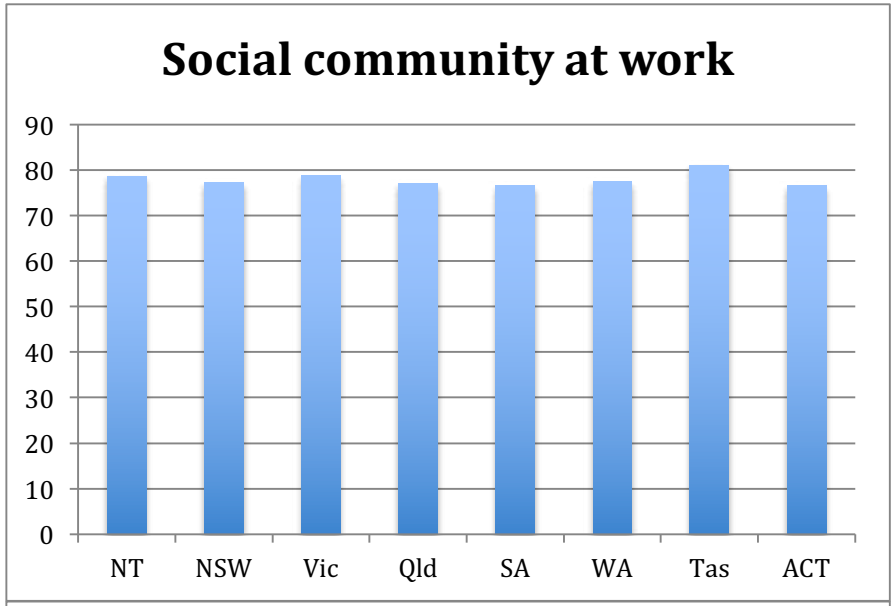
Social Support from Supervisor disaggregated by State, Sector, Level, Role and compared with the General Population

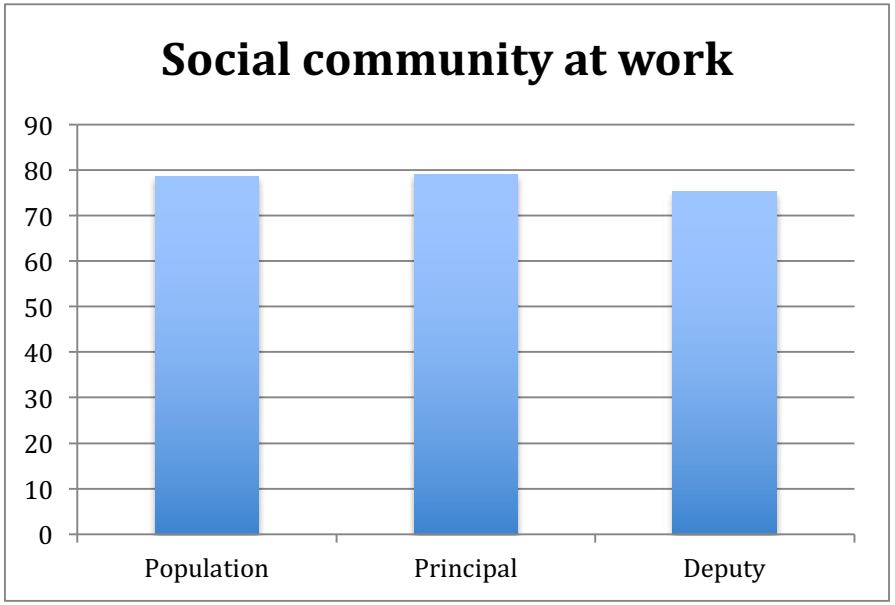


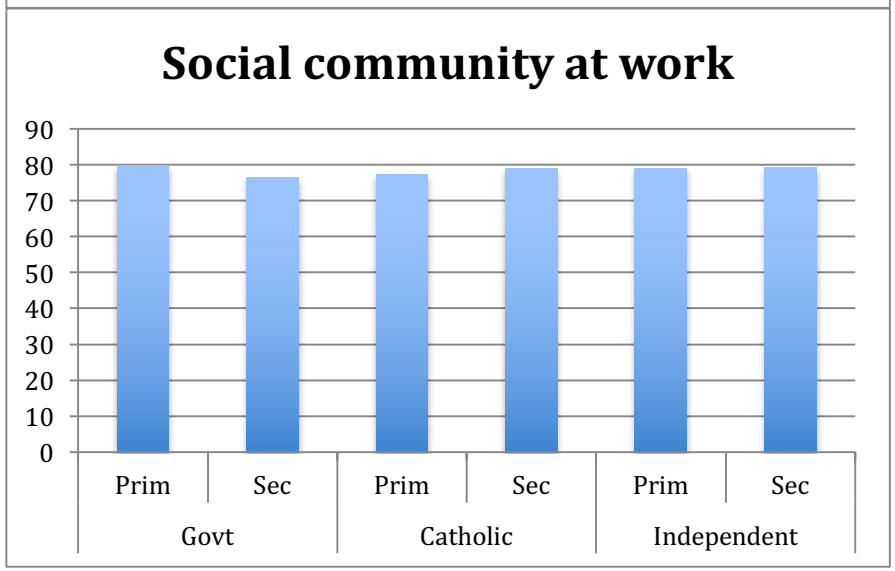




Social Community at Work disaggregated by State, Sector, Level, Role and compared with the General Population

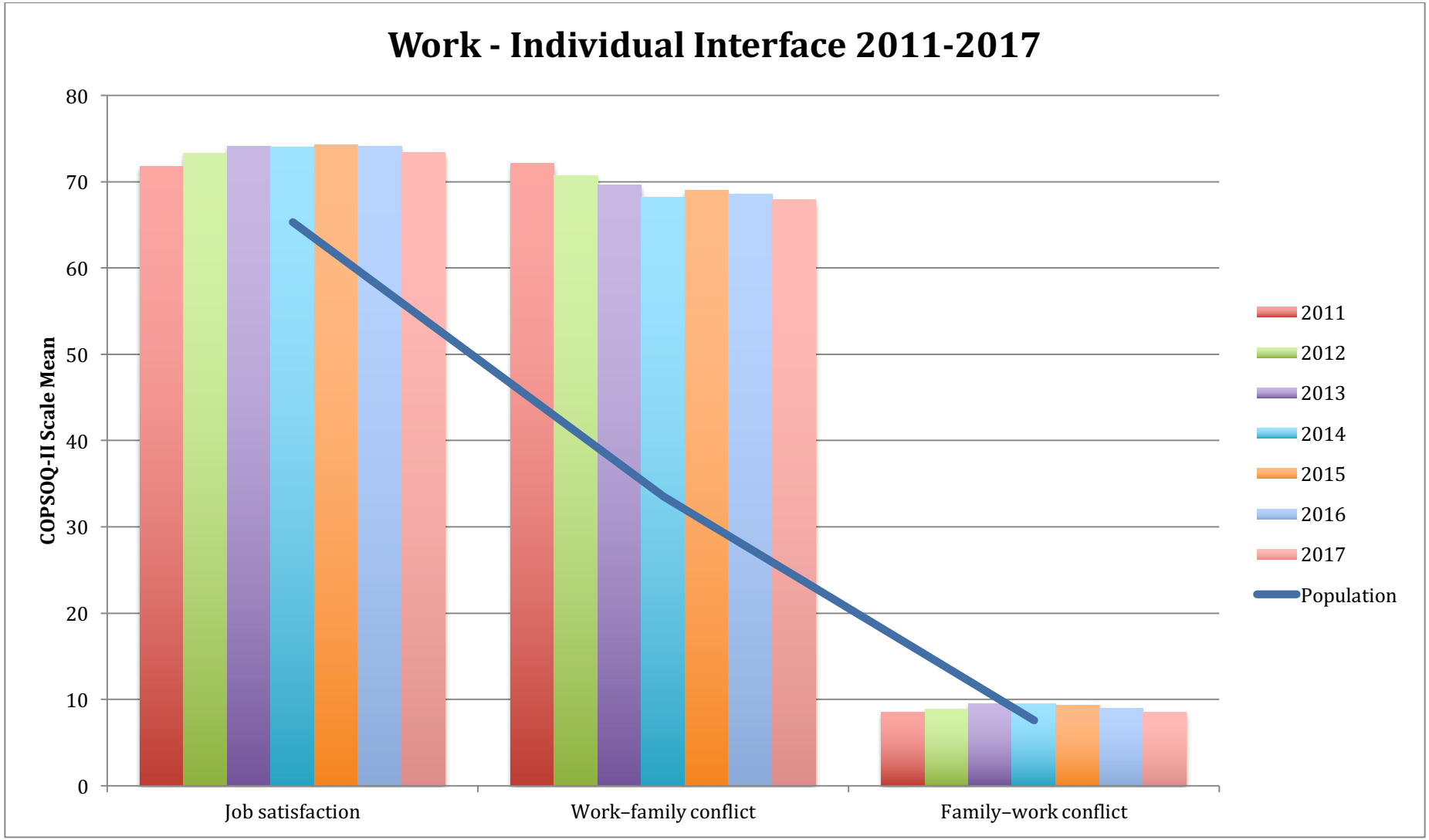






Work-individual Interface

Trend data 2011 – 2017



2017 Data in Detail

Subscales	Population		Critical Value*		All	Gov	Cat	Ind	Gender		Role		Govt		Catholic		Independent	
	M	*SD*	Low	High					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Job satisfaction	65.30	18.20	56.20	74.40	73.37	71.64	75.09	77.99	73.25	72.03	73.62	70.31	72.64	71.16	73.34	82.18	75.12	78.49
Work–family conflict	33.50	24.30	21.35	45.65	67.90	69.02	69.26	69.21	70.90	66.39	70.22	65.66	68.84	65.80	68.28	64.67	68.08	73.28
Family–work conflict	7.60	15.30	-0.05	15.25	8.59	8.88	9.24	9.63	8.26	10.09	9.26	8.22	7.82	8.90	8.58	10.33	15.80	4.86

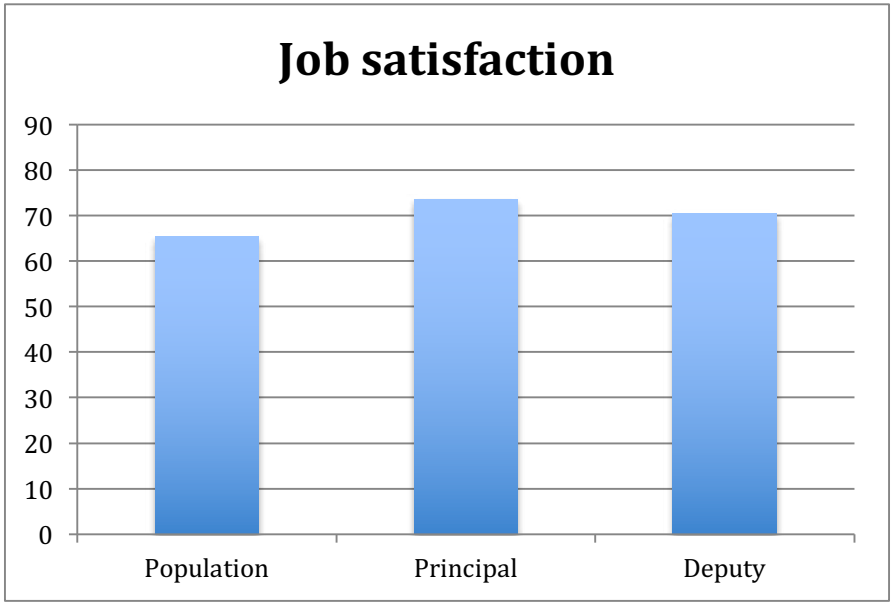
*Mean ±.5SD

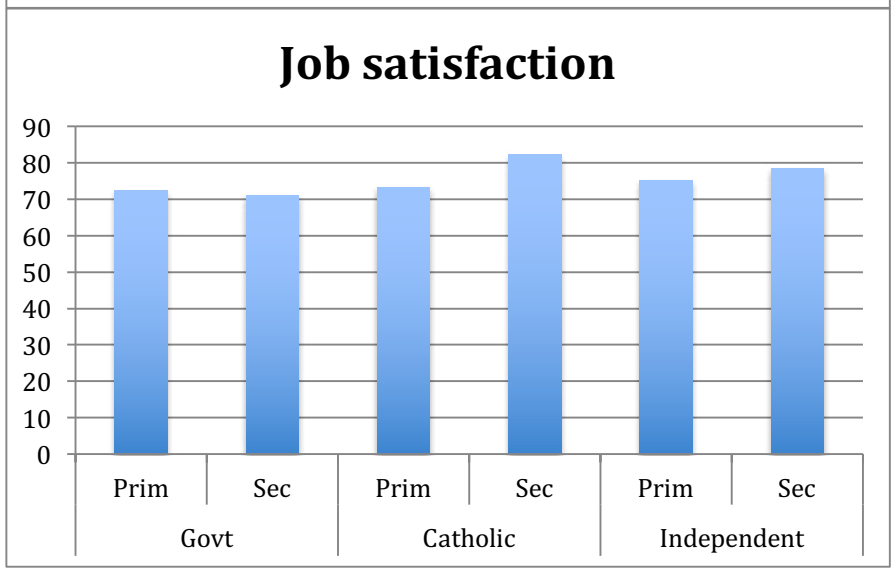
- **Job satisfaction** deals with principals' experience of satisfaction with various aspects of work.
- **Work-family conflict** deals with the possible consequences of work on family/personal life. The focus is on two areas, namely conflict regarding energy (mental and physical energy) and conflict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

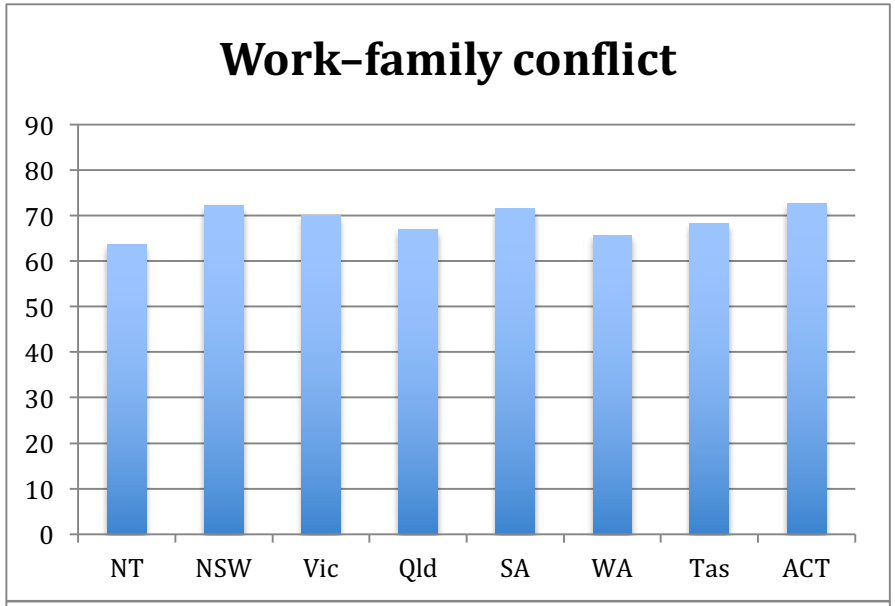
- **Trends** Job satisfaction has been trending up slightly over the survey period. Work family conflict has been trending down slightly over the same period.
- **Job satisfaction** Generally speaking secondary school principals are noticeably more satisfied with their job than their primary colleagues and the general population, with Independent primary school leaders the exception, reporting the highest average levels of Job Satisfaction.
- **Work-family conflict** while the trend is down, the levels is still very high, at 2.2 times the rate of the general population. 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 along with the diminishing levels of support should be cause considerable concern for policy makers, as it related directly to the Quantitative Demands of the role.
- **Family-work conflict** School leaders' average scores are at the general population levels.

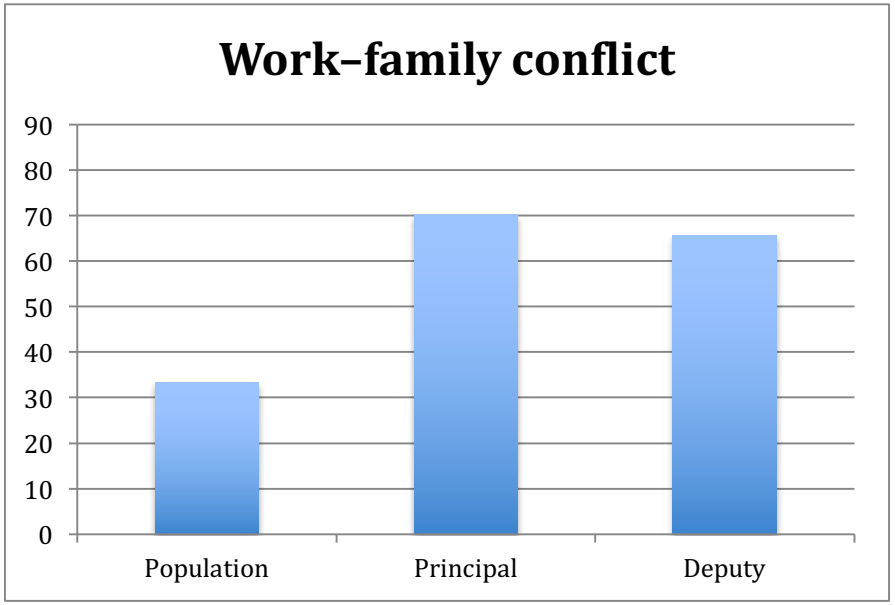
Job Satisfaction disaggregated by State, Sector, Level, Role and compared with the General Population

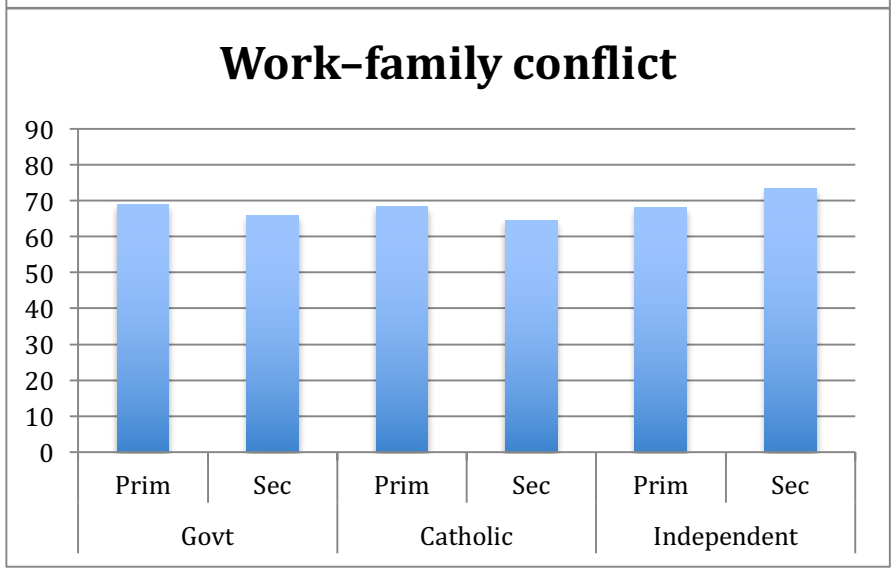




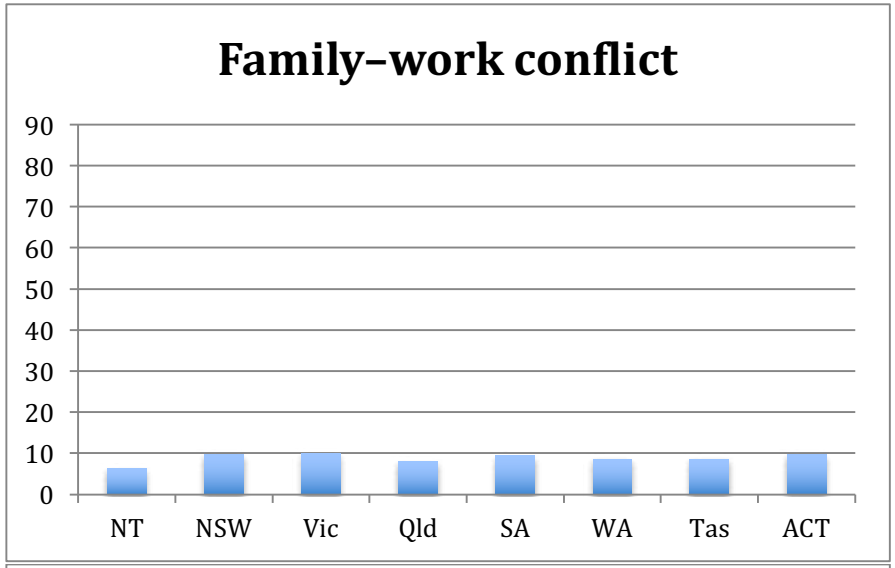
Work-Family Conflict disaggregated by State, Sector, Level, Role and compared with the General Population

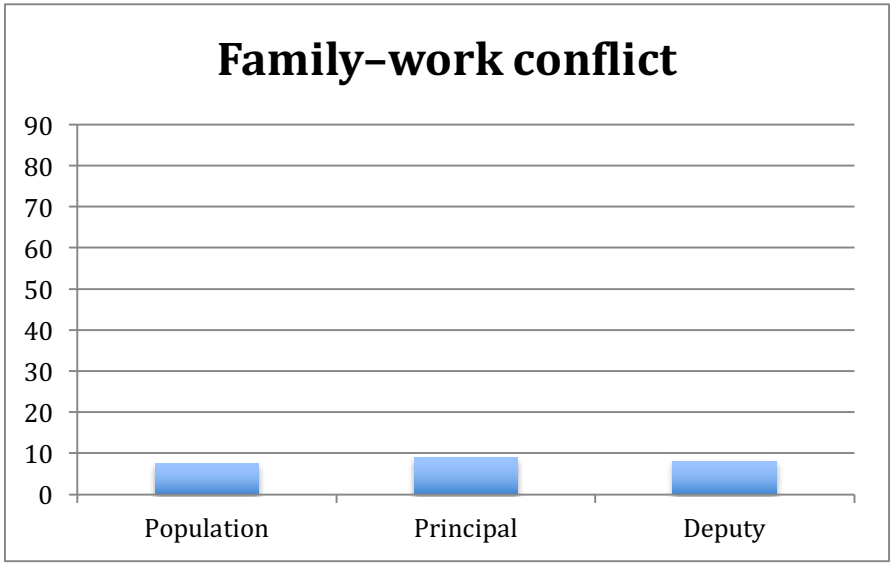


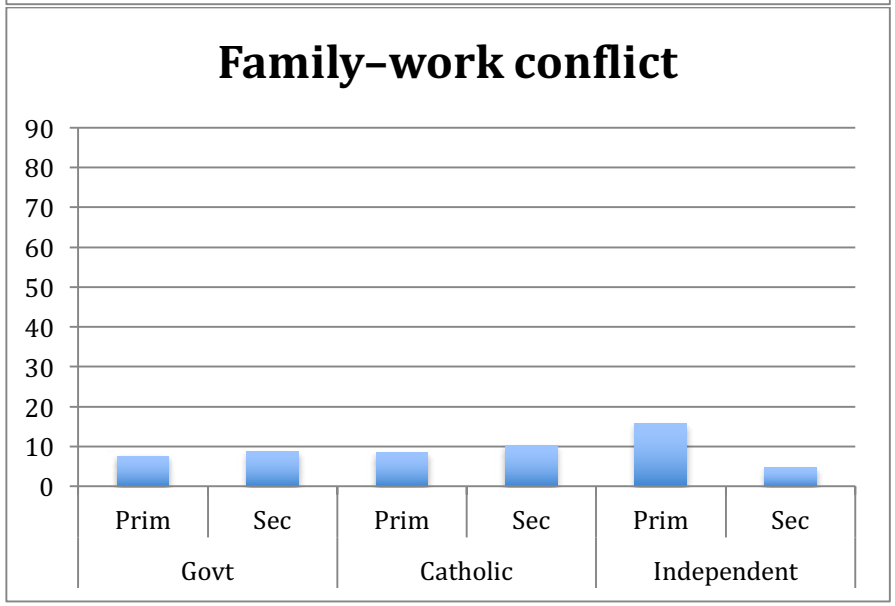




Family-Work Conflict disaggregated by State, Sector, Level, Role and compared with the General Population

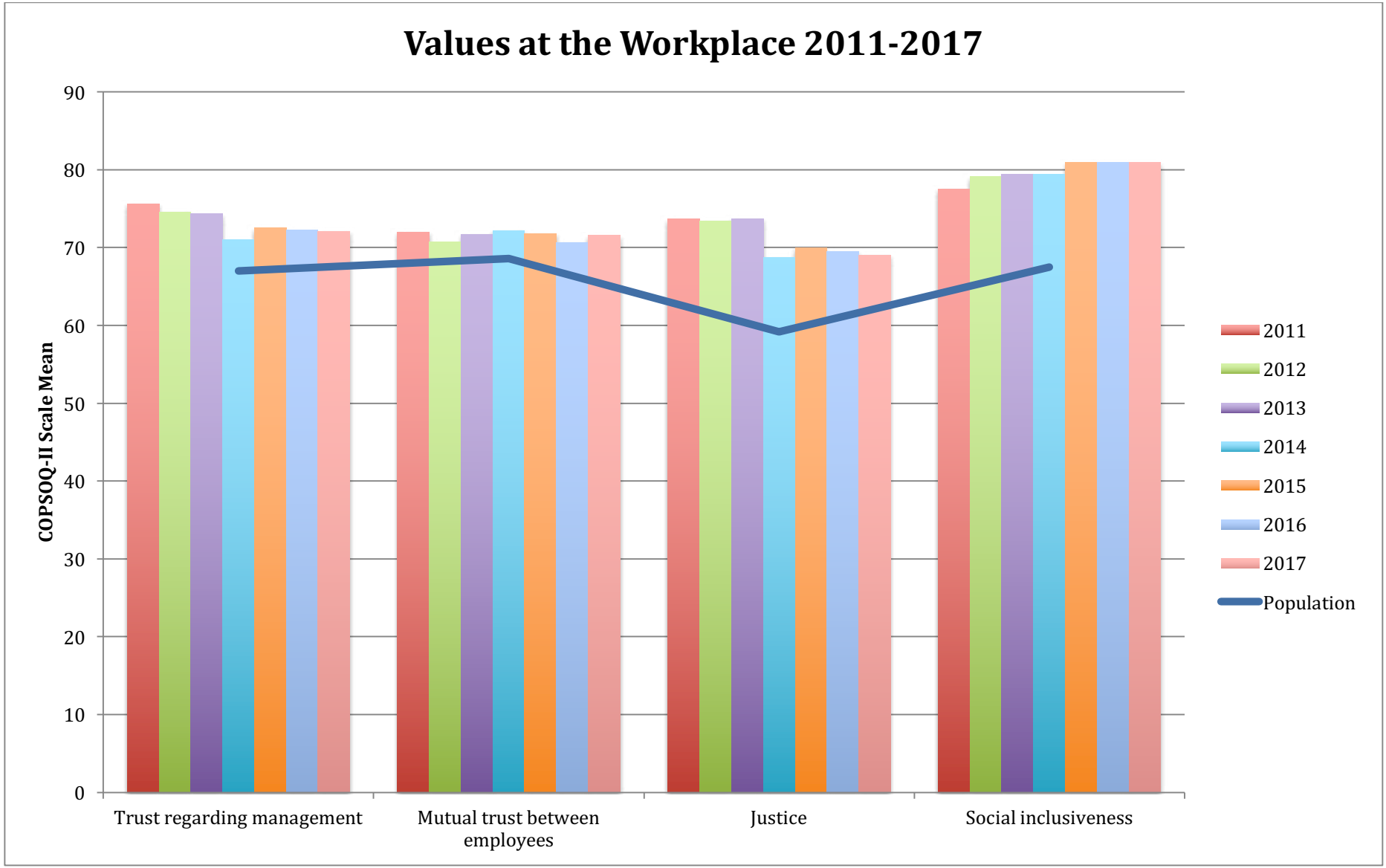






Values at the Workplace

Trend data 2011 – 2017



2017 Data in Detail

Subscales	Population		Critical Value*		All	Govt	Cath	Ind	Gender		Role		Govt		Catholic		Independent	
	M	SD	Low	High					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Trust regarding management	67.00	17.70	58.15	75.85	72.10	71.24	72.69	74.79	71.99	71.50	72.24	70.46	72.40	70.46	72.64	75.88	71.66	79.17
Mutual trust between employees	68.60	16.90	60.15	77.05	71.55	70.26	71.64	73.61	70.89	70.67	72.60	65.63	72.83	67.81	72.31	71.45	71.93	71.02
Justice	59.20	17.70	50.35	68.05	69.00	68.07	69.90	70.86	68.55	68.69	69.11	67.41	69.06	68.03	70.42	71.43	67.79	71.09
Social inclusiveness	67.50	16.30	59.35	75.65	80.93	82.41	74.20	76.33	79.41	82.39	80.50	81.45	82.45	84.96	73.81	78.49	72.26	83.85

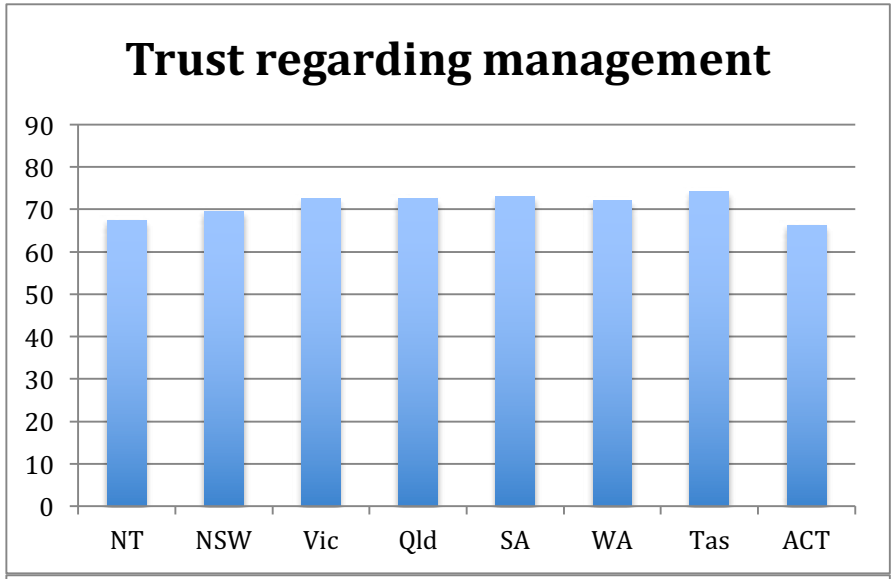
*Mean ±.5SD

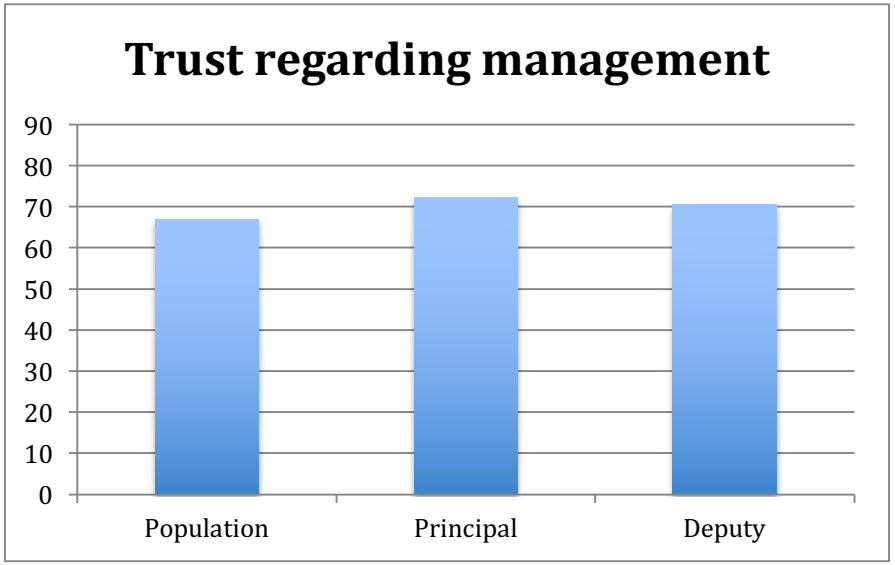
- **Trust regarding management (Vertical Trust)** deals with whether the employees can trust the management and vice versa. Vertical trust can be observed in the communication between the management and the employees.
- **Mutual Trust between Employees (Horizontal trust)** deals with whether the employees 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.

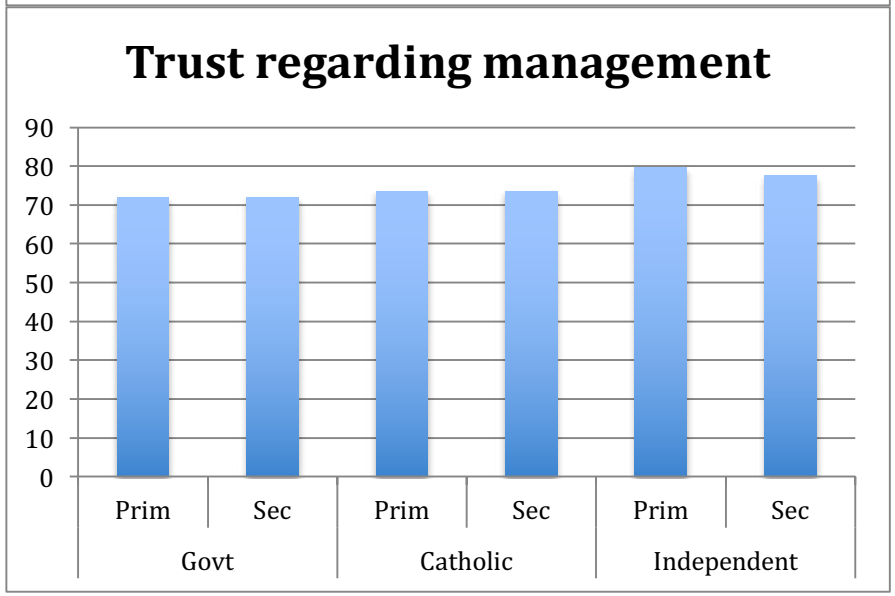
Results

- **Trends** Trust Regarding Management and Justice are trending down over the life of the survey while social inclusiveness is trending up.
- **Trust regarding management (Vertical Trust)** Independent school leaders have, on average, noticeably higher trust in their management than the other groups, albeit Catholic secondary school leaders are close to the cut off score. Tasmanian school leaders have noticeably less trust in leaders than all other states.
- **Mutual Trust between Employees (Horizontal trust)** School leaders report, on average similar levels of horizontal trust as the general population.
- **Justice** All groups report noticeably higher levels of trust than the general population.
- **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.

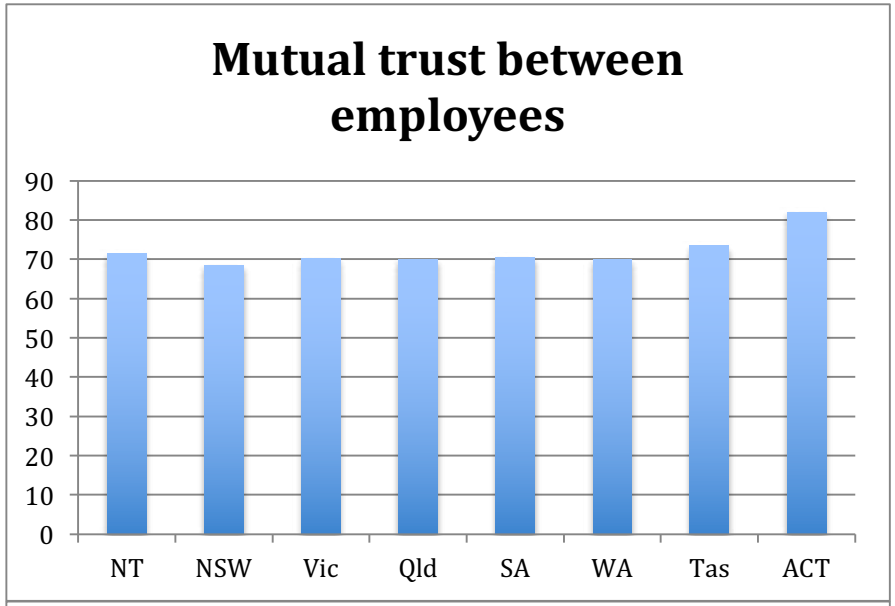
Trust regarding management disaggregated by State, Sector, Level, Role and compared with the General Population

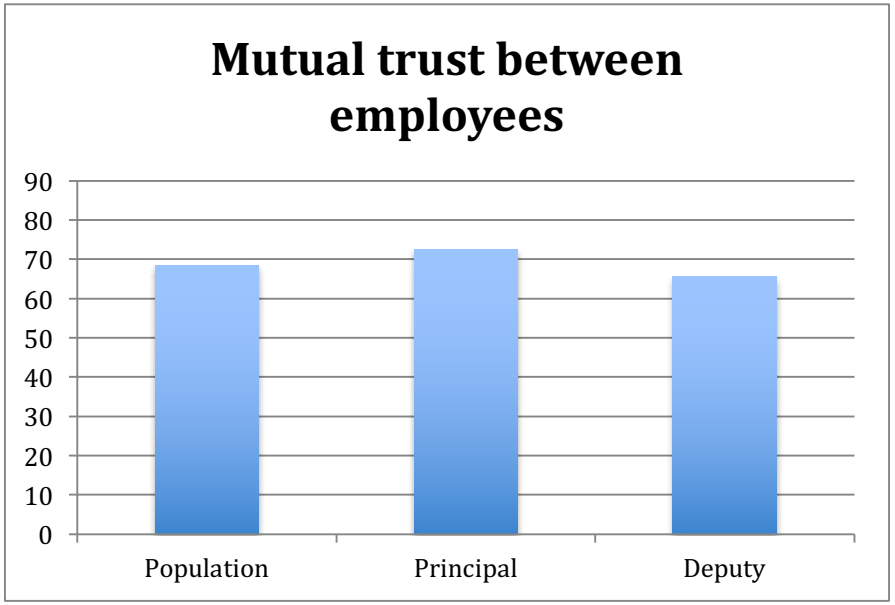


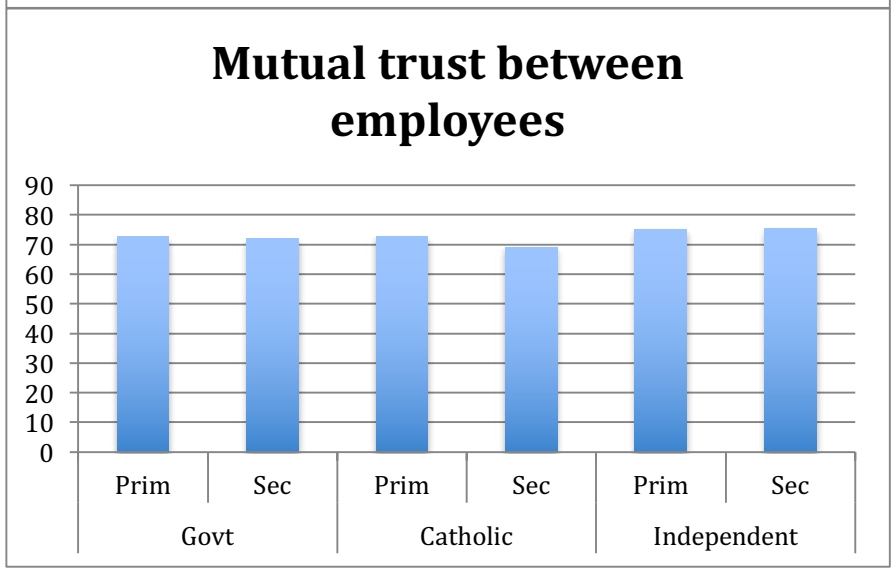


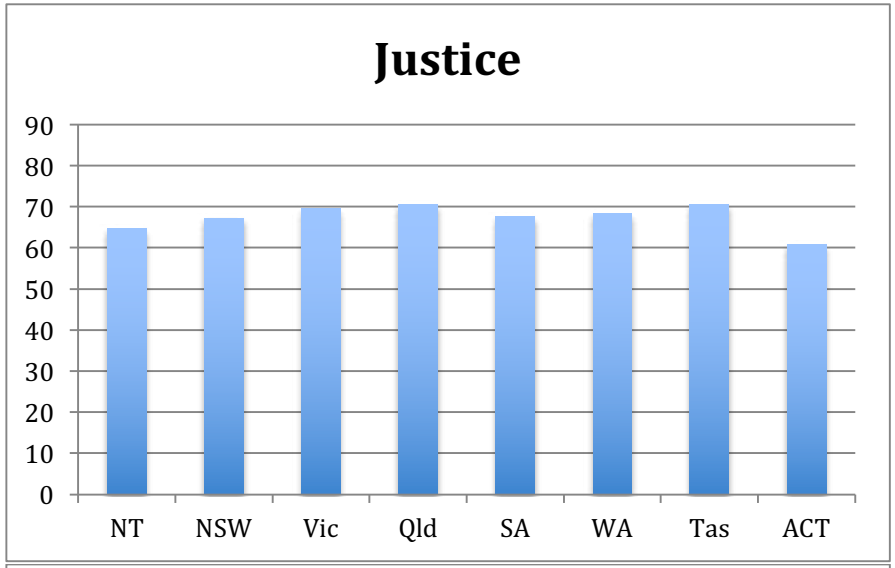


Mutual Trust between Employees disaggregated by State, Sector, Level, Role and compared with the General Population








Justice
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Qld
SA
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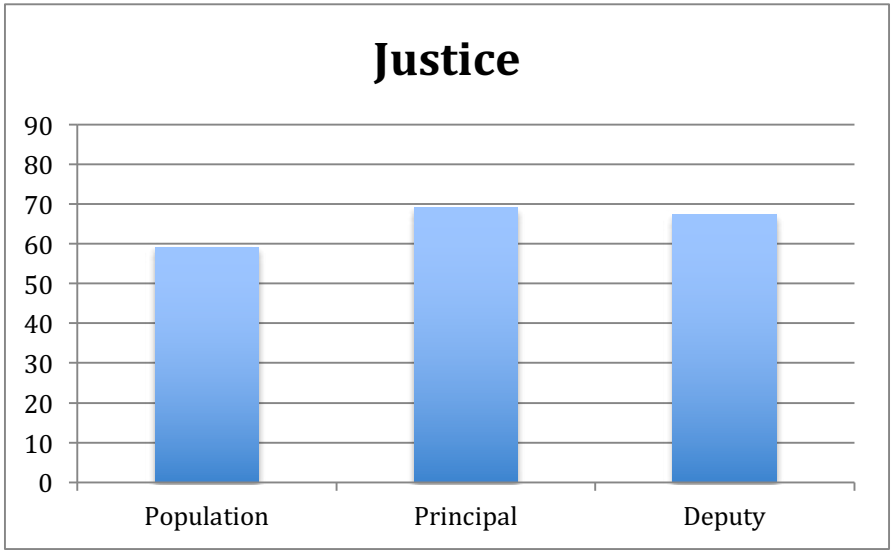
Tas
ACT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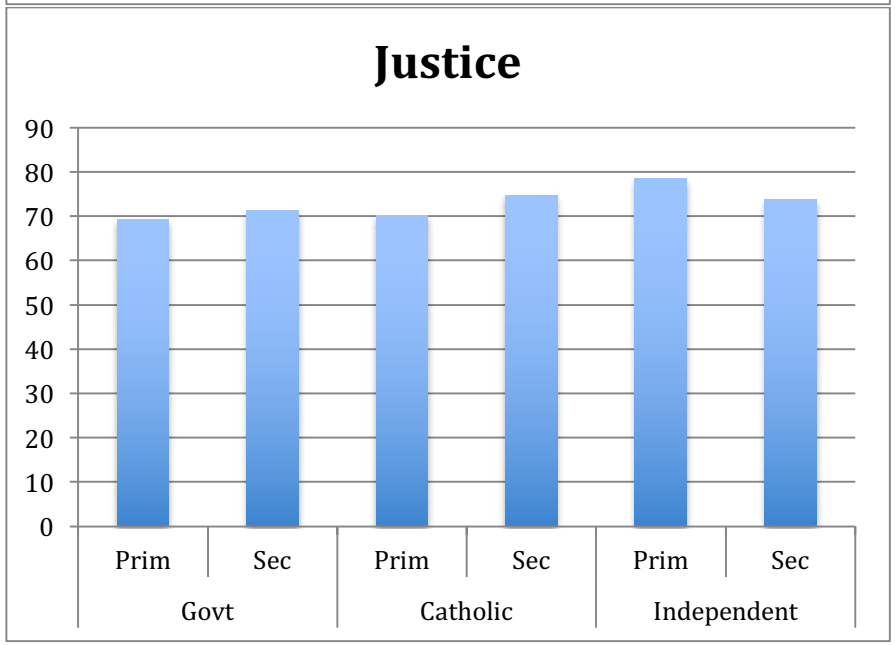
Deputy


Justice
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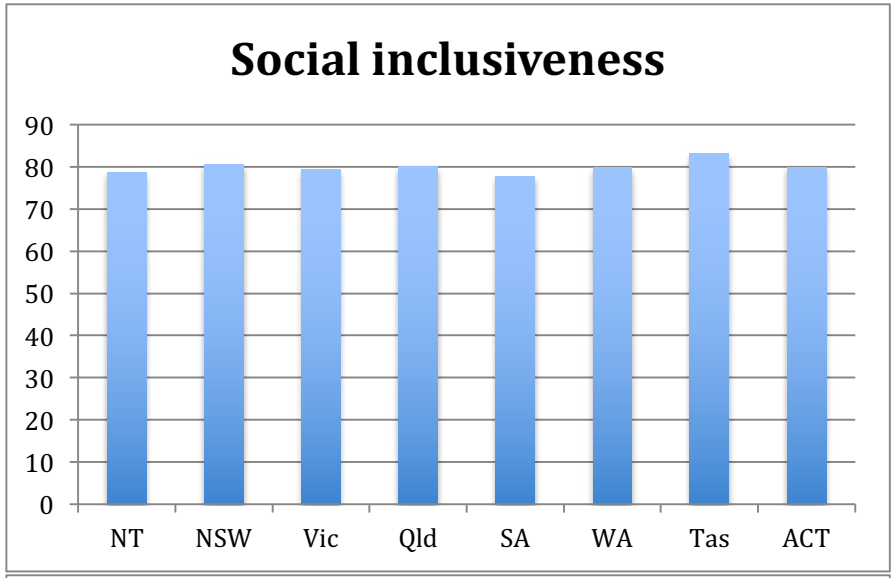
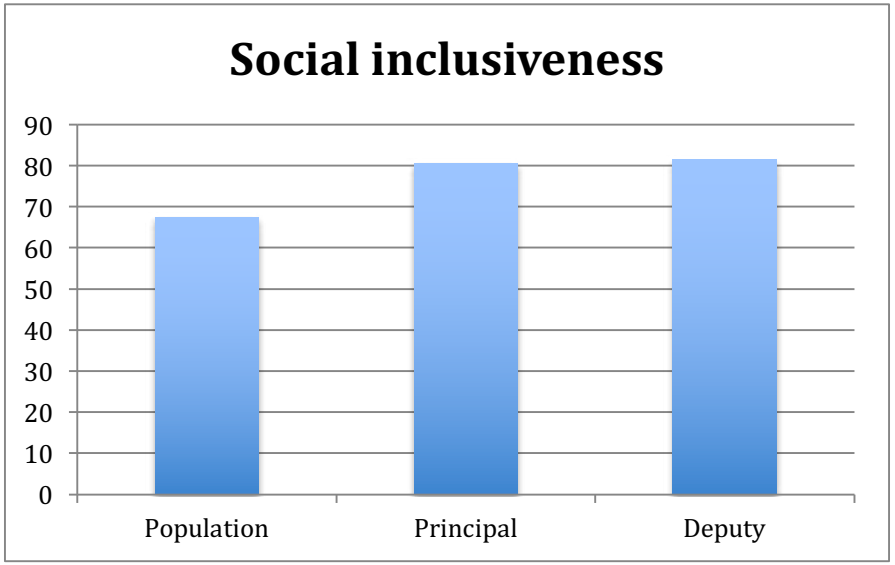
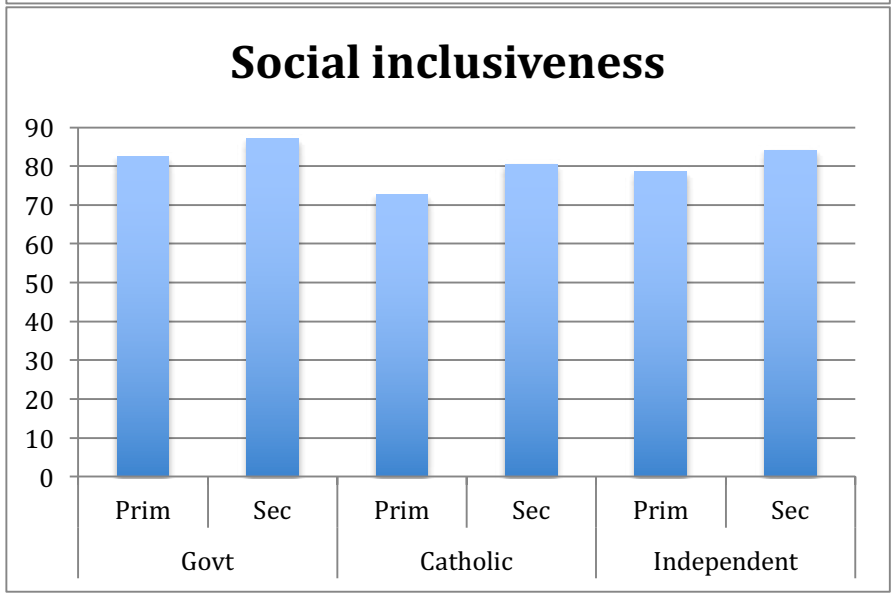
Govt
Catholic
Independent

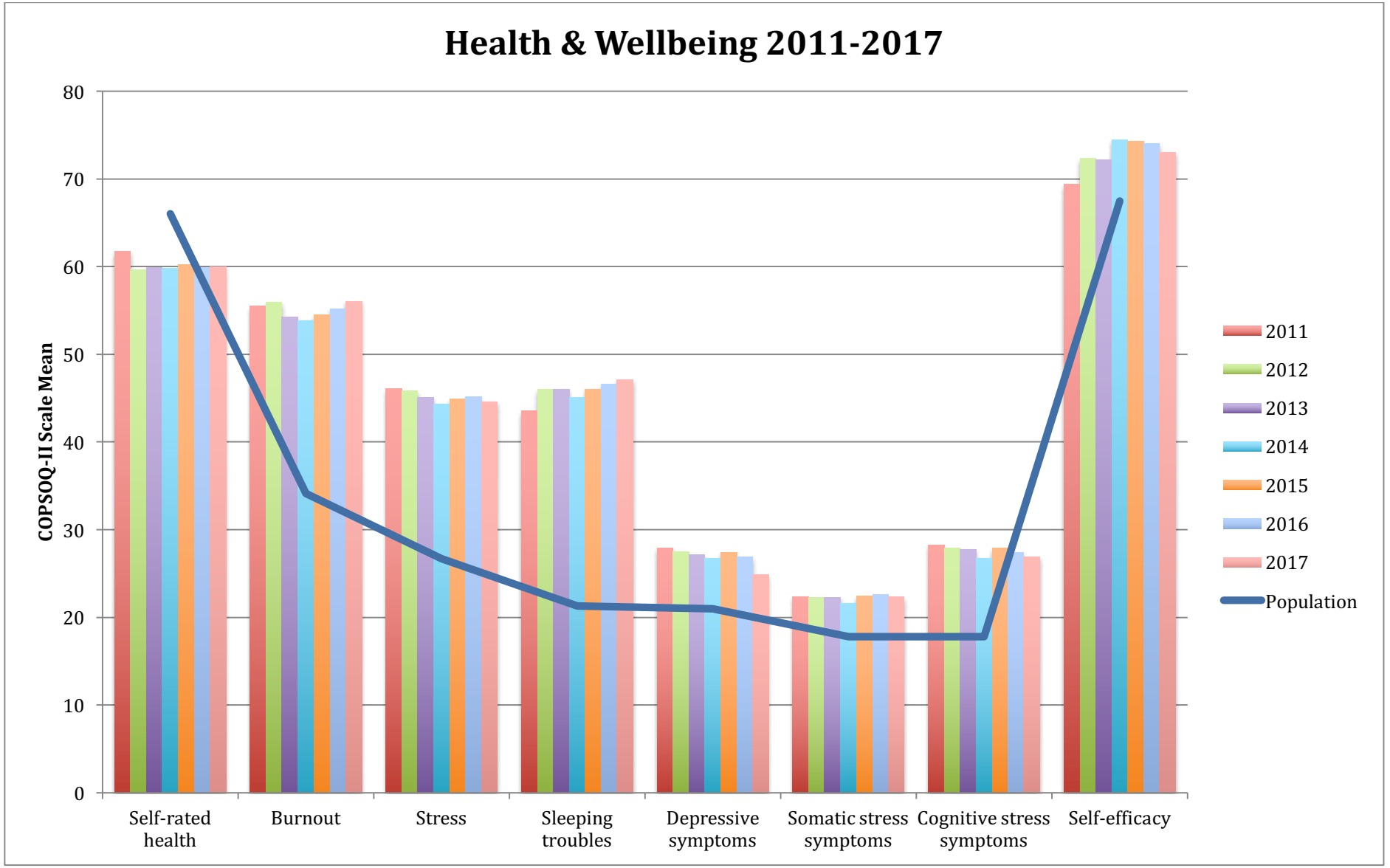
Social Inclusiveness disaggregated by State, Sector, Level, Role and compared with the General Population







Trend data 2011 – 2017



2017 Data in Detail

Subscales	Population		Critical Value*		All	Govt	Cath	Ind	Gender		Role		Govt		Catholic		Independent	
	M	SD	Low	High					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Self-rated health	66.00	20.90	55.55	76.45	59.98	57.91	60.18	64.70	59.54	57.98	58.28	60.44	59.43	59.03	59.39	69.90	62.83	60.42
Burnout	34.10	18.20	25.00	43.20	56.07	56.47	54.63	51.95	57.49	53.23	55.62	56.19	57.40	55.85	57.23	47.83	55.18	56.25
Stress	26.70	17.70	17.85	35.55	44.60	44.99	45.08	42.40	45.36	43.86	44.83	44.65	45.19	43.97	46.70	42.98	45.56	39.58
Sleeping troubles	21.30	19.00	11.80	30.80	47.09	47.79	47.29	42.25	47.86	46.17	47.50	46.69	48.32	46.26	48.58	44.52	47.94	39.06
Depressive symptoms	21.00	16.50	12.75	29.25	24.87	26.17	25.72	23.10	25.27	26.59	25.80	25.85	24.77	25.99	25.96	23.60	25.74	18.49
Somatic stress symptoms	17.80	16.00	9.80	25.80	22.35	23.17	22.14	19.80	24.63	19.85	22.62	23.07	23.64	21.96	22.60	19.26	21.22	16.93
Cognitive stress symptoms	17.80	15.70	9.95	25.65	26.90	28.32	27.43	23.00	27.67	27.66	28.04	26.76	27.95	26.21	28.17	24.49	25.16	17.19
Self-efficacy	67.50	16.00	59.50	75.50	73.04	72.71	72.00	72.84	73.19	71.80	72.88	71.85	73.24	73.37	72.19	76.09	72.46	75.94

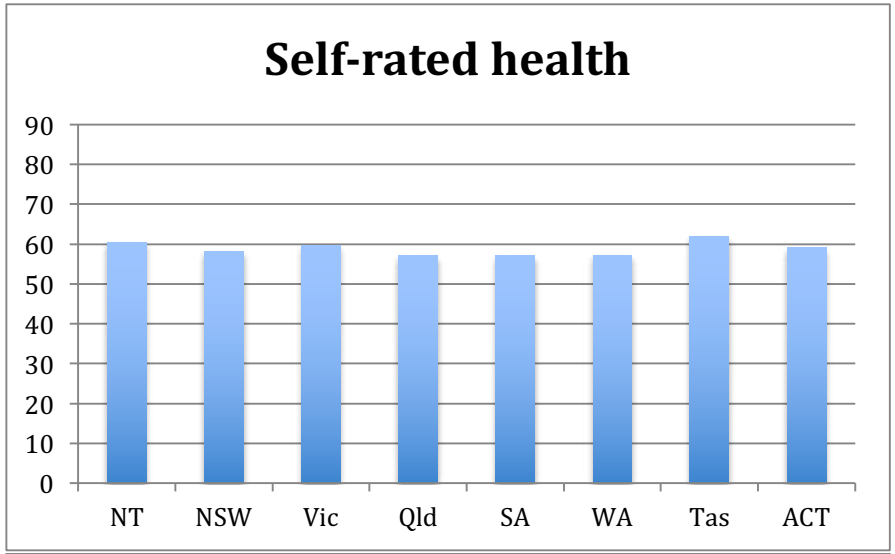
*Mean ±.5SD

- **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, hospitalisations, 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** Self-rated health remains ~10% below the general population. This is despite the fact that school leaders have all the attributes of a work group that should exceed the average. On 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 scores. Levels of Sleeping Troubles are trending up, which is very concerning. They remain at double the rate of sleeping difficulties experienced by the general population. Self-Efficacy is also trending up over the survey period.
- **General health** is discussed above. It is 0.9 times the rate of the general population.
- **Burnout** school leaders report 1.6 times the rate of burnout compared to the general population. It is noticeably higher in New South Wales and SA and the ACT than the other states.
- **Stress** is reported at 1.7 times the general population rate. All groups report levels above the critical cut off score.

- **Sleeping troubles** is reported at 2.2 times the general population rate. Chronic sleep deprivation predicts a number of long-term health issues, including memory difficulties, obesity and depression.
- **Somatic stress** is reported at 1.3 times the general population rate.
- **Cognitive stress** school leaders report 1.6 times the rate of Cognitive Stress compared to the general population. It appears to predominate in primary school leaders regardless of state and sector, and is noticeably higher in New South Wales, South Australia and Victoria.
- **Depressive symptoms** are reported for school leaders at 1.3 times the rate of the general population.
- **Self-efficacy** All school leaders report, on average, levels at or approaching noticeably higher scores on this scale than the general population.


Self-rated health
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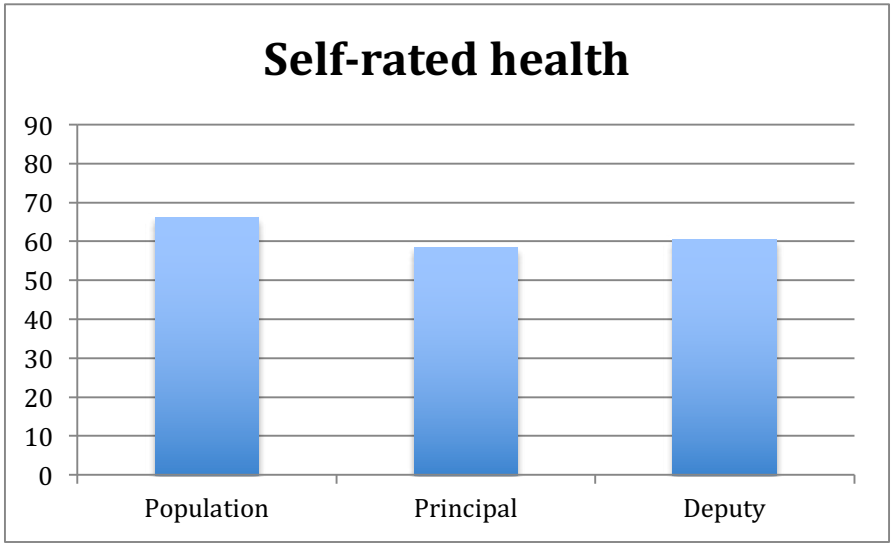
Self-rated health
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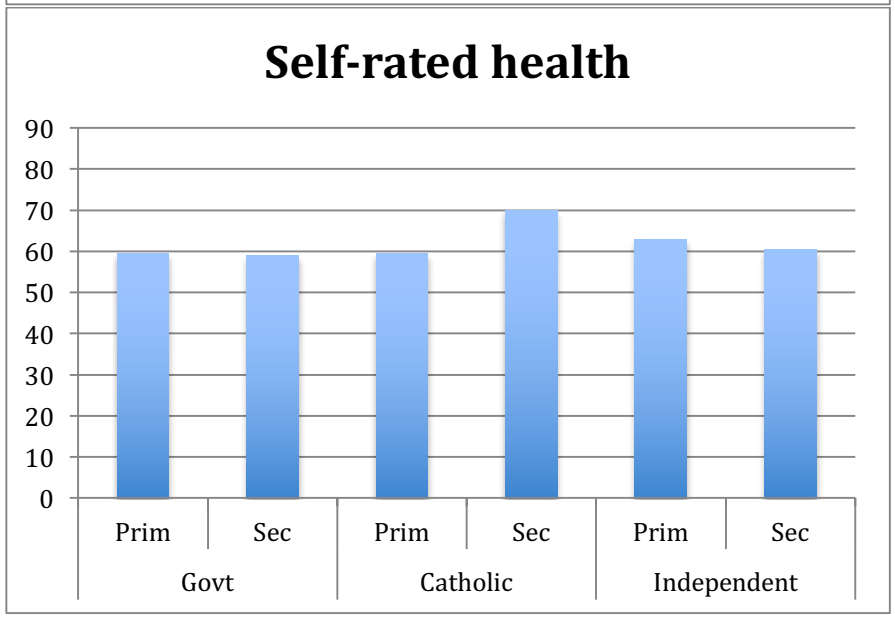
Population
Principal
Deputy


Self-rated health
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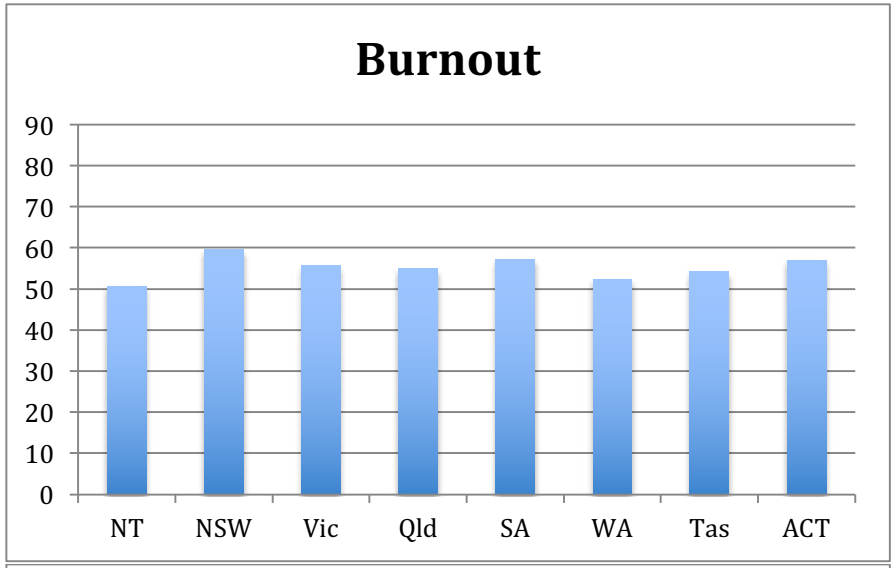
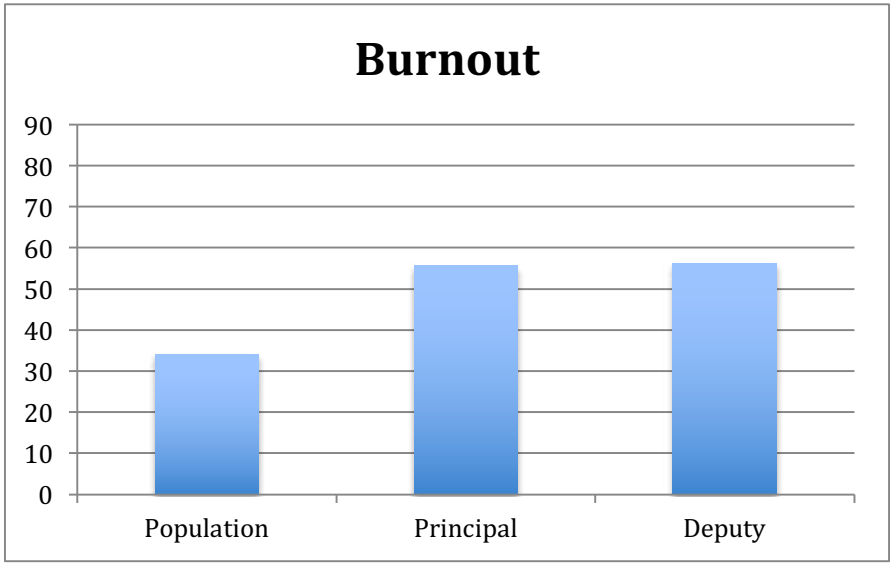
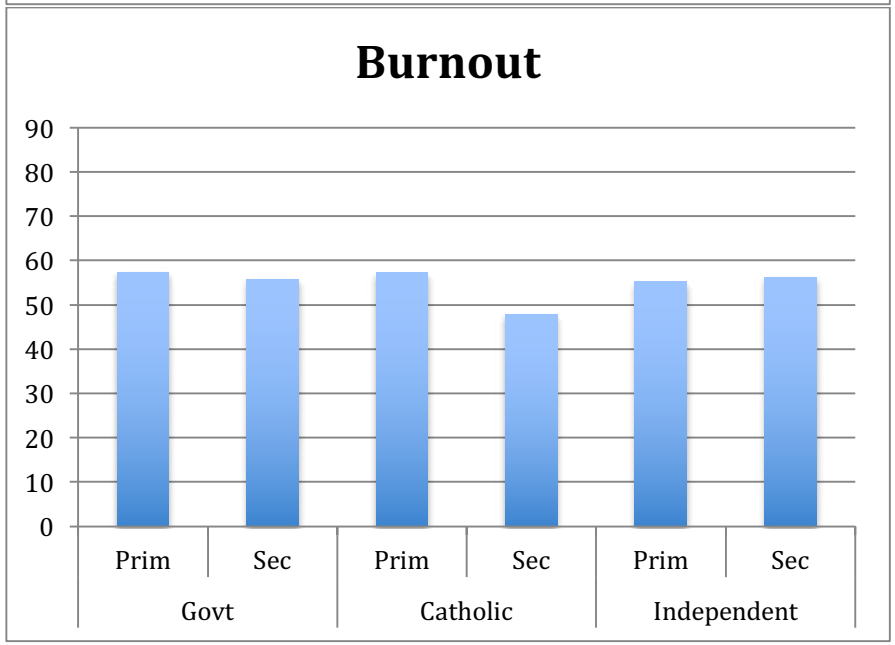
Prim
Sec
Govt
Catholic
Independent

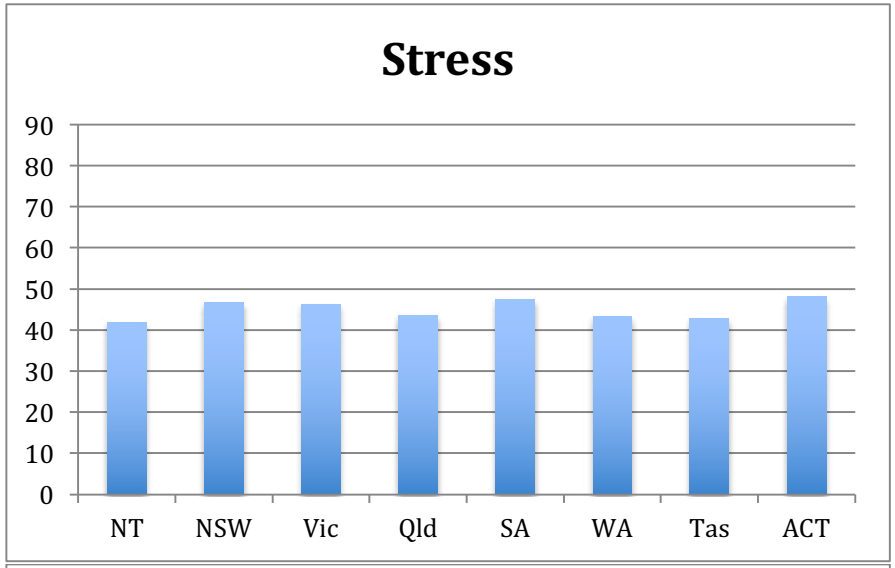
Burnout disaggregated by State, Sector, Level, Role and compared with the General Population

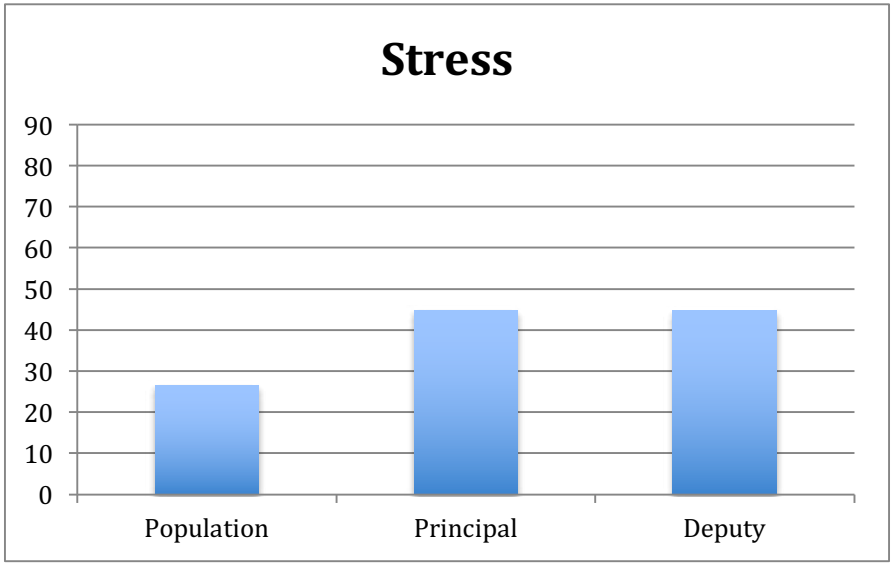


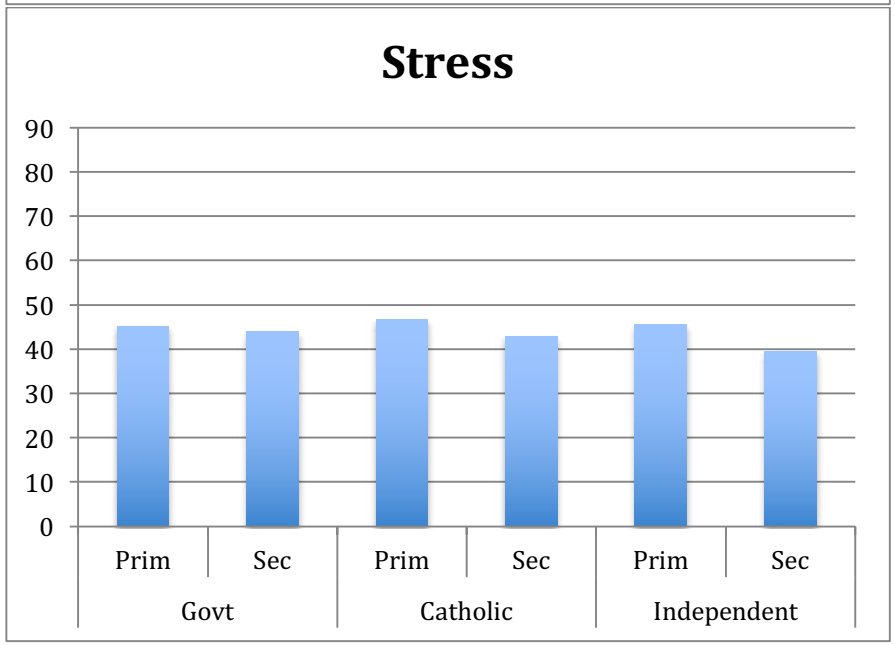




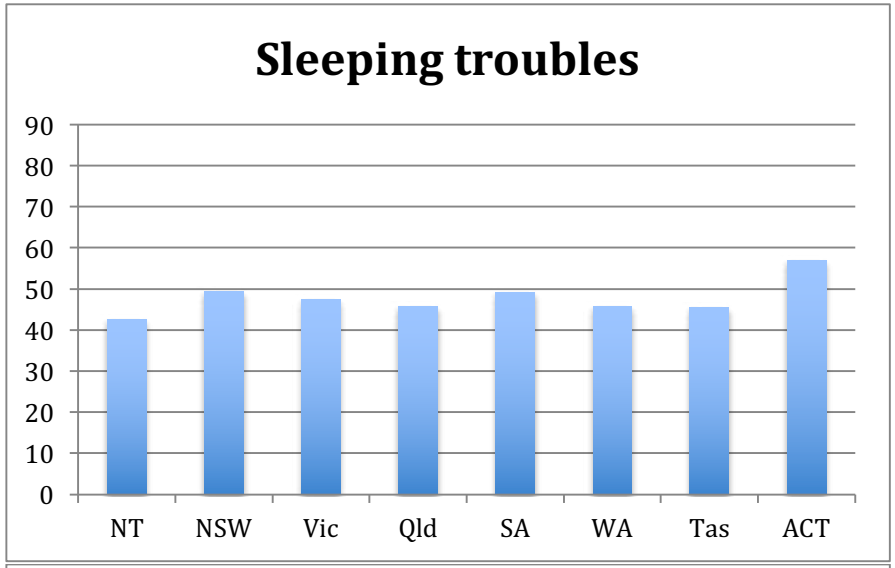
Stress disaggregated by State, Sector, Level, Role and compared with the General Population

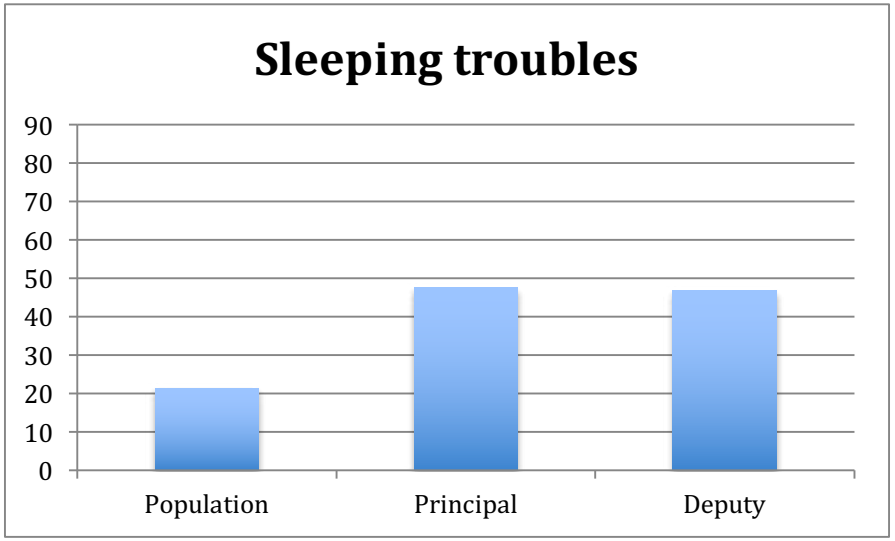


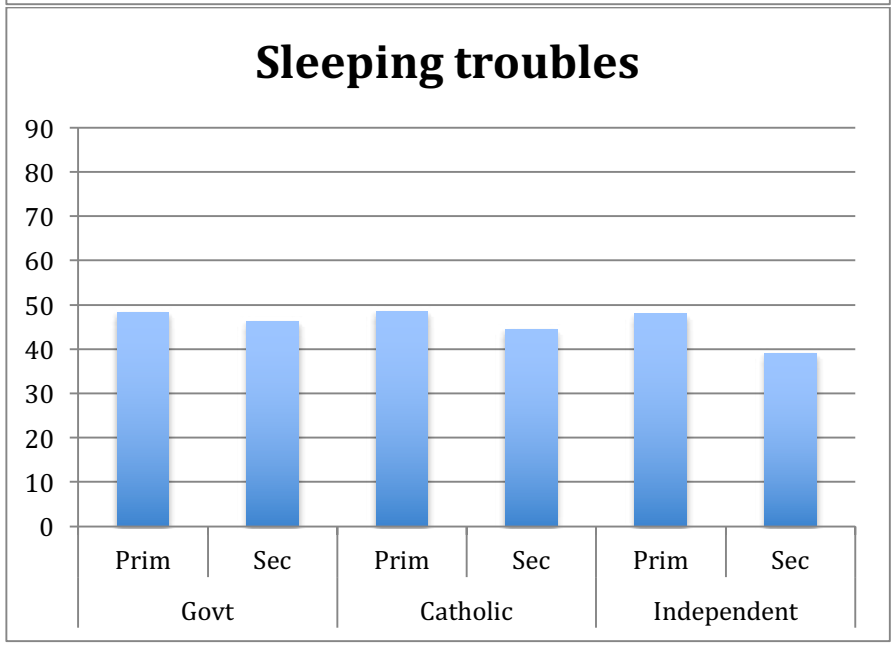




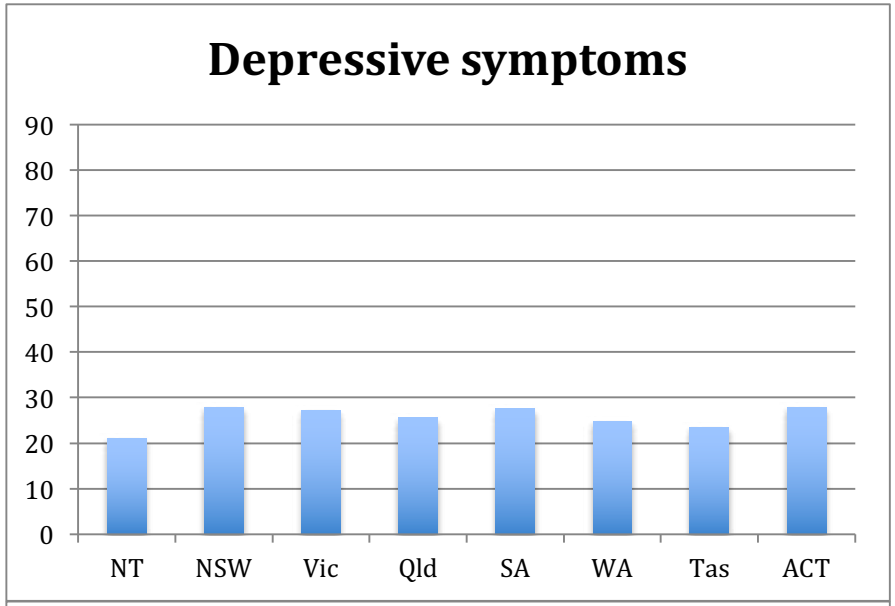
Sleeping Troubles disaggregated by State, Sector, Level, Role and compared with the General Population

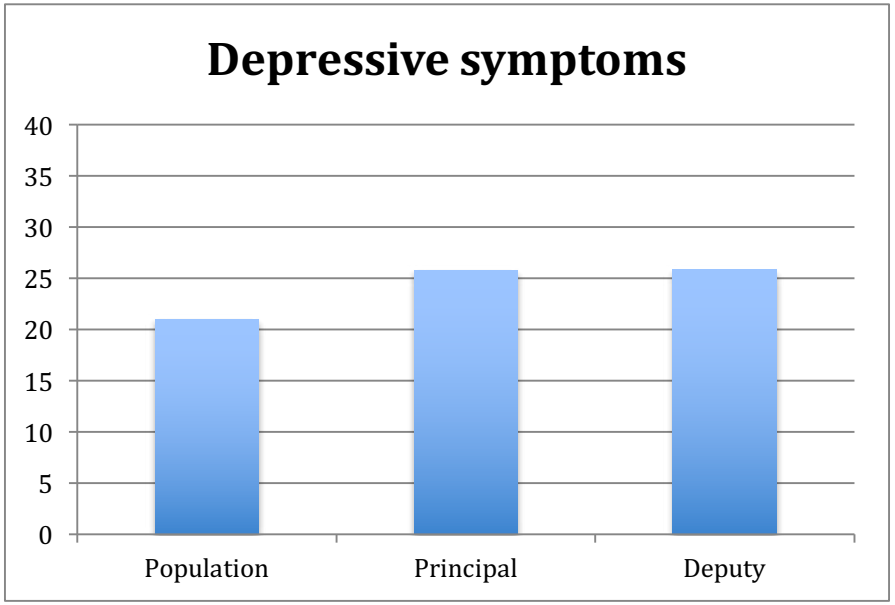


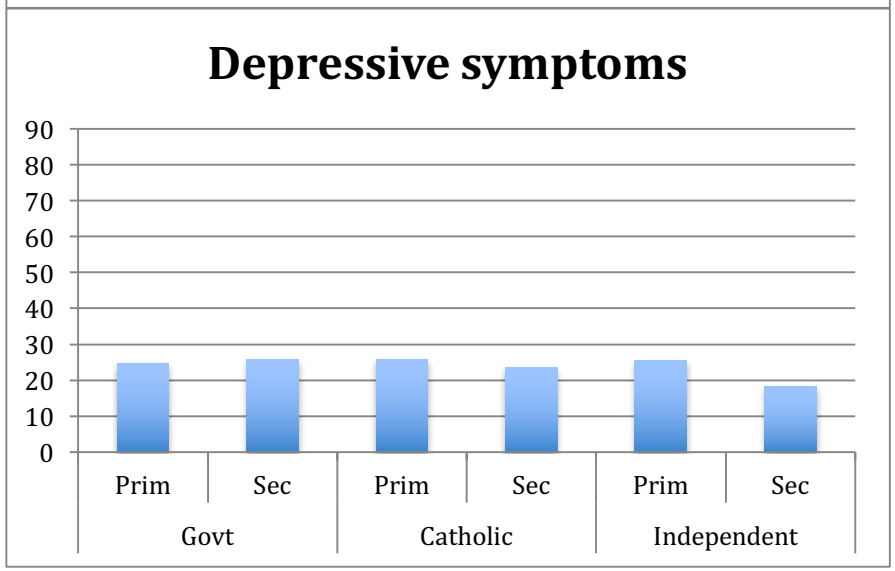




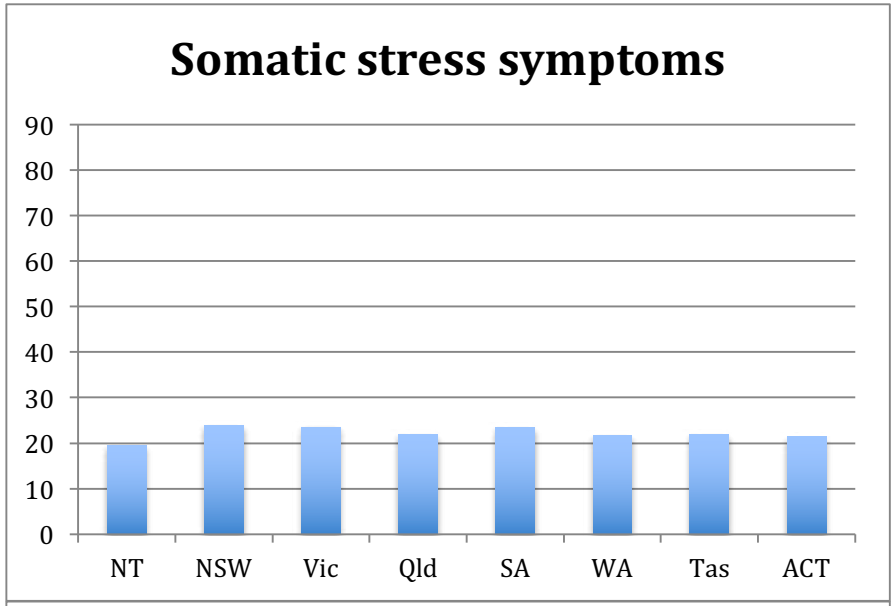
Depressive Symptoms disaggregated by State, Sector, Level, Role and compared with the General Population

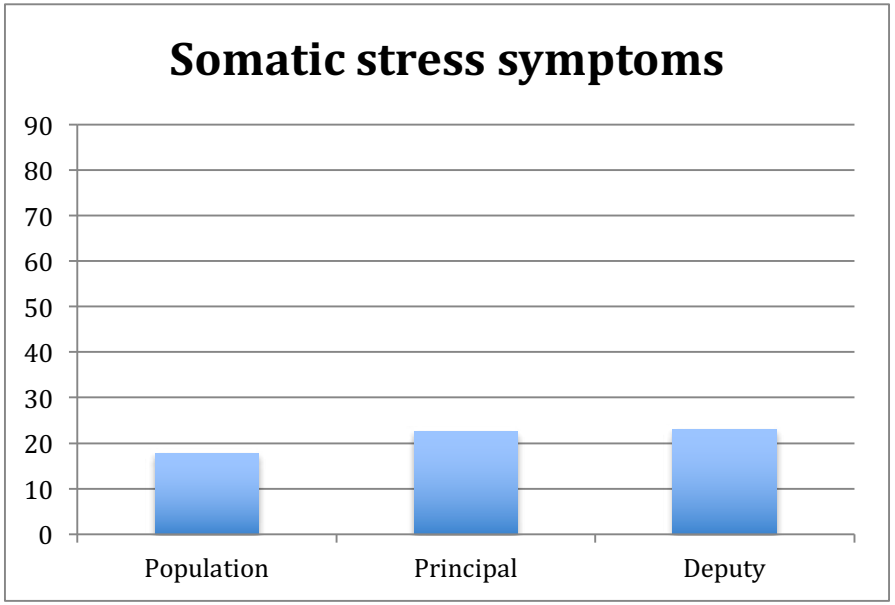


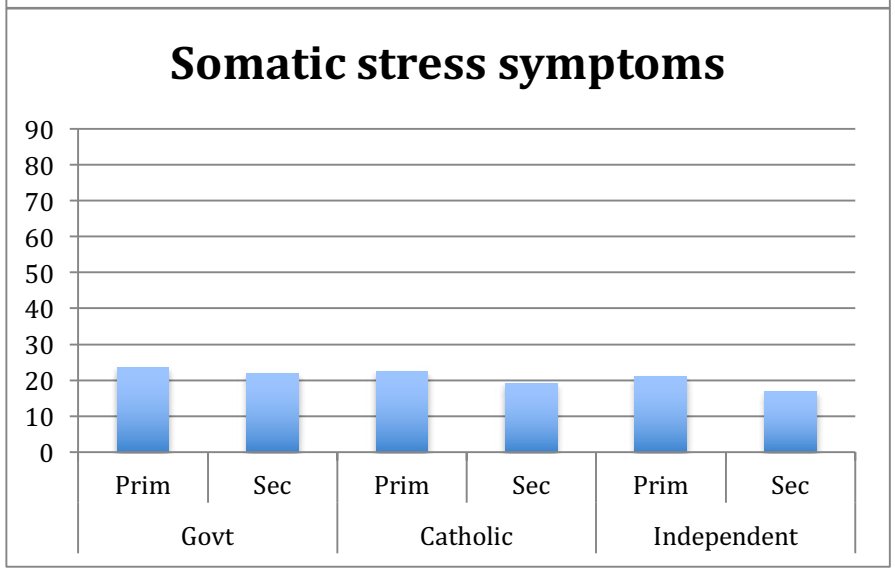




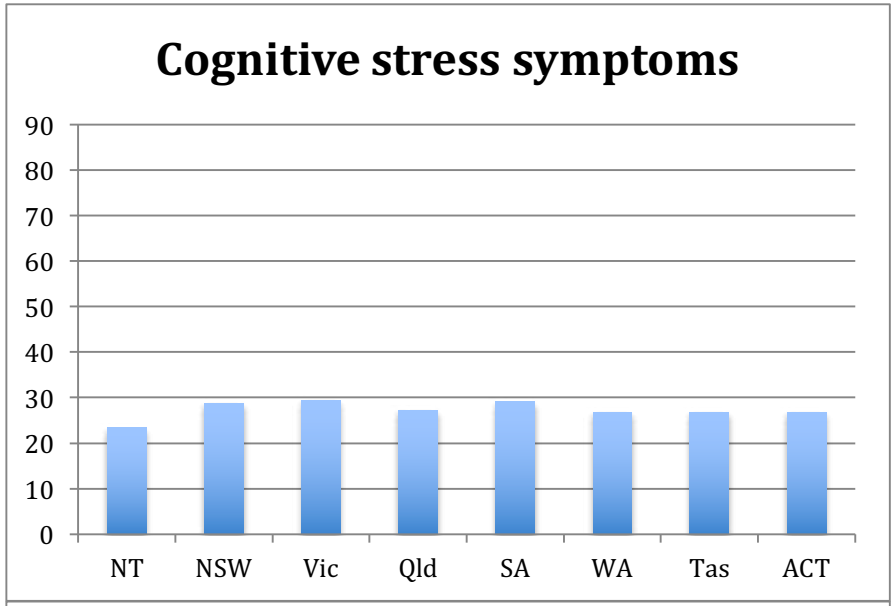
Somatic Stress disaggregated by State, Sector, Level, Role and compared with the General Population

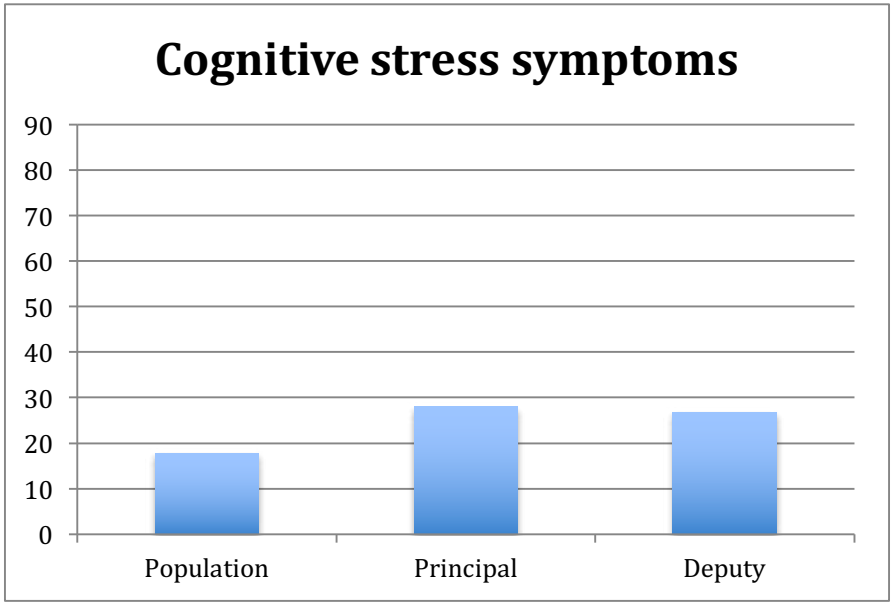


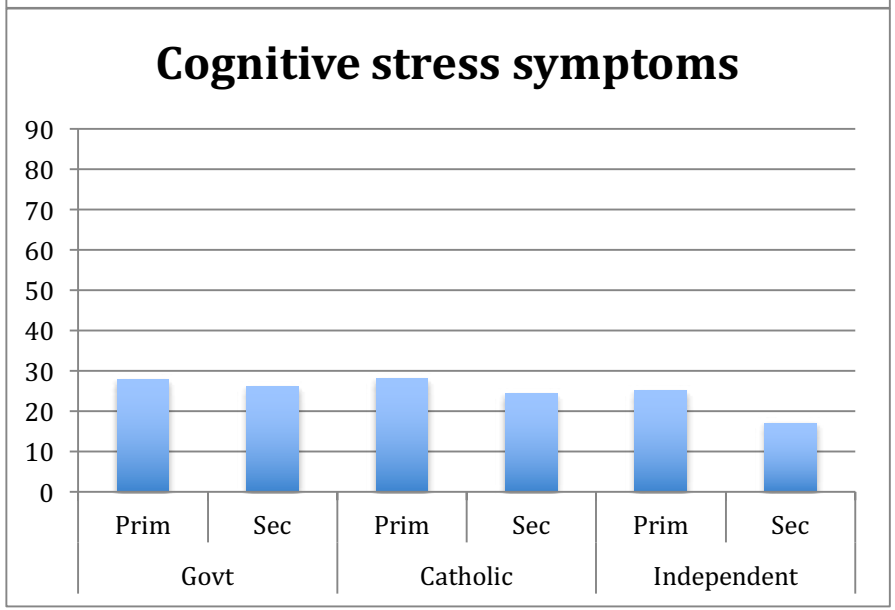




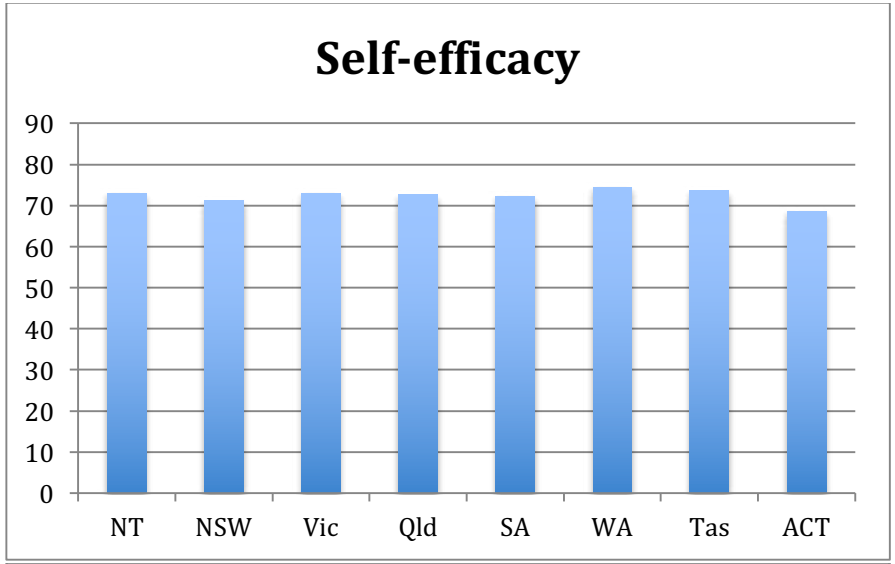
Cognitive Stress disaggregated by State, Sector, Level, Role and compared with the General Population

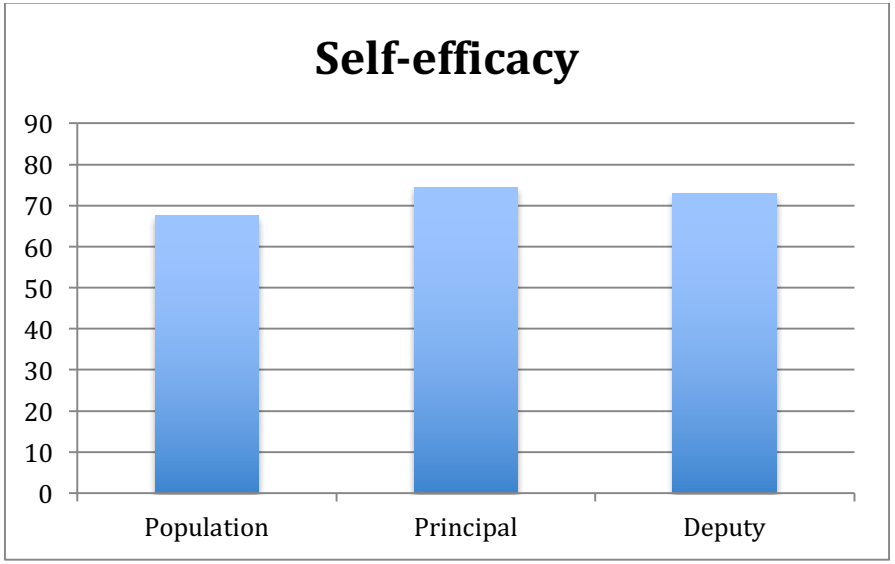


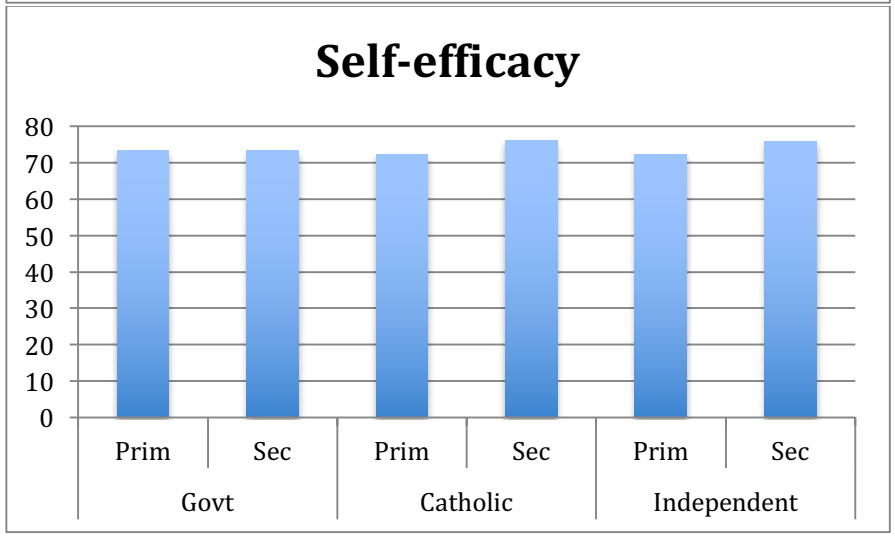




Self-Efficacy disaggregated by State, Sector, Level, Role and compared with the General Population

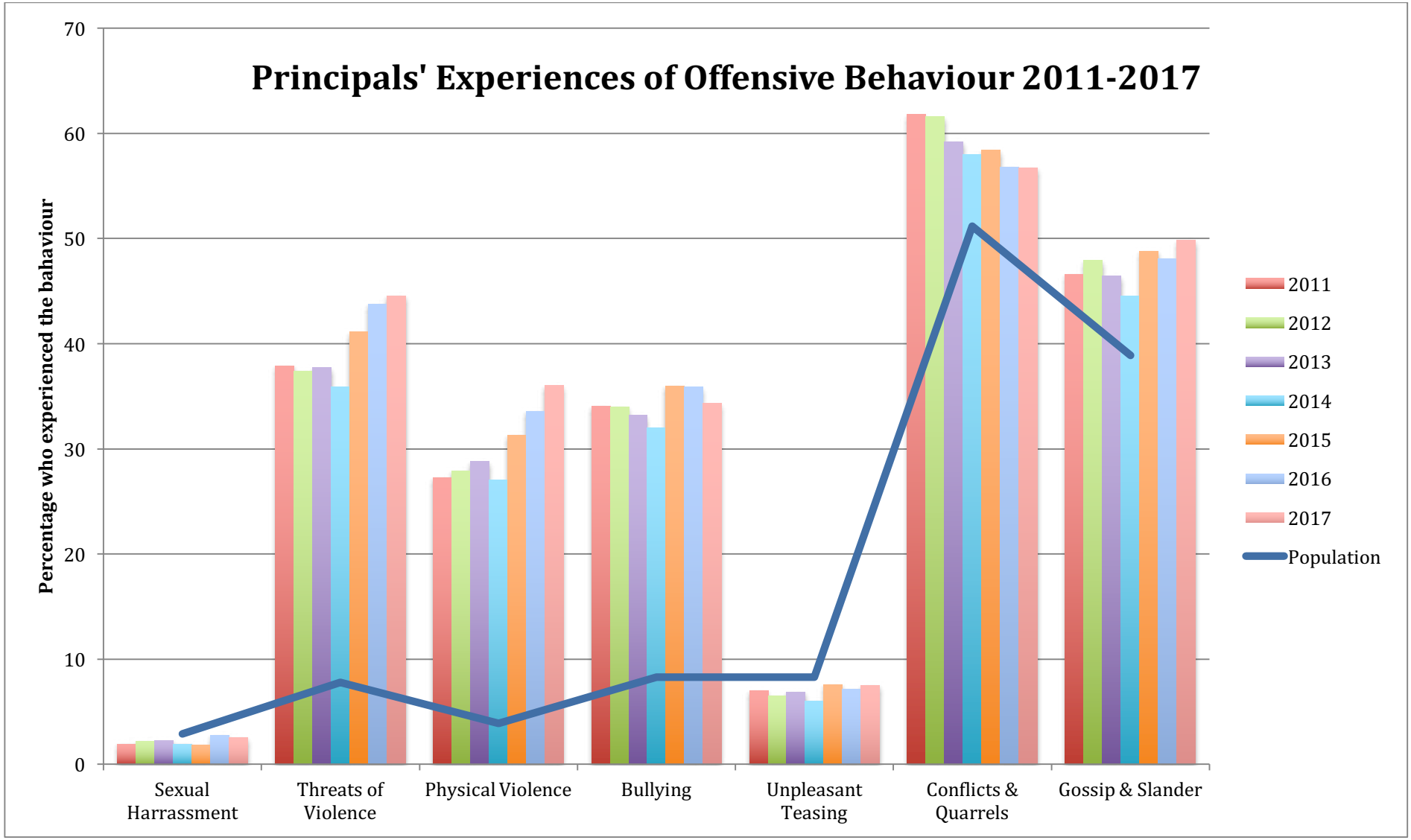






Offensive Behaviour

Trend data 2011 – 2017



2017 Data in Detail

Prevalence Rates (%)

Subscales	Population	All	Govt	Cath	Ind	Gender		Role		Govt		Catholic		Independent	
						F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Sexual Harassment	3%	3%	3%	3%	2%	2%	3%	3%	3%	2%	3%	3%	2%	1%	0%
Threats of Violence	8%	45%	51%	33%	17%	46%	43%	46%	43%	48%	53%	35%	22%	14%	17%
Physical Violence	4%	36%	43%	24%	7%	38%	34%	36%	40%	42%	41%	24%	18%	7%	8%
Bullying	8%	34%	37%	34%	28%	39%	30%	36%	34%	34%	39%	35%	22%	22%	21%
Unpleasant Teasing	8%	8%	9%	9%	4%	8%	9%	8%	9%	7%	9%	10%	10%	5%	4%
Conflicts and Quarrels	51%	57%	57%	60%	58%	58%	58%	58%	58%	56%	59%	61%	47%	58%	42%
Gossip and Slander	39%	50%	51%	53%	50%	51%	51%	54%	43%	53%	45%	50%	55%	51%	33%

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.

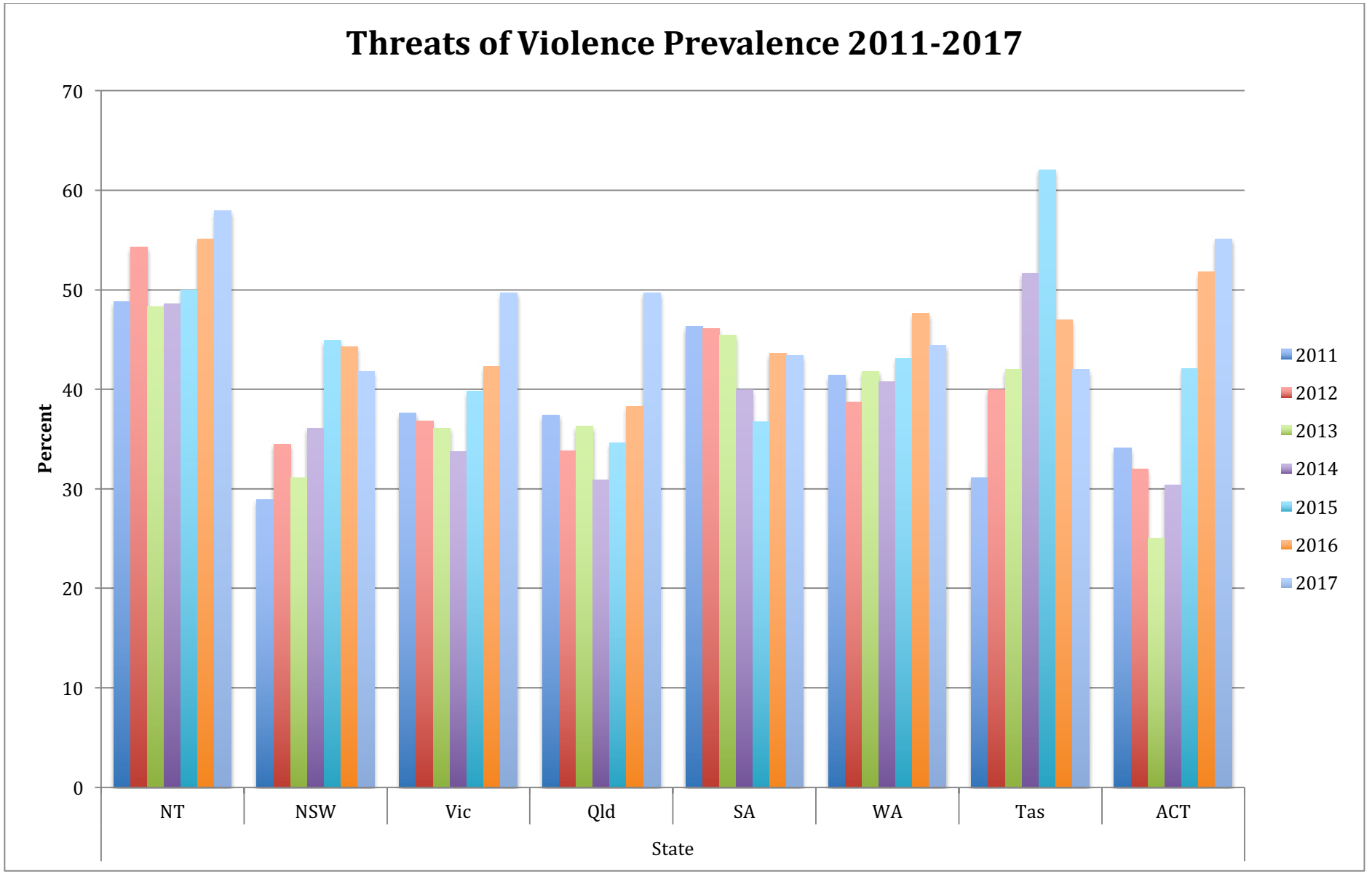
Results

- **Trends** The levels of offensive behaviour are growing in many parts of the country, but it is not uniform. In New South Wales, the ACT and Tasmania the trend was extremely worrying in 2016 while Victoria and Queensland have significantly increased in 2017. In Tasmania, the rates for Threats of Violence doubled between 2011-2015, but fell in 2016 and 2017.
- **Sexual harassment** remains low relative to the general population, but there is no acceptable prevalence for this behaviour.
- **Threats of violence** have increased from 4.9 to 5.6 times the general population prevalence. This prevalence rate is extremely high (in 2011, 38% of participants had been threatened. This rose to 44% by 2016 which remained in 2017; close to 1 in 2 principals receiving a threat). Secondary principals received the most threats. Approximately 1 in 2 Government schools 1 in 3 Catholic school and 1 in 8-12 Independent school principals are threatened each year These differences are all statistically significant (p.<.001) This is not surprising as both the Catholic and Independent sectors can remove violent students from their systems but the Government system cannot. This means that most violent students will eventually end up in the Government system, by late secondary school. There were no significant differences between primary and secondary schools or gender of the leader.
- **Physical violence** has increased from 7 to 8.4 times the general population prevalence, following a peak of 8.6 times in 2016. In 2017 there were statistically significant differences for Gender with women (36%) suffering higher prevalence than their male (29.97%) colleagues (p<.04). There

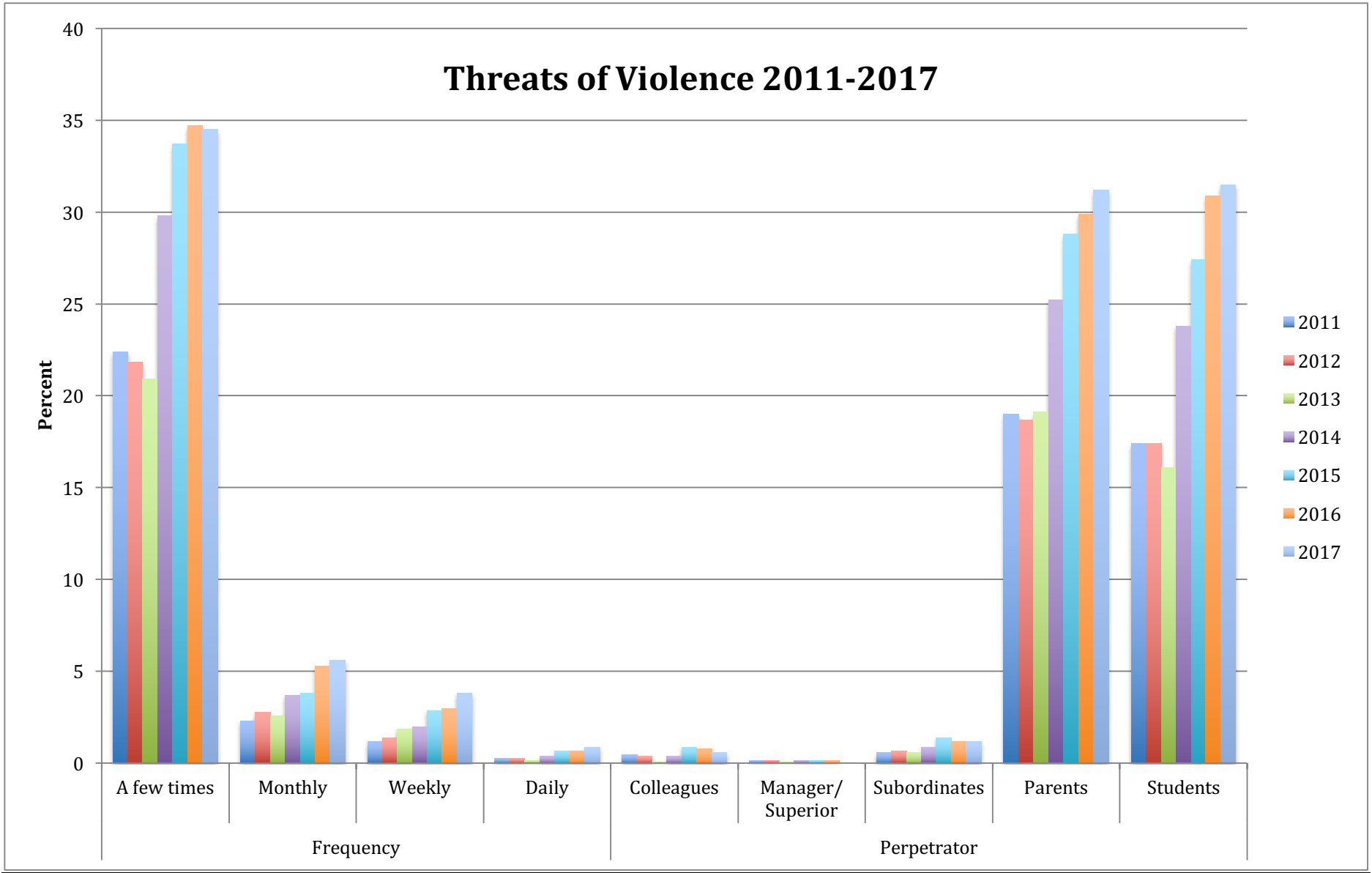
were no significant differences between school type or role. There were statistically significant differences between sectors with Government schools (40.54%) suffering significantly higher prevalence than Catholic (16.51%) and Independent (8.05%) schools (p<001). In 2017, the prevalence in the Northern Territory (57.89%) and the ACT (55.10%) remain significantly higher than the other states.

- **Bullying** is a little more difficult to analyse. Rates have moved up and down by relatively large amounts over the life of the survey, and increased slightly overall from 4.1 to 4.3 times the general population prevalence. It is still double the population rate. In all years except 2014 women (34-40%) were statistically significantly more likely to experience bullying than their male colleagues (28-34%). Bullying was less prevalent in Primary schools (30-34%) than Secondary schools (36-43%). In 2011 and 2015 Deputies/Assistants (38/40%) reported significantly higher prevalence than Principals (32/36%). No differences were reported in other years. Sector differences were reported in all years except 2012 and 2016. In those years Independent schools reported slightly lower prevalence than both Government and Catholic schools who were, in the main, not significantly different from each other. It remains unacceptably high in all sectors. Victoria has consistently had the lowest reported prevalence (27-33%), statistically significantly lower than NSW (40-45%) in most years.
- **Unpleasant teasing** has remained low, in line with the general population rate.
- **Conflicts and quarrels** are reducing over the life of the survey and currently sit at 10% higher than the general population prevalence rate. Males (59-62%) report higher prevalence than females (55-61%) reaching statistical significance in 2014-15. Secondary schools (59-69%) report higher prevalence than primary schools (56-61%); significantly different in 2011 and 2016. Assistants/Deputies (55-61%) report higher prevalence than Principals (57-62%) but this only reached statistical significance in 2015 (55% and 60% respectively). There were no state differences reported.
- **Gossip and slander** while not reducing over time the prevalence is 1.3 times that of the general population. There were no statistically significant differences in prevalence for Gender. Primary schools (46-50%) report higher prevalence than Secondary schools (39-48%) reaching statistical significance in 2014-16. Principals (47-52%) report significantly higher prevalence than Deputies/Assistants (38-46%) and Gossip and Slander is more common among Catholic schools (47.56%) than Government (44-48%) and Independent (43-50%), reaching statistical significance in 2013 and 2015.

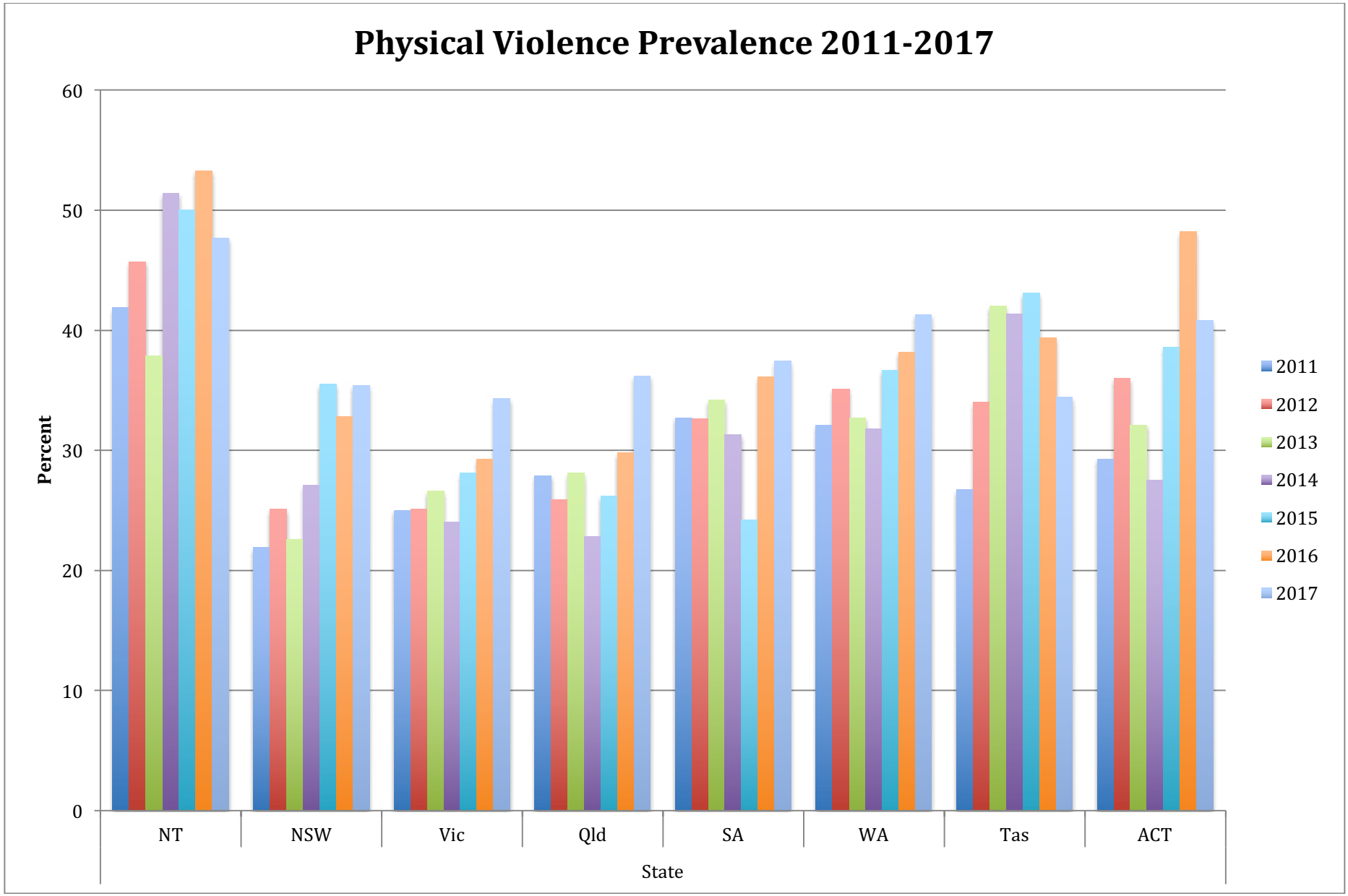
Threats of Violence Trend Prevalence disaggregated by State



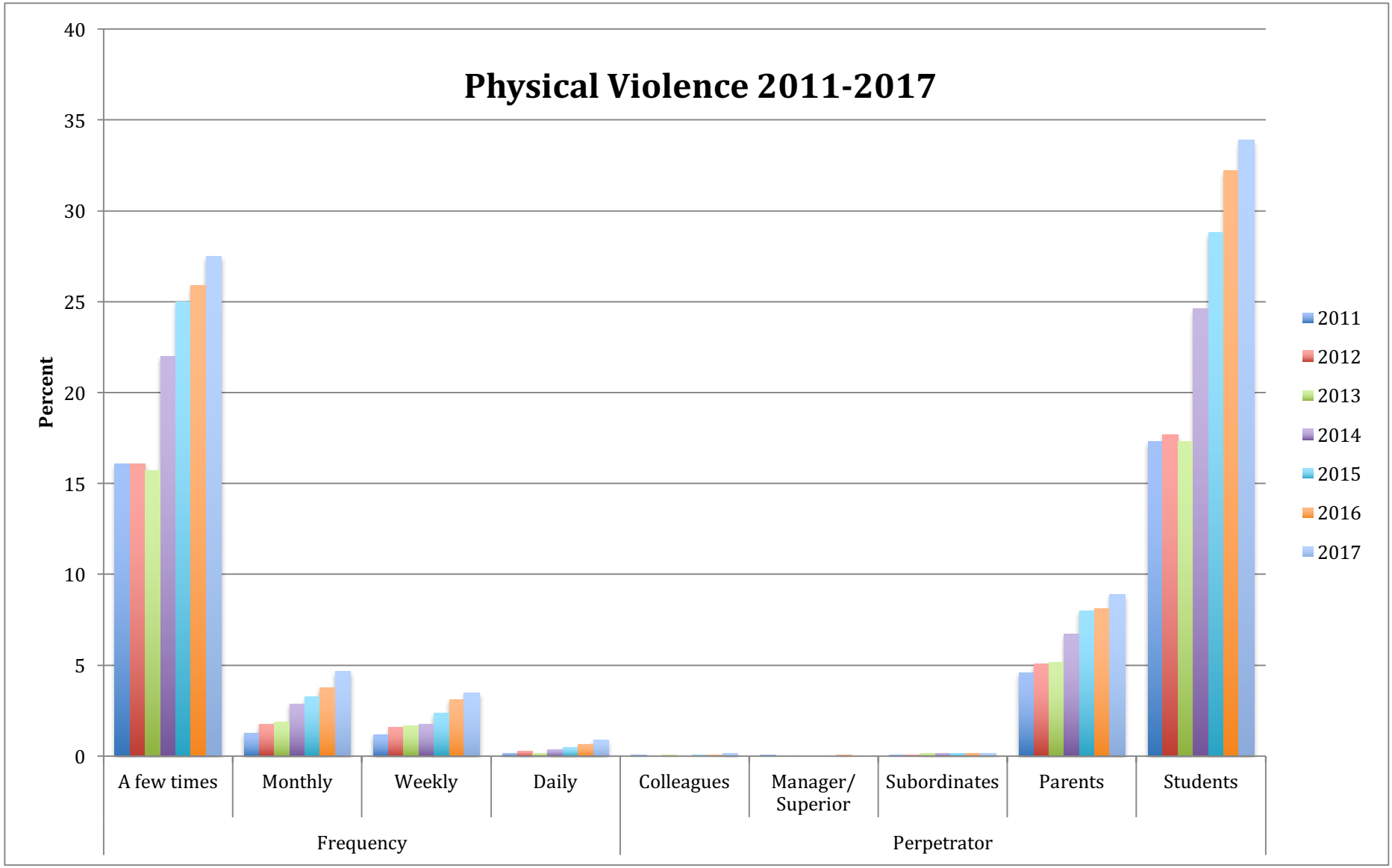
Threats of Violence Trend Prevalence disaggregated by Frequency and Perpetrator Group



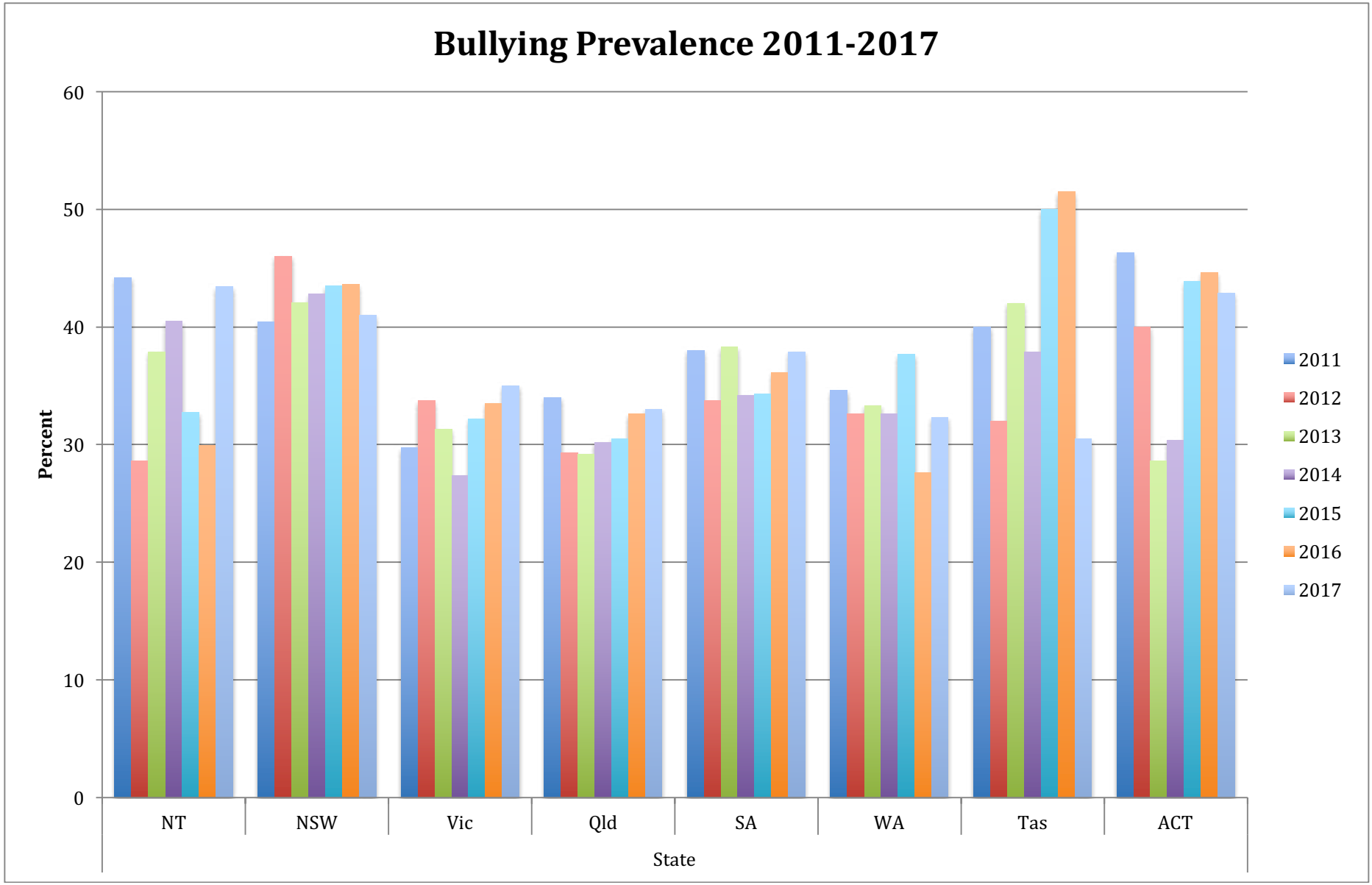
Physical Violence Trend Prevalence disaggregated by State



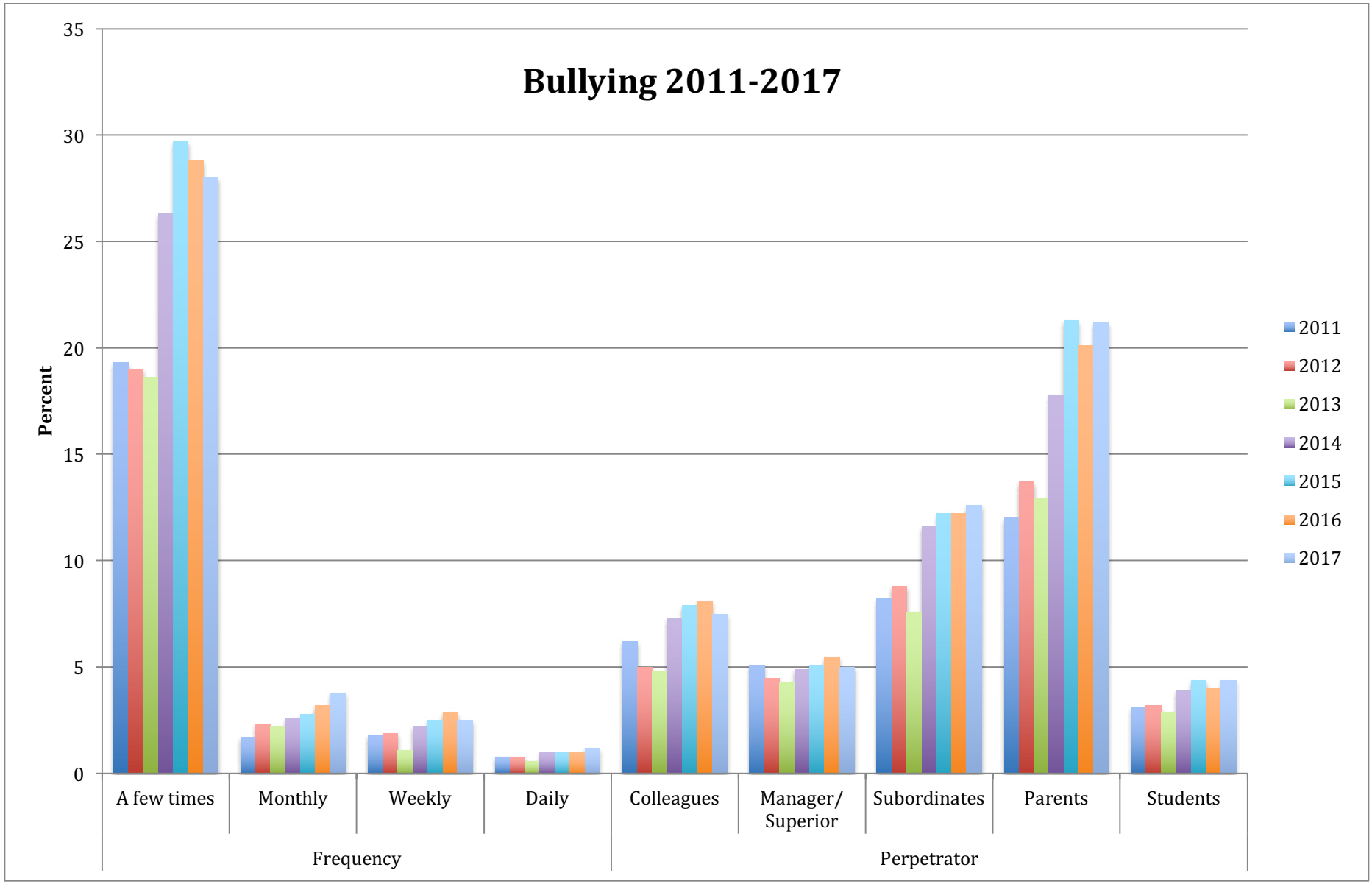
Physical Violence Trend Prevalence disaggregated by disaggregated by Frequency and Perpetrator Group



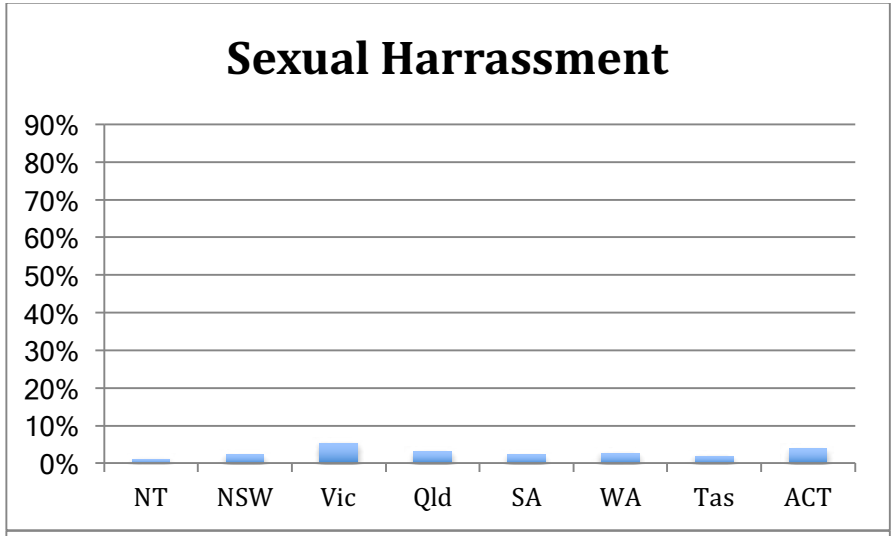
Bullying Trend Prevalence disaggregated by State

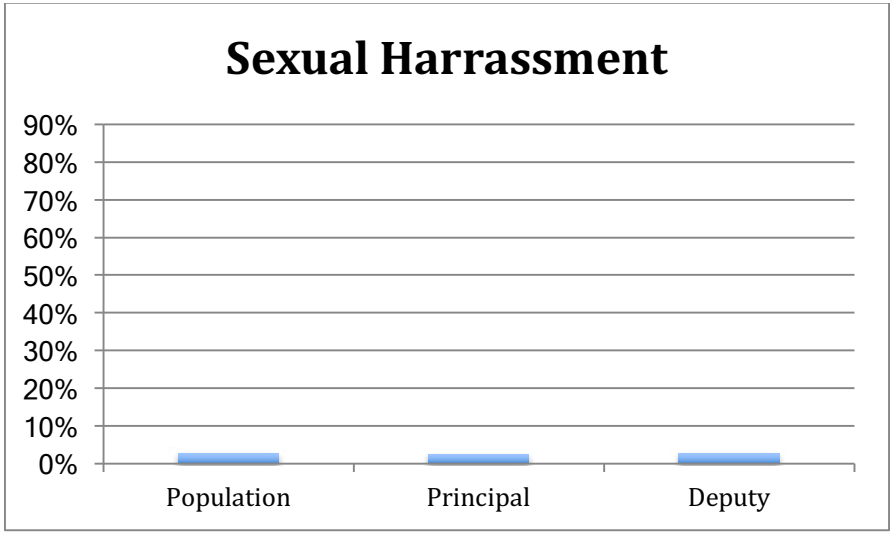


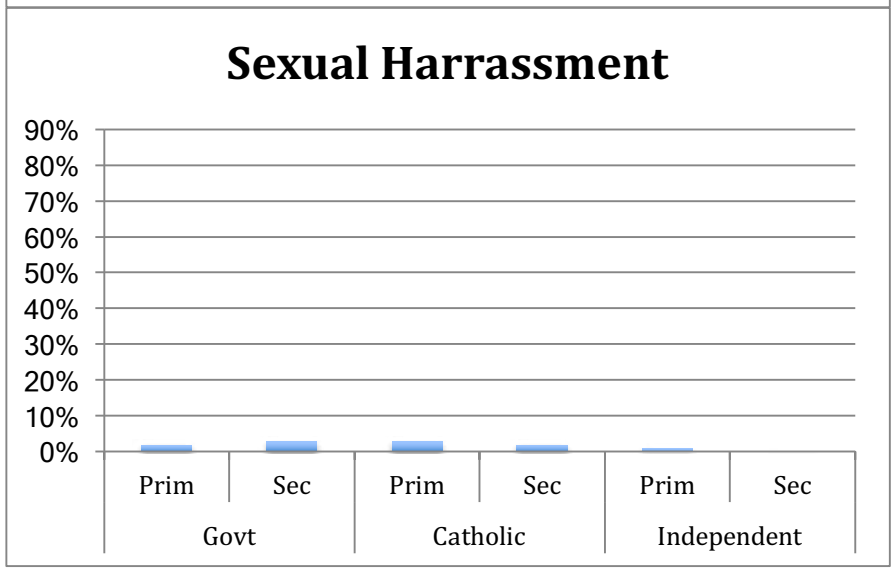
Physical Violence Trend Prevalence disaggregated by disaggregated by Frequency and Perpetrator Group



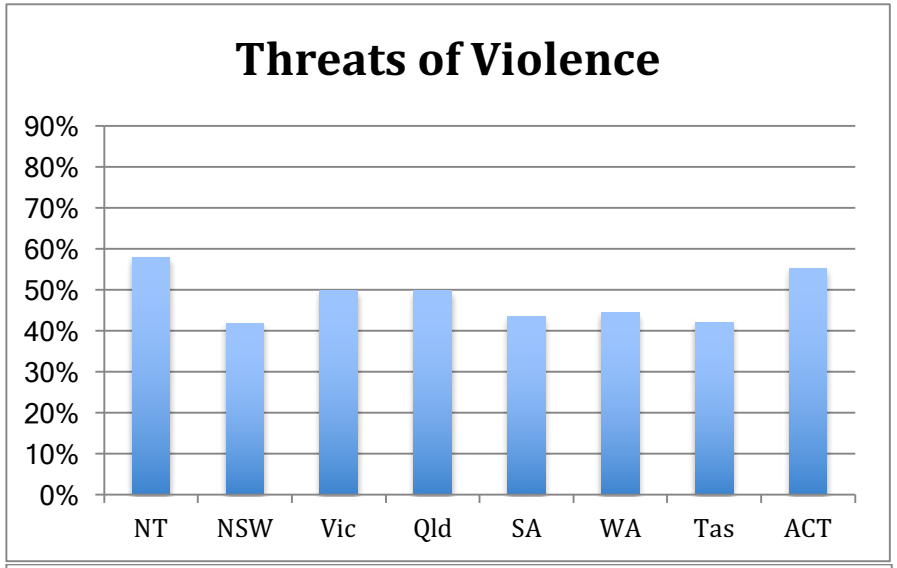
Sexual Harassment disaggregated by State, Sector, Level, Role and compared with the General Population

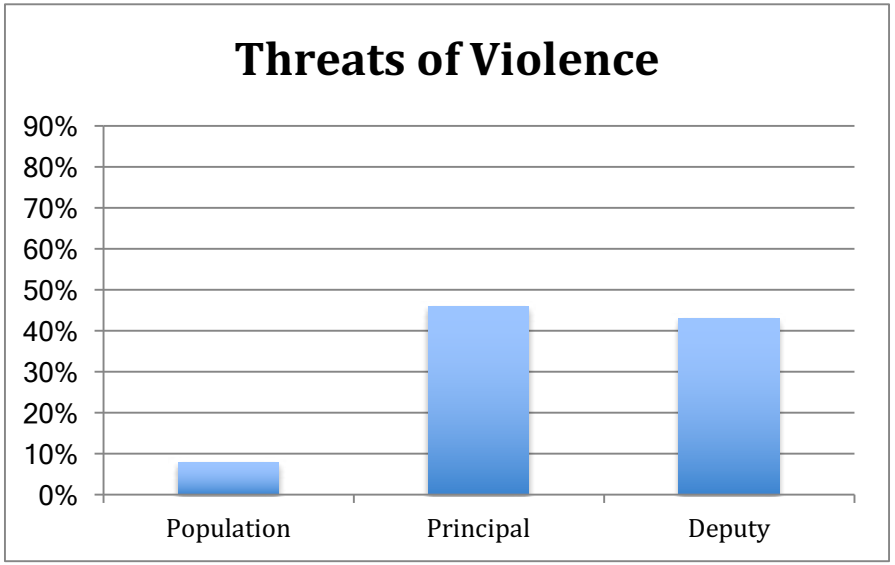


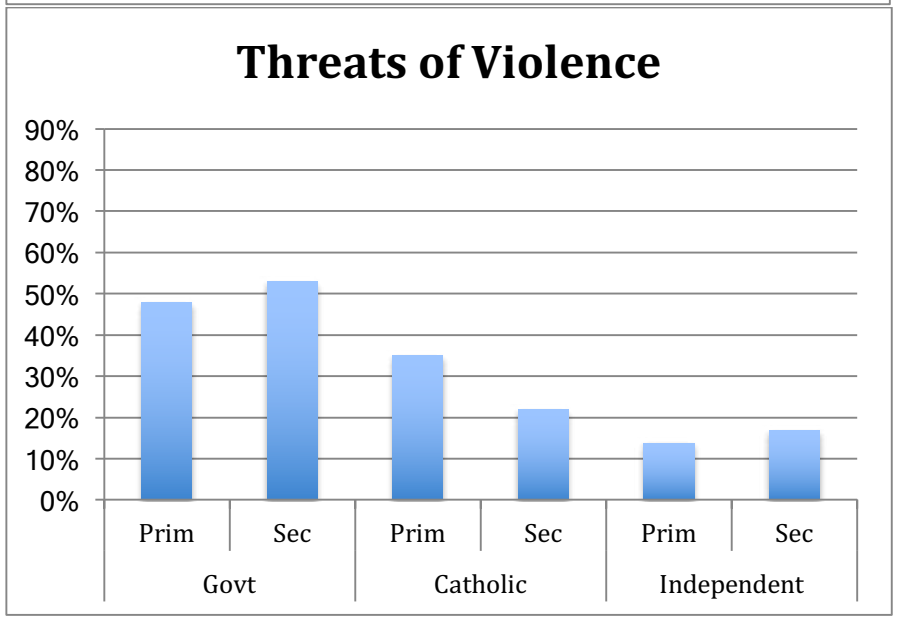




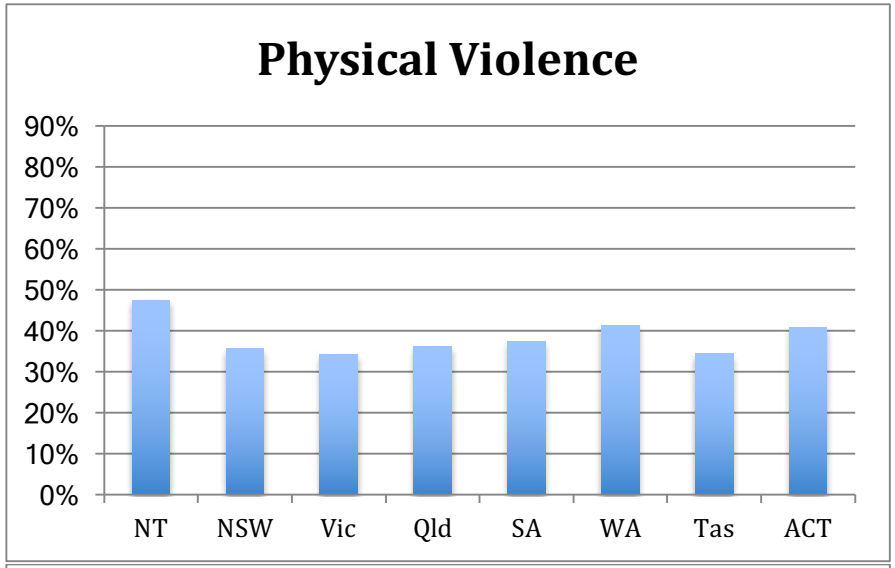
Threats of Violence disaggregated by State, Sector, Level, Role and compared with the General Population

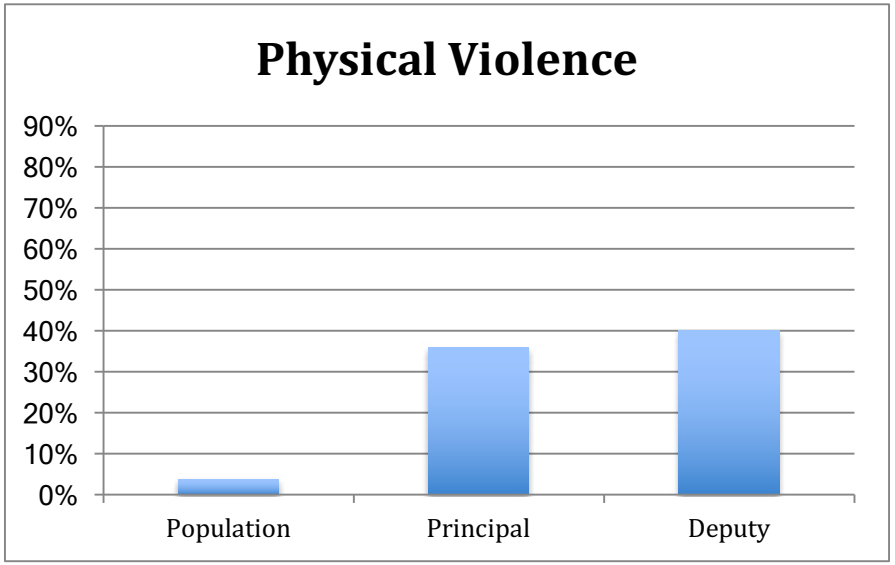


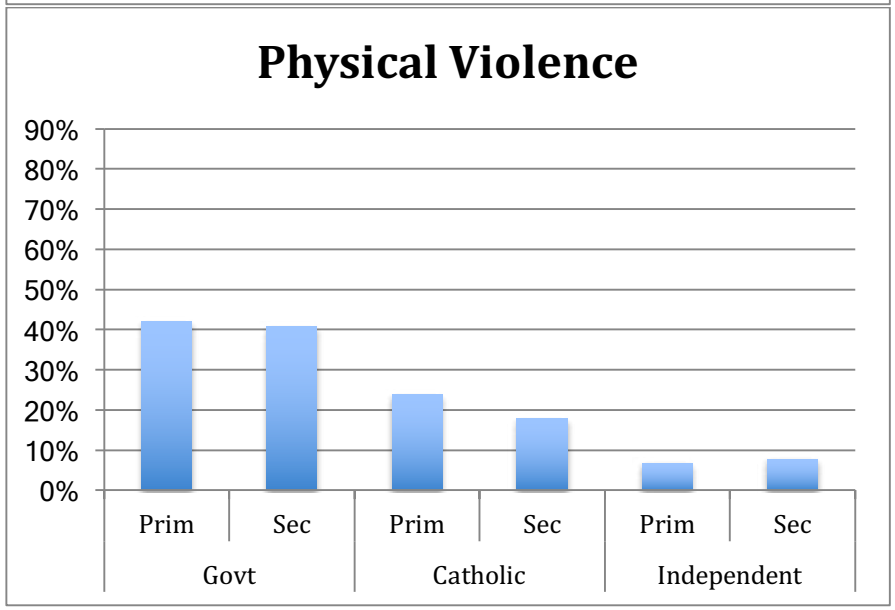




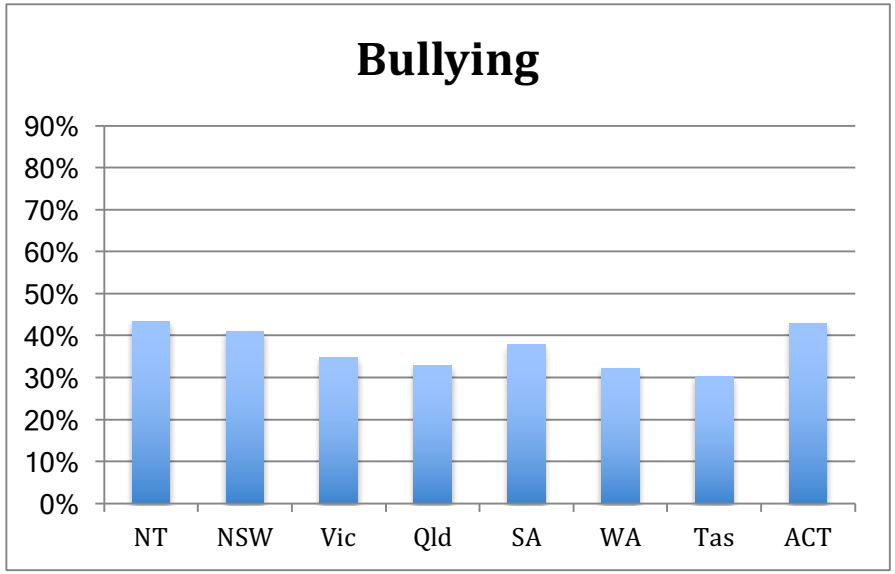
Physical Violence disaggregated by State, Sector, Level, Role and compared with the General Population

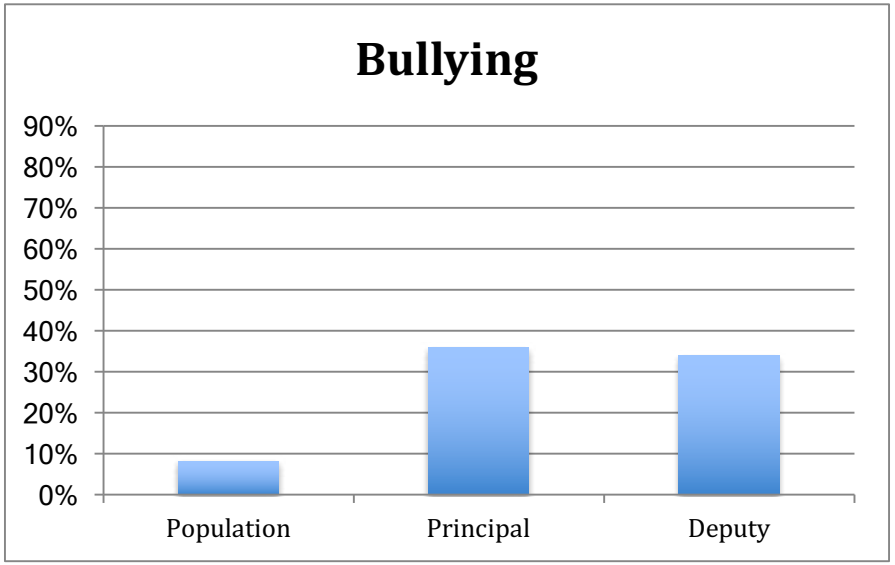


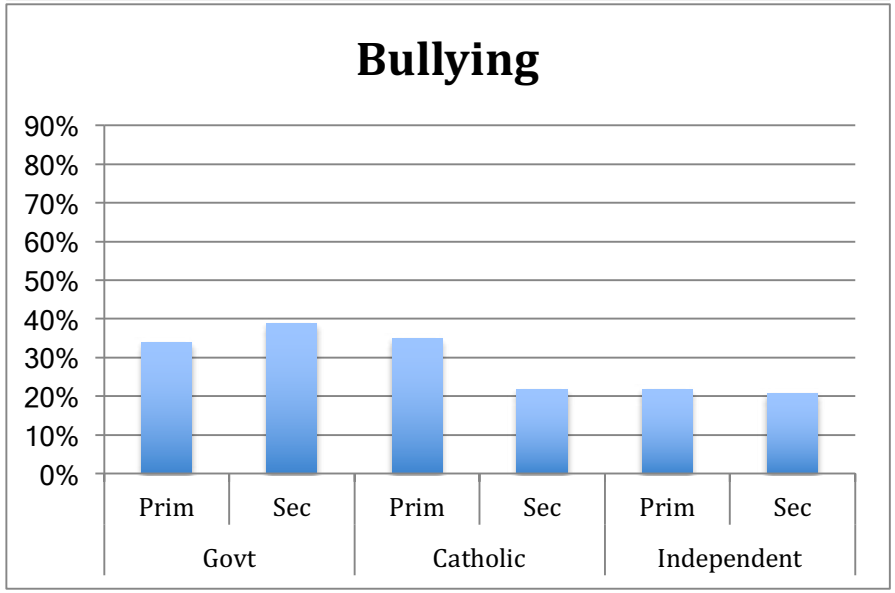


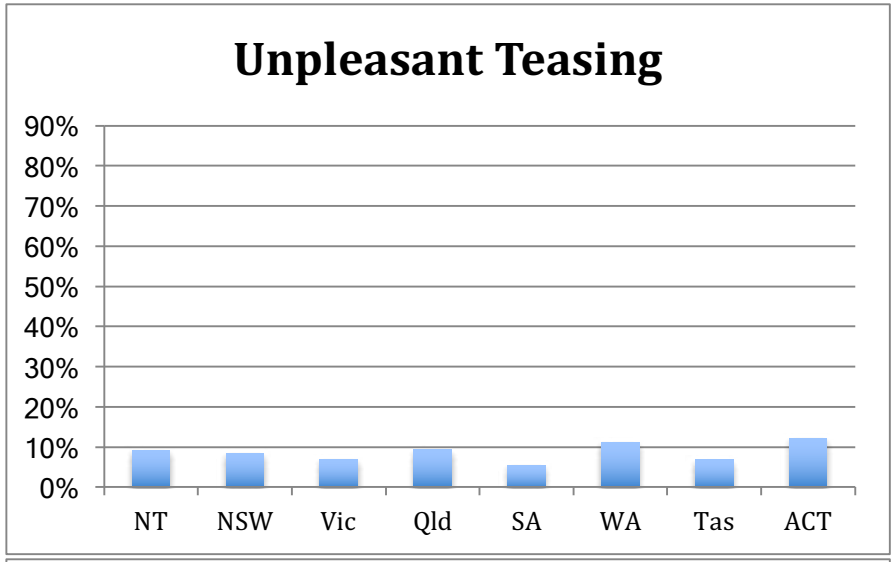


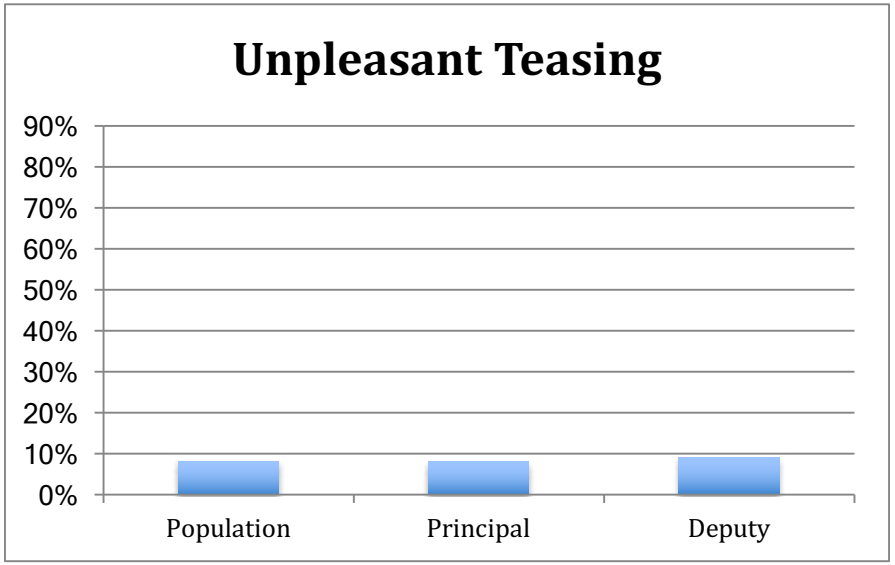
Bullying disaggregated by State, Sector, Level, Role and compared with the General Population








Unpleasant Teasing
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
NT
NSW
Vic
Qld
SA
WA
Tas
ACT


Unpleasant Teasing
90%
80%
70%
60%
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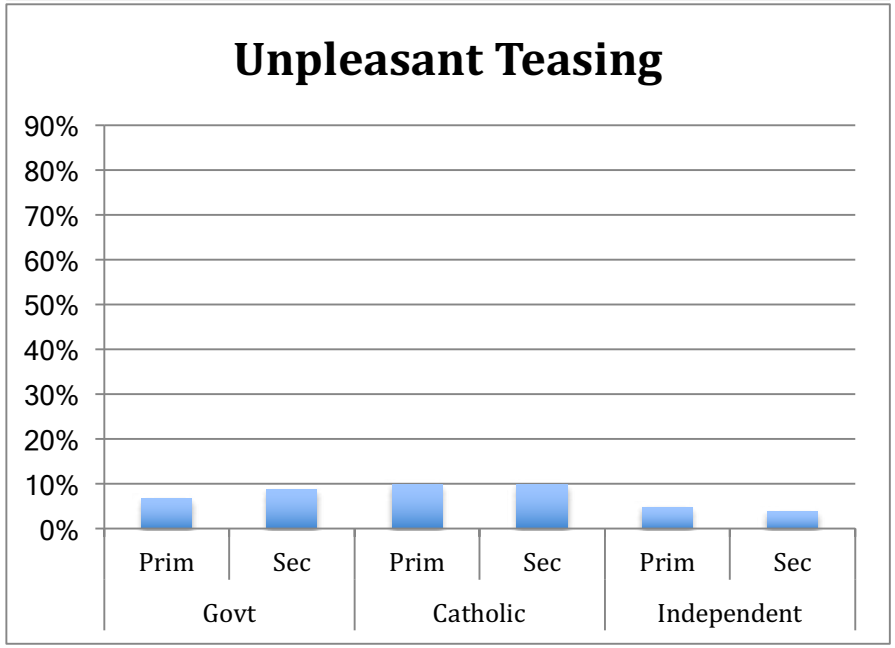
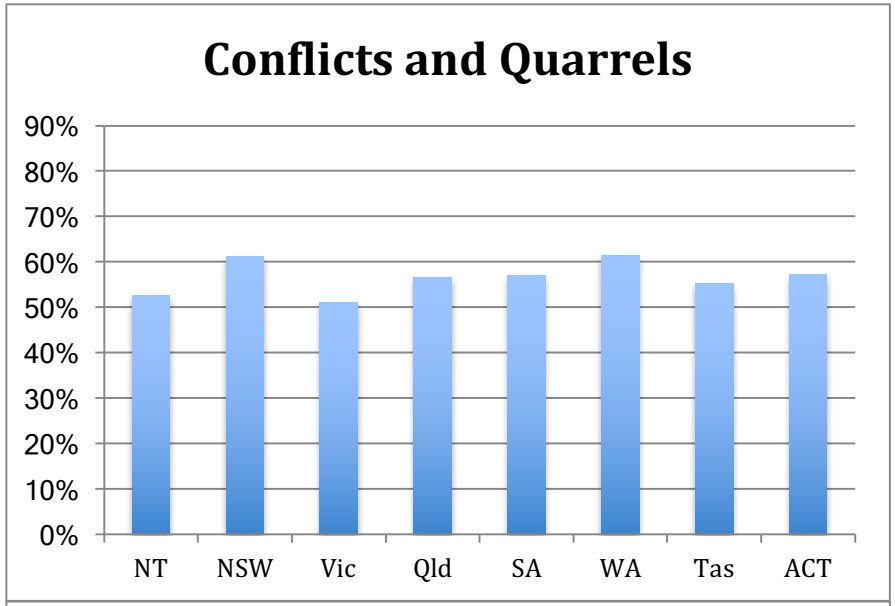
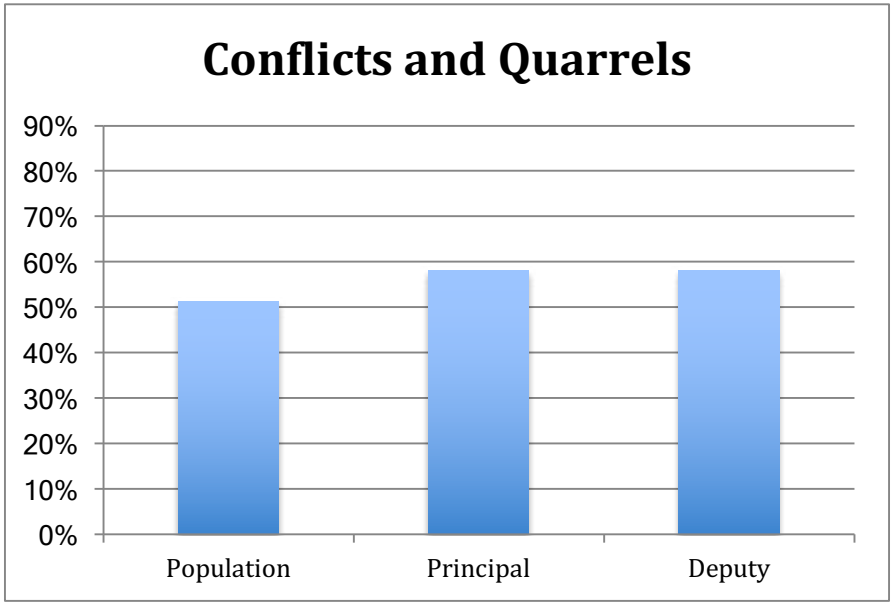
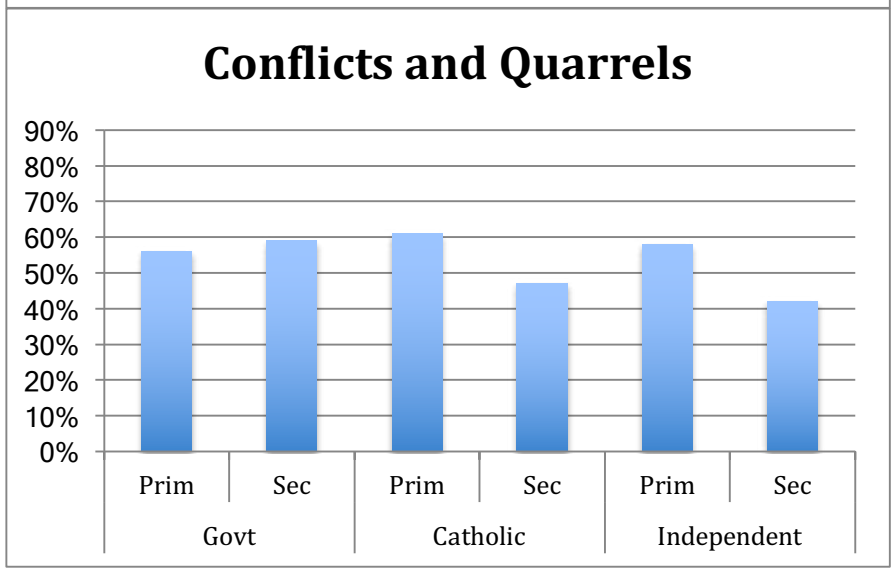
40%
30%
20%
10%
0%
Population
Principal
Deputy


Unpleasant Teasing
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Prim
Sec
Prim
Sec
Prim
Sec
Govt
Catholic
Independent

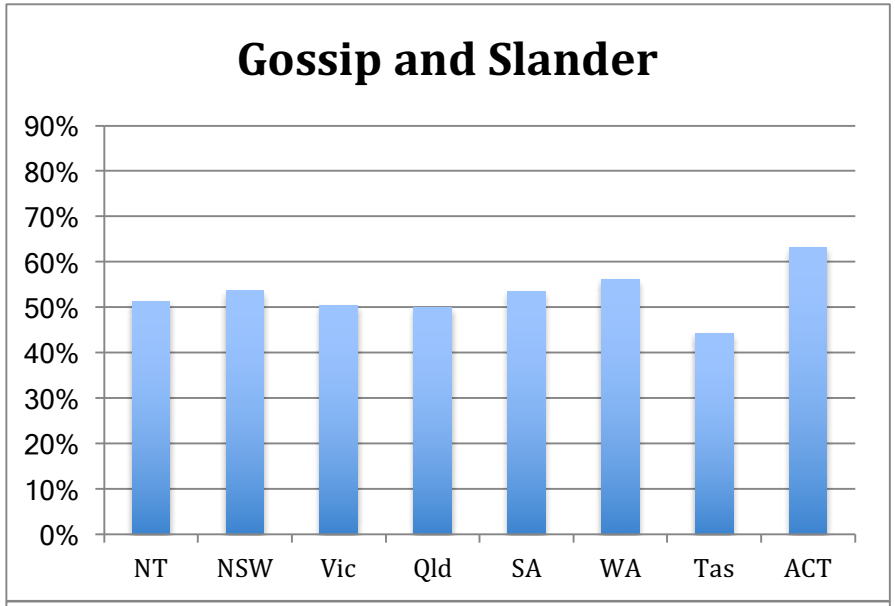
Conflicts and Quarrels disaggregated by State, Sector, Level, Role and compared with the General Population

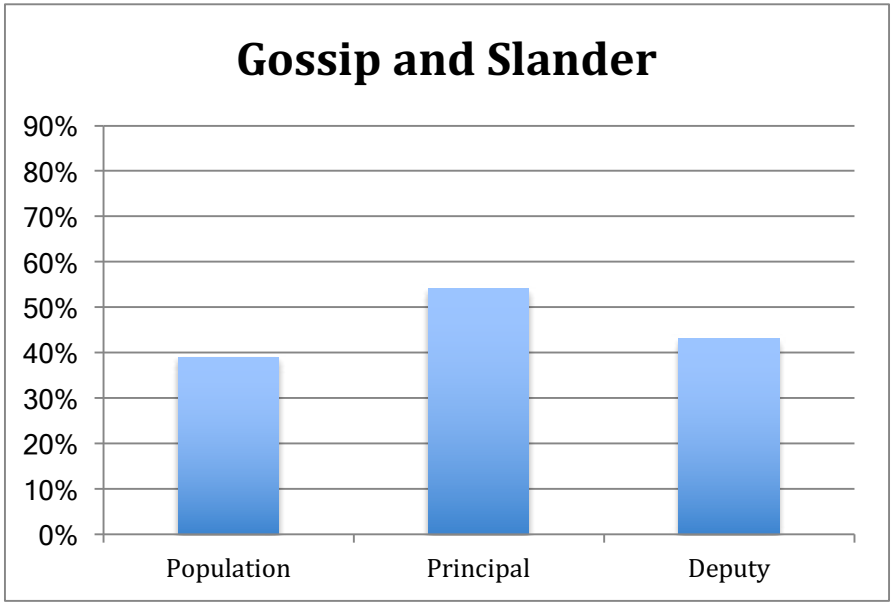


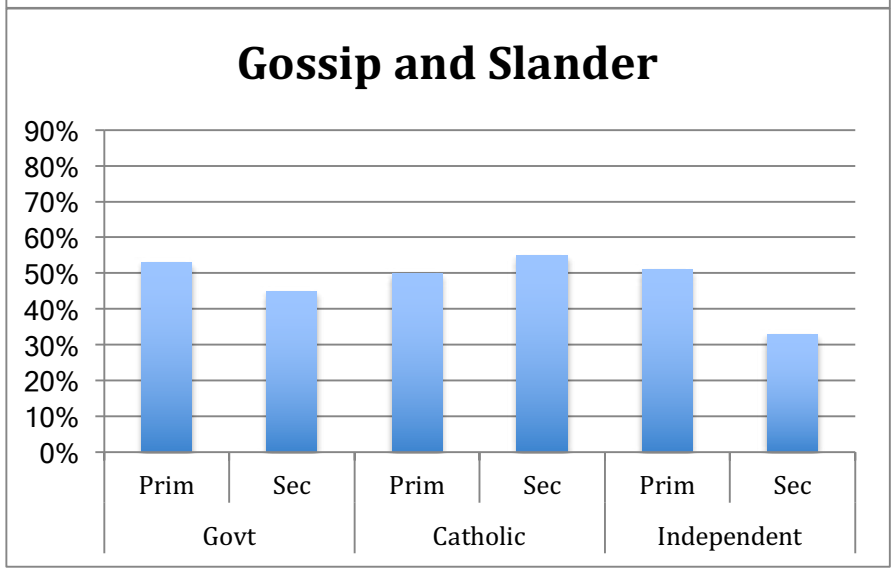




Gossip and Slander disaggregated by State, Sector, Level, Role and compared with the General Population







2. Sources of Stress

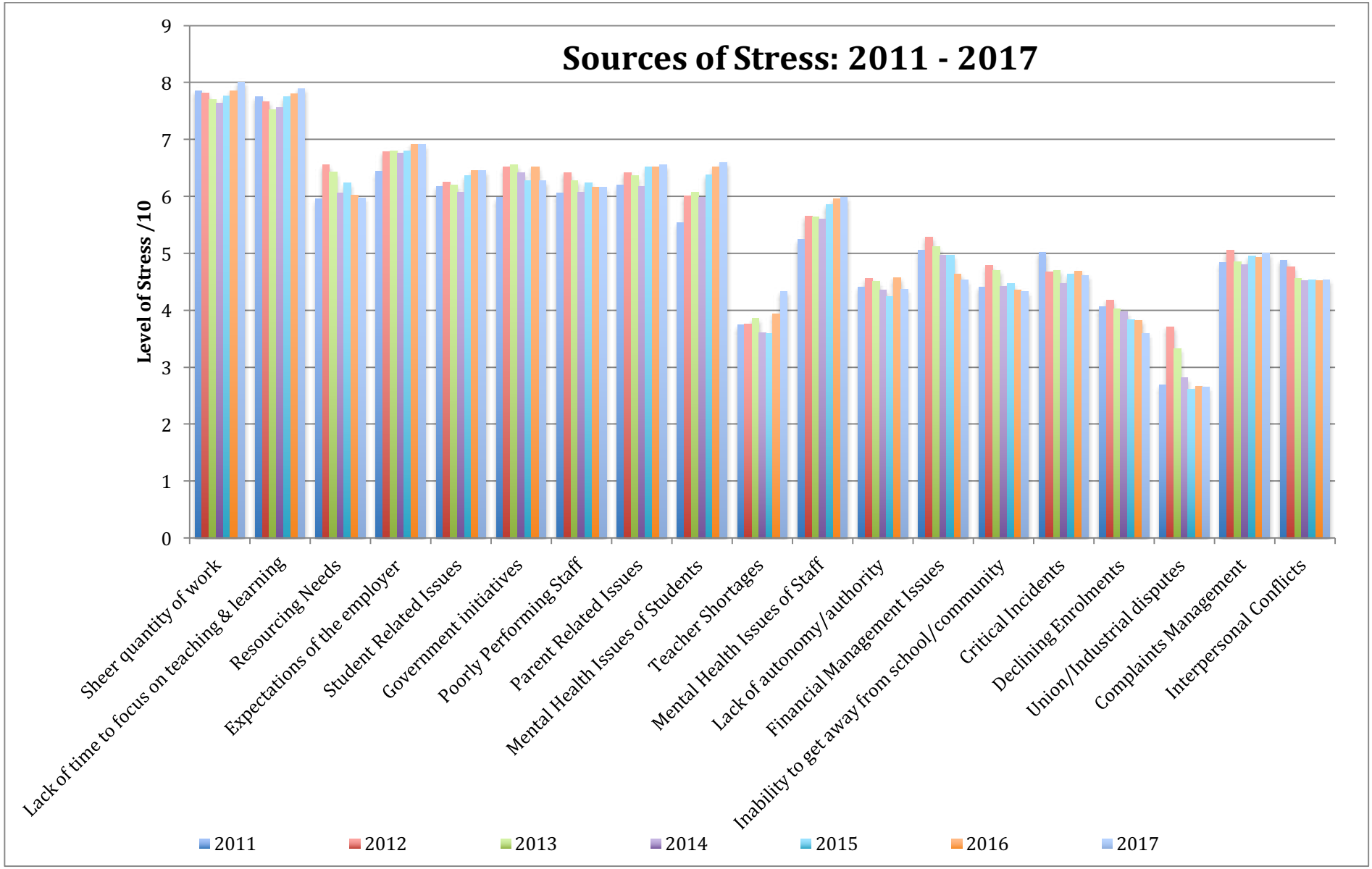
Introduction

The following pages report on specific stressors (questions were taken from the 2004 International Confederation of School Principals Irish school survey). Items are reported for Gender, Sector and Level and Role. Some caution must be applied to interpreting results for independent secondary schools, as they are not uniformly distributed across geolocations, or states. There were virtually no state differences once Geolocation was accounted for. Therefore, it is very likely that geolocation rather than state is a stronger indicator of some of the school contextual issues across the country.

Trend data 2011 - 2017

Sources of Stress	2011 (N=2049)		2012 (N=2084)		2013 (N=2010)		2014 (N=2467)		2015 (N=2574)		2016 (N=2785)		2017 (N=2436)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Sheer quantity of work	7.85	2.26	7.81	2.13	7.7	2.1	7.64	2.21	7.76	2.18	7.85	2.16	8.01	2.10
Lack of time to focus on teaching & learning	7.75	2.28	7.67	2.14	7.53	2.2	7.56	2.25	7.75	2.18	7.8	2.19	7.89	2.17
Resourcing Needs	5.96	2.62	6.55	2.45	6.43	2.4	6.06	2.59	6.23	2.58	6.02	2.63	5.97	2.67
Expectations of the employer	6.44	2.74	6.79	2.52	6.8	2.5	6.76	2.63	6.8	2.58	6.92	2.58	6.91	2.61
Student Related Issues	6.18	2.68	6.25	2.5	6.2	2.5	6.07	2.55	6.36	2.54	6.45	2.64	6.45	2.64
Government initiatives	5.98	2.51	6.52	2.43	6.55	2.4	6.42	2.49	6.27	2.46	6.52	2.52	6.27	2.51
Poorly Performing Staff	6.06	2.96	6.42	2.74	6.28	2.7	6.07	2.75	6.24	2.72	6.16	2.80	6.16	2.74
Parent Related Issues	6.2	2.69	6.42	2.49	6.36	2.5	6.18	2.54	6.52	2.55	6.52	2.58	6.55	2.59
Mental Health Issues of Students	5.53	2.75	6.01	2.6	6.07	2.6	5.98	2.63	6.38	2.65	6.52	2.65	6.6	2.60
Teacher Shortages	3.74	2.7	3.76	2.59	3.86	2.7	3.6	2.63	3.59	2.69	3.94	2.84	4.34	2.94
Mental Health Issues of Staff	5.24	2.72	5.65	2.64	5.64	2.6	5.61	2.59	5.86	2.65	5.96	2.69	5.99	2.63
Lack of autonomy/authority	4.41	2.92	4.56	2.68	4.51	2.6	4.36	2.62	4.25	2.64	4.57	2.72	4.37	2.69
Financial Management Issues	5.05	2.78	5.29	2.69	5.12	2.6	4.96	2.61	4.97	2.71	4.64	2.69	4.53	2.70
Inability to get away from school/community	4.41	3.02	4.78	2.86	4.7	2.8	4.42	2.82	4.47	2.84	4.36	2.87	4.33	2.87
Critical Incidents	5.02	3.09	4.68	2.74	4.7	2.7	4.47	2.74	4.63	2.78	4.69	2.82	4.61	2.88
Declining Enrolments	4.06	3.27	4.18	3.13	4.03	3.1	3.97	3.09	3.83	3.10	3.82	3.12	3.59	3.05
Union/Industrial disputes	2.69	2.3	3.71	2.68	3.33	2.5	2.81	2.21	2.62	2.21	2.67	2.28	2.66	2.26
Complaints Management	4.84	2.94	5.05	2.77	4.86	2.7	4.8	2.75	4.95	2.80	4.93	2.88	5	2.85
Interpersonal Conflicts	4.88	2.96	4.77	2.75	4.56	2.7	4.52	2.75	4.54	2.80	4.52	2.84	4.54	2.80

Sources of Stress 2011 - 2016



2017 Data in Detail

Items	All	Gov	Cat	Ind	Gender		Role		Govt		Catholic		Independent	
					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Sheer quantity of work	8.01	8.13	8.03	7.45	8.19	7.84	8.17	7.68	8.14	7.82	8.09	7.8	7.52	7.86
Lack of time to focus on teaching & learning	7.89	8.07	8.15	6.7	8.1	7.71	8.09	7.49	8.1	7.73	8.33	7.61	6.85	7.14
Resourcing Needs	5.97	6.12	5.85	5.32	6.05	5.93	6.1	5.68	6.12	5.86	6.05	5.16	5.09	5.29
Expectations of the employer	6.91	7.28	6.36	5.14	7.01	6.83	7.09	6.47	7.37	7.01	6.75	5.18	5.31	4.64
Student Related Issues	6.45	6.58	6.69	5.67	6.58	6.4	6.46	6.65	6.55	6.42	6.92	6.12	5.74	6.21
Government initiatives	6.27	6.47	6.32	5.13	6.38	6.22	6.37	6.13	6.41	6.28	6.64	5.98	4.85	5.29
Poorly Performing Staff	6.16	6.25	6.34	5.97	6.16	6.35	6.15	6.54	5.69	7	6.22	6.67	5.34	6.89
Parent Related Issues	6.55	6.57	6.87	6.28	6.64	6.51	6.62	6.5	6.78	6.16	7.15	6	6.62	6.07
Mental Health Issues of Students	6.6	6.79	6.65	5.71	6.8	6.45	6.64	6.77	6.52	7.07	6.44	7.31	5.16	6.32
Teacher Shortages	4.34	4.55	4.27	3.55	4.54	4.23	4.32	4.66	3.88	4.9	4.23	4.14	3.12	4.04
Mental Health Issues of Staff	5.99	6.14	6.09	5.33	6.13	5.95	6.07	6.05	5.81	6.4	6	6.43	4.81	5.82
Lack of autonomy/authority	4.37	4.64	4.39	3.53	4.43	4.58	4.45	4.6	4.28	4.91	4.24	4.88	3.93	3.32
Financial Management Issues	4.53	4.56	4.59	4.42	4.53	4.59	4.78	3.89	4.41	4.65	4.52	4.73	4.29	3.86
Inability to get away from school/community	4.33	4.21	5.04	5.05	4.36	4.49	4.49	4.18	4.11	3.9	4.98	4.82	4.78	5.04
Critical Incidents	4.61	4.86	4.43	3.9	4.64	4.79	4.73	4.64	4.51	4.93	4.42	4.2	3.34	4.14
Declining Enrolments	3.59	3.26	4.75	4.36	3.55	3.64	3.75	3.08	3.23	3.27	4.68	4.41	4.69	4.5
Union/Industrial disputes	2.66	2.55	3.18	2.91	2.55	2.86	2.74	2.51	2.46	2.65	2.89	3.78	2.26	3.71
Complaints Management	5	5.12	5.3	4.6	4.98	5.26	5.17	4.93	4.92	5.38	5.19	5.47	4.31	4.43
Interpersonal Conflicts	4.54	4.55	5.07	4.4	4.4	4.93	4.63	4.58	4.27	4.79	5.09	5.1	4.4	4.54

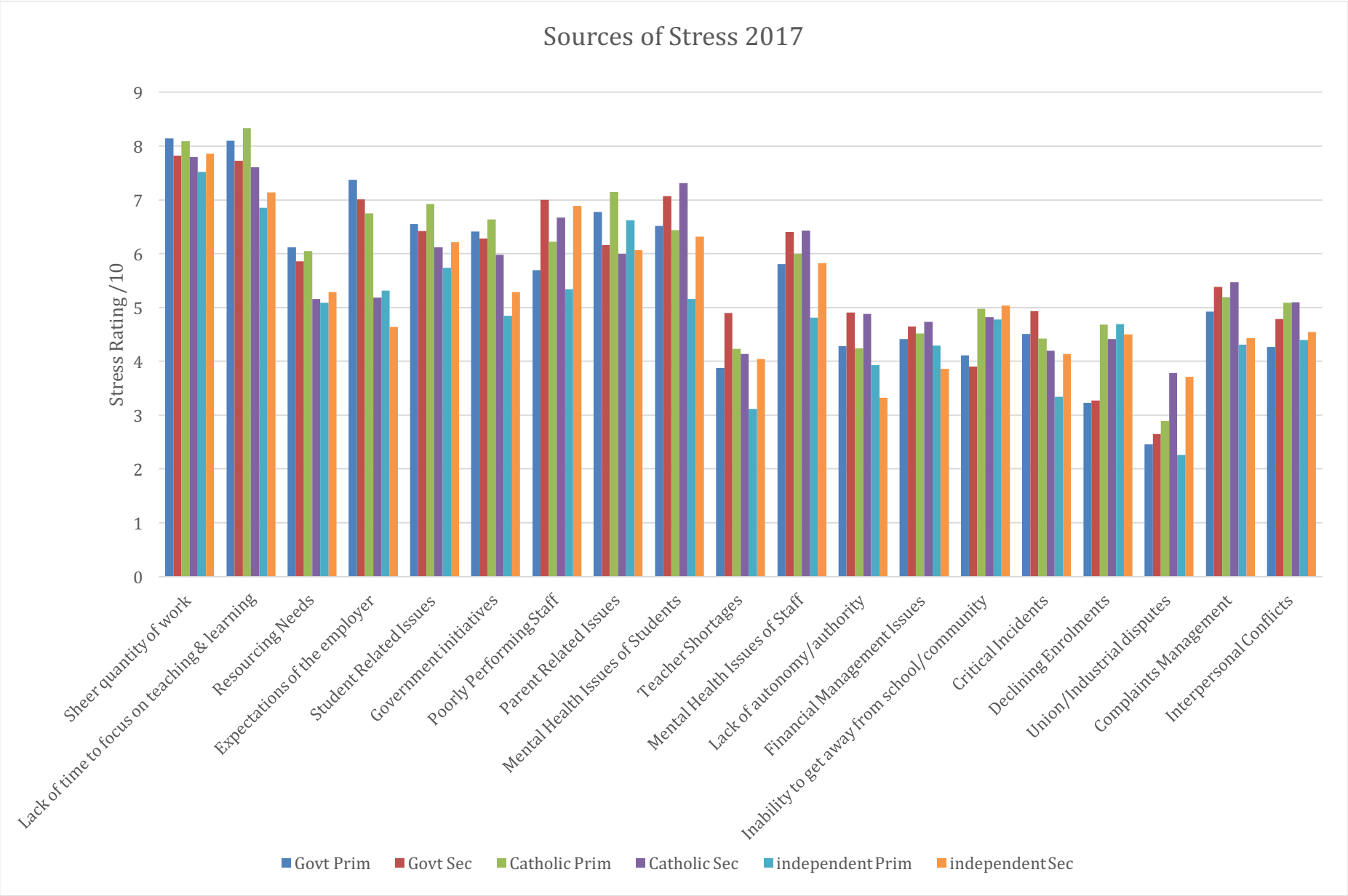
- **Sources of stress**. Principals were asked to rate the level of stress they felt in relation to their job tasks listed above

Results

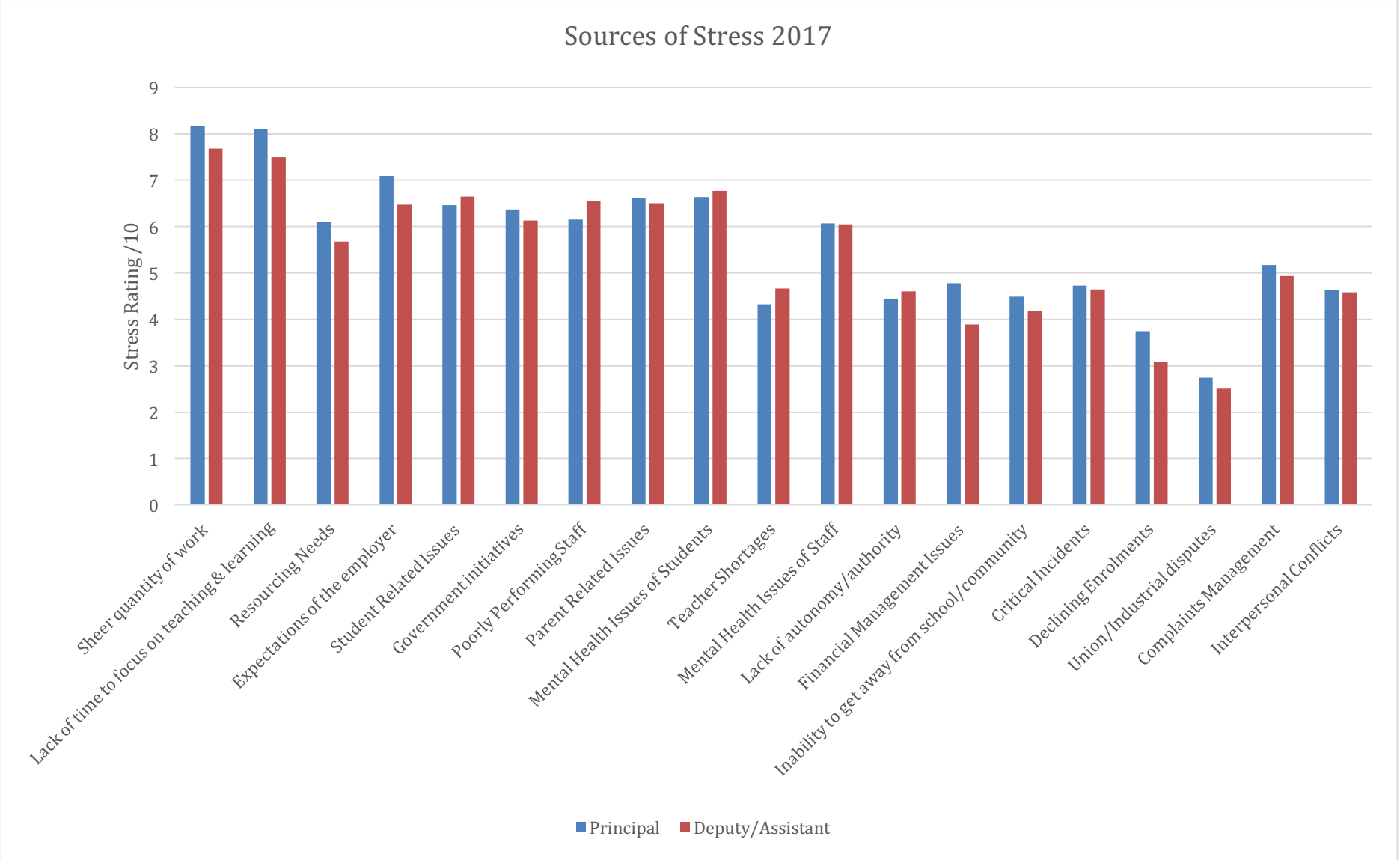
- **Trends** Most stressors have remained relatively stable. Sheer Quantity of Work and Lack of Time to Focus on Teaching and Learning have consistently been the highest rated by all groups. There are significant increases in the stress caused by Mental Health issues of both students and staff over the 6-year survey period. This is a worrying trend that goes well beyond the school gate, and confirms similar findings in various studies of mental health. The costs associated with this trend were recently estimated to be $10.9 Billion annually (PricewaterhouseCoopers Australia, 2014). As the education workforce is very large, a significant proportion of these costs could be saved. PwC reported a 2.3 return on investment when organisations addressed the issues directly. It appears foolhardy not to do so in the education sector. Declines are noted in Union/Industrial Disputes for the same period.
- **Gender** No significant differences exist for individual stressors except interpersonal conflicts, which are experienced as more stressful by men. Both groups report the same ranking of each stressor.
- **Sector and Type** The pattern here is similar to gender. While the differences are larger between these groups than gender differences most are less than 1-point and the rankings are identical except for independent secondary school principals who rate government initiatives along with the mental

health issues of students as the most stressful items. The similarities rather than differences are the major finding here. The only exceptions to this was that Government school principals reported more stress resulting from expectations of their employers, while teacher shortages impacted more on secondary principals.

Sources of Stress 2017 disaggregated by Sector and Level



Sources of Stress 2017 disaggregated by Role



3. Sources of Support

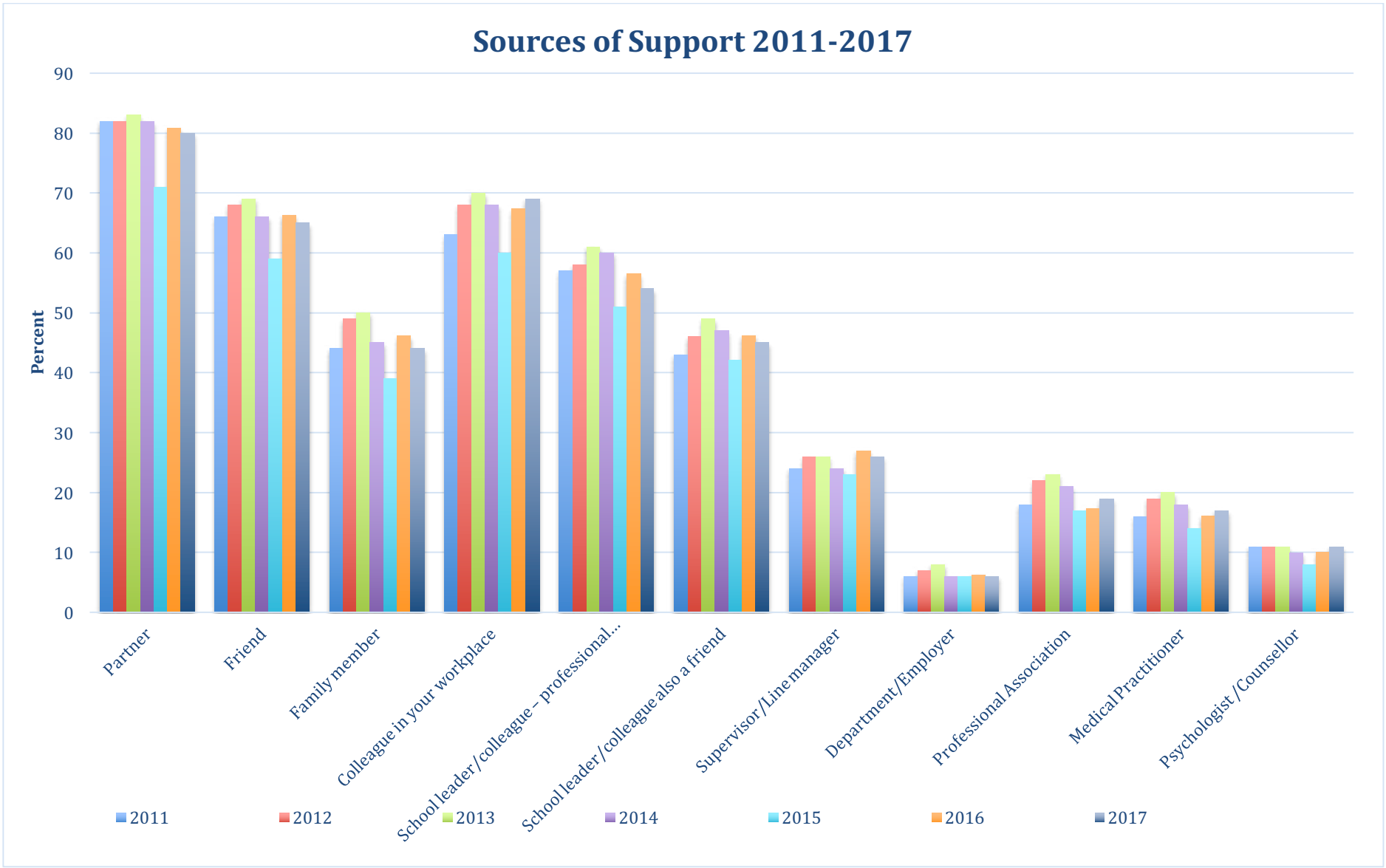
Introduction

Participants were asked to indicate the sources of support they received from each of the people listed on a 1-10 scale. Answers were converted to 10-100.

Trend data 2011 - 2017

Sources of Support	2011 (N=2049)		2012 (N=2084)		2013 (N=2010)		2014 (N=2467)		2015 (N=2863)		2016 (2725)		2017 (2406)	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Partner	82	38.3	82	38	83	37.8	82	38.5	71	45.2	81	39.42	80	40.1
Friend	66	47.4	68	46.7	69	46.4	66	47.4	59	49.2	66	47.29	65	47.6
Family member	44	49.7	49	50	50	50	45	49.7	39	48.9	46	49.86	44	49.7
Colleague in your workplace	63	48.2	68	46.8	70	45.6	68	46.6	60	49.1	67	46.89	71	46.1
School leader/colleague – professional relationship	57	49.6	58	49.4	61	48.8	60	49.1	51	50	56	49.59	55	49.8
School leader/colleague also a friend	43	49.6	46	49.8	49	50	47	49.9	42	49.3	46	49.87	45	49.8
Supervisor/Line manager	24	42.5	26	43.7	26	43.7	24	42.9	23	41.9	27	44.39	27	44
Department/Employer	6	24.4	7	25.8	8	27.6	6	24.5	6	23.8	6	24.32	6	22.9
Professional Association	18	38.2	22	41.5	23	42.4	21	40.9	17	37.2	17	37.85	19	39
Medical Practitioner	16	37	19	38.9	20	39.8	18	38.1	14	34.8	16	36.80	16	37.6
Psychologist /Counsellor	11	31.1	11	31.1	11	31.8	10	29.6	8	27.8	10	30.18	10	31.4

Sources of Support 2011 - 2017



2017 in Detail

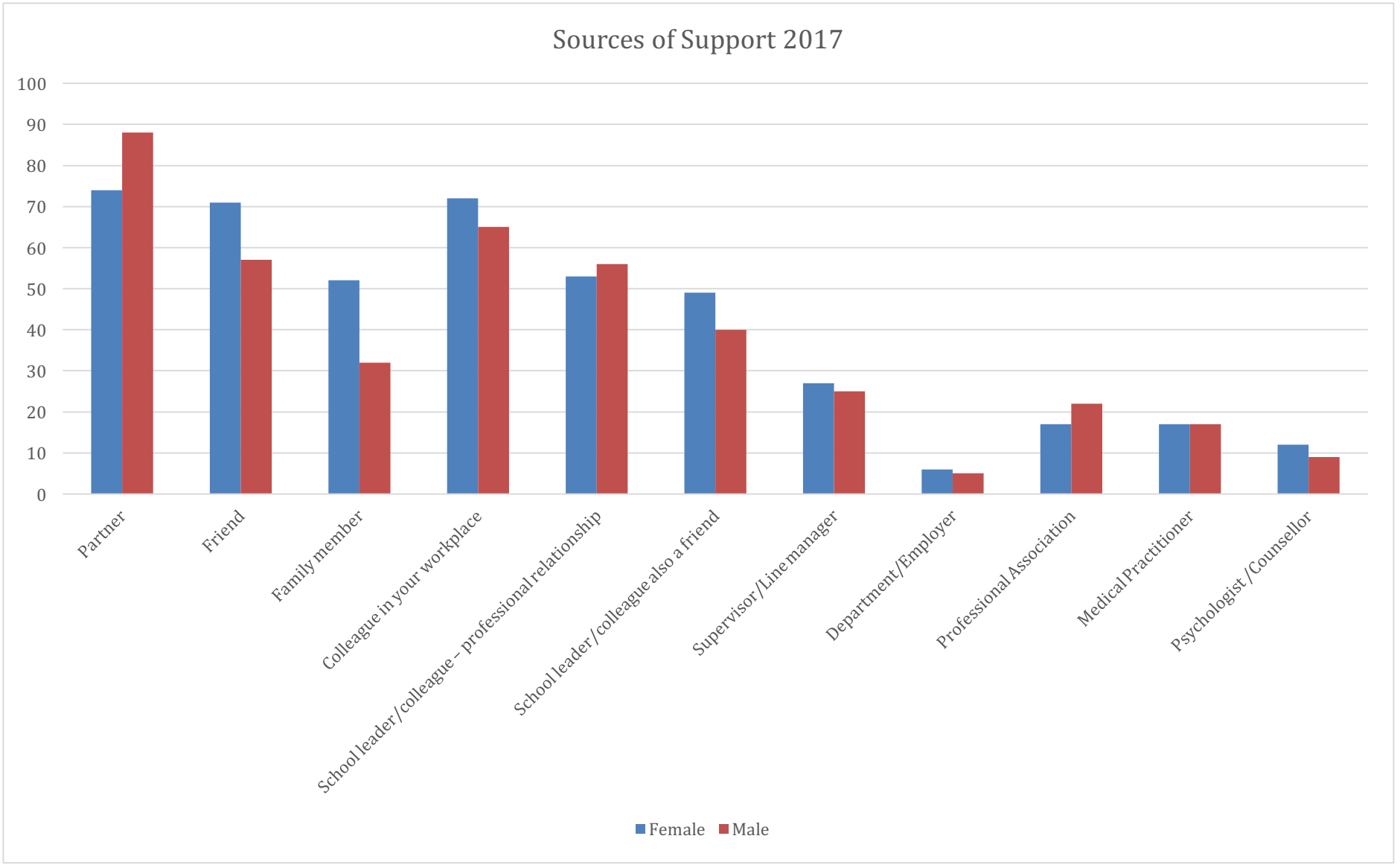
Items	All	Gov	Cat	Ind	Gender		Role		Govt		Catholic		Independent	
					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Partner	80	79	82	85	74	88	80	78	78	80	84	80	82	75
Friend	65	65	67	62	71	57	65	65	68	59	71	51	75	57
Family member	44	43	49	43	52	32	44	45	44	40	52	29	47	36
Colleague in your workplace	71	70	69	67	72	65	70	68	72	69	72	57	73	68
School leader/colleague – professional	55	53	57	56	53	56	56	48	54	53	55	69	51	54
School leader/colleague also a friend	45	47	45	37	49	40	47	39	46	44	48	37	41	21
Supervisor/Line manager	27	27	26	17	27	25	28	20	27	27	23	35	14	21
Department/Employer	6	6	7	3	6	5	7	2	5	5	8	4	3	4
Professional Association	19	19	13	22	17	22	22	10	19	20	12	8	25	14
Medical Practitioner	16	18	12	13	17	17	16	19	19	18	13	6	16	4
Psychologist /Counsellor	10	11	9	14	12	9	10	14	11	10	9	4	16	11

- **Sources of Support**. Principals were asked to indicate the sources of support from 11 options.

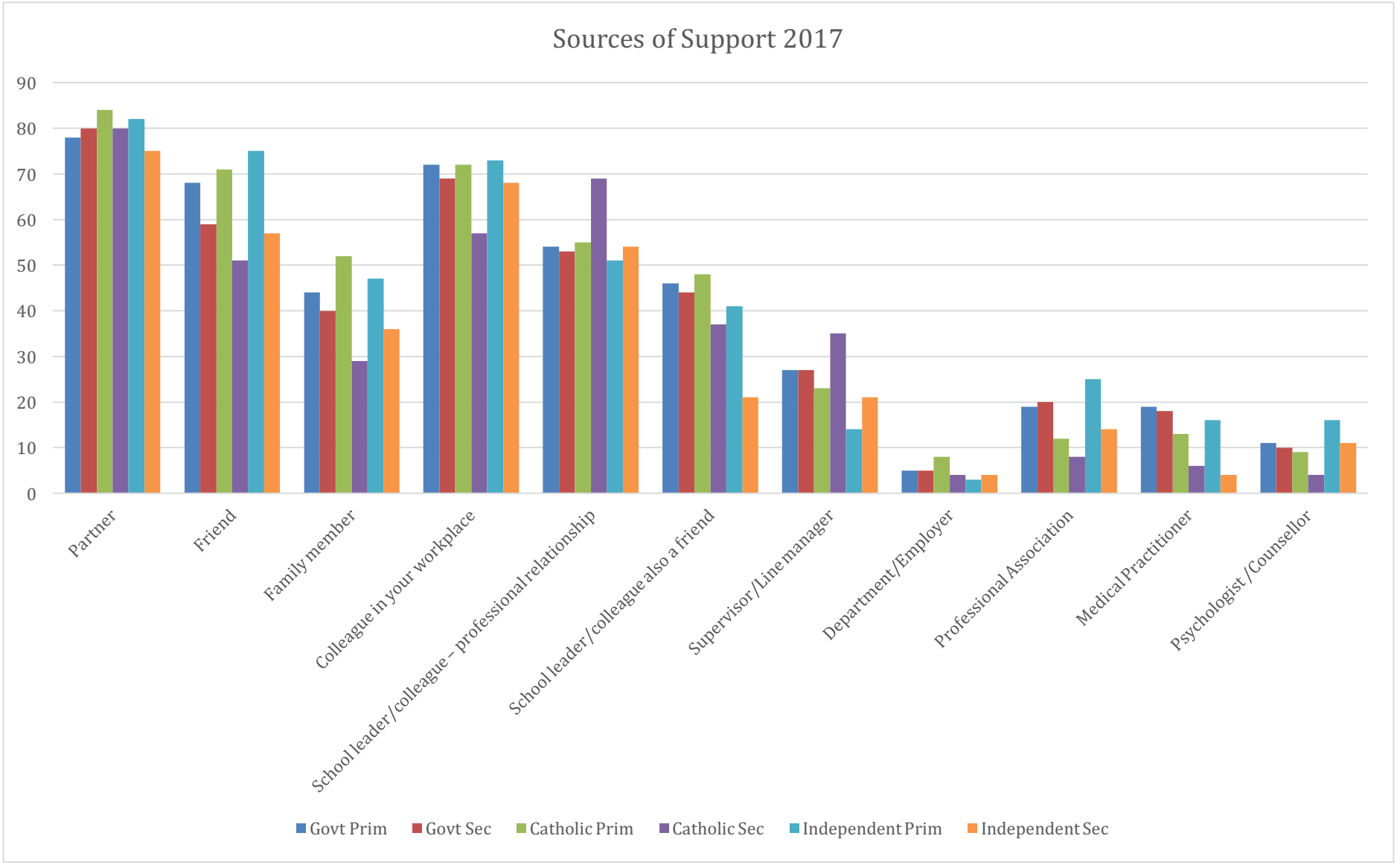
Results

- **Trends** show that every type of support is diminishing except from supervisors. The greatest declines are from the strongest supporters – Family. This is likely to be linked to the increasing job demands, which are related to high levels of work family conflict. These results suggest that there is a high level of structural problems in the system as a whole. There are differences between various groups depending on the support type, but they are more statistical than substantive. The pattern of responses across the system is remarkably similar. All principals face essentially the same difficulties and call on the same people to support them. The most worrying finding is that over time employers rate at <1 on a 1-10 scale for all 7 years of the survey. There is much work to be done by this important stakeholder group if adequate levels of trust are to be returned to the system. Social Capital is built on trust and schools rely on social capital to fully function.
- **Gender** Significant differences exist for individual sources of support. While family provides the largest source of support, the differences between males and females are very different. Both Males and Females report that their strongest support is from partners. However, females also perceive support coming from friends and other family members in much greater amounts than males. Women also experience higher levels of support from colleagues, which is an important aspect of social capital.
- **Sector and Type** The differences are strongest for Independent Secondary leaders, so should be read with the cautions outlined at the beginning of the technical report. There are no substantive differences between groups.

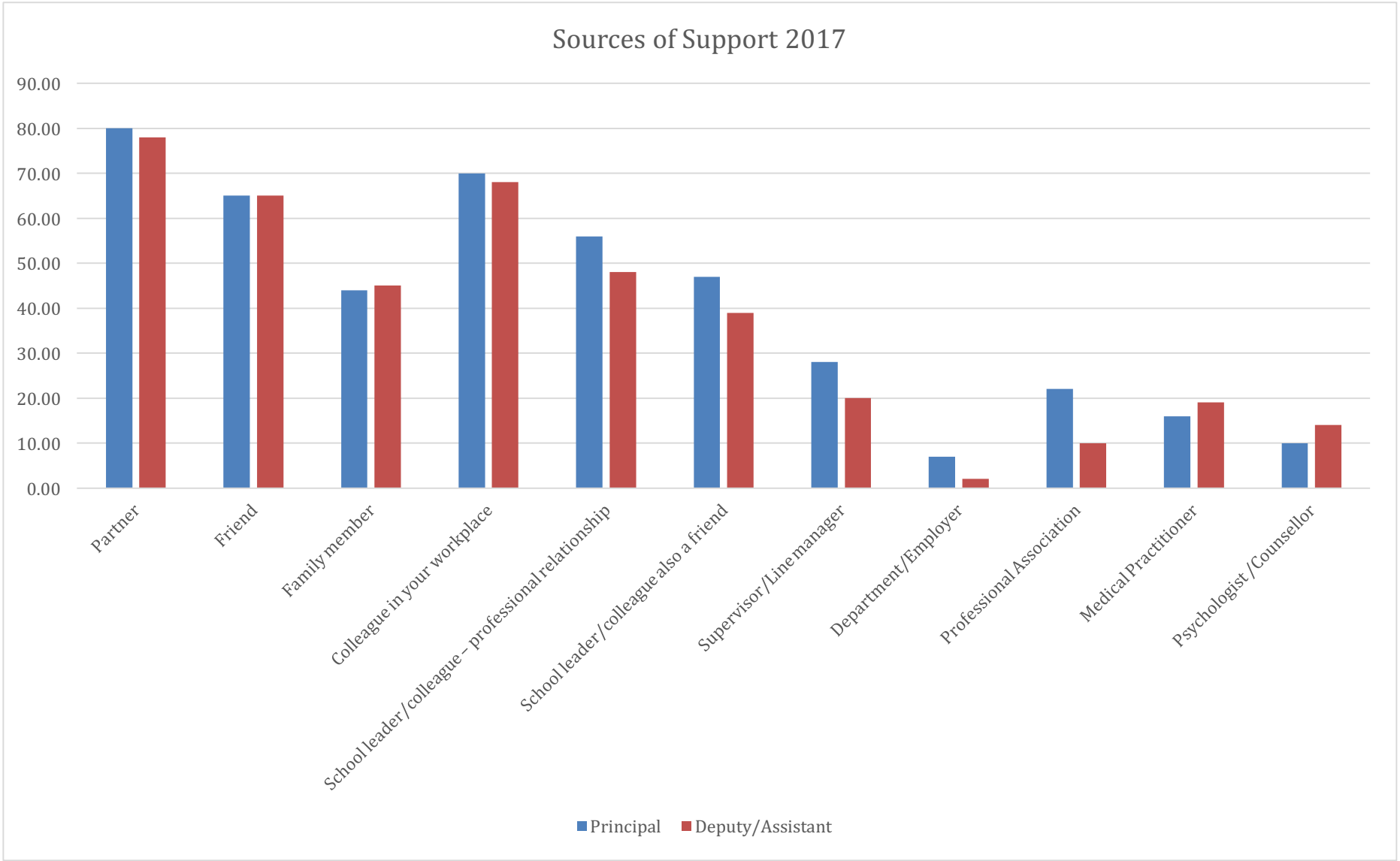
Sources of Support disaggregated by Gender



Sources of Support disaggregated by Sector and School Type



Sources of Support disaggregated by Role



4. 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. And, once again, some caution must be applied to interpreting results for independent secondary schools, as they are not uniformly distributed across geolocations, or states.

2017 Data in Detail

Scale	All	Government	Catholic	Independent	Gender		Role		Govt		Catholic		Independent	
					Female	Male	Principal	Dep/Ass	Prim	Sec	Prim	Sec	Prim	Sec
Social Capital	73.23	72.44	73.41	75.01	73.18	72.33	73.44	71.08	73.71	71.61	73.53	75.30	72.80	76.48

- **Gender** No significant differences exist.
- **Sector and Type** The pattern here is similar to gender; while the differences are slightly larger between the three groups, most are less than a 1-point difference. The similarities rather than differences are the major finding here.

The most interesting findings here relate to the spread of results across schools and the correlations with both positive and negative aspects of worklife.

There virtually no relationship between ICSEA scores and Social Capital, which demonstrates that it relies more on human resourcing than financial resourcing. It is also not related to proximity to capital cities as a number of other results are. This is good news, because there are no obvious restrictions on the potential of Social Capital tied to things that are difficult to change: level of funding and geolocation.

The spread of results show that there are many schools that are doing well, with a principal who is satisfied, confident, relatively autonomous and satisfied with the role. This information needs much further investigation, which will be carried out in the near future and further explication of this aspect of social capital is likely to prove fruitful.

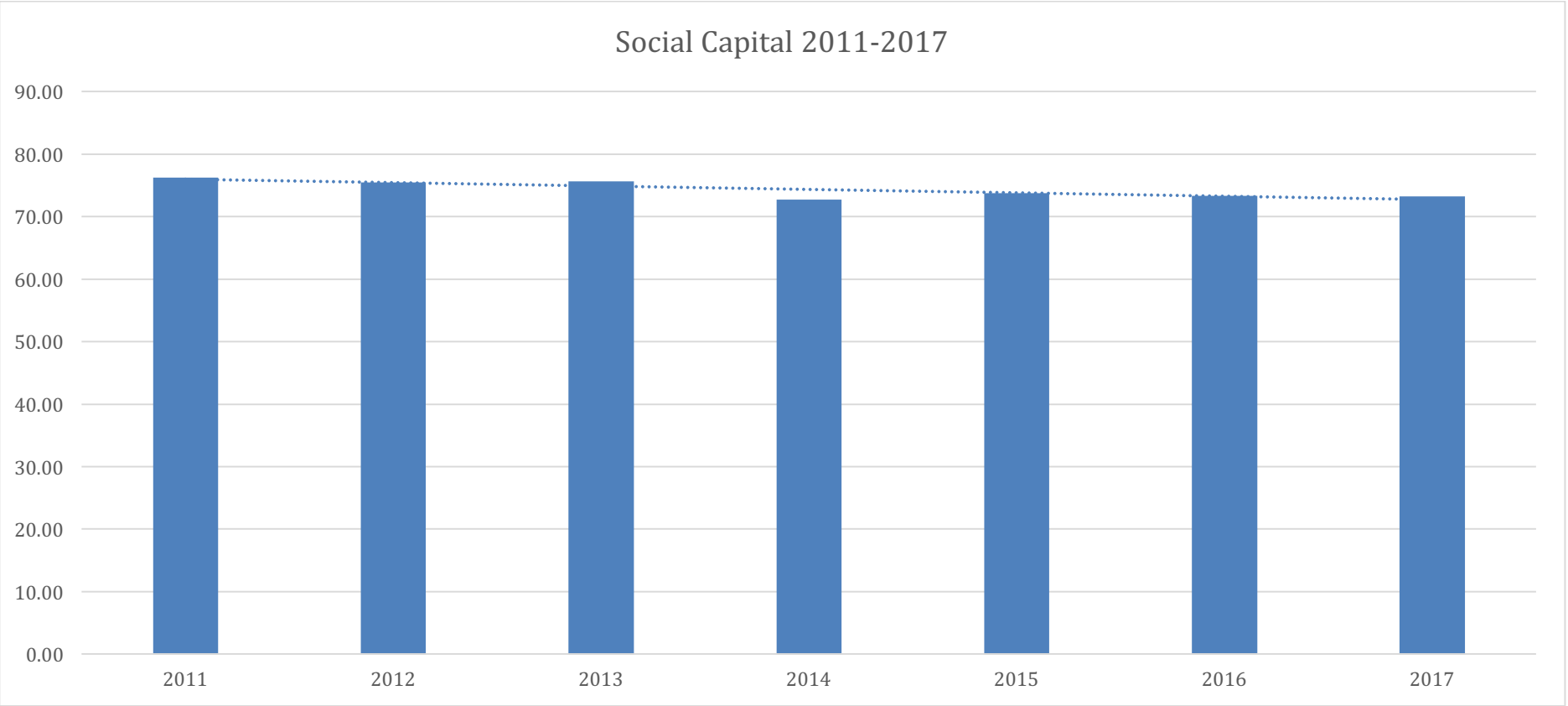
Social capital is correlated with increased perceptions job satisfaction, general health, confidence, autonomy and harmonious passion. Social capital is also correlated with decreased perceptions of quantitative and emotional demands, work-family conflict, stress, burnout, cognitive and somatic stress symptoms, sleeping difficulties and depressive symptoms.

The social capital results are consistent with 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.

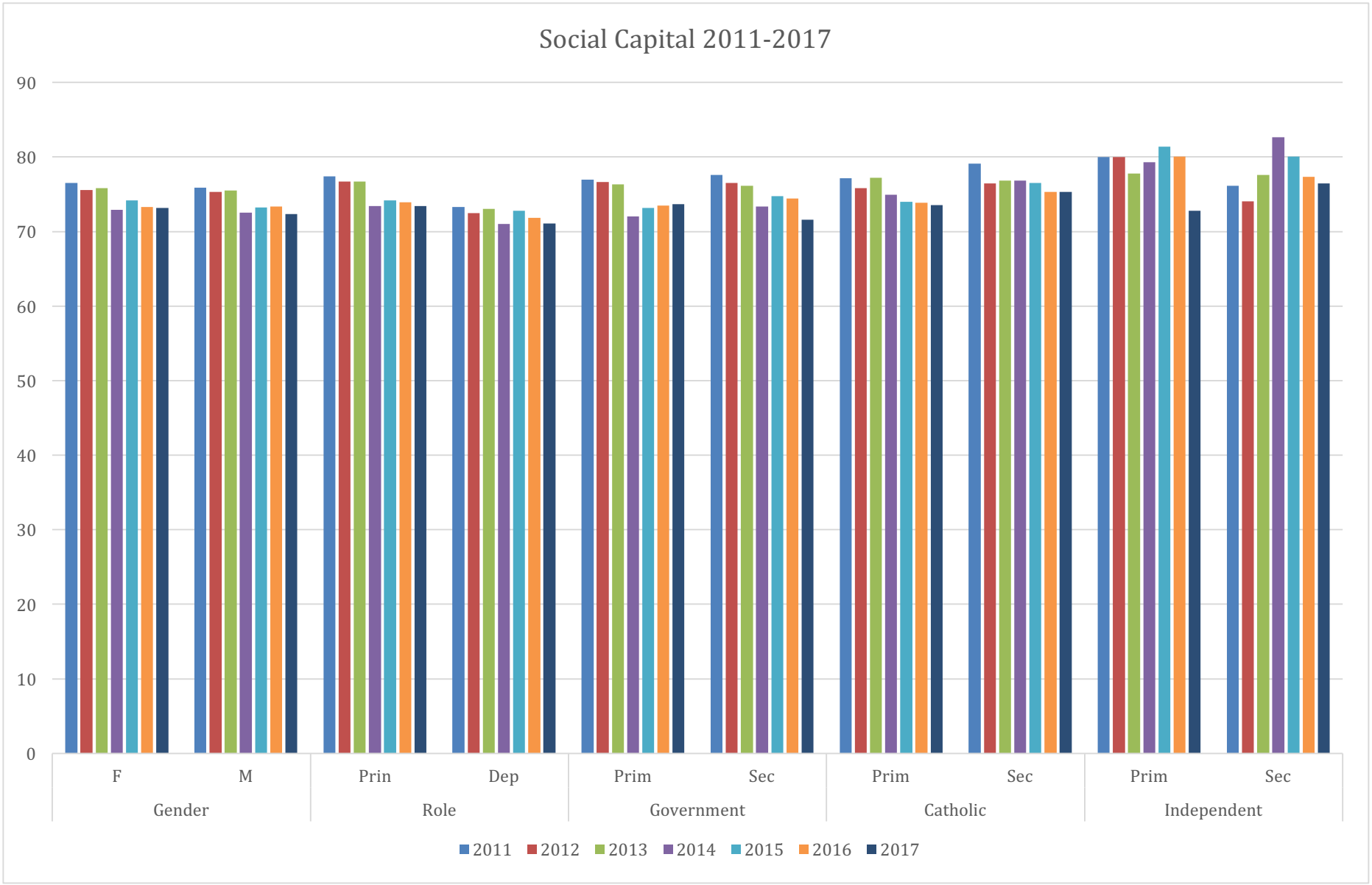
Table 6. Social Capital Trend Data

	Social Capital				
Year	N	Min	Max	Mean	SD
2011	2048	7.64	100	76.24	12.73
2012	2083	2.78	100	75.48	13.60
2013	2010	9.72	100	75.68	13.28
2014	2451	5.56	100	72.74	14.21
2015	2468	13.89	100	73.78	13.44
2016	2666	0	100	73.31	14.30
2017	2331	9.03	100	72.83	14.28

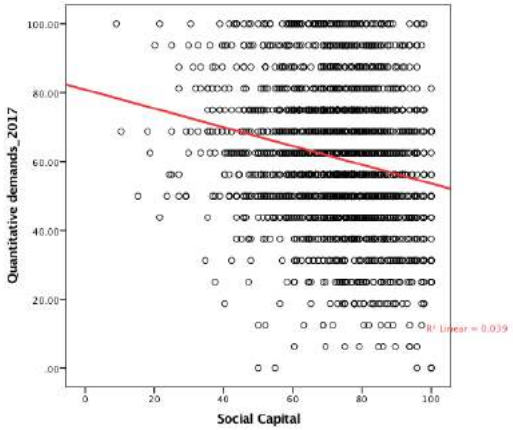
Social Capital Trend Data 2011-2017

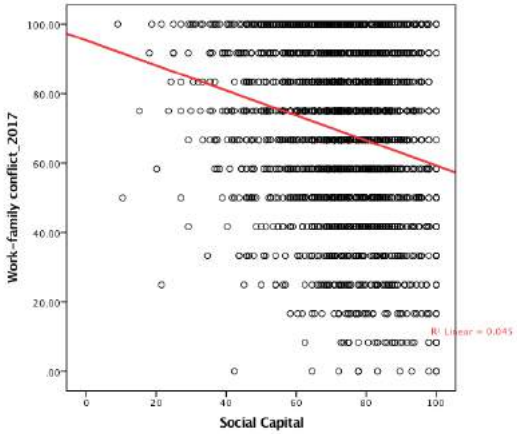


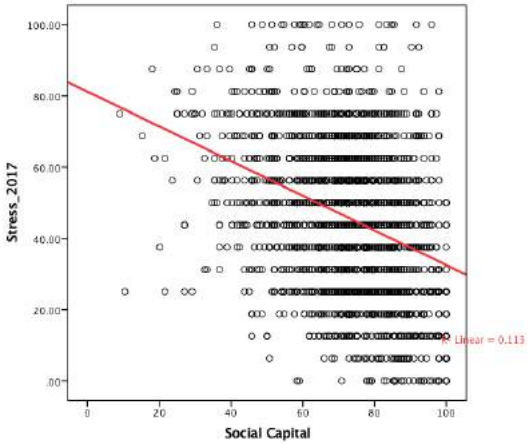
Social Capital trend data disaggregated by Gender, Role and Sector

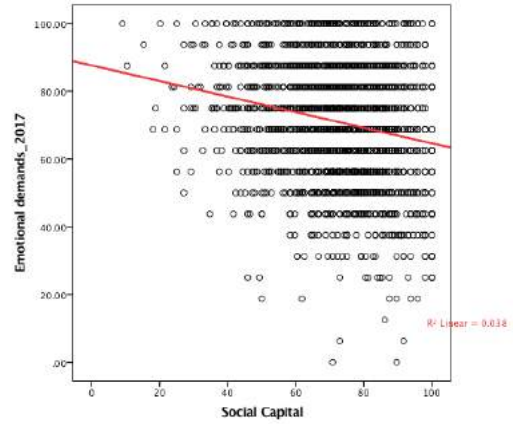


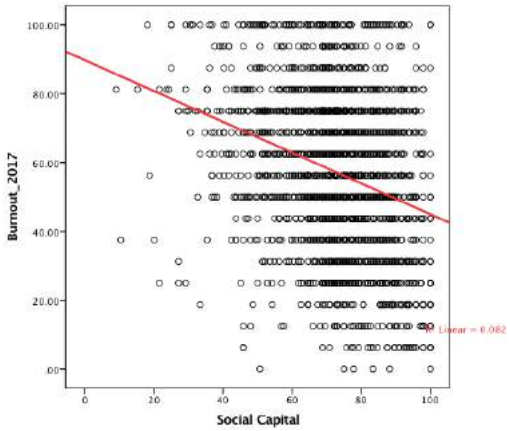
Correlations between Social Capital and Quantitative and Emotional Demands, Work-Family Conflict, Burnout, Stress and Sleeping Troubles

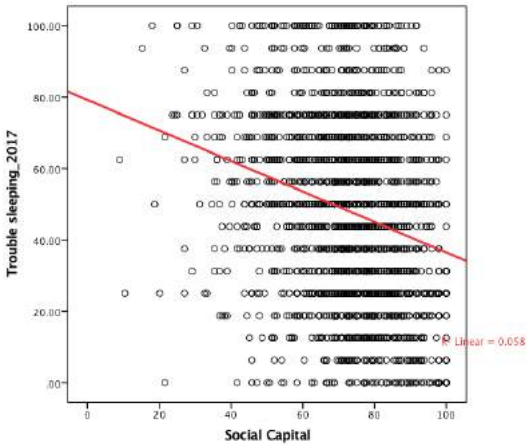




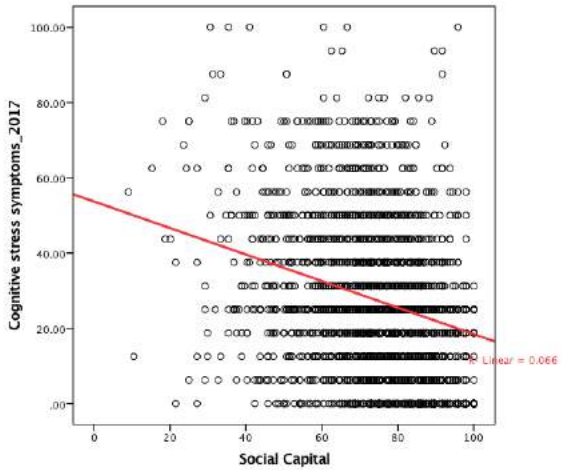


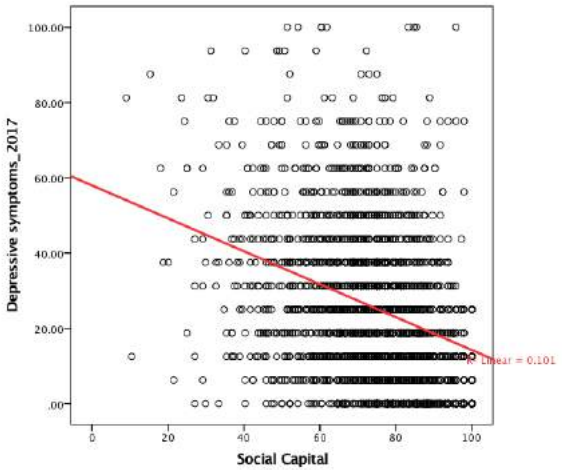


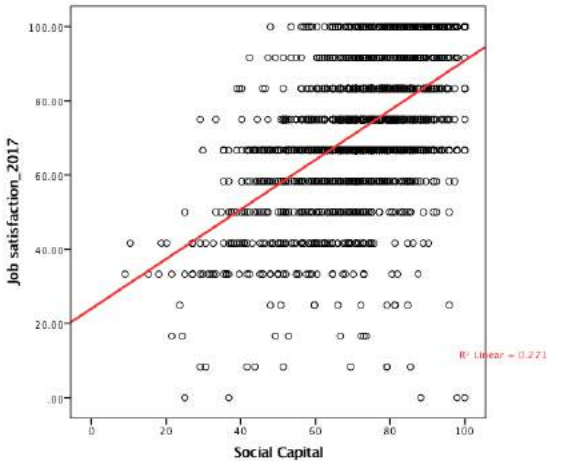


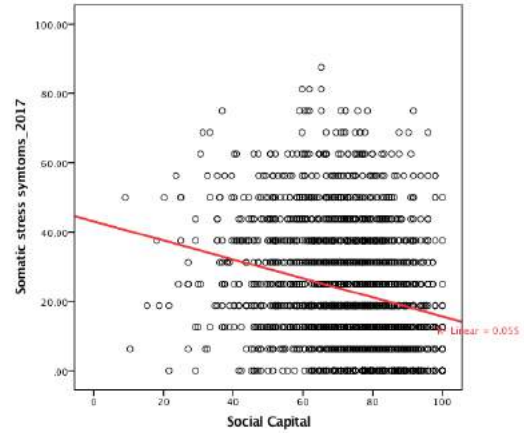


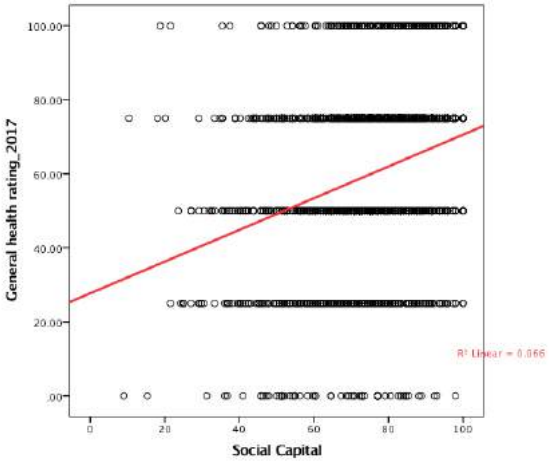
Correlations between Social Capital and Cognitive Stress, Somatic Stress, Depressive Symptoms, General Health, Job Satisfaction and Commitment to the Workplace

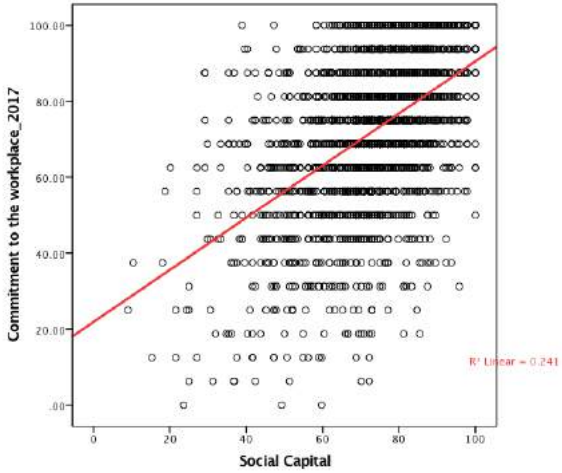




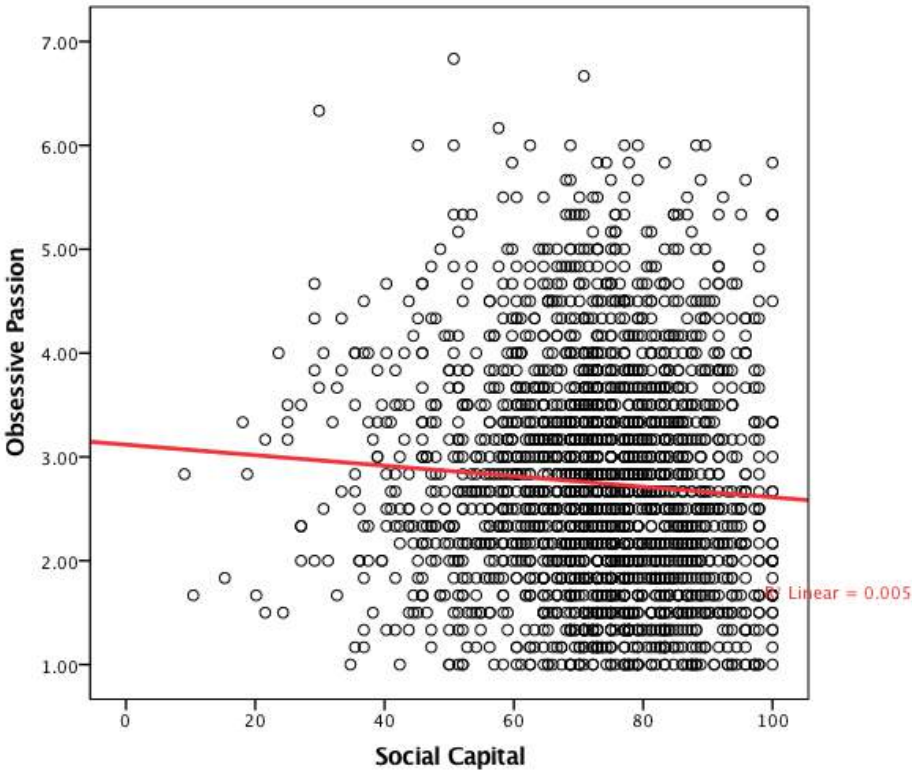


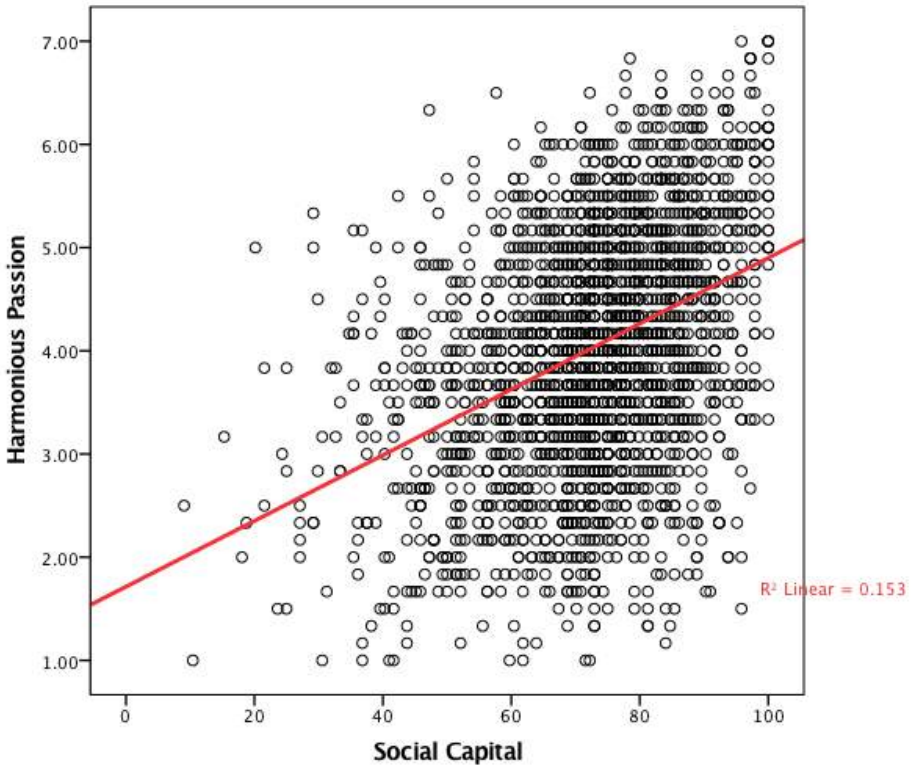






Correlations between Social Capital Obsessive & Harmonious Passion





5. Positive and Negative Affect Scale (PANAS)

This brief scale is one of the most widely used self-report measures of individual's positive and negative activation, developed by Watson, Clark, and Tellegen (1988). PA measures positive engagement with the environment and NA measures subjective distress and unpleasurable engagement. Enthusiasm and alertness are indicative of high PA, lethargy and sadness characterise low PA (Crawford & Henry, 2004).

Table 7. Positive and Negative Affect Scale (ANAS) comparisons for Australian Principals with the General Population and New Zealand Principals

PANAS		Population*		Australia						New Zealand		
				2016			2017					
		Mean	SD	Mean	SD	Percentile	Mean	SD	Percentile	Mean	SD	Percentile
Total	PA	31.31	7.65	37.25	6.8	77	37.23	6.88	77	36.63	6.08	72
	NA	16	5.9	18.99	7.05	78	17.77	6.42	74	19.25	6.64	78
Female	PA	30.62	7.89	37.52	6.8	81	37.64	6.97	81	37.05	6.02	77
	NA	16.68	6.37	19.05	6.95	90	17.77	6.44	74	19.14	6.44	78
Male	PA	32.06	7.31	36.84	6.78	77	36.64	6.70	77	35.64	6.11	70
	NA	15.2	5.23	18.88	7.21	78	17.78	6.40	74	19.51	7.1	80

*Crawford & Henry (2004) PA= Positive Affect; NA= Negative Affect

PA results place participants on the 77th percentile for both PA and 74th percentile for NA: very little change from 2016. The range of scores suggests wide variation between individuals in the cohort, but no significant differences were found for any of the comparison groups. The scores are also very similar to those reported by New Zealand school leaders.

6 Passion.

Introduction

The following pages report on the additional survey scale added in 2015, *The Dualistic Model of Passion* (Vallerand, 2015). Vallerand 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.
- The instrument captures the presence of passion, and the two types as separate scores.

Most principals describe themselves as passionate educators, so it will be crucial to determine firstly whether this is accurate, and second whether this represents risk or protection as related to school setting. Indeed, research in education settings in other countries (Trépanier, Fernet, Austin, Forest & Vallerand, 2014) has shown that increasing demands in the absence of sufficient resources leads to obsessive passion, which, in turn, leads to burnout and undermines work engagement. Conversely, resources in the absence of demands, facilitates harmonious passion, which, in turn, prevents burnout and facilitates work engagement. The results for this measure in 2015 are in line with previous studies and significantly correlated both positively and negatively with the Job Demands and Resources. In 2015, 91.5% of participants report being passionate (M=5.46, SD=0.93). Harmonious passion (M=4.1, SD=1.16) was more common than Obsessive passion (M=2.72, SD=1.07). These figures have remained remarkably stable over the life of the survey. The combination of social capital and passion may provide significant new areas for combating the increasing demands of the role. Examples of the relationships between job demands, outcomes, social capital and the dualistic model of passion are represented below.

Table 8. Passion presence, and subtype results for 2015 and 2016

		Passion 2015-2016									
		Gender		Role		Government		Catholic		Independent	
Year	Passion Type	F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
2015	Presence	5.59	5.29	5.49	5.38	5.47	5.51	5.32	5.82	5.61	5.45
	Obsessive	2.78	2.65	2.75	2.65	2.74	2.74	2.54	3.03	2.72	2.56
	Harmonious	4.13	4.06	4.08	4.18	3.99	4.11	4.08	4.53	4.50	4.42
2016	Presence	5.61	5.30	5.53	5.39	5.50	5.61	5.46	5.76	5.75	5.52
	Obsessive	2.79	2.67	2.74	2.72	2.73	2.69	2.68	2.87	2.90	2.49
	Harmonious	4.06	4.07	4.08	4.08	3.96	4.23	4.08	4.63	4.45	4.09
	Presence	5.57	5.30	5.50	5.33	5.45	5.35	5.39	5.71	5.43	5.74
2017	Obsessive	2.78	2.66	2.75	2.68	2.67	2.63	2.56	2.76	2.81	2.66
	Harmonious	3.99	4.03	4.01	3.99	3.98	3.94	4.11	4.40	4.30	4.12

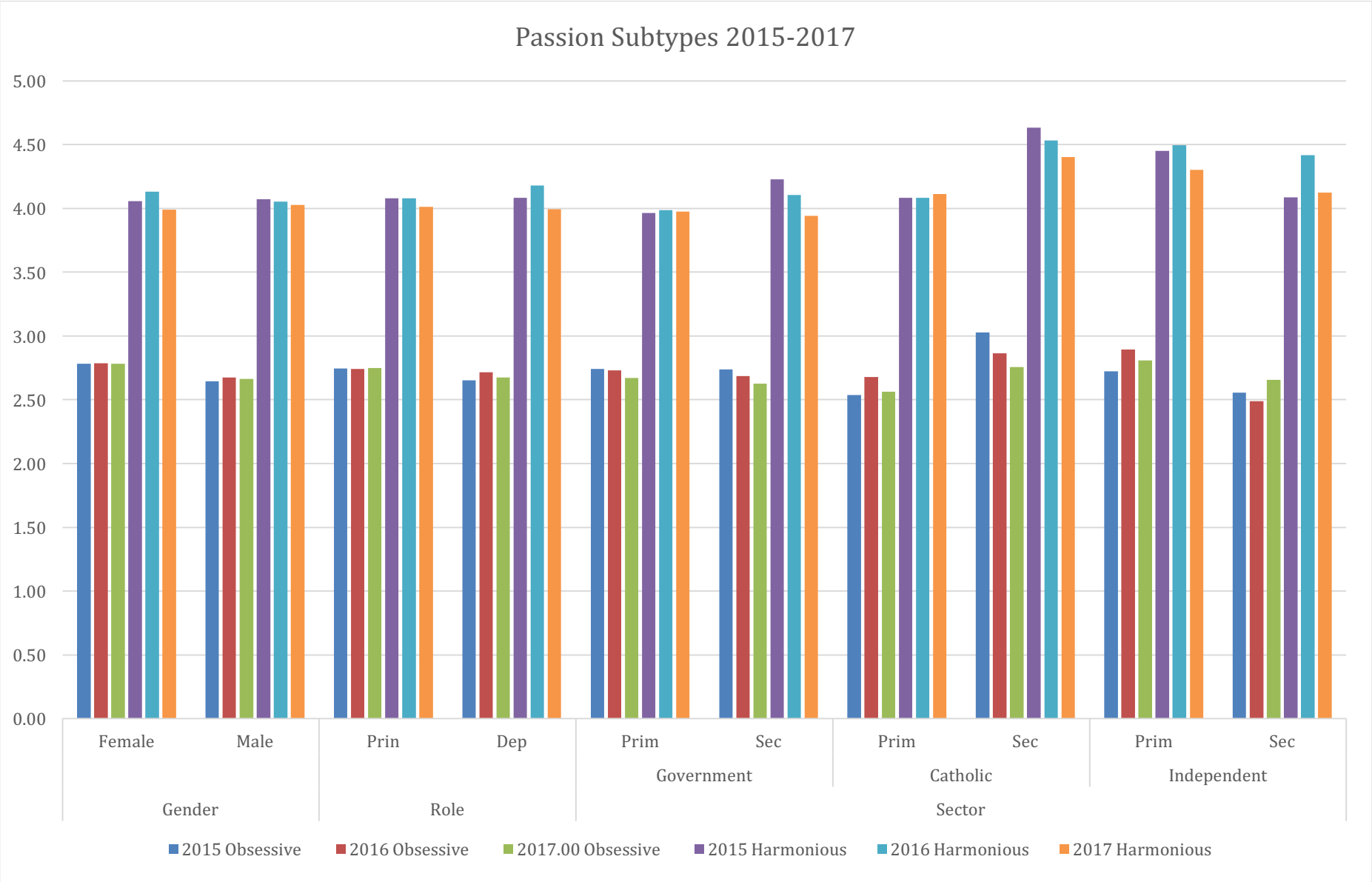
2017 Data in Detail

Passion	All	Govt	Catholic	Independent	Gender		Role		Govt		Catholic		Independent	
					F	M	Prin	Dep	Prim	Sec	Prim	Sec	Prim	Sec
Presence	5.45	5.44	5.50	5.58	5.57	5.30	5.50	5.33	5.45	5.35	5.39	5.71	5.43	5.74
Obsessive	2.69	2.72	2.68	2.87	2.78	2.66	2.75	2.68	2.67	2.63	2.56	2.76	2.81	2.66
Harmonious	4.03	3.94	4.18	4.29	3.99	4.03	4.01	3.99	3.98	3.94	4.11	4.40	4.30	4.12

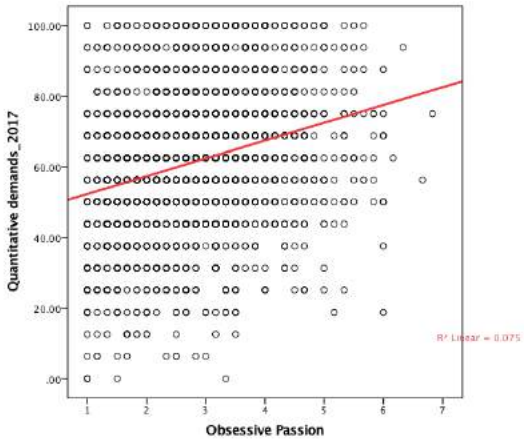
- **Gender** No significant differences exist.
- **Sector and Type** No significant differences exist.
- The most interesting findings here relate to the spread of results across schools and the correlations with both positive and negative aspects of worklife, which are represented graphically in the following pages

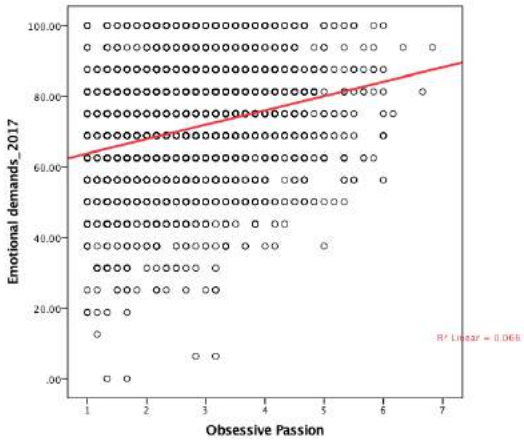
These early results suggest that the combination of passion and social capital, both of which appear unrelated to resourcing offer enticing possibilities for fundamental improvement of the school system.

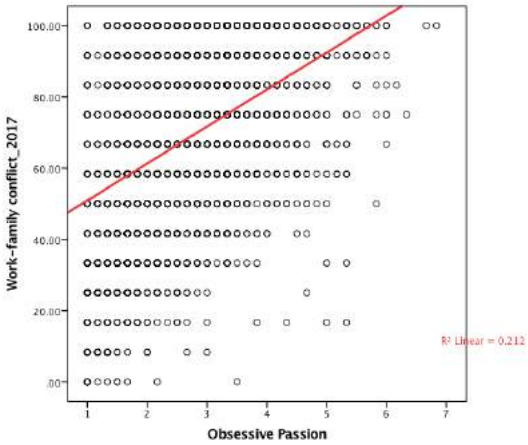
Passion disaggregated by Type, Gender, Role and Sector

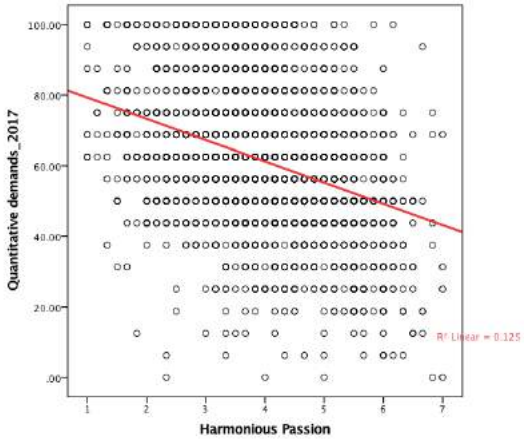


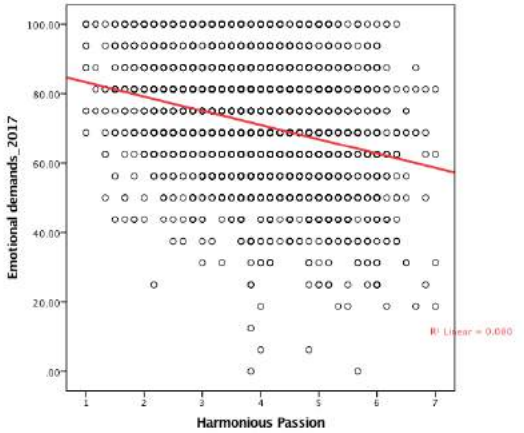
Correlations between Passion, Quantitative & Emotional Demands, and Work-Family Conflict

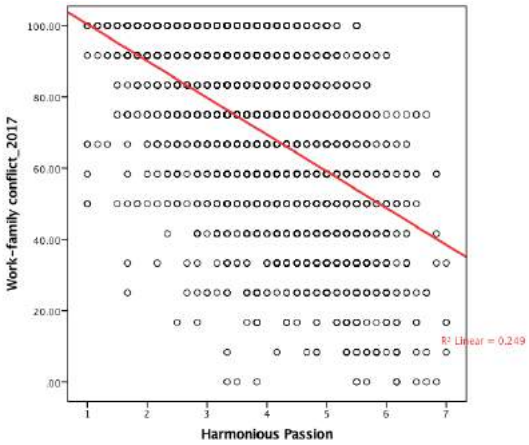




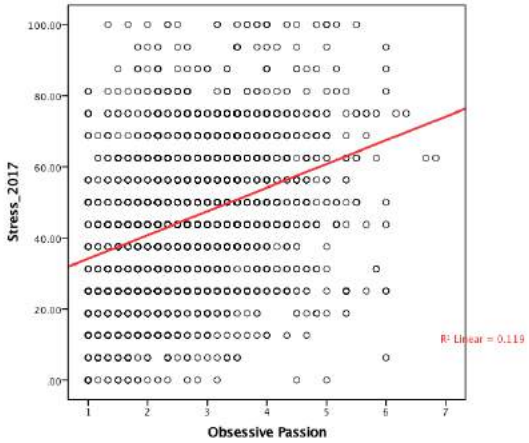


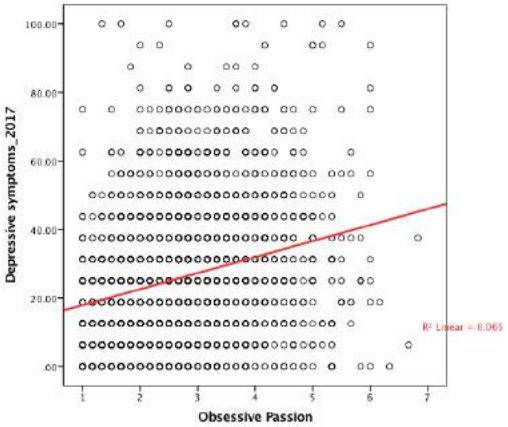


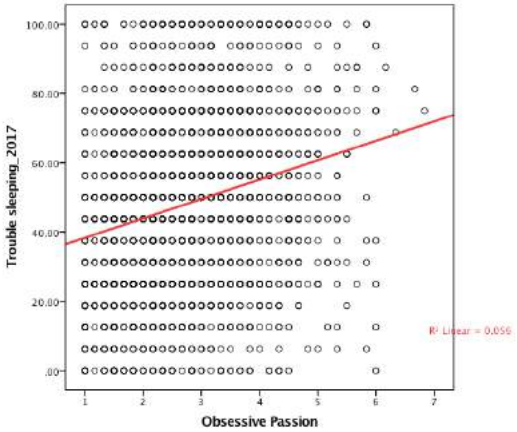


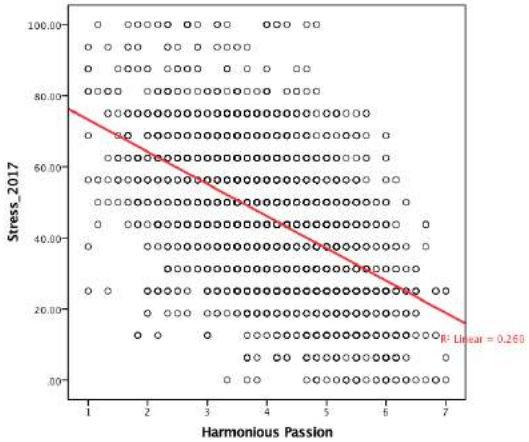


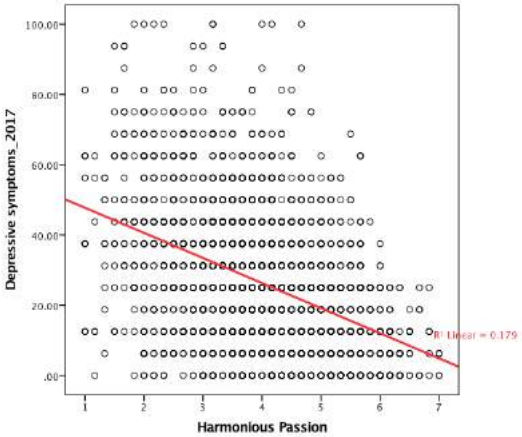
Correlations between Passion and Cognitive Stress, Depressive Symptoms, and Trouble Sleeping

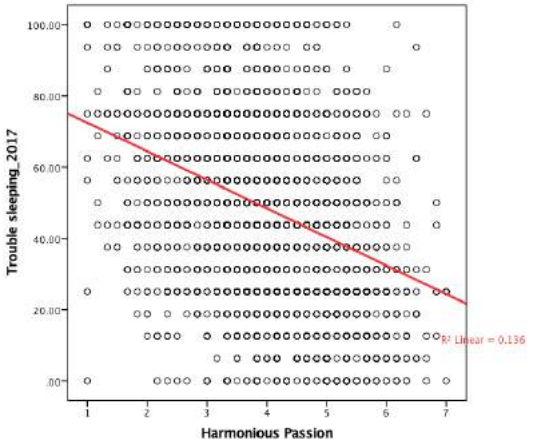




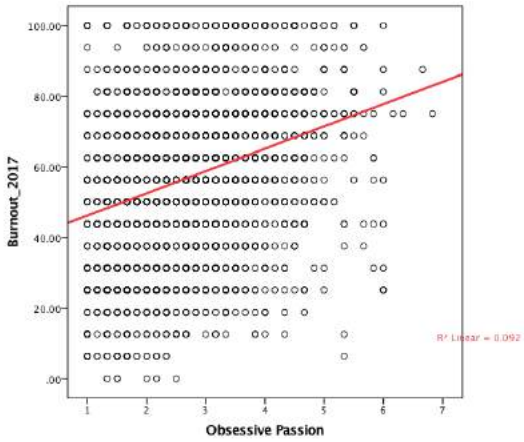


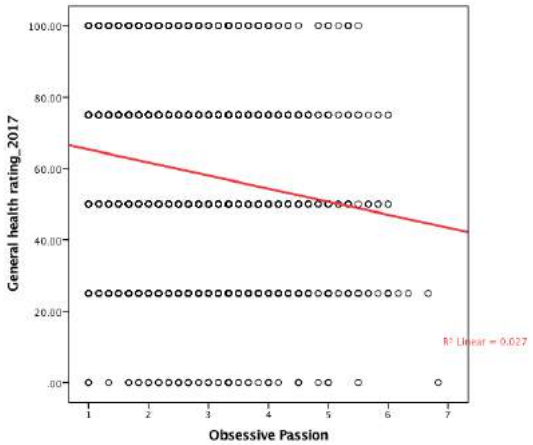


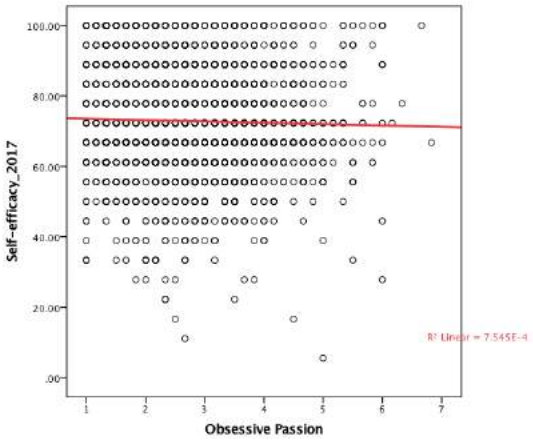


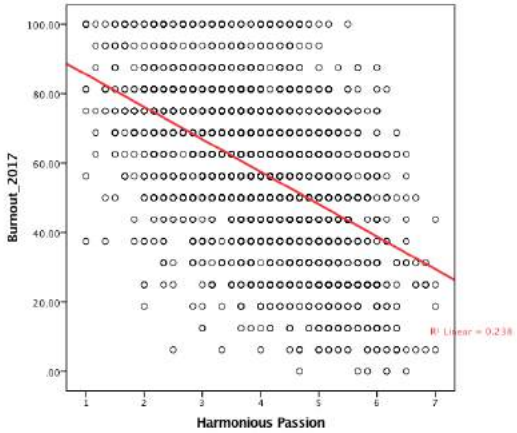


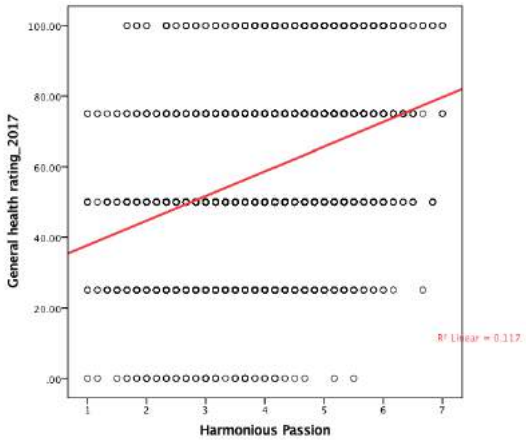
Correlations between Passion, Burnout, General Health and Self-Efficacy

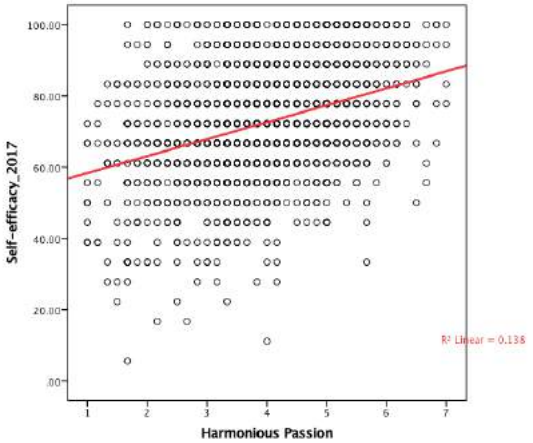












7. Composite Psychosocial Risk

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 in previous years 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 ≥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 ≤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 taxonomy of strain and resource scales are listed in the following table and figures along with the cumulative risk categories 2011-2017.

Table 9. 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 10. 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 Categories	% of School Leaders**							$Pop^{n\Pi}$
		2011	2012	2013	2014	2015	2016	2017	
No Risk	0	5.2	3.3	4.1	5.6	3.9	3.9	3	*13.5*
Low	1-2	27.6	27.6	28.2	26.7	24.0	22.4	20.3	*29.5*
Moderate	3-6	53.3	54.2	52.2	52.0	56.2	54.3	54.9	*32.7*
High	7-10	12.6	13.3	13.2	13.3	13.6	16.6	18	*16.1*
Very High	>10	1.3	1.6	2.2	2.4	2.2	2.9	2.9	*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.
Π Population figures are taken from Stauder, et al (2017, (N=13,104) disaggregated for 18 employment categories including a global education cohort (n=1063)).

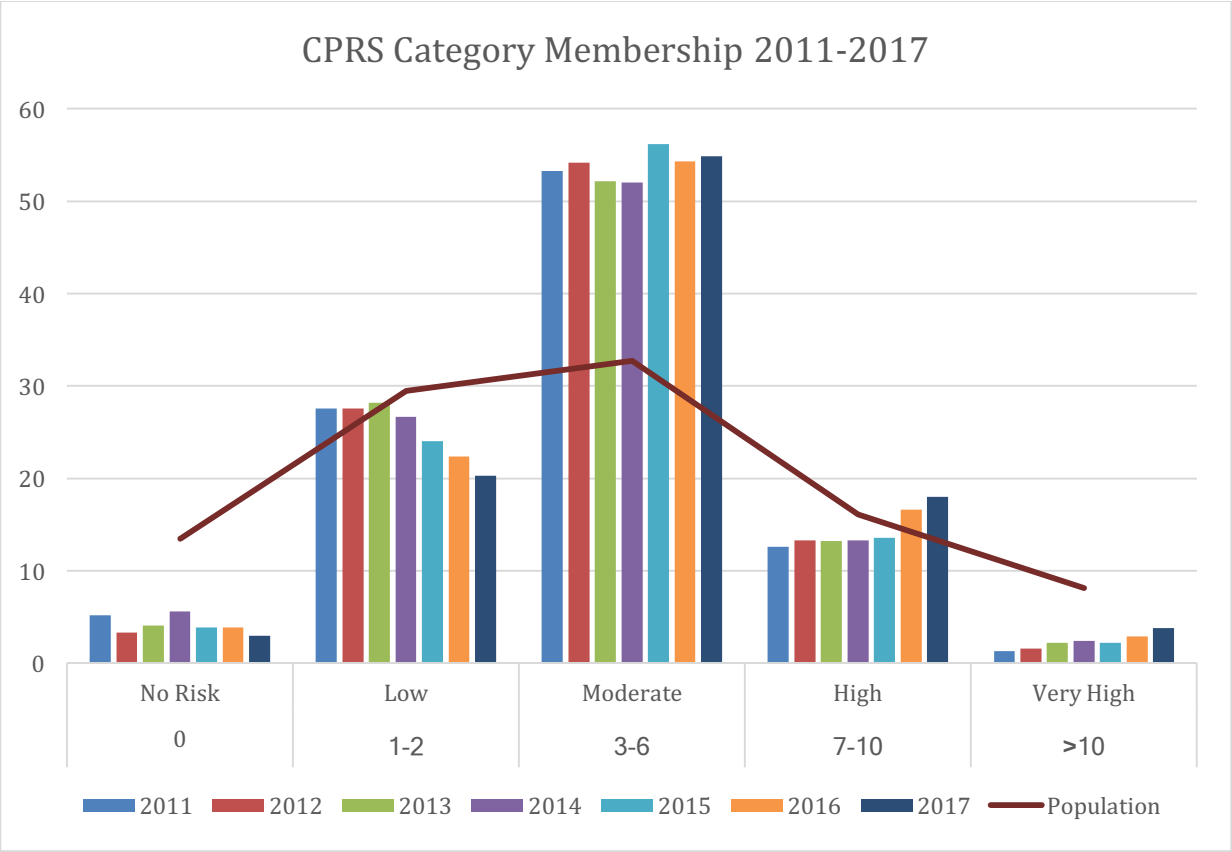


Figure 7. School Leaders Composite Psychosocial Risk (2016) compared with the general population figures drawn from Stauder, et. al., (2017).

The following figures display the changes in psychosocial risk since the survey began in 2011. Trends show the low risk group has been steadily falling while the moderate, high and very high groups have been increasing.

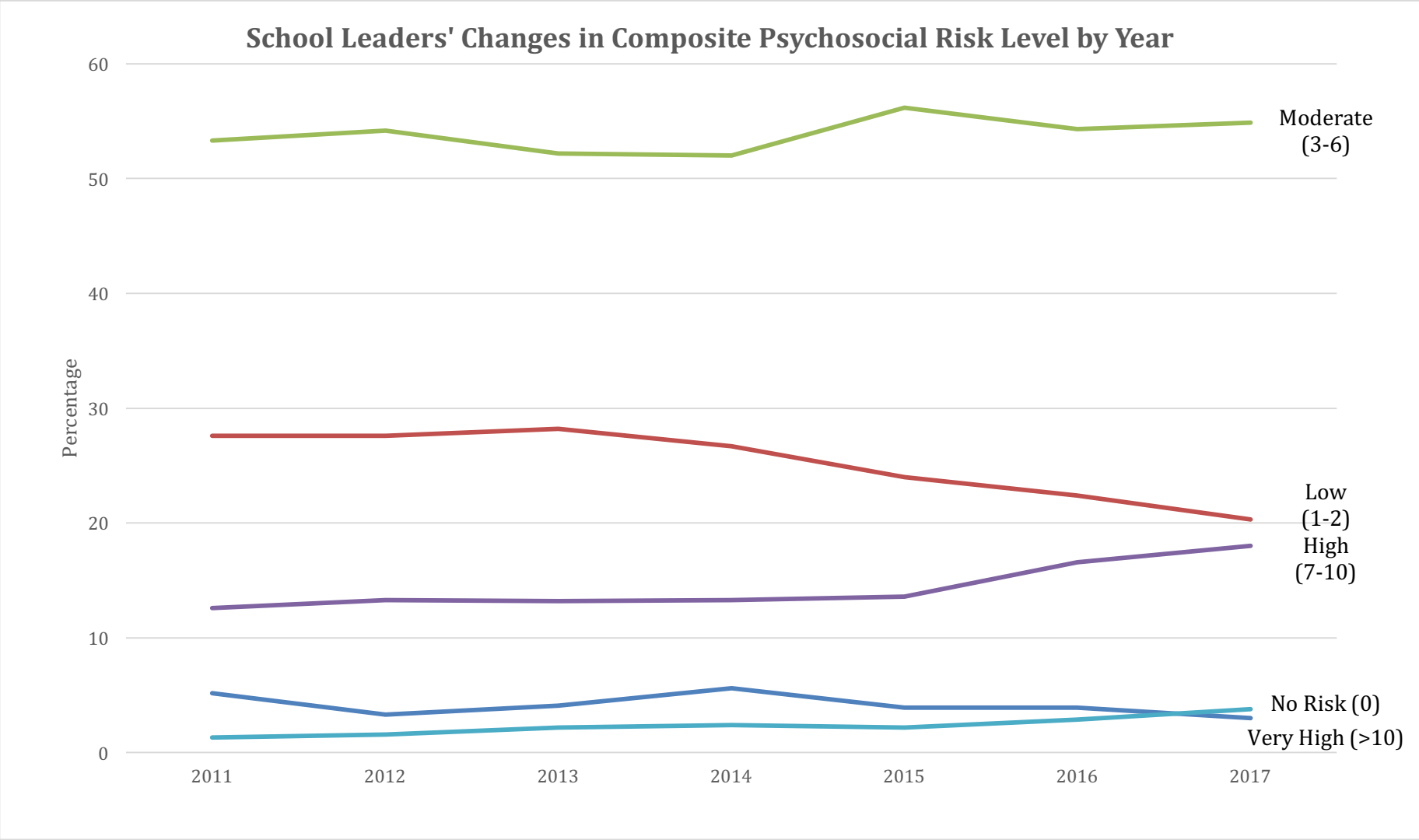


Figure 8. School Leaders' Composite Psychosocial Risk reported by category and year.

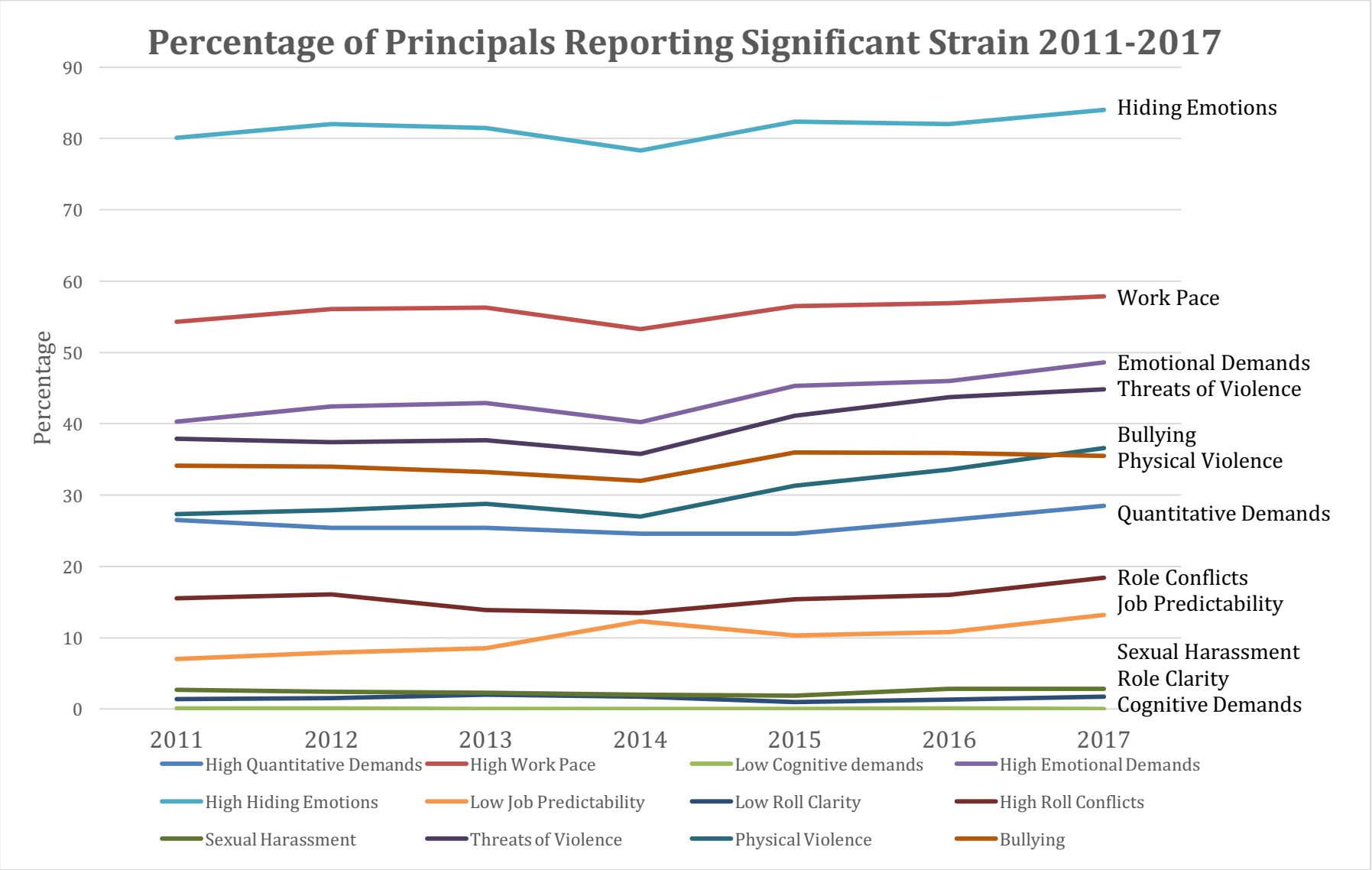


Figure 9. Percentage of participants who scored ≥75/100 on each strain variable from 2011-2016.

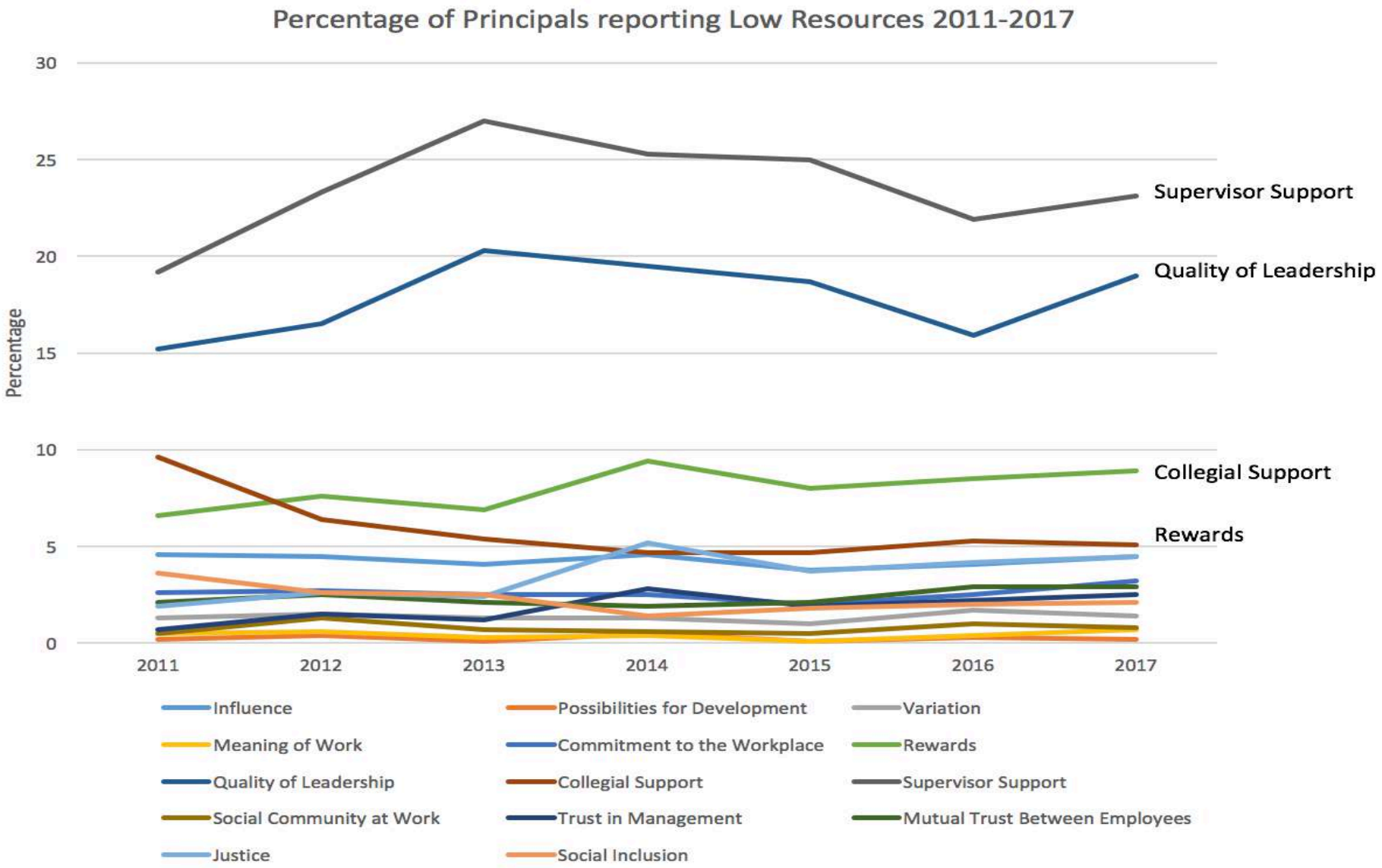


Figure 10. Percentage of principals who scored ≤25/100 on each resource variable from 2011-2016.

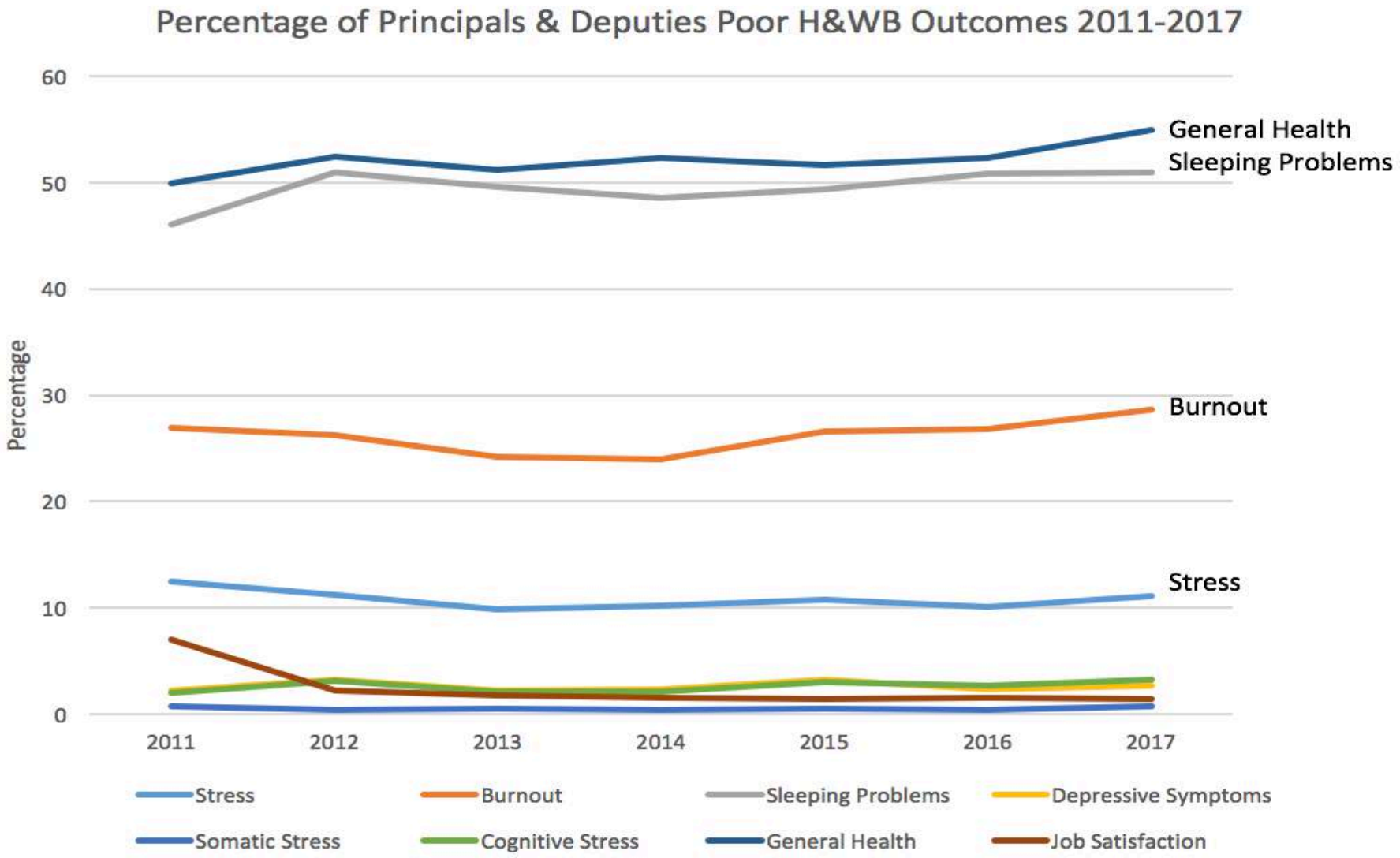


Figure 11. Percentage of School Leaders experiencing poor health and wellbeing outcomes 2011-2016.

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 11. 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

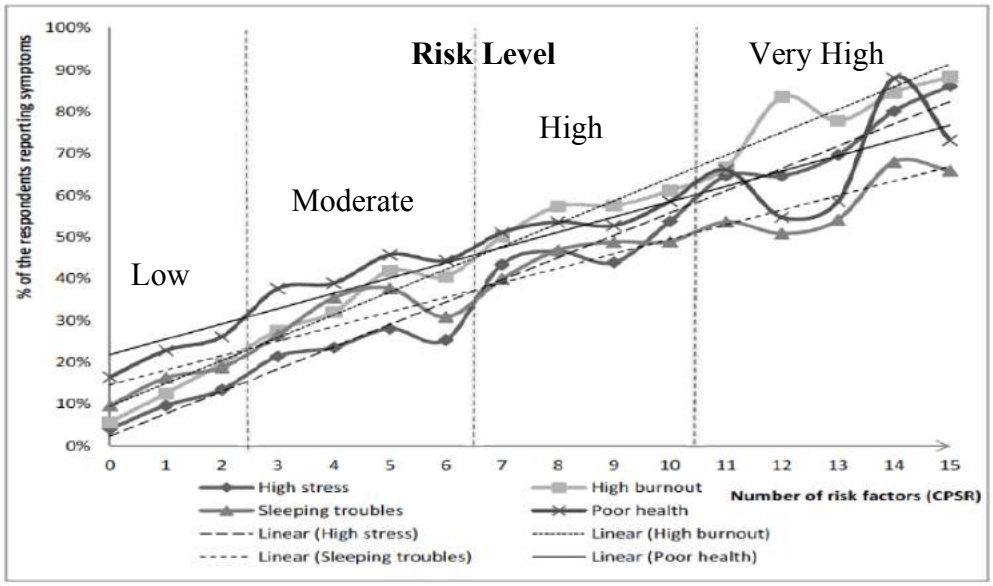


Figure 12. Increase in risk of developing physical or psychological symptoms as a result of psychological stressors at work (adapted from Stauder, et al. (2017).

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 in previous years.

References

ACARA. (2011). My School. Retrieved from http://www.myschool.edu.au/

ACARA. (2013). *Guide to understanding 2012 Index of Community Socio-educational Advantage (ICSEA) values*. Retrieved from Sydney: http://www.myschool.edu.au

Bakker, A. B., & Demerouti, E. (2014). Job demands-resources theory. In P. Y. Chen & C. L. Cooper (Eds.), *Work and wellbeing* (Vol. III, pp. 37-64). London: Wiley-Blackwell.

Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The alcohol use disorders identification test. Guidelines for use in primary care* (W. H. Organization Ed. 2nd ed.). Geneva.

Burens, I. (2015, Oct 7-9). *Psychosocial risk mangagement in France.* Paper presented at the COPSOQ International Workshop, MAS Centre Paris.

Chen, B., Vansteenkiste, M., Beyers, W., Boone, L., Deci, E., Kaap-Deeder, J., . . . Verstuyf, J. (2015). Basic psychological need satisfaction, need frustration, and need strength across four cultures. *Motiv Emot, 39*(2), 216-236. doi:10.1007/s11031-014-9450-1

Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227-268. doi:10.1207/S15327965PLI1104_01

Deci, E. L., & Ryan, R. M. (2012). Self-determination theory. In P. A. M. Van Lange, A. W. Kruglanski, E. T. Higgins, P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology (Vol 1).* (pp. 416-436). Thousand Oaks, CA: Sage Publications Ltd.

Fernet, C., Lavigne, G. L., Vallerand, R. J., & Austin, S. (2014). Fired up with passion: Investigating how job autonomy and passion predict burnout at career start in teachers. *Work & Stress, 28*(3), 270-288. doi:http://dx.doi.org/10.1080/02678373.2014.935524

Idler, E. L., & Benyamini, Y. (1997). Self-rated health and mortality: A review of twenty-seven community studies. *J Health Soc Behavior, 38*, 21–37.

Leithwood, K. (2006). *Teacher working conditions that matter: Evidence for change*. Retrieved from Toronto.

OECD (2013). Education at a Glance: Education indicators. Paris. OECD

Pejtersen, J. H., Kristensen, T. S., Borg, V., & Bjorner, J. B. (2010). The second version of the Copenhagen Psychosocial Questionnaire. Scandinavian Journal of Public Health, 38(Suppl 3), 8-24. doi:http://dx.doi.org/10.1177/1403494809349858

PricewaterhouseCoopers Australia. (2014). Creating a mentally healthy workplace: Return on investment analysis. Retrieved from http://www.headsup.org.au/creating-a-mentally-healthy-workplace/the-business-case). website: www.headsup.org.au Retrieved from www.headsup.org.au

Richardson, J., Khan, M., Iezzi, A., Sinha, K., Mihalopoulos, C., Herrman, H., . . . Schweitzer, I. (2009). *The AQoL-8D (PsyQoL) MAU Instrument: Overview September 2009*. Retrieved from Melbourne:

Richardson, J., Khan, M. A., Iezzi, A., & Maxwell, A. (2013). Validity and reliability of the Assessment of Quality of Life (AQoL)-8D multi-attribute utility instrument. *The Patient - Patient-Centered Outcomes Research, 7*(1), 85-96.

Ryan, R. M. (2015). *EMU methodology*. ARC Centre of Excellence for Indigenous thriving. IPPE. Sydney.

Sahlberg, P. (2015). *Finnish lessons 2.0: What can the world learn from educational* change in Finland? New York: Teachers College Press.

Sellar, S., & Lingard, B. (2014). The OECD and the Expansion of PISA: New Global Modes of Governance in Education. British Educational Research Journal, 40(6), 917-936

Stauder, A., Nistor, K., Zakor, T., Szabó, A., Nistor, A., Ádám, S., & Konkolÿ Thege, B. (2017). Quantifying multiple work-related psychosocial risk factors: Proposal for a composite indicator based on the COPSOQ II. International Journal of Behavioral Medicine. doi:10.1007/s12529-017-9651-6

Thomson, S., Bortoli, L. D., & Buckley, S. (2013). PISA 2012: How Australia measures up. Retrieved from Camberwell:

Trepanier, S.-G., Fernet, C., Austin, S., Forest, J., & Vallerand, R. J. (2014). Linking job demands and resources to burnout and work engagement: Does passion underlie these differential relationships? *Motivation and Emotion, 38*(3), 353-366. doi:http://dx.doi.org/10.1007/s11031-013-9384-z

Twemlow, S. W., Fonagy, P., & Sacco, F. C. (2001). An innovative psychodynamically influenced approach to reduce school violence. *Journal of the American Academy of Child & Adolescent Psychiatry, 40*(3), 377-379. doi:http://dx.doi.org/10.1097/00004583-200103000-00019

Twemlow, S. W., Fonagy, P., & Sacco, F. C. (2002). Feeling safe in school. *Smith College Studies in Social Work, 72*(2), 303-326.

Vallerand, R. J. (2015). *The psychology of passion: A dualistic model*. New York, NY: Oxford University Press.

Van den Broeck, A., Ferris, D. L., Chang, C.-H., & Rosen, C. C. (2016). A review of Self-Determination Theory's Basic Psychological Needs at Work. *Journal of Management, 42*(5), 1195-1229. doi:10.1177/0149206316632058

Williams, T., Ferraro, D., Roey, S., Brenwald, S., Kastberg, D., Jocelyn, L., . . . Stearns, P. (2007). *TIMSS 2007 U.S. technical report and user guide*. Retrieved from Washington DC: