



**TEN to
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The Australian Longitudinal
Study on Male Health
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Projects approved to access and use *Ten to Men* data: 2019

At the end of 2019, the following research projects were approved to access and use data from *Ten to Men*: The Australian Longitudinal Study on Male Health.

Associations between obesity risk factors, depression and anxiety in Australian boys and young men

Depression is one of the leading causes of illness and disability among Australian adolescents and is often found co-occurring with obesity. Adolescent depressive symptomatology is more likely to persist and carry on into adulthood as clinical depression. Studies suggest that a bi-directional relationship exists between obesity and depression and, therefore, preventing the onset of one may reduce the risk of the other. This project will explore the association between risk factors for being overweight or obese and depression and anxiety among adolescent Australian males.

Lead Investigator: Mr Vergil Dolar, The University of Melbourne

Disability and masculinity

Disability affects the process of gendering in many ways, including the time of gender socialization, and gendered role expectations. This project will examine the ways in which a males' conformity to traditional norms of masculinity varies by the presence of a disability. In particular, to assess specific aspects of the Conformity to Masculine Norms Inventory (CMNI) and severity of disability. We will assess whether masculinity is linked to health and wellbeing according disability status.

Lead Investigator: Professor Anne Kavanagh, The University of Melbourne

Disability and suicide

Disability is highly prevalent in Australian society, with an estimated four million people in the country reporting restrictions in mental, sensory or mobility functions. There is good understanding of some of the social and economic consequences associated with the presence of a disability, which appear to worsen after disability acquisition. Research has also shown a decline in mental health following the acquisition of a disability. However, there is a lack of research on the relationship between disability and suicidality. In particular, whether those persons who indicate they have a disability also report a Ten to Men: The Australian Longitudinal Study on Male Health 2.0 Data access and usage: Approved projects 2018 2 higher likelihood of thoughts of suicide and suicide attempts. This study seeks to unpack the relationship between the presence of a disability (including by type of disability) and suicidality using the first two waves of the Ten to Men: The Australian Longitudinal Study on Male Health. This information can be used to formulate prevention strategies and inform policy in the area of suicide prevention.

Lead Investigator: Dr Allison Milner, The University of Melbourne



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Examining correlates of co-morbid mental health and other non-communicable diseases

Mental health is frequently comorbid with other non-communicable diseases (NCDs), with a reciprocal relationship that often results in a further exacerbation of adverse health outcomes. This study is to examine the prevalence, behavioural risk factors, socio-demographic correlates and the impacts of this comorbidity on the risk of acquiring other NCDs among Australian males.

Lead Investigator: Dr Gregory Armstrong, The University of Melbourne

Experiences of intimate partner violence among Australian men with and without disability

Previous research has demonstrated that men and women with disabilities are more likely to experience inter-personal violence than their same sex non-disabled peers. Most research in the field has focused on violence in institutional settings and with much less research on intimate partner violence. Using data from Ten to Men we will assess whether being a victim or perpetrator of intimate partner violence varies between men with and without disability. This information is critical for the development of violence prevention strategies and will inform the provision of primary health care and domestic violence services.

Lead Investigator: Professor Anne Kavanagh, The University of Melbourne

Exploring the relationship between masculinity, social support, and self-reported mental wellbeing

The aim of this study is to investigate associations between masculine norms, social support, and men's self-reported mental wellbeing. Previous research has shown that certain aspects of masculinity are negatively associated with mental wellbeing, although fewer studies have taken measures of social support into account. Little research of this kind has been done in Australia and research internationally has not had access to a large population cohort. As such, this study will take into account a variety of relevant effect modifiers to investigate how conformity to masculine norms, social support, and mental wellbeing are associated among different groups of Australian men. This research addresses a gap in currently available knowledge and will provide a basis for future research on the temporal sequence of any observed associations.

Lead Investigator: Ms Marissa Shields, The University of Melbourne



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Exploring the relationship between physical activity and depression in Australian men

Public health policy and promotion need to address the high and growing prevalence and burden of disease mental illness presents. Physical activity is viewed as a low cost, low risk intervention that has established protective effects against depression. Current physical activity guidelines have demonstrated efficacy in increasing general health and preventing common burdens of disease. This research will explore the relationship physical activity and depression and specifically how dose and intensity of physical activity relate to depression.

Lead Investigator: Mr Remy Lindner, The University of Melbourne

Health and wellbeing of 10 to 17 year-old boys: Findings from Ten to Men: The Australian Longitudinal Study on Male Health

Poor health habits can develop in childhood and persist into adulthood, increasing risk for both childhood and adult physical and mental health conditions. In order to develop the most effective interventions for promoting better health habits among young males in Australia, it is essential to first understand the health profile of this group. This study aims to establish the occurrence of poor health behaviours, and mental and physical health conditions among the young members (participants ages 10-17 years) of the Ten to Men cohort. It will also examine whether health behaviours occur in clusters, and the relationship between co-occurrence on risk for poorer health outcomes.

Lead Investigator: Dr Angela Nicholas, The University of Melbourne

The health of males in male dominated, female dominated, and gender neutral occupations

This project seeks to examine gender norms in male dominated, female dominated, and gender neutral occupations and assess whether these are associated with mental health and suicidality among men.

Lead Investigator: Dr Allison Milner, The University of Melbourne

Health status of African Australians

Understanding the patterns of health and social behaviours among African Australians is important to design and implement culturally appropriate prevention interventions. Despite the existence of some small-scale studies that assessed specific risk factors among African-born Australians, there is limited evidence health and social risk behaviours of African Australians. The aim of this study is to describe the prevalence and correlates of health and social risks among African-born Australian men.

Lead Investigator: Dr Gregory Armstrong, The University of Melbourne



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Indigenous suicide

The suicide rate for Aboriginal and Torres Strait Islander peoples is estimated to be 23.0 per 100,000, which is twice the rate for non-Indigenous Australians. The issue is particularly pronounced among Aboriginal and Torres Strait Islander youth, with a suicide death rate of 52.5 per 100,000 among those aged 15-24, which is approximately four times the rate of their non-Indigenous counterparts. Given this, funding in the area of Indigenous youth suicide prevention has recently been dramatically increased. The Ten to Men cohort contains a sub-sample of 432 Aboriginal or Torres Strait Islander men from urban and regional Australia. This study will examine the prevalence of suicidal thoughts and attempts among Aboriginal and Torres Strait Islander men in urban and regional Australia, and see how it compares to their non-Indigenous counterparts. It will also examine how the prevalence of suicidal thoughts and attempts trends across age groups among Aboriginal and Torres Strait Islander men, and how this trend compares to that of their non-Indigenous counterparts.

Lead Investigator: Dr Gregory Armstrong, The University of Melbourne

Lifestyle behaviours and CVD related disease in men

Is inequality is bad for your health? Extant evidence suggests the link is variable, at least compared with absolute poverty. One explanation for this variability is that inequality should affect people differently depending on their individual circumstances. This research will explore the relationship between regional levels of inequality and individual self-reported health and wellbeing. Moreover, the study will examine how these relationships are affected (i.e., moderated) by individuals' (a) economic status and (b) endorsement of masculine norms. It is expected that inequality will negatively impact health the most for low socio-economic individuals and for those who endorse masculine norms.

Lead Investigator: Dr Ryan Perry, The University of Melbourne

Lifestyle behaviours and CVD related disease in men

Cross-sectional associations of multiple lifestyle behaviours (including Smoking, Drug use, Alcohol, BMI greater than or equal to 25kg/m², poor diet, physical inactivity, poor sleep and stress) and risk of Cardiovascular related disease in men.

Lead Investigator: Dr Lee Ashton, University of Newcastle

Masculinity and depression: Conformity to masculine norms across age groups

Conformity to masculine norms has been associated with poorer physical and mental health outcomes amongst men. It remains unclear how, if at all, lifespan developmental differences influence adherence to masculine norms, and whether experiences of low mood are implicated. A lack of representative data limits existing studies. This study will use Wave 1 TTM data to explore group differences in self-reported masculinity and depression, according



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to age. Potential age effects will be examined according to adolescent males (15-17 years), emerging adult males (18- 25 years), young adult males (26-35 years) and older adult males (36-55 years).

Lead Investigator: Dr Simon Rice, Centre for Youth Mental Health

Masculinity and help-seeking in men

We will explore men's health services use and attitudes to health services and help-seeking through a program of research papers. We will investigate help-seeking behaviours in association with masculinity as well as other socio-demographic factors and explore differences by age, SES and region. We will further explore characteristics of differences between men who engage with health services compared to those who don't. Of added interest is the relationship of traditional forms of masculinity, mental health and help-seeking in men.

Lead Investigator: Dr Marisa Schlichthorst, The University of Melbourne

Masculinity ideals for different generations of vulnerable male consumers of health services

What does it mean to be "a man" for young men who avoid using health services? We will investigate the different dominant masculine ideals of men in the Ten to Men study aged 15 to 49 years who do not regularly access health services (identified in our study as 'vulnerable male consumers'). Through latent profile analysis, we will identify different groups of younger men who share masculine ideals, social generation and negative health beliefs and behaviours. Through regression analysis we will assess whether social generation has a mediating effect on the relationship between traditional masculine ideals and negative health behaviours.

Lead Investigator: Ms Jacquie McGraw, Queensland University of Technology

Men: Roots and consequences of masculinity norms

Recent research has uncovered the historical roots of gender norms about women and the persistent effect of such norms on economic development. We find similar long-term effects of masculinity norms: beliefs about the proper conduct of men. We exploit a natural historical experiment in which convict transportation in the 18th and 19th century created a variegated spatial pattern of sex ratios across Australia. We show that in areas that were heavily male-biased in the past (though not the present) more Australians recently voted against same-sex marriage, an institution at odds with traditional masculinity norms. Survey data show that this voting pattern is mostly driven by men. Further evidence indicates that these historically male-biased areas also remain characterized by more violence, excessive alcohol consumption and occupational gender segregation. We interpret these behaviours as manifestations of masculinity norms that emerged due to intense local male-male competition that persisted over time.

Lead Investigator: Dr Victoria Baranov, The University of Melbourne

Men's healthy aging

There is increasing recognition that middle age is significantly underrepresented in health promotion and policies designed to improve the health of Australian men. Middle age is a pivotal period in one's life course in terms of finding a new or renewed purpose in life, addressing the excesses of youth and early adulthood, and setting up behavioural patterns that influence positive and healthy aging. This project examines relationships between middle aged men's personal characteristics, lifestyle characteristics, social environment, health and well-being. Social marketing implications are subsequently developed.

Lead Investigator: Professor Mike Reid, RMIT University

Multilevel regression and poststratification for addressing participant bias in health survey data

Large-scale surveys in population health are increasingly hampered by the difficulty of recruiting representative samples of participants, making the interpretation of findings difficult, especially with respect to prevalence and incidence of health conditions. For example, the nationwide Ten to Men study has recently recruited a cohort of 15,000 boys and men, aged 10-55 years, to be followed up over time, but participation was obtained for only 33% of those approached. New methods for generating accurate estimates of public opinion based on highly non-representative surveys have been developed recently in political science, using multilevel regression models and poststratification. This project will apply and evaluate these methods for the purpose of obtaining accurate population estimates in health surveys.

Lead Investigator: Ms Marnie Downes, The University of Melbourne

Prevalence and associations of complementary medicine use among Australian Men

Complementary medicine, a wide range of non-conventional therapies including acupuncture, naturopathy or herbal medicine, is widely used in Australia and worldwide. While previous research has examined who, why, and for what conditions women use complementary medicine, literally nothing is known about the men's perspective on complementary medicine. This project aims to examine how many men currently use complementary medicine; how men's characteristics such as age and education, and how health status and medical conditions influence the use of complementary medicine.

Lead Investigator: Dr Romy Lauche, University of Technology Sydney



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Prevalence and correlates of discrimination among Australian adult males

Discrimination is a human rights issue that describes a range of behaviours and practices whereby socially defined groups are treated differently because of their membership of that group, based on traits such as ethnicity, sexual orientation and disability. It exists on a continuum, from violence or illegal actions to subtle forms of social exclusion and is widely understood as a contributing factor to health and socioeconomic inequities. This research will use data collected for the Ten to Men cohort study to examine the prevalence and correlates of experiencing self-perceived discrimination in the preceding two years among Australian adult males aged 18 to 55 years. The research will also examine whether discrimination mediates the pathway between minority status and health outcomes like suicidal ideation. The findings will contribute to our understanding of the prevalence and impact of discrimination experiences across a range of minority groups, including: Aboriginal and Torres Strait Islander people, culturally and linguistically diverse migrant groups, men who have sex with men, people who use substances, and people with disabilities and mental disorder diagnoses.

Lead Investigator: Dr Gregory Armstrong, The University of Melbourne

Psychosocial working conditions, occupation and suicidality among Australia men: evidence from the Ten to Men cohort study

Adverse psychosocial factors in the workplace such as low control over work, lack of support from supervisors and colleagues, and high demands are risk factors for mental illness and psychological distress. There has also been some overseas research suggesting that these factors may also pose a risk for suicide. However, there has been no investigation into the relationship between psychosocial job stressors, occupation, and suicidality in Australia. Using data from waves 1 and 3 of Ten to Men, we seek provide insight into the psychosocial working conditions and occupation of Australian men in relation to suicide ideation and attempts. This information can be used to formulate research studies in this area and contribute to the development of suicide prevention initiatives.

Lead Investigator: Dr Allison Milner, The University of Melbourne

Psychosocial working conditions, occupation and suicidality among Australia men: evidence from the Ten to Men cohort study

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Lead Investigator: Dr Allison Milner, The University of Melbourne

The relationship between conforming to traditional masculine norms and informal help seeking behaviour in men with depression

Depression is a common mood disorder that seriously impacts on one's quality of life. Effective treatments are available for depression however men are less likely to seek treatment than women. Conforming to traditional masculine norms has been identified as an important barrier preventing men from seeking help for depression. Informal help seeking, described as seeking help from family and friends, can be beneficial as it can aid in bridging the gap between the recognition of depression and accessing treatment. This study aims to investigate the role of traditional masculine norms in the help seeking behaviours of men with depression.

Lead Investigator: Ms Bronwyn Wolfaardt, The University of Melbourne

Sexual identity, attraction and behavior and Australia men's health outcomes

There are well documented health disparities between heterosexual and sexual-minority men. However, significant inconsistencies across studies in how sexual orientation is measured (identity, attraction or behavior) mean that their results are often not comparable. This project will leverage Ten to Men data to determine the prevalence of sexual-minority status amongst Australian men, and how it varies across measures of sexual orientation; establish the degree of overlap in sexual-minority status measures based on identity, attraction and behavior; and examine how associations between sexual-minority status and health outcomes differ depending on the measure of sexual orientation considered.

Lead Investigator: Dr Francisco Perales, The University of Queensland

The sexual lives of Australian men with disabilities

It is commonly assumed that people with disability are less sexually active than their non-disabled peers. With the exception of specific disabilities such as spinal cord injury, sexual function should not be affected by disability. Furthermore, very little is known about sexual orientation, behaviours, pleasure and function of men with disability and whether this differs from men without disability or varies according to type of disability. This information is important for informing the provision of health services for men with disability.

Lead Investigator: Professor Anne Kavanagh, The University of Melbourne



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Suicidality and engagement in risky behaviours that carry health and social risks

The aim of this study is to examine whether suicidal thoughts and attempts co-occur with other health and social risk behaviours. The primary focus of suicide research is justifiably on the prevention of suicide, nevertheless, the majority of people who experience suicidal thoughts do not attempt suicide. There is a small but growing body of international research examining the co-occurrence of suicidality and engagement in risk behaviours that carry important long-term health and social consequences. This topic has been underexplored in Australia and has important practical implications for holistic psychosocial screening at the time of suicide risk assessment.

Lead Investigator: Dr Gregory Armstrong, The University of Melbourne

Understanding dynamics and health effects of intimate partner violence in men

We will explore the characteristics of men who report domestic violence, either perpetration and/or victimization, including associations with measures of masculinity and other social determinants of health, mental and physical health issues and behaviours and health service use. Understanding the profile of men with experience of domestic violence will guide subsequent research and inform the design of interventions for men and their families that will help address this problem.

Lead Investigator: Professor Kelsey Hegarty, The University of Melbourne

Understanding mental health, service-use and rurality in Australian men with a disability

This study will examine the intersection of mental health, service use and rurality in men with a disability. There is a need to understand whether rurality correlates to different mental health outcomes and history of service use for men with a disability, as previous studies suggest that there may be an unmet demand for services in rural areas. As men with a disability are at higher risk of mental ill-health, research is needed to inform resource allocation by the Primary Health Networks and the National Disability Insurance Scheme.

Lead Investigator: Mr Nicholas Fava, The University of Melbourne

Urban livability and health in Ten to Men: The Australian Longitudinal Study on Male Health

In 2013/14 ~16,000 males were recruited into Ten to Men: The Australian Longitudinal Study on Male Health. Professor Giles-Corti's team are using these data to examine the association between urban liveability and health and health behaviour outcomes, to develop policy and practice-relevant evidence and develop an advanced planning support system for designing healthy cities.



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Lead Investigator: Professor Billie Giles-Corti, RMIT University

Using longitudinal masculinity profiles to enrich men's suicide prediction: An epidemiological approach

Men are diagnosed with depression less frequently than women yet die from suicide at notably higher rates. Men's high suicide rates are influenced by a range of factors, and depression is a substantial risk factor for suicide. However, men who conform strongly to traditional masculine gender role norms are more likely than other men to present with atypical, externalizing depressive symptoms as well as standard symptoms. The aim of this study will be to longitudinally examine and compare how externalizing and typical depressive symptoms predict suicide based on men's conformity to traditional masculine gender role norms.

Lead Investigator: Associate Professor Matthew Genuchi, Boise State University

What do boys and men say about their health and relationships in an open-ended survey question?

Participants in Ten to Men are invited to make a free text comment at the end of the survey, and over 1000 participants made a comment. The comments cover a range of issues from; comments on the survey; clarification of their responses to the survey; unrelated comments or diagrams; and comments about their health and relationships. This project will summarise the comments that relate either to concerns about their health, or concerns about their relationships. This summary will provide insight into the things that men or boys felt were worthy of reporting, but not captured in survey responses. It will also be possible to describe the demographic and other characteristics of those who commented on either of these topics.

Lead Investigator: Dr Louise Keogh, The University of Melbourne