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9 In-groups, out-groups, and their contrasting perceptions of values among generational cohorts

10 of Australians

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1   Abstract

2   Personal values guide, and are used to justify, behaviours both within and beyond

3   organisational contexts. Baby Boomers, Generation X, and Generation Y are purported to

4   vary in the values they espouse, and hence their behaviours. The aim of this research was to

5   examine and compare self-ratings and out-group perceptions of the importance of the four

6   overarching clusters of values in Schwartz's circumplex model by generation. A convenience

7   sample of 157 participants (49 Baby Boomers, 47 Generation X and 61 Generation Y)

8   completed an online survey of self-rated values and perceptions of another generation's

9   values. Multivariate analyses identified that self-ratings of Self-enhancement, Openness to

10   change and Conservation value clusters varied between generations (medium effect size), but

11   Self-transcendence did not. Out-group perceptions of generations varied across all four value

12   clusters (very large effect size). We then compared each generation's self-ratings of value

13   importance with perceptions of value importance provided by other generations (in-

14   group/out-group comparisons). There were significant variations between self-ratings and

15   perceived importance ratings provided by other generations for all three generations (large

16   effect). Larger differences in other-ascribed than self-ascribed value importance across

17   generations highlights the need to avoid actions based on generation value stereotypes, both

18   within and beyond the workplace. Further research on a representative sample of the

19   Australian population using a mixed-methods approach is recommended.

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22   *Keywords*: comparisons; generations; out-group; social identity; stereotype; values.

23

1   In-groups, out-groups, and their contrasting perceptions of values among generational cohorts

2   of Australians

3   The study of basic human values is commonly based on Rokeach's (1973)

4   conceptualisation of values. Rokeach described human values as comprising a small set of

5   identifiable facets that are broadly universal in nature, stem from cultural and personality

6   influences, and influence a multitude of outcomes worth examining in the social sciences.

7   Rokeach's conceptualisation of human values led to the development of theoretically

8   congruent models and measures. Schwartz's (1992) circumplex model proposes that 10 basic

9   human values constructs can be arranged into four overarching values clusters. Self-

10   transcendence is an overarching cluster representing the basic values of universalism and

11   benevolence. The Conservation cluster envelopes the values of conformity, tradition, and

12   security. The Self-enhancement cluster comprises the values power, achievement, and, to a

13   degree, hedonism, which straddles the boundaries with the final cluster of Openness to

14   Change, enveloping stimulation and self-direction values. The validity of Schwartz's model

15   of basic human values has received generally positive support in the literature (e.g.,

16   Schwartz, 1992; Steinmetz, Isidor, & Baeuerle, 2012), and has provided researchers with a

17   valuable means of examining the relationships between values and outcomes relevant to

18   social scientists, per Rokeach's original supposition.

19   Personal values guide, and are used to justify, behaviours (Schwartz, 1992). Values

20   have often been framed in terms of their importance to workplace outcomes or predictions of

21   workplace behaviour such as excessive work engagement (Burke, 2001), and affective work

22   perceptions, such as the level of organisational commitment (e.g., Abbott, White, & Charles,

23   2005). For example, Abbott et al. demonstrated employees had a greater level of commitment

24   (as a sense of duty) to their employer if they had a greater personal preference for

25   conservative values. Values congruence between employee and employer has been linked to

1 employees' affective impressions of current positions (Kristof-Brown, Zimmerman, &

2 Johnson, 2005) and intentions to leave their employing organisation (e.g., De Cooman et al.,

3 2009). Beyond these organisational outcomes, the importance individuals attach to specific

4 values has been linked to their probability of accepting an orientation towards diversity

5 (Sawyerr, Strauss, & Yan, 2005), and their prospects of engaging in socialisation with an out-

6 group (Sagiv & Schwartz, 1995). In summary, previous research has established individual

7 values preferences have behavioural and cognitive implications in a range of domains,

8 including the workplace. Consideration of the role of generational cohort alongside individual

9 values preferences provides additional detail on the manner in which values are influential,

10 and this combination of constructs form the focus of the current study.

11   Recent research has examined the interplay between generational cohorts and basic

12 human values. While the nomenclature for the generations and the span of birth years each

13 represents vary in the literature (Parry & Urwin, 2011), research on (in ascending

14 chronological recency) Baby Boomers, Generation X, and Generation Y has demonstrated

15 variations in value importance between these groups. Similar to that of personality, values are

16 malleable across time based on the greater cultural context and social climate individuals are

17 immersed in as part of their development across the lifespan (Roberts, Walton, &

18 Viechtbauer, 2006). Consequently, differences in generational cohorts are in-part due to

19 variations in culture and climate experienced. Examining associations between generational

20 groups and workplace value preferences, one study noted that Baby Boomers reported that

21 status-related workplace values were less important to them than did generations Y and X

22 (Cennamo & Gardner, 2008). Generations X and Y tend to demonstrate a greater preference

23 to freedom-related workplace values than do Baby Boomers (Twenge, 2010; Twenge,

24 Campbell, Hoffman, & Lance, 2010), with Generation Y presenting the highest preference

25 for these types of values in comparison to Generation X (Cennamo & Gardner, 2008).

1   Collectivist values preferences, which encompass the importance of relationships with others,

2   were higher in managers within the Baby Boomer generational cohort in comparison to

3   business students under 25 years of age (Richards et al., 2012).

4   Several studies of generational differences and values have drawn upon Schwartz's

5   (1992) values clusters. Examining the importance of Self-enhancement values between

6   generations has been a common element in workplace research. For example, Generation X

7   was noted to have a strong inclination towards Self-enhancement values (Gursoy, Chi, &

8   Karadag, 2013; Lyons, Duxbury, & Higgins, 2005), especially when compared to Baby

9   Boomers (Egri et al., 2012). There is mixed evidence with regards to Self-enhancement

10   values for Generation Y; while Egri et al. noted Generation Y placed the highest importance

11   attributed to this value, Twenge (2010; Twenge et al., 2010) reported that Generation Y

12   placed significantly lower importance upon Achievement-related values related to the

13   centrality of work compared to Baby Boomers. Cogin (2012) similarly found Generation Y

14   participants placed less emphasis on Achievement values in terms of the importance of hard

15   work. In combination, these results suggest that while there are mixed findings for the

16   importance Generation Y places on Self-enhancement values, Generation X and Baby

17   Boomers generally place higher importance on these values. Baby Boomers place notably

18   higher importance on Conservation values in comparison to younger generational cohorts

19   (Egri et al., 2012; Feather & McKee, 2008). Conversely, Generation Y and X place

20   significantly higher importance on Openness to Change when compared to Baby Boomers

21   (Cogin, 2012; Egri et al., 2012; Gursoy et al., 2013; Twenge, 2010). With regards to Self-

22   transcendence values of universalism and benevolence, mixed findings have been presented

23   in the literature. Baby Boomers place significantly higher importance on these values

24   compared to younger generations (Egri et al., 2012; Lyons et al., 2005). Examining

25   Universalism value preferences specifically, however, Richards et al. (2012) noted a

1   significantly greater importance placed on this value by Generation Y in comparison to other

2   generations, while Twenge et al. (2010) noted no significant differences between generations

3   on altruistic values, a core component of Universalism. Previous research has reported cross-

4   cultural differences in value priorities (Vauclair, Hanke, Fischer, & Fontaine, 2011), and the

5   limited research on generational differences in the values of Australians (i.e., Cogin, 2012;

6   Egri et al., 2012; Feather & McKee, 2008) prompts the need for further examination within

7   this context.

8   In summary, while individual preferences for values appear to vary between

9   generational cohorts, the consistency of these findings has notable variability. However,

10   generational differences research has been criticised for methodological inconsistencies and

11   poor methodological rigour (Lyons & Kuron, 2014), with recommendations that future

12   research include sufficient theoretical grounding and consideration of results in terms of the

13   context and practical significance (effect size) of the findings. We attempt to address these

14   areas in the forthcoming research. Furthermore, the analysis used in many of the

15   aforementioned studies are either univariate in nature (e.g., Gursoy et al., 2013), or follow

16   multivariate testing with univariate post-hoc analyses (e.g., Cogin, 2012), effectively

17   circumventing the purpose of a multivariate approach to examine differences in the

18   importance of specific values *relative* to the importance of other values held by the

19   individual. Simultaneous analysis of multiple values has greater validity. Further research

20   into values preferences and generational cohorts adopting true multivariate analysis

21   approaches is required.

22   Additionally, research thus far has focused on participants' perceptions of values of

23   importance to their own generational cohort. Examination of the perceptions of value

24   importance for generational cohorts *beyond that* of the individual's own cohort has had

25   marginal investigation (e.g., Chi, Maier, & Gursoy, 2013; Williams, Coupland, Folwell, &

Sparks, 1997). For example, Chi et al. found differences for managerial perceptions of younger and older managers' values, although this pattern of managers' values differences was not replicated with line-level employees. Williams et al. found via discourse analysis the importance of out-group media portrayals of Generation X in terms of how they perceived themselves. Neither examined Generations Y, X, and Baby Boomers in terms of self-reflections on values or consideration of each of the other cohorts' values. The relevancy of inter-cohort perceptions of values between generations is underpinned by social identity theory (Tajfel, 1974), which purports that one's self-concept is influenced by the identified categorisation across a variety of constructs (e.g., nationality, race, and occupational type) that define important aspects of the individual (Hogg, Terry, & White, 1995). Furthermore, the individual's identification with specific social categories also implies a degree of evaluation regarding how one's social categorisation, or in-group, fares or behaves in comparison to out-groups. Tajfel (1974) proposed that one's in-group is perceived more favourably due to the types of stereotypes attached to the group's normative behaviours and expectations (a process known as self-enhancement, although not to be confused with Schwartz's [1992] values construct of the same name). This social categorisation aspect of social identity is important in emphasising the differences between the in-group and out-group, such that the differences can be exaggerated to promote the distinguishing aspects of the in-group and out-group (Hogg et al., 1995).

In order to apply social identity theory to research on values and generational cohorts, it appears valuable to understand the manner in which generational cohorts perceive the values preferences of generational cohorts beyond themselves. Gardner and Macky (2012) have previously noted the importance of stereotypical perceptions in inter-generational group comparisons (e.g., perceiving younger generations as being lazier than older generations) as opening the prospect of creating self-fulfilling prophecies. Thus, the manner in which older

1   generations may behave towards younger generations as a consequence of this stereotyped

2   perception of their values may inadvertently encourage behaviours in younger generations

3   complicit with these perceptions. A hypothetical example provided by Gardner and Macky

4   (2012) relevant to this notion was a hesitation in hiring younger employees due to perceived

5   laziness, contributing to a lower rate of youth employment. Therefore it is likely that intra-

6   generational comparisons of values would share similar patterns were research in this area to

7   be conducted; the perceptions of out-group generations may indeed exaggerate these

8   distinguishing facets of value importance based on stereotypes held by an in-group.

9   Consequently, the examination not only of the perceptions of value importance attributed to

10   out-groups is of merit, but the comparison between the in-group and out-group's perceptions

11   of their value importance preferences is a novel area of inquiry. Taking into account the

12   previously noted differences between self-perceptions of value importance between

13   generational groups, and the influence of values on societal and workplace outcomes, the

14   manner in which out-groups are possibly stereotyped into prioritising certain values has

15   potential impacts on workplace productivity, hiring, and government policy decisions (see

16   Gardner & Macky [2012] for further discussion on the ethical dilemmas associated with

17   generational stereotyping).

18   The aims of this study are therefore twofold. Examination of the self-perceptions of

19   value importance, based on Schwartz's (1992) values model and measurement, using

20   multivariate analyses will assist in clarifying conflicting findings in this area. Additionally,

21   examination of the out-group perceptions and comparisons between in-group and out-group

22   perceptions of value importance using multivariate analyses will provide novel information

23   regarding the potential disparities that exist between in-group and out-group perceptions of

24   value importance. The hypotheses tested as part of this study are as follows:

1   **H1**. There will be a statistically significant difference between generations' (Baby

2   Boomers, Generation X, and Generation Y) self-perceptions of value importance.

3   **H2**. There will be a statistically significant difference between generations' (Baby

4   Boomers, Generation X, and Generation Y) out-group perceptions of value

5   importance.

6   **H3**. There will be a statistically significant difference between generations' (Baby

7   Boomers, Generation X, and Generation Y) in-group perceptions and out-group

8   perceptions of value importance.

9   **Method**

10 **Participants**

11   During July and August 2011, adults aged 18 to 65 years living in Australia were

12 recruited using convenience and snowball sampling through social networking sites, research

13 websites, personal networks, and advertising in community newspapers. An a priori power

14 analysis using G*Power (Faul, Erdfelder, Lang, & Buchner, 2007) determined that 72

15 participants (24 per generation) would be required for adequate power (.80) in detecting a

16 medium effect (f = .374) reported by Lyons et al. (2005) at an alpha level of .05. The sample

17 comprised 157 participants (92 women, 51 men, 14 missing) with ages ranging from 18 to 65

18 years (M =37.27, SD = 13.72). There were 61 participants from Generation Y, 47 from

19 Generation X, and 49 Baby Boomers. A chi-square for contingencies analysis revealed no

20 significant difference in gender representation for each generational cohort, χ^2 (2) = 1.54, p =

21 .462.

22 **Measures**

23   A survey was created and hosted on Qualtrics.com. The first question asked

24 participants to select the year grouping within which they were born – 1946-1964 (Baby

25 Boomers), 1965-1981 (Generation X), or 1982-1993 (Generation Y). Next, participants

1 completed two versions of the Schwartz Value Survey (Schwartz & Sagiv, 1995), each with

2 44 items. The first measured the participants' self-rated values and the second measured the

3 participants' perceptions of one randomly-selected out-group generation's values. For

4 example, a Generation X participant would be required to rate his/her own values and then

5 his/her perceptions of the values help by either Baby Boomers or Generation Y. Participants

6 rated each value, for example, "CLEAN (clean, tidy)" on the extent to which it is "a guiding

7 principle in my life" on a nine-point Likert-type scale ranging from -1 (opposed to my

8 values) to 7 (of extreme importance). Participants were instructed to read all 44 items and rate

9 their most important and least important values in order to anchor the response scale for the

10 remaining values (Schwartz, 1992). Participants were then instructed to rate the values of one

11 out-group generation. The four overarching cluster scores were calculated by averaging

12 across the individual value ratings items within cluster type. Value data held adequate

13 internal consistency for each overarching cluster: Self-enhancement ($\alpha = .75$), Openness to

14 Change ($\alpha = .82$), Self-transcendence ($\alpha = .78$), and Conservation ($\alpha = .76$). Finally,

15 demographic information was collected for gender, age and country of birth.

16 **Procedure**

17   Ethics clearance was granted by the Curtin University Human Research Ethics

18 Committee. Potential participants were directed to the online information sheet and, if they

19 consented to participate, they were directed to the survey. Upon completion of the survey,

20 participants were directed to provide an email address should they wish to participate in a

21 prize draw to win one of three $50 Amazon.com vouchers.

22   Questionnaire data was downloaded from Qualtrics and imported into SPSS v.22 for

23 analysis. The procedures outlined by Schwartz (1992) were followed to remove cases with

24 high rates of missing data and undifferentiated responding. The remaining 157 cases were

25 retained for analysis.

Results

Descriptive statistics and correlations between value rating clusters for the three

generations combined are presented in Table 1. Mean scores (with standard deviations) for

self-ratings and perceived ratings of value importance for each generation are summarised in

Table 2.

<Table 1 approximately here>

<Table 2 approximately here>

Prior to inferential analysis, missing values analysis and screening for assumptions

was conducted. Non-significant Little's Missing Completely At Random test results ($p =$

.527) justified the use of expectation maximisation as the method of correcting for missing

data. Twelve univariate outliers, as indicated by box-plots, were removed. All other

assumptions were met unless stated otherwise.

Self-Ratings of Value Importance. To address the first hypothesis, a MANOVA was

conducted to examine multivariate differences in SVS values for each generation's self-

perception of their importance as guiding principles in their life. Box's M indicated a

potential issue with homogeneity of the covariance matrices ($p = .042$), therefore Pillai's

criterion was interpreted for the multivariate solution (Tabachnick & Fidell, 2013). There was

a significant effect of the self-perception of value importance and the generation of the

respondent, $V = .20$, $F(8, 304) = 4.13$, $p < .001$, $pr^2 = .10$. Discriminant function analysis was

used to investigate the significant multivariate result. Two discriminant functions were

presented in the results of the analysis; the first explained 72.3% of the variance, with a

canonical $R^2 = .14$ ($f^2 = 0.16$, medium effect size; Cohen, 1992), while the second function

explained 27.7% of the variance, canonical $R^2 = .06$ ($f^2 = 0.06$, small effect size; Cohen,

1992). Both functions significantly discriminated between the generations, $\lambda = .81$, χ^2 ($df = 8$)

1    $= 31.79$, $p < .001$, and the second function in isolation from the first significantly

2   discriminated between the generations, $\lambda = .94$, χ^2 $(df = 3) = 9.09$, $p = .028$. Conservation (r_1

3    $= -.57$, $r_2 = .26$) and Self-enhancement ($r_1 = .44$, $r_2 = .29$) loaded more strongly on function 1,

4   while Openness to Change ($r_1 = .17$, $r_2 = .96$) loaded more strongly on function 2. Self-

5   transcendence did not load strongly on either function ($r_1 = -.12$, $r_2 = .11$). Examination of the

6   combined-groups centroid plot (Figure 1) suggested that function 1 discriminated strongly

7   between the Baby Boomers and Generation Y self-perceptions, with elevated importance

8   placed on Self-enhancement for Generation Ys compared to Baby Boomers, and elevated

9   importance placed on Conservation for Baby Boomers compared to Generation Ys. Function

10   2 appeared to discriminate strongly between Baby Boomers / Generation Y and Generation X

11   ratings of value importance, with Baby Boomers and Generation Y's having elevated

12   importance placed on Openness to Change compared to Generation Xs. In summary,

13   significant differences between the generations' self-ratings of the importance of the SVS

14   value factors was evident in our data.

15   *<Figure 1 about here>*

16   **Perceived Value Importance**. To address the second hypothesis, a MANOVA was

17   used to examine the multivariate differences in the perceived importance of SVS values for a

18   generation other than the participants' own, or an out-group (e.g., a Baby Boomer's

19   perceptions on Generation Y). There was a significant difference in the perceived importance

20   of the SVS values for the out-group generations, $V = .61$, $F (8, 304) = 16.62$, $p < .001$, $pr^2 =$

21   .30. Discriminant function analysis was also used to investigate the significant multivariate

22   result. Two significant discriminant functions were presented in the solution; function 1

23   explained 93.2% of the variance (canonical $R^2 = .53$, $f^2 = 1.13$, very large effect size; Cohen,

24   1992), and function 2 explained 6.8% of the variance (canonical $R^2 = .08$, $f^2 = 0.09$, small

25   effect size; Cohen, 1992). Both functions significantly discriminated between the perceptions

1   of generations other than the participants' own, $\lambda = .43$, χ^2 $(df = 8) = 127.88$, $p < .001$, and

2   function 2 in isolation from function 1 significantly discriminated as well, $\lambda = .92$, χ^2 $(df = 8)$

3    $= 12.17$, $p = .007$. Conservation ($r_1 = .80$, $r_2 = .56$) and Openness to Change ($r_1 = -.75$, $r_2 =$

4   .55) loaded more strongly on function 1, while Self-enhancement ($r_1 = .08$, $r_2 = .71$) and Self-

5   transcendence ($r_1 = .27$, $r_2 = .53$) loaded more strongly on function 2. Examination of the

6   combined-groups centroid plot (Figure 2) indicated that function 1 discriminated strongly

7   between Generation Ys and Baby Boomers, with Baby Boomers being perceived as placing

8   considerable importance on Conservation values compared to Generation Ys, and inversely

9   Generation Ys were perceived as placing considerable importance on Openness to Change

10   values compared to Baby Boomers. Function 2 appeared to discriminate between Baby

11   Boomers / Generation Ys and Generation Xs.

12   The positive indices for all four value factors of at least moderate strength on this

13   function suggested that it differentiated Generation X from Generation Y and the Baby

14   Boomers in a similar manner. Looking at the out-group value means for Generation X

15   compared to the overall means for each of the out-group values, Generation X has elevated

16   scores on all four values. Consequently, the second discriminant function suggests that

17   Generation X was differentiated from Generation Y and the Baby Boomers due to this pattern

18   of generally elevated means across the set of values, although this effect size was small

19   compared to the first discriminant function ($f^2{}_{f1} = 1.13$ versus $f^2{}_{f2} = 0.09$). In summary,

20   significant differences between the perceptions of other generations by the participants were

21   noted for each of the SVS values factors.

22   *<Figure 2 about here>*

23   **Self and Other Ratings of Value Importance**. To address the third hypothesis,

24   MANOVAs were used to contrast differences in the perceived importance of the SVS values

25   by participants within each generation, and the perceived importance of the SVS values for

1   the same generation as inferred by those outside of the generation. For example, differences

2   in each SVS value between Baby Boomers, and non-Baby Boomer participants asked to infer

3   the importance of each SVS value for individuals from the Baby Boomer generation, were

4   contrasted. These differences were examined for each set of Baby Boomer / non-Baby

5   Boomer, Generation X / non-Generation X, and lastly Generation Y / non-Generation Y.

6   Box's M test results were disregarded in the forthcoming results due to equality of sample

7   sizes for each level of the independent variables, rendering homogeneity of the covariances

8   robust (Tabachnick & Fidell, 2013). The comparison between Baby Boomer and non-Baby

9   Boomer perceptions of the latter's value importance was significant, $V = .60$, $F(4, 93) =$

10 35.49, $p < .001$, $pr^2 = .60$. Similarly, the Generation X and non-Generation X perceptions of

11 the latter's values was significant, $V = .60$, $F(4, 101) = 38.49$, $p < .001$, $pr^2 = .60$. The

12 Generation Y and non-Generation Y perceptions of the latter's values was also significant, V

13 $= .57$, $F(4, 105) = 34.21$, $p < .001$, $pr^2 = .57$. Further examination of the significant

14 multivariate results for each generation/non-generation perception comparison via

15 discriminant function analysis was warranted.

16   Looking at the Baby Boomers self and other ratings discriminant function analysis,

17 the single extracted function was significant (canonical $R^2 = .60$, $f^2 = 1.50$, very large effect

18 size; Cohen, 1992), $\lambda = .40$, $\chi^2 (df = 4) = 87.12$, $p < .001$. Self-enhancement ($r_1 = -.55$), Self-

19 transcendence ($r_1 = .53$), and Openness to Change ($r_1 = .54$) appeared to be most

20 differentiated by the function, however Conservation was weakly represented ($r_1 = -.18$).

21 Non-Baby Boomers perceived Baby Boomers as placing higher importance on Self-

22 enhancement values compared to their own ratings. Baby Boomers ascribed higher

23 importance to Self-transcendence and Openness to Change values in comparison to the

24 ratings provided by Non-Baby Boomers.

1   The discriminant function analysis for Generation X self and other ratings of value

2   importance was significant (canonical $R^2 = .60$, $f^2 = 1.50$, very large effect size; Cohen,

3   1992), $\lambda = .40$, χ^2 ($df = 4$) $= 94.45$, $p < .001$. The canonical function differentiated strongly

4   between Self Enhancement ($r_1 = .86$) and Self Transcendence ($r_1 = -.76$) importance ratings

5   between levels, although Openness to Change ($r_1 = .20$) and Conservation ($r_1 = .06$) ratings

6   were less represented by this function. Generation Xs placed higher importance ratings to

7   Self-transcendence compared to perceived importance ratings made by other generations, and

8   ascribed lower importance to Self Enhancement compared to the perceived importance

9   ratings of other generations.

10   Generation Y self and other ratings of value importance extracted a significant single

11   function (canonical $R^2 = .57$, $f^2 = 1.33$, very large effect size; Cohen, 1992), $\lambda = .40$, χ^2 ($df =$

12   4) $= 94.45$, $p < .001$. The structure matrix for the significant function differentiated between

13   levels notably on the Self Transcendence ($r_1 = .81$) and Conservation ($r_1 = .62$) values, and to

14   a lesser extent the Self Enhancement ($r_1 = -.39$) and Openness to Change ($r_1 = -.31$) values.

15   Generation Y participants placed greater importance in Conservation and Self Transcendence

16   values, compared to perceived importance ratings from other generations. Conversely,

17   Generation Y participants placed less importance on Openness to Change and Self

18   Enhancement values compared to their perceived importance ratings provided by other

19   generations. In summary, all three generations demonstrated significant variation in their self-

20   ratings of importance for varying values factors in comparison to the perceived importance

21   ratings provided by other generations.

22   **Discussion**

23   The aim of this research was to examine and compare self-ratings and out-group

24   perceptions of the importance of Schwartz's four clusters of values by generation. As

25   predicted, there were significant differences between generations on value importance self-

1   ratings, and on out-group ratings. Further, comparative in-group/out-group ratings also

2   significantly differed.

3   Our results indicated significant patterned differences between generations on self-

4   ratings of value importance. As noted by Roberts et al. (2006), generational differences in

5   values were likely due to the different social climates and cultural contexts participants from

6   different generational cohorts were likely to have experienced. Examination of the first

7   discriminant function for the significant multivariate solution suggested that Generation Y

8   participants had higher self-ratings on Self-enhancement compared to Baby Boomers, while

9   the inverse applied for Conservation value preferences. These findings are generally

10   consistent with previous findings that Generation Y places higher importance than Baby

11   Boomers on Self-enhancement (Ergi et al., 2012) and freedom-related workplace values

12   (Cennamo & Gardner, 2008; Twenge, 2010; Twenge et al., 2010), which may be concordant

13   with the hedonism aspect of Self-enhancement as a construct. However Twenge's (2010;

14   Twenge et al., 2010) work has alternatively noted that Generation Y rated achievement-

15   related values (a facet of Self-enhancement) as less important than did Baby Boomers. Based

16   on the discriminant function differentiating Baby Boomers and Generation Y on the Self-

17   enhancement construct as a whole, however, it is plausible to suggest that the other facets of

18   the construct (hedonism and power values) were important in differentiating the generations

19   along this overarching value. The differentiation between Generation Y and Baby Boomers

20   on the Conservation self-ratings of importance was consistent with the direction reported in

21   previous literature (Egri et al., 2012; Feather & McKee, 2008).

22   The second discriminant function differentiated Baby Boomers and Generation Y

23   participants from Generation X participants on the Openness to Change values construct,

24   with the former generations placing joint greater importance compared to Generation X

25   participants. This was an unusual finding contradicting past research findings that younger

1   generations (inclusive of Generation X) typically report higher importance of Openness to

2   Change than their older counterparts (Cogin, 2012; Egri et al., 2012; Gursoy et al., 2013;

3   Twenge, 2010). While this anomalous finding might support previous reports that

4   Generation X is more conservative than previous generations (Lawrence, 1997 cited in Sirias,

5   Karp & Brotherton, 2007), replication is required.

6   Our finding of no noteworthy differences between generations on self-ratings results

7   of Self-transcendence is consistent with Twenge et al. (2010). However, the findings

8   contradict those of Lyons et al. (2005) and Richards et al. (2012) with regards to generational

9   differences on benevolence and universalism values (the two facets of Self-transcendence). It

10   is worth noting that our study sampled broader generational cohorts than did Lyons et al.

11   [2005], and had Self-transcendence competing for explanatory relevance with different

12   predictors (Schwartz's overarching values constructs) in comparison to Richards et al.[2012]

13   (collectivism / individualism). Both Lyons et al. [2005] ($N = 979$) and Richards et al. [2012]

14   ($N = 1518$) had notably larger sample sizes than our study, which may suggest that our non-

15   significant findings for Self-transcendence were due to an underpowered analysis. However,

16   our observed power (.99, $a = .05$) suggests that an underpowered analysis prompting type II

17   error is less likely. Taking into consideration the results of Schwartz and Bardi (2001), who

18   demonstrated that universalism and benevolence were consistently in the top three most

19   important values based on self-ratings regardless of national culture, it is perhaps unlikely

20   that generational differences would exist given the universal importance placed on these

21   types of values.

22   **Out-group Value Importance**

23   Generation Y was perceived to place a greater importance on Openness to Change

24   compared to Baby Boomers, with the inverse relationship occurring for Conservation. These

25   findings are supportive of the importance of stereotypes in potentially exaggerating out-group

1   generational differences. For example, Generation Y's exposure to computers and other

2   information technologies during their schooling has engendered a stereotype of seeking

3   innovative, stimulating, and fluidly changing situations (Gardner & Macky, 2012), consistent

4   with Openness to Change when interpreted within Schwartz's (1992) framework. Conversely,

5   when examining the Australian Broadcasting Corporation's (2013) Vote Compass results

6   from the 2013 federal election, Baby Boomer-aged respondents provided responses

7   consistent with a stereotype of conservative behaviour, for example, generally answering

8   more negatively to questions about immigration compared to younger generations. Gardner

9   and Macky (2012) similarly noted that Baby Boomers can be perceived stereotypically as

10   "traditional, conservative, and arrogant" (p. 419), which appears to be consistent with the out-

11   group perception results of the current analysis. As such, the first discriminant function

12   appeared to mirror current Australian societal stereotypes regarding the generations

13   differentiated on the values of Openness to Change and Conservation.

14   The second discriminant function for out-group perceptions did not discriminate

15   strongly between the value factors, but did suggest that Generation X differed from

16   Generation Y and the Baby Boomers in terms of being perceived as having elevated

17   importance across all four of Schwartz's (1992) overarching value factors (most evidently

18   with Self-enhancement). While perceiving a difference is fitting with social identity theory in

19   terms of social categorisation emphasising boundaries between in-group and out-group (Hogg

20   et al., 1995), it is unexpected that the boundaries depicted by function two are of such a non-

21   distinct nature. Further, it is contrary to Schwartz's (1992) circumplex model for values

22   preferences to be perceived as greater in all overarching constructs at once; values hierarchies

23   imply some values constructs are of lesser importance than others (Schwartz and Bardi,

24   2001). These unexpected results need to be considered alongside the smaller effect size of

25   function two compared to the first function. Function two is representative of a

1   comparatively minor influence on the processes associated with out-group perceptions of

2   Generation X.

3   **In-Group / Out-Group Comparisons**

4   The comparisons between in-group and out-group ratings of value importance

5   produced interesting results for each generational cohort when considered in relation to

6   Australia's current cultural climate. Out-groups perceived greater importance of Self-

7   enhancement values for baby Boomers, compared to that held by the Baby Boomers

8   themselves, and this may be reflective of the perceived prominent cultural influence of Baby

9   Boomers within Australia. For example, Davis (2007) described the marginalisation of youth

10 figures in Australian media and culture, with key roles held instead by members of the Baby

11 Boomer generation for several decades without strong transition. This may speak to a sense

12 of 'status-quo' regarding power and achievement within Australian society held by Baby

13 Boomers, without necessarily being apparent to those in power. Likewise, the dimmed

14 perception of Baby Boomer's Self-transcendence and Openness to Change values by the out-

15 group compared to Baby Boomers themselves may be reflective of similar societal

16 impressions.

17   Generation X participants provided lower self-ratings of the importance of Self-

18 enhancement ratings, while providing greater importance on Self-transcendence in

19 comparison to their out-groups. This is a congruent pairing of values directions consistent

20 with Schwartz's (1992) circumplex model. Comparatively higher self-rating of Self-

21 transcendence value importance for each generation compared to out-group perceptions may

22 be reflective of a form of a socially desirable response bias, given the positive and universally

23 valued nature of values such as benevolence and universalism that form the crux of this

24 overarching construct. Consequently controls for self-serving response biases would be a

25 valuable addition to future research on in-group / out-group comparisons in values research

1   among generations. The variation between out-group and Generation X perceived importance

2   ratings for Self-enhancement may be reflective of societal milestones or psychosocial

3   development experienced by the now-middle-aged members of the Generation X cohort. For

4   example, taking the classic perspective of Erikson's (1950) middle-age psychosocial

5   development milestone of generativity versus stagnation, Generation X members are likely

6   perceived to be achievement focused while in the process of making their lives have a lasting

7   impact on society (e.g., via raising children, workplace successes, etc.), speaking to the

8   elevated perception of Self-enhancement value importance by out-groups. For Generation X

9   participants, these aspects of value importance may seem reflective of the 'status quo' at this

10   stage of adult development, reducing the overtness of these values' importance in guiding

11   behaviour as perceived by out-groups.

12   The in-group / out-group comparisons for the Generation Y perceptions were of

13   interest due to all four of Schwartz's (1992) overarching values constructs presenting

14   distinctions between in-group and out-group. Generation Y participants perceived themselves

15   as placing more importance on Conservation and Self-transcendence values compared to out-

16   group perceptions, while conversely placed lower importance on Openness to Change and

17   Self-enhancement values compared to out-group perceptions. These results may be reflective

18   of the degree of stereotyping obfuscation in the media regarding Generation Y, who as

19   commented on in an editorial by Davis (2007) are presented in a series of discordant

20   extremes within Australian culture. For example, media depictions of Generation Y paint the

21   cohort as being dependent in some instances, and strongly independent in others; as being

22   self-centred in some examples, and highly socially-conscious in others (Davis, 2007). The

23   exaggerated differences between in-group and out-group suggested as part of social identity

24   theory (Tajfel, 1974), with social categorization amplifying these defining boundaries (Hogg

25   et al., 1995), appears to be arguably influential in the case of Generation Y.

1   **Implications**

2   A key element to consider both in workplaces and broader societal applications is the

3   possible influence of generation value stereotypes, particularly with regards to perceptions by

4   an out-group. Previous studies have noted stereotyping behaviour based on employee

5   generation contributes to employment and task-setting biases (e.g., Gardner & Macky, 2012).

6   Our study supports a misalignment between self- and stereotyped-preferences for values

7   through an in-group, out-group comparative lens (Tajfel, 1974), demonstrating the

8   importance of considering out-group's perceptions of generations.

9   Weston (2001) provided managerial insights into engaging different generational

10   groups within the workplace, detailing the variations in communication and work-style

11   employees would prefer based on the values their generation is assumed to hold. Our results

12   support the notion of out-groups perceiving generational groups in a stereotyped manner,

13   which when applied to the workplace has implications in terms of how managerial staff may

14   perceive employees from out-group generational cohorts. It is questionable whether managers

15   in the workplace should assume that employees are notably different from each other on the

16   basis of their generational cohort membership however; these arguably stereotypical

17   assumptions of generational groups do not necessarily apply to individuals (Gardner &

18   Macky, 2012). This is not to ignore the statistically significant self-ratings of value

19   importance that we noted in the current study; Generation Y was distinguished from the Baby

20   Boomers on the Self-Enhancement and Conservation factors. However, comparisons of effect

21   sizes indicate that out-group perceptions were a source of greater importance in

22   discriminating between generational groups than self-perceptions. The concern in an applied

23   context is if managerial staff address members of generational groups with an expectation

24   that they will be different, or will require special means of engagement to enhance

25   productivity. Unintentionally, managerial staff assuming and addressing implied differences

1   based on employee generation may make more salient the generational groups that exist

2   within a working team. This may in turn amplify stereotypes and social comparisons of

3   generational out-groups, consistent with Tajfel's (1974) social identity theory. Employee

4   perceptions of fit influence an array of organisationally-beneficial outcomes (Kristof-Brown,

5   Zimmerman, & Johnson, 2005), and making salient a means of non-fit between employees is

6   arguably not in the best interest of managerial staff or organisational wellbeing. While

7   Weston (2001) describes differences in engaging employees based on generation, they aptly

8   note that "the challenge as a manager is to acknowledge the inherent differences in

9   generations without approaching individuals with preconceived biases" (p. 20), and it is this

10   consideration of employees as individuals that we echo as being of great importance.

11   Lyons and Kuron (2014) have recently stated the importance of considering effect

12   sizes in investigations of this domain. Based on the effect sizes observed, the saliency of out-

13   group perceptions and stereotyping is arguably a legitimate concern that requires caution in

14   applied contexts; the practical differences between the generations' self-perceptions is

15   notably less than that of which stereotyping perceptions would suggest. Furthermore,

16   previous research has demonstrated a greater degree of similarity rather than differences

17   across generations (e.g., Mencl & Lester, 2014). Generational differences in work values and

18   job entitlement beliefs (Krahn & Galambos, 2014) are weaker than would be predicted by

19   stereotypes. Schneider's (1987) attraction-selection-attrition model describes the process in

20   which employees within a workplace tend towards homogeneity in shared personality traits,

21   climate, and values preferences (e.g., Boone, Olffen, & Roijakkers, 2004). Consequently,

22   markedly different and poor-fitting employees are less likely to be employed and retained at

23   an organisation, an incompatible notion with assertions of values-heterogeneity among a

24   generationally-diverse workplace.

25   **Limitations and Future Directions**

A noted limitation was that the sample was limited in age range. Participants were all 18 years of age or older; thus, Generation Y members born between 1994 and 1999 were not represented in this research. Similarly, participants older than Baby Boomers (e.g., Traditionalists) were not included. Ethnicity data was not collected, prohibiting examination of possible differences across ethnic groups. No measure of socially desirable responding was included. The need for this was indicated by the high importance each generation placed on Self-transcendence. It is unknown whether the web-based data gathering for the study may have influenced the representativeness of the sample, however previous studies using this procedure of data gathering (e.g., Lyons et al., 2010) have not noted associated sample bias. Future research would benefit from representative sampling of Australians across all generations and ethnicities, and the inclusion of a social desirability measure.

A valuable future direction in the area of generational comparisons of values perceptions would involve the integration of qualitative data to supplement quantitative findings in this area. Lyons and Kuron (2014) have recently called for qualitative investigation in the area of generational influences on outcomes such as work values and attitudes, and this may assist in clarifying the influence of contextual elements. We would therefore encourage future research using mixed-methods approaches to investigate generational influences on values perceptions.

Key Points

What is already known about this topic

- Schwartz's circumplex model identifies four overarching value clusters: Self-transcendence, Conservation, Self-enhancement and Openness to Change

- Generations vary in the self-ascribed (in-group) importance of each value cluster

- Personal values guide, and are used to justify, behaviours

What this topic adds

- We found differences in perceived (out-group) value importance of clusters for each generation

- We also found differences between in-group and out-group perceptions of value importance for each generation

- There were larger differences in other-ascribed than self-ascribed value importance across generations, highlighting the need to address actions based on generation value stereotypes in the workplace

Acknowledgements

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Figure Captions

Figure 1. Centroid plot of discriminant functions for self-ratings of values factor importance.

Figure 2. Centroid plot of discriminant functions for out-group perceptions of values factor importance

Table 1.

Bivariate Correlation Coefficients, Means, and Standard Deviations of Values Ratings *(N =
157).*

	SE-S	ST-S	OC-S	C-S	SE-O	ST-O	OC-O	C-O
SE-S								
ST-S	.18*							
OC-S	.36**	.29**						
C-S	.38***	.56***	.21**					
SE-O	.35**	.39**	.28**	.26**				
ST-O	.24**	.33**	.39**	.15	.12			
OC-O	.04	.29**	.15	.24**	.05	-.04		
C-O	.32**	.14	.34**	.11	.33**	.63**	-.52**	
M	3.23	5.13	4.56	3.95	4.53	3.89	4.43	3.62
SD	.95	.77	1.01	.99	1.05	1.02	1.36	1.50

Note. SE-S = Self-enhancement self-rating; ST-S = Self-transcendence self-rating; OC-S = Openness to change
self-rating; C-S = Conservation self-rating; SE-O = Self-enhancement out-group rating; ST-O = Self-
transcendence out-group rating; OC-O = Openness to change out-group rating; C-O = Conservation out-group
rating.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

Table 2.

Means (Standard Deviation) Scores for Self-Ratings and Perceived Importance of Values by Generation *(N = 157)*.

Value	Self-ratings			Perceived Importance		
	BB	X	Y	BB	X	Y
SE	3.09 (1.01)	3.08 (0.98)	3.45 (0.83)	4.49 (1.09)	4.80 (1.00)	4.26 (1.00)
ST	5.19 (0.68)	5.11 (0.77)	5.10 (0.84)	4.14 (0.93)	4.08 (0.99)	3.42 (0.99)
OC	4.69 (1.02)	4.19 (1.07)	4.74 (0.89)	3.23 (1.23)	4.66 (1.10)	5.34 (0.81)
C	4.27 (0.95)	3.92 (0.94)	3.72 (1.00)	4.72 (1.09)	3.83 (1.21)	2.26 (1.10)

Note. SE-S = Self-enhancement; ST = Self-transcendence; OC = Openness to change; C = Conservation; BB = Baby Boomers; Y=Generation Y; X = Generation X.