

Are people becoming more entitled over time? Not in New Zealand

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Mplus syntax for the models reported here have been posted on the NZAVS website. Syntax and data are also available upon request for reviewing purposes.

www.psych.auckland.ac.nz/uoa/NZAVS

Abstract

It is a common conception that entitlement is increasing among younger generations over time. However, although there is some evidence for this trend, other findings are less conclusive. The current research investigated change in psychological entitlement across the adult lifespan for men and women (ages 19 to 74), using six annual waves of data (2009-2014) from the New Zealand Attitudes and Values Study (N = 10,412). We employed Cohort-Sequential Latent Growth Modelling to assess mean-level change in entitlement. Entitlement was found to be generally unchanging over time for both men and women, with only those aged 65 and above showing increasing entitlement. Entitlement showed a steady downwards trend across age. These findings from a large national probability sample suggest that change in entitlement may follow a decreasing developmental trend across the life span. In New Zealand, at least, there is no evidence for a narcissism epidemic.

Keywords: Cohort-Sequential Growth Model; Life Span Development; Narcissism; Psychological Entitlement

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Both the public discourse and psychological literature are concerned with the current ‘narcissism epidemic’ or ‘culture of entitlement’ – that is, the idea that narcissism and entitlement are on the rise (Stein, 2013; Twenge, 2013). In particular, ‘millennials’ (born between 1982 and 2002) are believed to be more narcissistic and entitled than previous generations, due to recent cultural shifts towards individualism and selfishness (Stein, 2013; Twenge, 2006), producing unrealistically positive self-views associated with grandiose behaviour, aggression, and exploitativeness (Campbell, Bosson, Goheen, Lakey, & Kernis, 2007). However, providing data to support these claims is challenging, as developmental trends (levels of entitlement changing as people age and mature) and societal trends (shifts in culture over time and differences between generations) are likely to be occurring at the same time. Additionally, any changes are likely to differ from context to context, and yet research has largely been confined to the United States (US). In the current research, we analyse a representative sample of New Zealanders and employ Cohort-Sequential Latent Growth Models (LGMs) to present new data on this issue, tracking change in psychological entitlement across 6 years over the entire adult lifespan for men and women.

Narcissism and Entitlement over Time

Efforts to untangle cohort effects from developmental effects and examine change in narcissism across generations have been made by collecting multiple cross-sectional samples of North American college students across several decades and comparing their narcissism scores (see Twenge, 2013; Trzesniewski & Donnellan, 2010 for a review). However, the results from research in this area are conflicting. In the first such cross-temporal meta-analysis, Twenge, Konrath, Foster, Campbell, and Bushman (2008) investigated change in narcissism scores (as measured by the Narcissistic Personality Inventory or NPI; Raskin & Terry, 1988) among samples of college students. Results showed that NPI scores increased

over time from the 1980's up to 2006, by approximately a third of a standard deviation. The authors theorised that rising levels of individualism over time have produced a cultural shift where college students today are more entitled than college students at the same age in previous decades and generations (Twenge et al., 2008).

However, when Trzesniewski, Donnellan and Robins (2008) compared narcissism scores among college and high school students from 1982 to 2007, they concluded that there was no change in NPI scores. This data was subsequently reanalysed a number of times with various subsamples added or removed, resulting in Twenge and Foster (2008; 2010) concluding that there was an increase in narcissism over time, and Roberts, Edmonds, and Grijalva (2010) and Donnellan, Trzesniewski, and Robins (2009) concluding that there was no change in narcissism over time. In other data, Stewart and Bernhardt (2010) found that narcissism scores among 2004 to 2008 undergraduate students were higher than scores among undergraduates before 1990, whereas Grijalva et al.'s (2015) meta-analysis found no difference in narcissism scores among undergraduates between 1990 and 2013, and Trzesniewski and Donnellan (2010) found no evidence for increases in egotism, self-enhancement, individualism or self-esteem over time among US high school students (1976-2006).

In sum, there is no definitive pattern of narcissism increasing, or staying the same, over time or across generations. Next, we review the research relating specifically to entitlement, the measure employed in the current research. Psychological entitlement is a core facet of narcissism (Krizan & Herlache, 2017) and represents a global sense that one is entitled to more than others (Campbell et al., 2004). It is known as the 'socially toxic' aspect of narcissism (Ackerman et al., 2011; Trzesniewski, Donnellan, & Robins, 2008); while narcissism as a whole may include some adaptive elements that are associated with positive psychosocial outcomes (Campbell et al., 2007; Ackerman et al., 2011), entitlement is

associated with high neuroticism, low agreeableness, higher selfishness and aggression, lower empathy, poorer mental health, and lower self-esteem (Campbell et al., 2004; Ackerman et al., 2011; Brown et al., 2009; Clarke et al., 2015; Grubbs & Exline, 2016). Therefore, psychological entitlement represents a wholly maladaptive trait that taps into the heart of concerns about rising narcissism (*cf.* Crowe, LoPilato, Campell, & Miller, 2016).

Entitlement can have differing associations to the NPI scale (Ackerman et al., 2011; Brown, Budzek, & Tamborski, 2009; Clarke, Karlov, & Neale, 2015), but in this case seems to show the same pattern of conflicting results across time. Several of the previously reviewed studies (Donnellan et al., 2009; Trzesniewski et al., 2008; Twenge & Foster, 2010) broke the NPI scale down into subscales, including the Entitlement/Exploitativeness subscale. In Trzesniewski et al.'s (2008) study, where no change was found over time with the overall NPI scale, Entitlement/Exploitativeness showed a small increase over time. Yet in other research, Entitlement/Exploitativeness showed no change over time when an increase was found in the NPI scores as a whole (Donnellan et al., 2009; Twenge & Foster, 2010). We interpret these findings with caution as separating the NPI into its subscales lowers its reliability (*e.g.*, Brown et al., 2009), and the Entitlement/Exploitativeness scale and Psychological Entitlement Scale (PES) employed in this study are related but separate measures (Campbell et al., 2004; Grubbs & Exline, 2016).

Associations with Age

We now turn from cohort research investigating the same age groups across time, to cross-sectional research using samples with wide age ranges at a single time point. Results consistently show that narcissism is negatively associated with age (Foster et al., 2003; Wilson & Sibley, 2011). Research using two large samples of New Zealand adults found that both narcissism and entitlement had negative relationships with age; people in their 20's scored the highest, but then scores progressively lowered up to age 75 (Wilson & Sibley,

2011). Foster et al. (2003) found similar results in their large, online, cross-cultural sample, with narcissism and entitlement showing negative trends across ages 8 to 83.

These findings fit well with the view of narcissism as a trait that naturally decreases across the lifespan (Kohut, 1971). In fact, multiple theories such as the maturity principle (Caspi et al., 2005) and social investment theory (Roberts & Wood, 2006), suggest a pattern of moving away from entitlement and narcissism as one ages, matures, and increases their commitment to social roles and institutions such as work, marriage, and the community. In Roberts et al.'s (2010) cross-sectional sample, they found that splitting participants into age-dependent roles, such as student or grandparent, magnifies the typically observed negative association between narcissism and age. These results provide strong support for the theory that narcissism is likely to decrease across the lifespan as people take on more mature, interpersonal roles with high levels of commitment.

Gender Differences

Gender has a clear and consistent relationship to narcissism, with men scoring higher than women on measures of both narcissism and entitlement (Foster et al., 2003; Wilson & Sibley, 2011). Grijalva et al.'s (2015) meta-analysis showed that men scored higher on narcissism across 355 studies, and in particular, men scored higher on the entitlement facet of the NPI. However Grijalva et al. (2015) did not find an interaction between gender and age or gender and time in their meta-analysis, with men simply scoring higher in narcissism across different ages and different generational cohorts. In contrast, cross-sectional data within New Zealand supports the idea that there are gender differences in changes in entitlement, finding that while entitlement was generally negatively associated with age for both men and women, the trend for men was much weaker and lagged behind the trend for women by about 10 to 15 years (Wilson & Sibley, 2011). Additionally, in previous research where increases in narcissism have been found, results suggests that only women's scores are increasing, as they

come more in line with men's higher narcissism scores (Donnellan et al., 2009; Twenge et al., 2008; Twenge & Foster, 2010). Therefore, we aim to examine change in entitlement separately for men and women to avoid such confounds.

Unanswered Questions

Despite the body of research surrounding narcissism and entitlement, there are several issues that remain unaddressed. Firstly is the question of whether change in narcissism is occurring - or not occurring - among *all* age groups. Terracciano (2010) and Twenge et al. (2008) both point out that, while there is some evidence that societal trends may be affecting levels of entitlement, research has focused exclusively on children, adolescents, and college students. It is difficult to argue that increases in narcissism are occurring only among millennials when there is no similar research available in other age cohorts for comparison. Any increases in narcissism could be the same across all age cohorts, and representative of a larger societal shift. Additionally, if there are increases in entitlement over time among young people only, this effect may be a short-lived phenomenon that does not have a long-lasting impact into adulthood as young people navigate a particularly self-focused life stage (Arnett, 2010; Stewart & Bernhardt, 2010; Terracciano, 2010). Change in entitlement may show a completely different trajectory beyond the ages that have been researched so far.

Furthermore, college and high school student samples are not particularly representative of the population and often make use of samples of convenience, so results cannot be readily generalised to other groups (Arnett, 2013; Donnellan et al., 2009; Trzesniewski & Donnellan, 2010; Trzesniewski et al., 2008). Undergraduates now and in previous decades all score above the test norms in narcissism (Stewart & Bernhardt, 2010), so those who attend college are specifically unrepresentative in terms of narcissism. Rising college costs (Davidson, 2015) also mean that each annual sample of college students across the decades may be comprised of wealthier and wealthier segments of the population. Thus,

college students are not only unrepresentative of the general population; they may also be *increasingly* unrepresentative over time – and increasingly likely to have higher levels of entitlement relative to other young people.

Finally, while discussion of the narcissism epidemic has long since reached New Zealand media (*e.g.*, Remes, 2016), all of the previous research tracking change in narcissism over time has been conducted within the single cultural context of the United States. NPI scores have been found to be higher in the US than in other locations such as Asia or the Middle East (Foster et al., 2003), suggesting that data from the US is unlikely to be representative of changes in other countries. Although New Zealand is also a Western country, there are still potential cultural differences in the expression and development of narcissism. New Zealand is a country that emphasises humility as representative of the national image (Sibley, Hoeverd, & Liu, 2011a), and Stronge, Cichocka and Sibley (2016) reported that 91% of their census weighted New Zealand sample had low levels of psychological entitlement. Thus we have some reason to believe that entitlement levels are lower in New Zealand than in the United States, and that entitlement could develop in different ways as well. The aim of the current research is to address these issues using longitudinal research conducted with a large, representative sample of New Zealanders that is heterogeneous in terms of age and other demographic factors.

Cohort-Sequential Latent Growth Model

To investigate change in entitlement over the lifespan, we employ Cohort-Sequential Latent Growth Models in order to take into account changes over both time and age (Preacher, Wichman, Mac, Callum, & Briggs, 2008; Prinzie & Onghena, 2005). We use two different but complementary approaches to do so (see Method section for details). First, we estimate a single group model that estimates change over six years across the adult lifespan. If a participant was 18 in 2009, 19 in 2010, and 20 in 2011, their responses inform the

estimation of the growth curve at those particular ages. Similarly, a person who was 41, 42, and 43 at the different assessment points would then inform a later portion of the growth curve. With this method, each participant contributes to different parts of the curve across the adult lifespan based on the available data (currently six years in the NZAVS). Given the size and range of the NZAVS sample, we can estimate changes in psychological entitlement over time across the entire adult lifespan (18-74).

Second, we use a multi-group model to estimate change across five years in separate but sequential 5-year birth cohorts. This approach means we can compare change in entitlement across different birth cohorts and see if, for example, younger generations are increasing in entitlement more rapidly or differently to older generations. In addition, the level of entitlement for one age group at their initial point of assessment (2009) will overlap with the estimated level of entitlement for the previous age cohort at their final assessment (2013) – thus we can estimate whether a 25 year old today is more entitled than a 25 year old was 5 years before. Taken together, these approaches allow us to observe change as people age, but also assess the magnitude of cohort differences. Naturally, in order to precisely measure the extent to which change over time is due to aging versus generational differences, many more years of data would be needed – a lifetimes worth. However, the Cohort-Sequential LGMs offer a method that provides useful information and assists our interpretation of developmental and cohort effects.

Milojev and Sibley (2016) used this technique to investigate change in the HEXACO personality traits over time and age. They found that Honesty-Humility (which serves as an approximation of reverse-coded narcissism) showed a steady, positive linear relationship across age, and increases in Honesty-Humility were found within each 5-year birth cohort over a recent five year period. This suggests that Honesty-Humility increases as people age, indicating a possible developmental effect. However, there was evidence of cohort

differences among younger cohorts, as people at age 34 had higher Honesty-Humility in 2014 than 34 year olds in 2009– that is, Honest-Humility has increased over time at that age.

However, Honesty-Humility includes facets of sincerity and fairness, and so does not provide a pure (reverse-coded) estimate of entitlement (Ashton & Lee, 2007; Milojev & Sibley, 2016). In our reanalysis of this data (Milojev & Sibley, 2016), we use items assessing entitlement only. We also aim to expand on these results by modelling separate LGMs for men and women, as gender differences in narcissism (both cross-sectionally and over time) are well-documented (Foster et al., 2003).

Overview and Guiding Hypotheses

In summary, the association between birth cohorts and entitlement is not particularly clear (*e.g.*, Trzesniewski et al., 2008; Twenge et al., 2008), and the generalizability of previous research is questionable. As much of the previous research has been conducted within the United States, while the current research is conducted within New Zealand (a country that emphasises low entitlement as part of the national image; Sibley et al., 2011a), we expect our results to be more in line with those that show no change in entitlement over time. Taken together with the cross-sectional negative association between age and entitlement, which is well supported both empirically and theoretically (Caspi et al., 2005; Wilson & Sibley, 2011), we theorise an overall developmental pattern where entitlement decreases across the lifespan as people age across six years, but entitlement does not increase over time over the last five years.

In investigating our hypotheses, we would expect to see that the single-group model has a negative slope across age. Because the single-group model incorporates both the cross-sectional association between entitlement and age, as well as longitudinal change across six years, we turn to the multi-group model in order to determine whether this negative relationship occurs from developmental change, or a generational difference. If it is a largely

developmental effect, the slopes for each 5 year birth cohort from the multi-group model should fit well with the overall slope from the single-group model, and be negative (or potentially non-significant given the time-frame). In contrast, if entitlement is increasing over time, the multi-group model should display positive slopes, indicating that entitlement has increased across five years (even as the single-group model may show a negative association between entitlement and age driven by cohort differences). If this occurs across all age cohorts, it would suggest that entitlement is on the rise generally; if this pattern is only found in younger cohorts, then it would suggest that entitlement is increasing among younger generations but not older generations. Finally, we also model separate trajectories of change in psychological entitlement for men and women. Although some research has found that gender doesn't moderate these changes (Grijalva et al., 2015), the existence of contrasting evidence (Donnellan et al., 2009; Twenge et al., 2008; Twenge & Foster, 2010) suggests it is worth investigating.

Method

Analyses were conducted for the 10,412 (62.5% women) participants who responded to at least three out of the six waves of the New Zealand Attitudes and Values Study (NZAVS). The NZAVS is an ongoing study that has been conducting an annual longitudinal panel survey of adult New Zealanders since 2009 (Time 1) through 2010 (Time 2), 2011 (Time 3), 2012 (Time 4), 2013 (Time 5), and 2014 (Time 6). We present a focused reanalysis of the data from Milojev and Sibley (2016). The items used to measure psychological entitlement make up part of the Milojev and Sibley measure of Honesty-Humility. However, Milojev and Sibley focus on tracking changes in Honesty-Humility, and Big Six personality more generally, while in the current research, we track change in psychological entitlement, separately for men and women.

The majority of the participants identified as New Zealand European (91.1%), while 15.5% of the sample identified as Māori, 4.1% identified as Pacific, and 4.7% identified as Asian. Socioeconomic status was calculated using the New Zealand Deprivation index, a decile based measure of deprivation in neighbourhood units across the country with 1 representing the most affluent neighbourhoods and 10 representing the most deprived (see Atkinson, Salmond, & Crampton, 2014). The mean score for the NZ Deprivation index in the sample was 4.86 (SD = 2.80). The mean age of the sample was 47.92 (SD = 14.91), and ages ranged from 13 to 94. For the purposes of estimating the Multi-Group Cohort-Sequential LGMs, participants were grouped into 5-year cohorts based on the year of their birth. These birth cohorts and their respective sample sizes are presented in Table 1.

We tested for demographic differences between those that responded to at least three waves and those who did not respond to enough waves and thus were excluded from the models. Looking at differences in the first wave, those who were excluded from the model for not responding in enough waves were younger ($M = 43.49$, $SD = 14.70$) than those included in the model ($M = 47.91$, $SD = 14.91$, $t_{(19,801)} = -25.24$, $p < .001$). The excluded participants were also more likely to be living in less affluent areas ($M = 5.06$, $SD = 2.85$) than included participants ($M = 4.86$, $SD = 2.79$, $t_{(11,030)} = 3.60$, $p < .001$), but there were no significant gender differences between excluded and included participants (62.0% female vs. 62.5%, respectively). Excluded participants were slightly higher in psychological entitlement ($M = 2.81$, $SD = 1.43$) than those included in the model ($M = 2.67$, $SD = 1.36$, $t_{(10,276)} = 5.34$, $p < .001$). For a more detailed analysis of sample retention and bias associated with the longitudinal nature of the NZAVS please refer to Satherley et al. (2015).

Materials

Psychological entitlement was measured by a short-form, 2-item measure adapted from Campbell et al. (2004). These questions were embedded in the larger NZAVS

questionnaire, among items assessing HEXACO or Big 6 personality, all measured by a Likert scale from 1 (very inaccurate) to 7 (very accurate). The items used to measure entitlement were: “[I] feel entitled to more of everything” and “[I] deserve more things in life”. The mean scale score was used in the analyses, and was constructed by calculating the mean of the two item scale. Scale reliability estimates using Cronbach’s α were stable, ranging from .70 to .73 across the six points of assessment.

Analysis

As described earlier, we used two different but complementary estimations of Cohort-Sequential Latent Growth Models in order to assess change in levels of psychological entitlement across the lifespan (Milojev & Sibley, 2016; Preacher et al., 2008; Prinzie & Onghena, 2005). Firstly, we employed a Single-Group Cohort-Sequential Latent Growth Model to estimate an overall growth trajectory for psychological entitlement between the ages of 19 to 74. Note that we included all participants in the analyses, including those younger than 18 and older than 74, however we did not include them in the estimation of model-implied growth trajectories as these groups have small sample sizes which may be unreliable (see Table 1). Secondly, we employed a Multi-Group Cohort-Sequential Latent Growth Model for each five year birth cohort (presented in Table 1) across the same age range. This second approach allows us to assess whether cohort effects are present in the estimated change trajectories in entitlement. The two types of models were estimated in *MPlus 7.4* (Muthén & Muthén, 1998-2015) using maximum likelihood with robust estimation of standard errors (MLR).

To investigate gender differences in change in entitlement, we used a multi-group approach for both models, allowing for differences between men and women and estimating separate growth trajectories. We allowed the intercept and growth factors to differ for men and women, thus enabling us to estimate separate rates of change in psychological

entitlement across the lifespan. We constrained the variances for the growth factors to equality as we assume that the levels of individual differences in the rates of change are equal for men and women.

Single-Group Cohort-Sequential Latent Growth Model

Single-Group Cohort-Sequential LGMs were estimated based on scale means of entitlement at each of the six waves of annual assessments. The assessments correspond to the years 2009 (Time 1), 2010 (Time 2), 2011 (Time 3), 2012 (Time 4), 2013 (Time 5), and 2014 (Time 6). In order to estimate developmental change across the age range, participants' ages were used as individual varying time indicators. A participant who was 19.50 years of age at their first response at Time 1 would be 20.50 years of age at the follow-up at Time 2, assuming that they completed each wave at a yearly interval. As participants rarely complete their responses exactly one year apart (i.e. 350 days for some participants, 400 days for others), participants' exact ages (to two decimal places) were estimated at each time point, allowing for variation in age at assessment points. The responses from a participant who is 19.50 years of age at Time 1 will inform estimation of the growth curve in that area of the age range, while the response from someone who was 41.50 years of age at Time 1 will inform estimation of a later part of the growth curve. With the diverse range of age-cohorts represented and the large number of participants of overlapping ages, a growth curve can be estimated representing change in entitlement over time from ages 19 to 74, with the different participants' data informing different portions of the curve.

We modelled the rate of change in entitlement as a polynomial growth function including a linear, quadratic, and a cubic component. Even if these components were not significant, they were retained in the model in order to adjust for possible quadratic or cubic effects while estimating the linear component of the growth model. It is entirely possible that change over time follows a curvilinear pattern, so even if we were

not yet able to statistically detect such patterns, they should be adjusted for. It also provides a more robust test of the linear component of the model.

A latent intercept (i) and a latent slope (s) were estimated based on the participants' ages estimated as individually varying time indicators, using the TSCORE function in *MPlus*. Age was centered on the sample means for men and women. Quadratic (q) and cubic (c) slopes were also estimated. The latent intercept was estimated by fixing the six factor loadings (T1 to T6) to 1. The latent intercept thus estimated the mean levels of psychological entitlement at the sample mean age, for both men and women. The latent slope was estimated based on individually-varying indicators of participants' age over time (T1 to T6). Similarly the quadratic and the cubic latent slope were estimated based on the quadratic and cubic functions of the individually varying indicators of participants' age over time, respectively. Thus, the latent linear (s), quadratic (q), and cubic (c) slopes represent the linear or curvilinear change trajectory for entitlement across the available age range (19 through to 74).

Multi-group Cohort-Sequential Latent Growth Model

To estimate the Multi-Group Cohort-Sequential LGMs the sample was organised into 12 sequential 5-year birth cohorts as presented in Table 1, for both men and women ($n = 6,330$). In congruence with the 5-year birth-cohorts, the multi-group growth model was estimated based on the first five points of assessment (Time 1 to Time 5). The 12th birth cohort (born in 1991 and later) was removed from the multi-group analyses due to small sample size (see Table 1), leaving 11 5-year birth cohorts in the analysis (those born between 1940 and 1990). The multi-group models essentially estimate a different latent growth trajectory in psychological entitlement for each of these eleven birth cohorts. While the NZAVS data allows for the use of 6-year birth cohorts, 5-year birth cohorts were used based

on the common practice in the available literature on aging and normative change (*e.g.*, Lucas & Donnellan, 2011; Milojev & Sibley, 2016).

As with the single-group model, the multi-group models were estimated based on the individually varying time indicators (*i.e.* date of response rather than age at time of response). Within these models a latent intercept (*i*) was estimated as in the single group models, along with the latent slope (*s*), for each of the 5-year age cohorts seen in Table 1. The variances of the latent intercept and the latent slope, and the covariance between the intercept and slope were constrained to equality across the birth-cohorts. Unlike the single group models, only the linear slope was estimated in these models (refer to Milojev & Sibley, 2016, for Monte Carlo Simulations that estimate the power to detect varying effect sizes *i.e.* the latent slope, given the varying sample sizes of the cohorts).

Each cohort LGM estimated change in psychological entitlement over 5 years of assessment for that cohort – *i.e.* the 1986 to 1990 birth-cohort represented change from 19 years of age to 24 years of age; the 1981 to 1985 cohort represented change from 24 years of age to 29 years of age, and so on. For each 5-year age cohort, the youngest age represented by that cohort was taken as an indicator of age in this framework. As the multi-group models spanned consecutive 5-year periods, the organisation of birth cohorts into 5 year bands allowed us to sequentially organise the multiple LGMs. By employing this approach, the estimated levels of entitlement, the intercepts, and the latent change trajectories (*i.e.*, the slopes) could be plotted across the adult lifespan (ages 19-74). This allows for simultaneous investigation of estimated cross-sectional cohort differences in the latent intercepts (*i.e.* the cohort differences in levels of entitlement at Time 1), the change trajectories in each cohort and the cohort differences in the rate of change (*i.e.* the latent slopes for each 5-year birth cohort), as well as the overall pattern of change in psychological entitlement that may be observed across the adult lifespan. Most importantly, this approach allows one to appreciate

the age differences that are due to cohort differences, and those that are due to change over time. Sample *Mplus* syntax for the Single-Group and the Multi-Group Cohort-Sequential Growth Models can be found in Supplementary File 1.

Results

Descriptive statistics and bivariate correlations for psychological entitlement on the six assessment occasions are presented in Table 2. The mean of psychological entitlement at Time 1 was 2.67 on a scale of 1 to 7 ($SD = 1.36$). The means of entitlement at all time points (overall and separate for men and women) are presented in Table 2. The one year test-retest correlation for psychological entitlement was .63 (Time 1 to Time 2), while the five year re-test correlation was .59 (Time 1 to Time 6).

Single-Group Cohort-Sequential Latent Growth Models

The parameter estimates for the Single-Group Cohort-Sequential LGMs estimating mean-level change in psychological entitlement across the six annual assessments for men and women are presented in Table 3. Figure 1 shows the estimated values of psychological entitlement across ages 19 to 74 for women, while Figure 2 presents the same estimated values for men. The Single-Group Cohort-Sequential LGMs are represented by the dark lines within each figure. For women, the estimated mean level of entitlement at the sample mean age (about 46 years of age; or 46.2 specifically) was 2.76 [2.72, 2.79]. The LGM indicated a negative linear trend from age 19 to age 74. For men, the estimated mean level of entitlement at the sample mean age (50.8 years of age, specifically) was 3.01 [2.96, 3.05]. The LGM indicated a curvilinear trend, with psychological entitlement initially getting higher across the age range, and then lowering after the mid-30's.

Multi-Group Cohort-Sequential Growth Models

The Multi-Group Cohort-Sequential LGMs are also presented in Figure 1 for women, and Figure 2 for men, with the estimates represented as the light lines within each age-cohort.

These models estimate mean-level change between the five annual assessments – from October 2009 to July 2013 – within each of the 11 five-year birth cohorts for men and women. For women, the slopes are non-significant in almost all cohorts, indicating there is no within-cohort change over time. The exception is the 69-74 age cohort, where a positive, significant slope is shown ($s = .066$), indicating that the oldest age cohort reported increasing levels of psychological entitlement over 5 years. For men, we see a similar pattern with no within-cohort change over time observed in most age cohorts, but a significant positive slope in the 64-69 ($s = .041$) and 69-74 ($s = .051$) age cohorts. For both men and women, the Multi-Group Cohort-Sequential LGM indicates an overall change trajectory that is subjectively comparable to that estimated by the Single-Group Cohort-Sequential modelling framework (represented as the darker line in Figure 1 and Figure 2, and described in the previous section).

Cohort Effects

In the multi-group models, the use of 5-year birth cohorts with the 5 yearly assessments means there is an overlap between the estimated mean level of entitlement at the last assessment of one birth cohort, and the mean-level of entitlement for the same age at the first assessment point of the next cohort. For example, the LGM for the youngest cohort used in our models estimates change from age 19 at the first assessment to age 24 at the fifth and final assessment. The LGM for the next cohort estimates change across the five yearly assessments, from age 24 to age 29. Therefore, the two models each provide an estimate of mean-level entitlement at age 24, one from the five-year latent change trajectory from age 19 to 24 (in 2013), and the second estimate from the initial level of the trait for those aged 24 to 29 (in 2009). The discrepancy between these two estimates can provide an indication of the difference between the model-implied value based on change over time, and the model-implied value based on cohort differences. That is, we can examine whether the change in

entitlement seen across five years among 19-24 years olds puts them in the same place developmentally as a 24 year old from five years before; if not, cohort differences may be at play.

The differences in estimated values of entitlement at Time 5 (2013) and the estimated values for the same age at Time 1 (2009) are presented in Figure 3 for both men and women, and it can be seen that many of the differences between the overlapping ages are non-significant, with confidence intervals that pass through 0. However, there are some significant differences. Among women, the results indicate that the 59-64 age cohort had higher estimated levels of entitlement than the 64-69 age cohort. Among men, differences can be observed where the 59-64 and 64-69 age cohorts have higher estimated levels of entitlement than their respective subsequent age cohorts. The differences described here are not ideal indicators of cohort effects, but they are a novel method for investigating cohort effects (see Milojev & Sibley, 2016) given the lack of longitudinal data collected across generations and consisting of participants of all ages.

We additionally conducted a formal test for cohort differences across the various change trajectories by running a set of models where the latent intercepts and the latent slopes were constrained to equality across each age cohort. We then compared the fit of these constrained models to the baseline models where the intercepts and slopes are free to vary across the age cohorts (those presented in Figure 1 and Figure 2). The unconstrained models ($AIC = 72914.991$, $aBIC = 73100.908$) provided a better fit than the constrained models ($AIC = 80075.476$, $aBIC = 80093.353$), as indicated by the smaller information criteria values (Akaike Information Criteria and sample size adjusted Bayesian Information Criteria) in the unconstrained models. These results suggest that cohorts are changing at different rates or in different directions (possibly reflecting the significant positive slopes in the oldest cohorts while the other cohorts show no change).

Discussion

The current research investigated change in psychological entitlement across the adult lifespan, using Cohort-Sequential Latent Growth Models and a large, heterogeneous longitudinal sample of adult New Zealanders. Overall, entitlement shows a steady negative trend across the ages 19 to 74. The multi-group model fits well with the single-group model, and there is little evidence of cohort differences. Younger birth cohorts (those defined as millennials) have higher levels of entitlement than older cohort birth cohorts, but their entitlement is not on the rise over time; instead, this may be the starting point of a lifelong decrease in entitlement as people age and mature.

The Single-Group Cohort-Sequential Latent Growth Models indicated a steady negative association between entitlement and age among women. Among men, a small initial positive trend in entitlement is observed from age 19 until the early 30's, at which point men also begin to show the negative trend across age cohorts. This fits with previous research demonstrating negative relationships between age and both entitlement and narcissism (Foster et al., 2003; Wilson & Sibley, 2011). With six years of data, we cannot yet be confident that entitlement decreases across the lifespan as people age, however, this is the 'least contaminated' model; in addition to measuring entitlement across age, we also integrate longitudinal change across six years. Nonetheless, this does not rule out the possibility of cohort effects contributing to the overall negative slope. For further clarification, we turn to the Multi-Group Cohort-Sequential Latent Growth Model.

The multi-group model was largely non-significant across the multiple birth cohorts, suggesting no change in entitlement over time. Significant positive slopes were found in the oldest age cohort (69-74) among women, and the two oldest cohorts (64-74) among men, suggesting that entitlement has increased among these ages, and only these ages, between 2009 and 2013. This may simply demonstrate a developmental pattern where those who have

entered retirement feel that they have worked hard and deserve more at this point in their life. These results hold parallels to Marsh, Nagengast, and Morin's (2012) "la dolce vita" effect where people become more self-focused and more self-content in their old age. There are no increases across time in any of the other birth cohorts, and in particular, there is no increase in entitlement across five years in those who fit in the millennial generation.

There are two interpretations for the largely non-significant multi-group model, while entitlement showed a negative trend across the lifespan in the single-group model. Firstly, if entitlement is not changing over time, then differences across the lifespan are largely driven by cohort effects (*e.g.*, Milojev & Sibley, 2016). However, we tested for cohort differences in entitlement levels at select ages in 2009, and again in 2013, and there were very few differences. The only significant difference for women was at age 64, suggesting that women at age 64 in recent years have higher entitlement than women at age 64 five years prior. For men, there were significant positive differences at ages 64 and 69, similarly suggesting that entitlement is higher at those ages today than at the initial assessment in 2009. Younger cohorts having higher entitlement than their subsequent older cohort could contribute to the negative trend found across the lifespan. The evidence certainly suggests that some cohort differences are at play in older birth cohorts. However, given that these findings are limited to a few cohorts, they do not fully explain the negative association between entitlement and age, as the single-group model is informed by data from the entire age range. The second interpretation is developmental – if cohort effects cannot explain the negative association in full, then developmental change likely plays a role in the negative trend in entitlement across the lifespan, even though we may not (yet) detect decreases in entitlement across a period of five years; developmental changes are likely to be slow, incremental, and difficult to detect.

Entitlement has long been argued to be the domain of youth. Several researchers have put forward the view that entitlement is high among children, adolescents, and young adults,

but that this is only temporary; entitlement should follow a decreasing developmental pattern as people grow, mature, and become committed to a variety of social roles such as work, marriage, and children (Arnett, 2010; Caspi et al., 2005; Kohut, 1971; Roberts & Wood, 2006). Roberts et al. (2010) argue that even when small differences are found across generations, they are unlikely to be larger or more important than the developmental changes. Our results support this view, with entitlement levels lowering across age cohorts, while there is limited evidence for cohort differences. Thus when older generations look at younger generations and judge them to be more narcissistic than themselves, they may in fact be correct – at their current age. However, if entitlement follows a developmental pattern, these older generations may have been just as entitled when they were young. As Roberts et al. (2010) put it, “every generation is Generation Me... until they grow up” (pp. 7).

It is difficult to compare our results directly to previous longitudinal studies, as the current research was conducted within New Zealand as opposed to the US, with a representative heterogeneous population as opposed to college and high school students, and examines data from a shorter time-span than previous research. However, despite these differences and our earlier discussion of New Zealand’s different cultural context, our results do fit well with studies from the US that conclude there is no increase in entitlement over time (Donnellan et al., 2009; Grijalva et al., 2015; Roberts et al., 2010; Trzesniewski et al., 2008; Trzesniewski & Donnellan, 2010). The results from the multi-group model showed no significant change in entitlement within the same age ranges examined in previous studies. Additionally, the cohort differences we found were minimal, and not widespread enough to fully explain the higher entitlement in younger cohorts relative to older cohorts.

Yet our results may not be inconsistent with previous research that found an increase, either (Stewart & Bernhardt, 2010; Twenge et al., 2008; Twenge & Foster, 2008; Twenge & Foster, 2010). All previous data measuring change in narcissism over time was collected pre-

2009 and therefore before the Global Financial Crisis (GFC) that affected many countries, New Zealand included (The Treasury, 2016). Recent research has suggested that those who were emerging adults during a recession, as evidenced by high unemployment rates for those aged 18-25, were likely to have lower narcissism than those who came of age at more prosperous times; this may even be an explanation for the rising narcissism levels measured over the past few decades (Bianchi, 2014; Twenge, 2013). As we have only measured entitlement post-GFC, we may have essentially ‘missed’ the rise in narcissism among younger generations reported in US samples (Twenge, 2013).

However, Bianchi (2014) notes that time did not appear to temper the effect of recessions on narcissism levels; that is, the conditions experienced in emerging adulthood set lower (or higher) narcissism levels for life. Thus we would expect to see a ‘bump’ in narcissism levels for those who were aged 18-25 before 2009 – which may in fact be apparent among our results for men. Interestingly, further research has demonstrated that the effect reported by Bianchi (2014) may be limited to men, as men may place greater importance on economic achievement (Leckelt et al., 2016). While these results taken together are still far from conclusive, they warrant further exploration, and the potential impact of the recession on the current research should not be underestimated. Nonetheless, while entitlement may or may not have increased before data collection, as of 2009, entitlement is not increasing among New Zealanders; it will be interesting to see whether post-2009 data in other contexts will show similar results going forward.

Gender Differences

Overall, men had higher mean levels of entitlement than women. In the single-group model, women show a steady negative trend in entitlement across the adult lifespan, however men show an initial positive trend in entitlement that levels off in the early 30’s and then begins the same decline across age cohorts. These results suggest young men may become

increasingly entitled as they move from their teens through to young adulthood, however, without finding significant increases in entitlement over time we interpret these results with caution; this ‘bump’ may also be related to pre-recession cohort differences as discussed previously. There was also no evidence of women’s entitlement increasing to match men’s over time as has been suggested in previous research (Donnellan et al., 2009; Twenge et al., 2008; Twenge & Foster, 2010). If anything, signs point to a potential increase in entitlement in men over time as more of the slopes (while non-significant) were in a positive direction in the multi-group model among men as compared to women; something we aim to collect more data on, particularly given the smaller sample sizes for men.

Strengths, Limitations and Future Directions

This longitudinal research expands upon previous research in the area by investigating change in entitlement across the adult lifespan, using a nationally representative heterogeneous sample. Extant research (*e.g.*, Twenge et al., 2008; Trzesniewski & Donnellan, 2010) has focused on change in narcissism among high school and college students only. However, societal shifts that lead to increases in entitlement among younger generations may reasonably also affect older generations, so claims cannot be made comparing these generations unless change in entitlement is measured across a variety of ages; the current research only found increases among those aged over 65. We note that if we only measured entitlement in young people, we might conclude that young men are increasing in entitlement over time, however the data show that this trend reverses by the early 30’s. Finally, examining change at all ages means we can incorporate views of entitlement and narcissism as personality traits that develop across the lifespan into the wider debate about change over time.

The current research is also the first to track change in entitlement longitudinally outside of the US, an important first step as media discussion of rising narcissism reaches

well beyond North America (*e.g.*, Remes, 2016). Although New Zealand's emphasis on a humble self-concept suggests there may be differences between countries in the development of narcissism over time, our results do not conflict much with previous research. Nonetheless, it must be cautioned that these results may not be generalizable to other contexts, and to less individualistic contexts in particular (Foster et al., 2003). Although others have suggested that the rising levels of narcissism in the US may have abated in post-GFC years (Twenge, 2013), our results may also be unique to the New Zealand context. For example, while we considered that the recession may have played a role in our results, supported by US data (Bianchi, 2014), this effect did not replicate in Germany (Leckelt et al., 2016). Changes in entitlement are likely to be culturally bounded, and future research should focus on collecting longitudinal data in multiple contexts.

We noted earlier that the current research is a finer-grained analysis extending upon Milojev and Sibley's (2016) research tracking change in Honesty-Humility (and Big Six personality more generally). Here, we utilised two of the items used to measure Honesty-Humility (reverse-coded) in order to measure entitlement. We did so because the four-item Honesty-Humility subscale employed by Milojev and Sibley (2016) incorporated facets of sincerity and fairness rather than being a pure measure of entitlement (Ashton & Lee, 2007). Specifically, that four-item measure was proposed by Sibley et al. (2011b) and used two items adapted from the HEXACO (Ashton & Lee, 2009) and two items adapted from the PES (Campbell et al., 2004). Critically, we also expand upon prior research by estimating a multi-group model to analyse change for men and women separately. This provides a more focused analysis of potential gender differences in change in entitlement over time. These important distinctions between our analyses and research focus, and those of Milojev and Sibley, are illustrated in the different results found in the current research; while the general trend is in

the same direction, we find several gender differences and differences in both the significance and direction of the multi-group LGMs.

The Cohort-Sequential LGMs allow us to estimate both change over time, and change due to cohort differences. These models cannot, however, completely untangle cohort effects; we use 5-6 years of data to answer a question that, to be answered fully, requires a lifetimes worth. The model allows us to estimate to what extent cohort effects may be impacting upon our estimates of change across age. The results show that, when tracking each cohorts change across time separately, they fit very neatly with the overall change across age, suggesting cohort differences are contributing minimally. However we must recognise this approach as an approximation only at this current point in time; one we hope to improve upon in the future.

A natural drawback of a longitudinal sample is the opportunity for systematic attrition. We mentioned earlier that participants excluded from the analyses for not answering enough time points were slightly higher in entitlement than those included, which is not particularly surprising given the nature of entitlement. Satherley et al. (2015) found that Honesty-Humility is associated with higher sample retention within the NZAVS, indicating that those who are higher in entitlement may be more likely to drop out, which could potentially contribute to a negative trend in entitlement over time. Additionally, those who aren't included in the analyses are younger than those included. This could mean we are not tracking change in entitlement among those who are young and highly entitled; it may be that this population is the most likely to display increasing entitlement over time as entitlement may be self-sustaining (Campbell & Foster, 2007; Grubbs & Exline, 2016).

A limitation of this research is the short-form measure of entitlement we have used; a necessary trade-off of using a large-scale study with a nationally representative sample is the use of shorter measures. These two items serve as markers for entitlement, and the measure is

capable of tracking meaningful change in individuals over time, although the effect may be stronger if a multi-item scale was used. However, it is important to note that short-form measures may be associated with Type I or Type II errors (Credé et al., 2012; Krueger, Emons, & Sijtsma, 2013). This measure of entitlement has been used in previous research within New Zealand multiple times (Stronge et al., 2016; Wilson & Sibley, 2011) and shows good reliability, but there appear to be some differences in the association between entitlement and age, and the NPI and age, for men in particular (Wilson & Sibley, 2011). We hope that these results illustrate the importance of expanding beyond a single age-group when investigating development and cohort effects in future research, which may be able to utilise larger and more diverse measures.

Additionally, this measure may be tapping into non-exploitative entitlement, suggested by Lessard, Greenberger, Chen and Farruggia (2011) to be a form of entitlement where one believes they have a right to positive outcomes, but not a right to exploit others to get those outcomes. Therefore, when we report an increase in entitlement among those post-retirement age, it likely reflects that people feel deserving of positive outcomes at that life stage, rather than a sudden shift towards exploitative behaviour. Non-exploitative entitlement comes without the negative psychosocial consequences of exploitative entitlement, so the measure used in the current research may not be directly comparable with those in previous research. It is possible that there is a rise in exploitative entitlement over time, without a concurrent rise in non-exploitative entitlement (also see Crowe et al., 2016 for their emotionally stable/vulnerable conception of entitlement). However, we note that this seems unlikely given that non-exploitative entitlement is moderately correlated with exploitative entitlement, the PES, and the NPI (Lessard et al., 2011).

Finally, the lack of significant positive slopes in the multi-group model is, of course, not evidence that there is no increase in entitlement over time. We suggest we were unable to

detect a decrease in entitlement within younger birth cohorts despite an overall negative trend across the lifespan, but it is possible that entitlement is in fact increasing over time, but slowly enough that more power is needed in order to detect the effect (*e.g.*, among men aged 29-34; see Milojev & Sibley, 2016, for Monte Carlo simulations estimating the size of the effect that can be detected given the sample sizes in each birth cohort). However, those cohorts that do have significant slopes are not the largest in sample size, so if it is a matter of power to detect an effect, at the very least, the oldest cohorts are increasing in entitlement more rapidly than younger cohorts. Certainly, there is no evidence in these results for any kind of meaningful increase in entitlement among younger generations. Regardless, while six years of longitudinal data across the adult lifespan gives us an excellent first look, we do not expect change to be rapid and we are continuing to collect more annual waves of data.

Conclusion

We used a series of Cohort-Sequential Latent Growth Models to investigate change in psychological entitlement across the adult lifespan and over six years, for men and women. Our results indicate that psychological entitlement is steadily, negatively associated with age, but there is little evidence that entitlement is increasing across time. These results offer no support for the popular notion that entitlement is currently on the rise among ‘millennials’ or younger generations—at least in the New Zealand context. Instead, they point to the idea that younger generations are naturally higher in entitlement than older generations as part of a developmental process. In time, as these current generations grow up and become less entitled, they may themselves become concerned by the entitled behaviour they observe in future generations.

References

- Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., & Kashy, D. A. (2011). What Does the Narcissistic Personality Inventory Really Measure? *Assessment*, 18(1), 67-87. doi: 10.1177/1073191110382845.
- Arnett, J. J. (2010). Oh, grow up! Generational grumbling and the new life stage of emerging adulthood—Commentary on Trzesniewski & Donnellan (2010). *Perspectives on Psychological Science*, 5(1), 89-92. doi: 10.1177/1745691609357016
- Arnett, J. J. (2013). The Evidence for Generation We and Against Generation Me. *Emerging Adulthood*, 1(1), 5-10. doi: 10.1177/2167696812466842.
- Ashton, M.C., & Lee, K. (2007). Empirical, theoretical, and practical advantages of the HEXACO model of personality structure. *Personality and Social Psychology Review*, 11, 150-166. doi: 10.1177/1088868306294907
- Ashton, M.C., & Lee, K. (2009). The HEXACO-60: A short measure of the major dimensions of personality. *Journal of Personality Assessment*, 91, 340-345.
- Atkinson, J., Salmond, C., & Crampton, P. (2014). *NZDep2013 Index of Deprivation*. Department of Public Health, University of Otago, Wellington
- Bianchi, E. C. (2014). Entering Adulthood in a Recession Tempers Later Narcissism. *Psychological Science*, 25(7), 1429-1437. doi: 10.1177/0956797614532818.
- Brown, R. P., Budzek, K., & Tamborski, M. (2009). On the Meaning and Measure of Narcissism. *Personality and Social Psychology Bulletin*, 35(7), 951-964. doi: 10.1177/0146167209335461.
- Campbell, W.K., Bonacci, A.M., Shelton, J., Exline, J.J., & Bushman, B.J. (2004). Psychological Entitlement: Interpersonal consequences and validation of a self-report

measure. *Journal of Personality Assessment*, 83, 29-45. doi:
10.1207/s15327752jpa8301_04

Campbell, W. K., & Foster, J. D. (2007). The Narcissistic Self: Background, an Extended Agency Model, and Ongoing Controversies. In C. Sedikides, & S. J. Spencer, *The self. Frontiers of social psychology* (pp. 115-138). New York, NY: US: Psychology Press.

Caspi, A., Roberts, B. W., & Shiner, R. L. (2005). Personality Development: Stability and Change. *Annual Review of Psychology*, 56, 453–484. doi:
10.1146/annurev.psych.55.090902.141913

Clarke, I. E., Karlov, L., & Neale, N. J. (2015). The many faces of narcissism: Narcissism factors and their predictive utility. *Personality and Individual Differences*, 81, 90-95. doi: 10.1016/j.paid.2014.11.021.

Credé, M., Harms, P.D., Niehorster, S., & Gaye-Valentine, A. (2012). An evaluation of the consequences of using short measures of the Big Five personality traits. *Journal of Personality and Social Psychology*, 102, 874-888. doi: 10.1037/a0027403

Crowe, M. L., LoPilato, A. C., Campbell, W. K., & Miller, J. D. (2016). Identifying two groups of entitled individuals: Cluster analysis reveals emotional stability and self-esteem distinction. *Journal of Personality Disorders*, 30(6), 762-775. doi:
10.1521/pedi_2015_29_229

Davidson, A. (2015, September 8). *Is College Tuition Really Too High?*. Retrieved from New York Times: <http://www.nytimes.com/2015/09/13/magazine/is-college-tuition-too-high.html>

- Donnellan, M. B., Trzesniewski, K. H., & Robins, R. W. (2009). An emerging epidemic of narcissism or much ado about nothing? *Journal of Research in Personality*, 43, 498-501.
- Foster, J. D., Campbell, W. K., & Twenge, J. M. (2003). Individual differences in narcissism: Inflated self-views across the lifespan and around the world. *Journal of Research in Personality*, 37, 469-486. doi:10.1016/S0092-6566(03)00026-6.
- Grijalva, E., Newman, D. A., Tay, L., Donnellan, M. B., Harms, P. D., Robins, R. W., & Yan, T. (2015). Gender Differences in Narcissism: A Meta-Analytic Review. *Psychological Bulletin*, 141(2), 261-310. doi: 10.1037/a0038231.
- Grubbs, J. B., & Exline, J. J. (2016). Trait entitlement: A cognitive-personality source of vulnerability to psychological distress. *Psychological Bulletin*, 142(11), 1204-1226. doi: 10.1037/bul0000063
- Kohut, H. (1971). *The analysis of the self*. New York: International Universities Press.
- Krizan, Z., & Herlache, A. D. (2017). The narcissism spectrum model: A synthetic view of narcissistic personality. *Personality and Social Psychology Review*. doi: 10.1177/1088868316685018
- Kruyen, P.M., Emons, W.H.M., Sijtsma, K. (2013). On the shortcomings of shortened tests: A literature review. *International Journal of Testing*, 13, 223-2484.
- Leckelt, M., Back, M. D., Foster, J. D., Hutteman, R., Jaeger, G., McCain, J., et al. (2016). Entering adulthood in a recession tempers later narcissism – But only in men. *Journal of Research in Personality*, 60, 8-11. doi: 10.1016/j.jrp.2015.10.006.
- Lessard, J., Greenberger, E., Chen, C., & Farruggia, S. (2011). Are youths' feelings of entitlement always "bad"? Evidence for a distinction between exploitive and non-

- exploitive dimensions of entitlement. *Journal of Adolescence*, 34(3), 521-529. doi: 10.1016/j.adolescence.2010.05.014
- Lucas, R.E., & Donnellan, M.B. (2011). Personality development across the life span: Longitudinal analyses with a national sample from Germany. *Journal of Personality and Social Psychology*, 101, 847-861.
- Marsh, H. W., Nagengast, B., & Morin, A. J. (2012). Measurement Invariance of Big-Five Factors Over the Life Span: ESEM Tests of Gender, Age, Plasticity, Maturity, and La Dolce Vita Effects. *Developmental Psychology*, 49(6), 1194-1218. doi: 10.1037/a0026913.
- Milojev, P., & Sibley, C. G. (2016). Normative Personality Trait Development in Adulthood: A 6-Year Cohort-Sequential Growth Model. *Journal of Personality and Social Psychology*. doi: 10.1037/pspp0000121
- Muthén, L.K. and Muthén, B.O. (1998-2015). *Mplus user's Guide. Seventh edition*. Los Angeles, CA: Muthén & Muthén
- Preacher, K. J., Wichman, A. L., MacCallum, R. C., & Briggs, N. E. (2008). *Latent growth curve modeling*. Thousand Oaks, CA: Sage Publications.
- Prinzie, P., & Onghena, P. (2005). Cohort-Sequential design. In B. Everitt & D. Howell (Eds.), *Encyclopaedia of statistics in behavioral science. Vol. 1* (pp. 319-322). New York: Wiley.
- Raskin, R., & Terry, H. (1988). A principal-components analysis of the Narcissistic Personality Inventory and further evidence of its construct validity. *Journal of Personality and Social Psychology*, 54(5), 890-902. doi: 10.1037/0022-3514.54.5.890.

Remes, O. (2016, March 16). Why are we becoming so narcissistic? Here's the science.

Retrieved from New Zealand Herald:

http://www.nzherald.co.nz/lifestyle/news/article.cfm?c_id=6&objectid=11606472

Roberts, B. W., Edmonds, G., & Grijalva, E. (2010). It Is Developmental Me, Not Generation Me: Developmental Changes Are More Important Than Generational Changes in Narcissism - Commentary on Trzesniewski & Donnellan (2010). *Perspectives on Psychological Science*, 5(1), 97-102. doi: 10.1177/1745691609357019.

Roberts, B., & Wood, D. (2006). Personality development in the context of the neo-socioanalytic model of personality. In D. Mroczek, & T. Little (Eds.), *Handbook of personality development* (pp. 11-39). Mahwah, NJ: Erlbaum.

Satherley, N., Milojev, P., Greaves, L. M., Huang, Y., Osborne, D., Bulbulia, J., & Sibley, C. G. (2015). Demographic and Psychological Predictors of Panel Attrition: Evidence from the New Zealand Attitudes and Values Study. *PLOS ONE*, 10(3), e0121950.

Sibley, C. G., Hoeverd, W. J., & Liu, J. H. (2011a). Pluralistic and Monocultural Facets of New Zealand National Character and Identity. *New Zealand Journal of Psychology*, 40(3), 19-29.

Sibley, C. G., Luyten, N., Purnomo, M., Moberly, A., Wootton, L. W., Hammond, M. D., ... & Robertson, A. (2011b). The Mini-IPIP6: Validation and extension of a short measure of the Big-Six factors of personality in New Zealand. *New Zealand Journal of Psychology*, 40, 142-159.

Stein, J. (2013, May 20). *Millenials: The Me Me Me Generation*. Retrieved from Time Magazine: <http://time.com/247/millennials-the-me-me-me-generation/>

- Stewart, K. D., & Bernhardt, P. C. (2010). Comparing Millennials to Pre-1987 Students and with One Another. *North American Journal of Psychology*, 12(3), 579-602.
- Stronge, S., Cichocka, A., & Sibley, C. G. (2016). Narcissistic self-esteem or optimal self-esteem? A Latent Profile Analysis of self-esteem and psychological entitlement. *Journal of Research in Personality*, 63, 102-110.
- Terracciano, A. (2010). Secular Trends and Personality: Perspectives From Longitudinal and Cross-Cultural Studies—Commentary on Trzesniewski & Donnellan (2010). *Perspectives on Psychological Science*, 5(1), 93-96, doi: 10.1177/1745691609357017.
- The Treasury. (2016). *New Zealand Economic and Financial Overview*. Retrieved from <http://www.treasury.govt.nz/economy/overview/2016>
- Trzesniewski, K. H., & Donnellan, M. B. (2010). Rethinking “Generation Me”: A Study of Cohort Effects From 1976–2006. *Perspectives on Psychological Science*, 5(1), 58–75. doi: 10.1177/1745691609356789.
- Trzesniewski, K. H., Donnellan, M. B., & Robins, R. W. (2008). Do Today’s Young People Really Think They Are So Extraordinary? An Examination of Secular Trends in Narcissism and Self-Enhancement. *Psychological Science*, 19(2), 181-188. doi: 10.1111/j.1467-9280.2008.02065.x.
- Twenge, J. (2006). *Generation Me: Why today's young Americans are more confident, assertive, entitled - and more miserable than ever before*. New York: Free Press.
- Twenge, J. M. (2013). The Evidence for Generation Me and Against Generation We. *Emerging Adulthood*, 1(1), 11-16. doi: 10.1177/2167696812466548.
- Twenge, J. M., & Foster, J. D. (2008). Mapping the scale of the narcissism epidemic: Increases in narcissism 2002–2007 within ethnic groups. *Journal of Research in Personality*, 42, 1619-1622. doi:10.1016/j.jrp.2008.06.014.

- Twenge, J. M., & Foster, J. D. (2010). Birth Cohort Increases in Narcissistic Personality Traits Among American College Students, 1982–2009. *Social Psychological and Personality Science*, 1(1), 99-106. doi: 10.1177/1948550609355719.
- Twenge, J. M., Konrath, S., Foster, J. D., Campbell, W. K., & Bushman, B. J. (2008). Egos Inflating Over Time: A Cross-Temporal Meta-Analysis of the Narcissistic Personality Inventory. *Journal of Personality*, 76(4), 875-901. doi: 10.1111/j.1467-6494.2008.00507.x.
- Wilson, M. S., & Sibley, C. G. (2011). ‘Narcissism creep?’: Evidence for Age-Related Differences in Narcissism in the New Zealand General Population. *New Zealand Journal of Psychology*, 40(3), 89-95.

Table 1

Descriptives and bivariate correlations for psychological entitlement at the six assessment points. All correlations are significant at $p < .001$.

	Mean (SD)			Bivariate Correlations				
	Overall	Women	Men	1	2	3	4	5
Time 1	2.67 (1.36)	2.55 (1.34)	2.86 (1.38)	-				
Time 2	2.88 (1.36)	2.77 (1.35)	3.07 (1.36)	.625	-			
Time 3	2.80 (1.30)	2.70 (1.29)	2.96 (1.31)	.592	.647	-		
Time 4	2.78 (1.32)	2.68 (1.30)	2.96 (1.33)	.583	.615	.604	-	
Time 5	2.74 (1.30)	2.64 (1.29)	2.91 (1.29)	.561	.592	.585	.625	-
Time 6	2.65 (1.28)	2.56 (1.28)	2.82 (1.26)	.590	.594	.598	.628	.657

Table 2

Sample sizes and the represented age range for the 5-year birth cohorts for women and men.

Birth Cohort	N (women)	N (men)	Age in T1 (approx. 2009)	Age in T5 (approx. 2013)
1940 and older	187	187	69	74
1941 to 1945	290	261	64	69
1946 to 1950	420	321	59	64
1951 to 1955	457	318	54	59
1956 to 1960	501	297	49	54
1961 to 1965	491	299	44	49
1966 to 1970	429	234	39	44
1971 to 1975	392	162	34	39
1976 to 1980	285	104	29	34
1981 to 1985	212	58	24	29
1986 to 1990	219	101	19	24
1991 and younger	84	21	18	23
Total	3,967	2,363	-	-

Table 3

Parameter coefficients for the single-group age-based Latent Growth Model for psychological entitlement for women and men, estimating the change trajectory from age 19 to 74.

	95% CIs					
	<i>Estimate</i>	<i>se</i>	<i>p -value</i>	<i>Low</i>	<i>High</i>	<i>Variances</i>
Women						
Intercept	2.773	.019	<.001	2.736	2.810	1.074**
Linear Slope	-.178	.015	<.001	-.206	-.149	.322*
Quadratic Slope	-.013	.006	.042	-.026	.000	.030
Cubic Slope	.003	.002	.212	-.002	.008	.001
Men						
Intercept	3.120	.027	<.001	3.067	3.173	1.074**
Linear Slope	-.177	.019	<.001	-.214	-.140	.322*
Quadratic Slope	-.032	.009	.001	-.050	-.014	.030
Cubic Slope	.011	.003	.001	.005	.017	.001

Akaike Information Criterion = 124432.734; Sample-size adjusted Bayesian Information Criterion = 124510.118; N = 10,412; **, p < .001, * p < .05

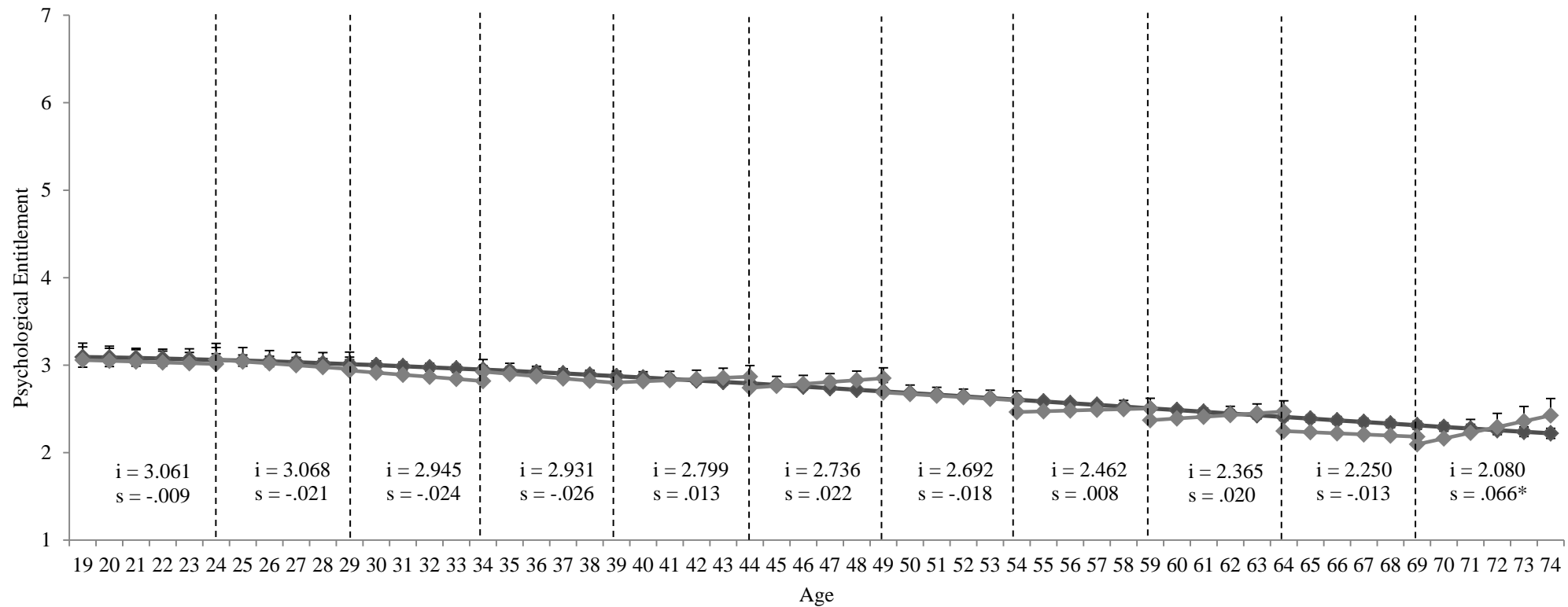


Figure 1. Developmental patterns of normative (mean-level) change in psychological entitlement for women. Each panel shows the latent change trajectories based on the (a) six-year single-group cohort-sequential latent growth model (dark line; $N = 6,509$), and (b) five-year multi-group Cohort-Sequential latent growth models across the 5-year birth cohorts presented in separate sections (light lines; $n = 3,967$). The estimates of the latent intercept and the latent slope for each cohort are presented in the graph. Estimates are based on the mean-levels of psychological entitlement (y axis) across age and assessments (x-axis). The 95% confidence intervals are presented as error bars around each point estimate. Within each cohort, i = intercept for that parameter, s = the fixed effect for the slope.

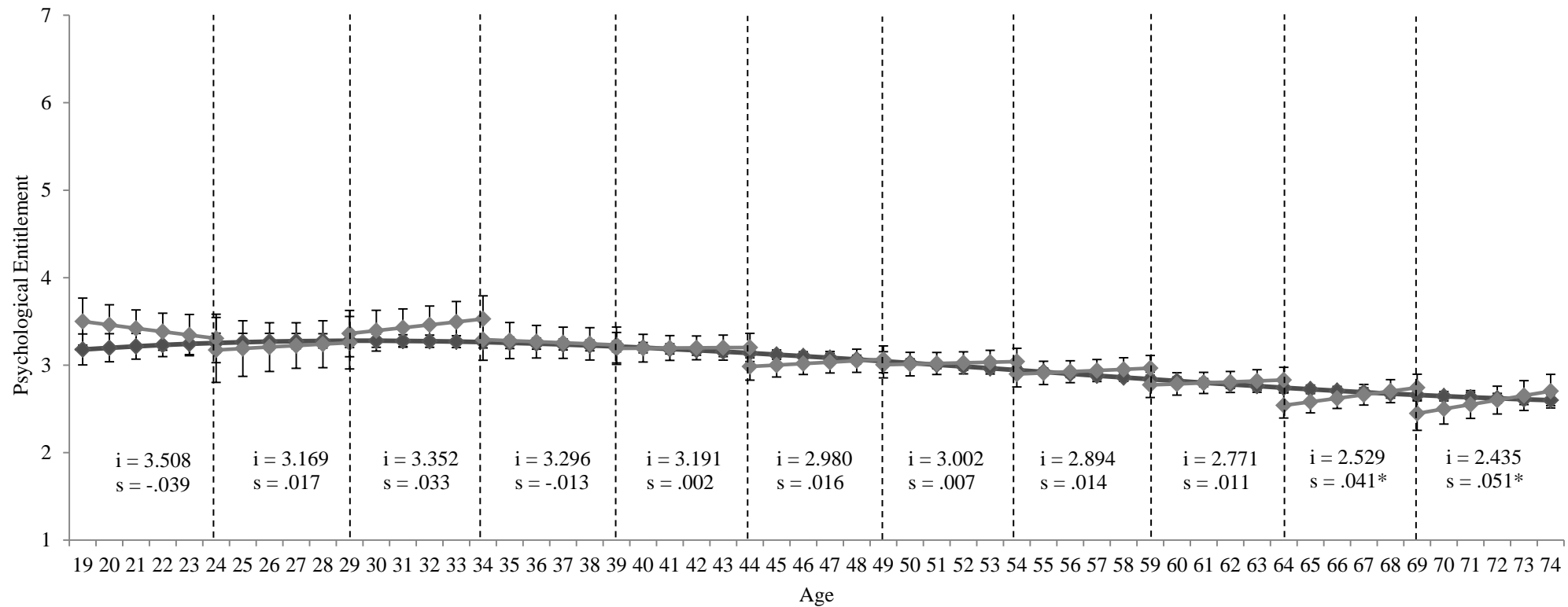


Figure 2. Developmental patterns of normative (mean-level) change in psychological entitlement for men. Each panel shows the latent change trajectories based on the (a) six-year single-group cohort-sequential latent growth model (dark line; $N = 3,903$), and (b) five-year multi-group Cohort-Sequential latent growth models across the 5-year birth cohorts presented in separate sections (light lines; $n = 2,363$). The estimates of the latent intercept and the latent slope for each cohort are presented in the graph. Estimates are based on the mean-levels of psychological entitlement (y axis) across age and assessments (x-axis). The 95% confidence intervals are presented as error bars around each point estimate. Within each cohort, i = intercept for that parameter, s = the fixed effect for the slope.

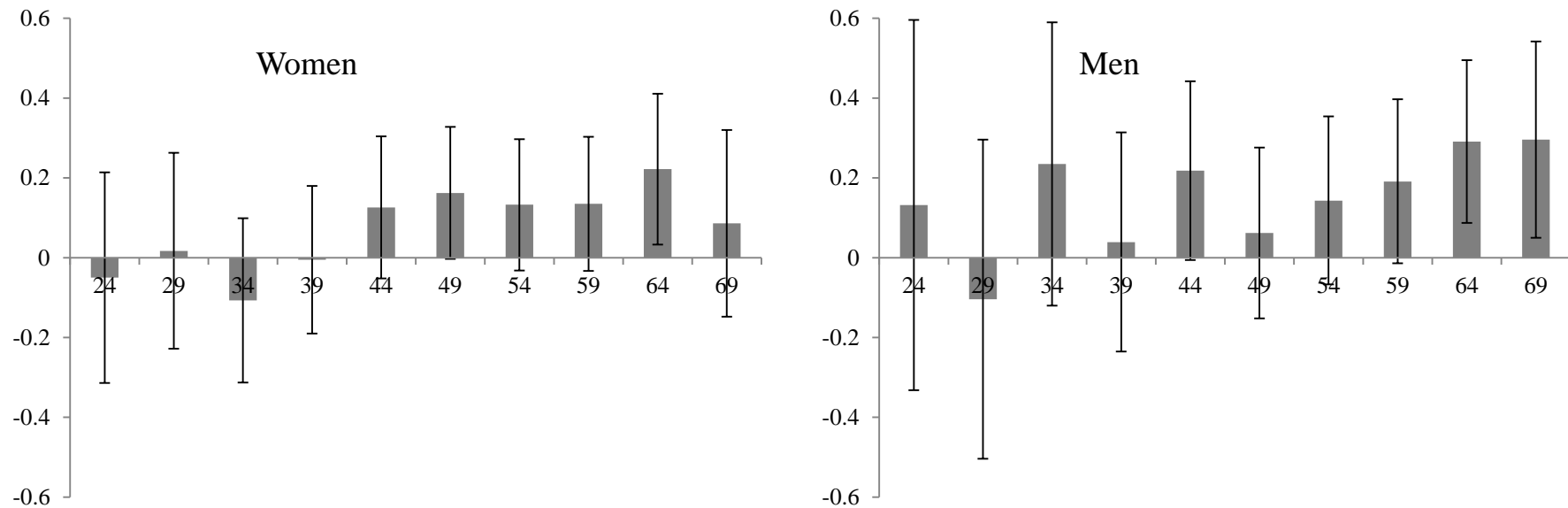


Figure 3. Estimated cohort effects between each of the cohorts as seen in Figure 1 (women) and Figure 2 (men). The bars represent the difference between the mean-level of psychological entitlement at the intercept of the latent growth model for each age cohort, and the mean-level at the participants' age as estimated by the latent growth model from the preceding cohort. For example, the first bar in each panel indicates the difference between the level of psychological entitlement at age 24 based on the intercept of the 24 to 29 age cohort, and the level of psychological entitlement at age 24 as estimated by the latent growth model from the previous cohort (19 to 24). Thus bars with a positive value represent an age with higher model-implied levels of psychological entitlement in 2014 than the initially assessed levels of psychological entitlement in 2009 at the same age. Error bars represent 95% confidence intervals.