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Gender role ideology and implications for well-being among older adults in Singapore

Nadya HAIFAN

Singapore Management University, nadyamh@smu.edu.sg

Erra Natalia SAYRI

Singapore Management University

Micah TAN

Singapore Management University, micahtan@smu.edu.sg

Mindy Eiko TADAI

Singapore Management University, metadai@smu.edu.sg

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**Gender Role Ideology
and Implications for
Well-being Among Older
Adults in Singapore**

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Introduction

Gender role ideology, referring to the attitudes that individuals hold with respect to the social roles that different genders should adopt, have been suggested to affect the mental well-being (e.g., Paul & Moser, 2009; Sweeting, 2014) and marital satisfaction (e.g., Amato et al., 2007; Davis & Greenstein, 2009) of individuals. Despite this, gender role ideology and the impact they may have on well-being is understudied among older adults in Singapore. Given this, the current report provides a brief examination of gender role ideology among older adults in Singapore. This includes the following:

1. The demographic distribution of gender role ideology among older adults in Singapore
2. The relationship between gender role ideology and mental well-being among older adults in Singapore
3. The relationship between gender role ideology and marital satisfaction among older adults in Singapore

It is hoped that this preliminary understanding of gender role ideology among older adults in Singapore will be able to inform further research on the topic, as well as guide potential policy interventions related to the issue of gender role ideology.

Background on gender role ideology

Gender role ideologies (GRI) have been frequently assessed at the individual level in sociological surveys exploring beliefs regarding appropriate behavioural roles for women and men (Halman et al., 2005) – this is commonly termed as gender roles (Blackstone, 2003, p. 337). When discerning an individual's GRI, researchers often ask questions regarding the individual's opinion concerning the duties men and women ought to play within the household and in the labour market, their essential differences, and their responsibility to society.

Gender role ideology has largely been thought to vary along the lines of traditionalism versus egalitarianism (Sweeting et al., 2014). Traditional GRI reflects the idea that paid work is the duty of a man — who is often regarded as the 'breadwinner' of the household — while a woman's primary role is to care for her family and their home. An egalitarian view of gender roles espouses equal involvement of both genders in employment and caretaking duties (Mickelson, Claffey, & Williams, 2006).

Since the latter half of the twentieth century, GRI has been found to be increasingly egalitarian in more developed countries. Inglehart and Norris (2003), for instance, find that socioeconomic development – the shift from agrarian societies to industrialised societies, and the shift from industrial towards post-industrial societies – significantly transforms cultural attitudes towards gender roles.

In Singapore, economic development has been associated with government policies that have influenced gender roles (Aryee, 1993). In the 1960s and 1970s, government policies effectively discouraged large families although these policies were later reversed when labour became scarce. Subsequent government policy was observed to progressively encourage women to have more children while promoting women's participation in the labour force. The result was that dual-earner families became the most common family structure in Singapore, encouraging more egalitarian perspectives on gender roles (Aryee, 1993). Nevertheless, while these shifts in GRI have occurred over the past few decades, patriarchal values and the traditional mindset about gender roles have been found to remain deeply entrenched among Singaporeans (Channel News Asia, 2020).

In terms of demographic trends, GRI has been found to be predicted by characteristics such as gender, age, race, education, and marital status (Beyerlein, 2007). Separately, Bolzendahl and Myers (2004) and McDaniel (2008) find that women tend to hold more egalitarian gender attitudes in comparison to men. Other researchers such as Davis and Robinson (1991) have provided intuitive explanations to explain this phenomenon – for instance that women are more likely to be egalitarian because it directly benefits them to possess these views than to hold traditional gender attitudes that disadvantage them. It has also been argued that individuals of higher educational attainment may be more inclined to hold more egalitarian views of GRI because education reduces gender prejudice (Hastie, 2007).

As mentioned, GRI has also been shown to impact the mental well-being of individuals. For example, it has been hypothesized that adopting traditional gender role ideologies can act as a psychosocial stressor which might facilitate the development of depression (Rosenfield & Mouzon, 2013; Paul & Moser, 2009; Van De Vijver, 2007). On a similar note, an egalitarian GRI has been found to be positively related to improved mental health (Read & Grundy, 2011; Sweeting et al., 2014) due to fewer life stressors. One explanation for this relationship is the presence or absence of gender-role conflict: gender-role conflict is defined as a psychological state in which socialized gender roles have negative consequences on the person or others and occurs when rigid, sexist, or restrictive (i.e., traditional) gender roles result in personal restrictions, devaluation, or violation of others or self (O'Neil, et al., 1995; O'Neil, 2008). Other studies have found that women with depression experience gender-related causes such as distress from feelings of entrapment in gender roles and attempts to meet the expectations of being a 'good' mother or woman (Walters, 1993; Vidler, 2005; Chandra & Satyanarayana, 2010).

Finally, the relationship between GRI and marital satisfaction has also been widely explored (e.g., Gove et al., 1983; Mickelson et al., 2006; Ng et al., 2009; Qian & Sayer, 2016). Marital satisfaction refers to an individual's overall feeling about marriage and has been shown to be strongly associated with psychological well-being and lower depression. It has been found, for instance, that women have lower marital satisfaction scores due to the lack of emotional support from their spouses and an uneven distribution of household labour that is often

borne by women, one possible implication of holding more traditional gender role attitudes (Mickelson, 2006; Qian and Sayer, 2016).

Singapore Life Panel Data

The current report utilizes data from the Singapore Life Panel (SLP), a monthly panel survey that has been conducted since July 2015 (see Vaithianathan et al. (2018) for details regarding sample recruitment). Respondents are part of a nationally representative sample of 56–75-year-old (in 2021) Singaporeans and their spouses. About 7000 to 7500 respondents participate in the SLP survey every month. This paper uses data collected from modules fielded in April 2021 (n = 6,872 for respondents aged between 56-75) when GRI was studied, and December 2020 (n = 7,127 for respondents aged between 56-75) when marital satisfaction was studied.

To discern an individual's GRI, we ask a total of 11 questions fielded in April 2021, according to a 5-point Likert scale with the following options: 1) Strongly Disagree; 2) Disagree; 3) Agree; 4) Strongly Agree; 5) Don't Know. Each question measures a person's opinion toward the roles of husbands as breadwinners, wives as homemakers, differences in natural dispositions between men and women, and the factors that define the identity of each gender.

An example of a question is listed below:

Table 1: Example of a question from the 'Gender Role Ideology' module for April 2021

It is perfectly fine if a wife works and her husband stays home to take care of the children.
<ol style="list-style-type: none"> 1. Strongly Disagree 2. Disagree 3. Agree 4. Strongly Agree 5. Don't Know

In the question above, Strongly Disagree is given a score of 1, Disagree is given a score of 2, Agree is given a score of 3, Strongly Agree is given a score of 4, and Don't Know is disregarded and given a missing value instead. To derive GRI scores, we sum up the scores across all 11 questions. Following this scale, a lower score indicates a more traditional GRI while a higher score indicates a more egalitarian GRI. The maximum score an individual can obtain under our gender role attitude scale is 44 points – a maximum of 4 points per question across 11 questions.

Where appropriate, questions are reverse coded so that the scoring system is consistent. This same method is employed for measures of depression, which is measured by four 6-point

Likert questions with a total maximum score of 24 points, where a higher score means that a person is more depressed. Marital satisfaction is measured by 9 5-point Likert questions, where 'Don't Know' responses are replaced with a missing value. Hence, the total maximum score for marital satisfaction is 36 points, with a higher score indicating higher marital satisfaction. All questions measuring GRI, marital satisfaction, and depression can be found in Appendix under [Table A1](#), [Table A2](#), and [Table A3](#), respectively.

Demographic Distribution of Gender Role Ideology among the Singapore Life Panel

Table 2: Overall demographic distribution of GRI scores in the SLP

Factor	Mean	SD
Overall	27.85	4.38
Gender		
Male	27.71	4.38
Female	27.97	4.38
Race		
Chinese	27.92	4.26
Malay	26.42	4.41
Indian	27.25	5.46
Other	29.63	5.58
Education		
Primary/none	27.51	4.10
Secondary	27.52	4.20
Post-secondary without University	27.85	4.49
Post-secondary with University	29.07	4.79
House type		
HDB 1-3 Room	27.70	4.27
HDB 4-5 Room or EC	27.70	4.36
Private apartment or property	28.47	4.46
Age Group		
56-60	28.13	4.45
61-65	28.03	4.33
66-70	27.59	4.43
71-75	27.32	4.19
Marital Status		
Married	27.72	4.36
Single (never married)	28.62	4.48
Separated	28.11	4.55
Divorced	28.40	4.59
Widowed	27.91	4.27

*Note: Higher GRI scores reflect more egalitarian views with regards to gender roles, while lower GRI scores reflect more traditional views.

[Table 2](#) displays the demographic distribution of GRI in the SLP by presenting the average GRI score of each demographic group, as well as the standard deviations of GRI scores within the group. Overall, differences in GRI scores between demographic groups are minimal. In terms of race, Malay respondents were found to have the lowest GRI score (26.42 on average), while 'Other' respondents scored the highest (29.63 on average). In terms of education, GRI scores were found to increase progressively with the level of education, with respondents with Primary/No education having the lowest scores (GRI score of 27.51), compared to respondents with a Post-secondary with University education who scored the highest on average (GRI score of 29.07). In terms of housing type, respondents living in private apartments or properties were found to have higher GRI scores on average as compared to respondents living in HDB 4-5 Room flats/ECs or smaller. We also observe that GRI scores decreased with age, with respondents aged between 56-60 having the highest scores (GRI score of 28.13 on average) as compared to respondents aged between 71-75 (average GRI score of 27.32). Finally, married respondents were found to have the lowest GRI score on average relative to all other marital statuses, although differences were small.

Table 3: Linear Regression Predicting GRI scores with demographic variables as covariates

Variable	Beta
Gender	
Male	<i>REF</i>
Female	0.03 ^t
Race	
Chinese	<i>REF</i>
Malay	-0.07***
Indian	-0.03 ^t
Other	0.04**
Education	
Primary/none	<i>REF</i>
Secondary	-0.01
Post-secondary without University	0.02
Post-secondary with University	0.11**
House type	
HDB 1-3 Room	<i>REF</i>
HDB 4-5 Room or EC	0.01
Private apartment or property	0.03
Marital Status	
Married	<i>REF</i>
Single never married	0.05**
Separated	0.01
Divorced	0.04**

Widowed	0.03*
Age	-0.06***
Adjusted R-Squared	0.03
N	5,059

^t $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

To examine the significance of these differences in means according to demographic factors, we subsequently ran a linear regression model predicting GRI scores with the demographic variables included in the model. The results indicate that female respondents were found to have significantly greater GRI scores relative to male respondents, implying that among older adults, women are more likely to hold egalitarian views on gender roles. Differences between respondents based on race were also found to be significant, with 'Other' respondents being the most likely to have higher GRI scores relative to Chinese respondents. In terms of education, we find that the difference in GRI scores between respondents with Post-secondary with University education to be significant, while no significant differences were found between respondents of other educational levels. Housing type was not found to have a significant effect on GRI score while age was found to be a significant factor, with older respondents having lower GRI scores (i.e., being more likely to hold more traditional views of gender roles). Finally, in terms of marital status, respondents who were never married, divorced, or widowed, were found to be significantly more likely to have higher GRI scores.

Overall, these initial findings suggest that gender, race, education, and age are significant factors determining GRI among older adults in Singapore, with education appearing to be the strongest factor, where older adults with a Post-secondary with University education being more likely to hold egalitarian views on gender roles.

GRI and Mental Well-being (Depression)

Given the association between GRI and mental well-being that has been observed in previous studies, we subsequently sought to preliminarily examine if the same relationship can be observed in the SLP.

Figure 1: Scatter-plot of the Mental Well-being and GRI Scores in the SLP (Note: For ease of interpretation, the average mental well-being score for each GRI score is plotted)

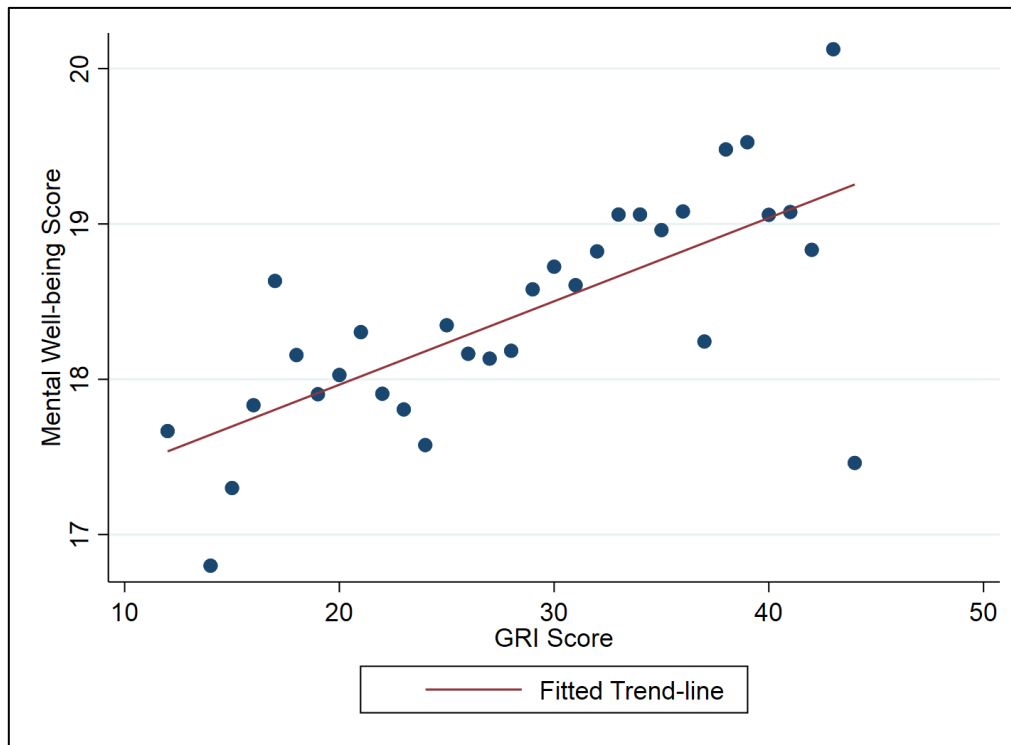


Figure 1 presents the bivariate association between mental well-being (measured as depression – see Table A3 in the Appendix for full instrument) and GRI Score. The correlation coefficient of the bivariate association was found to be $r = 0.11$ (calculated as Spearman's R) which indicates a very weak bivariate association between the two variables.

Table 4: Linear Regression Predicting Mental Well-being with Gender Role Ideology and demographic variables as covariates

Covariate	Beta
Gender Role Ideology	0.10***
Gender	
Male	REF
Female	0.01
Race	
Chinese	REF
Malay	0.08***
Indian	-0.03*
Other	0.02 ^t
Education	
Primary/none	REF
Secondary	0.05**
Post-secondary without University	0.03

Post-secondary with University	0.07***
House type	
HDB 1-3 Room	REF
HDB 4-5 Room or EC	0.03 ^t
Private apartment or property	0.07**
Age	0.08***
Marital Status	
Married	REF
Single never married	-0.03*
Separated	-0.04**
Divorced	-0.02 ^t
Widowed	-0.06***
Adjusted R-Squared	0.03
N	5,053

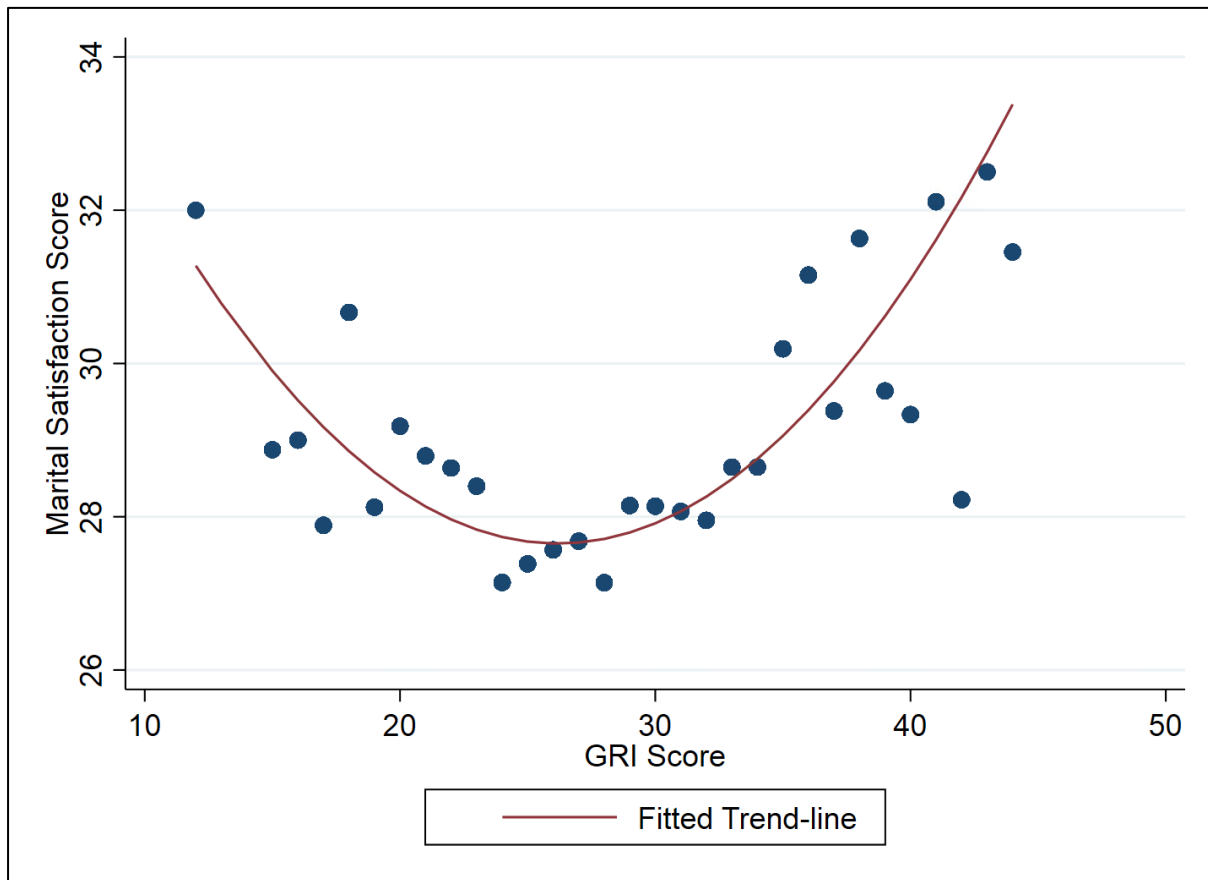
^t $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

We nevertheless further sought to investigate if GRI would significantly predict mental well-being as the literature suggests, and to do this we ran a multivariate linear regression predicting mental well-being. The results of the model are presented in [Table 4](#) above. As can be seen, Gender Role Ideology did significantly predict the mental well-being of our respondents, with respondents with more egalitarian views on gender roles being more likely to have better mental well-being (in this case measured as having a lower likelihood of experiencing depressive symptoms). Additionally, we find that relative to demographic predictors of mental well-being among our respondents, GRI was the strongest predictor, albeit marginally.

GRI and Marital Satisfaction

As earlier discussed, another area of significant interest in studying Gender Role Ideology is its effect on the marital satisfaction of individuals who are married. As such, we preliminarily examine how GRI may be associated with marital satisfaction among our respondents.

Figure 2: Scatter-plot of the Marital Satisfaction and GRI Scores in the SLP (Note: For ease of interpretation, the average marital satisfaction score for each GRI score is plotted)



[Figure 2](#) presents a scatterplot of the marital satisfaction and GRI scores among our respondents, with a fitted regression line overlaid. As can be seen, a polynomial relationship appears to be observed between marital satisfaction and GRI among our respondents, where respondents with higher or lower GRI scores rating their satisfaction with their marriage higher relative to respondents with GRI scores closer to the mean (mean GRI score = 27.80). In other words, respondents holding stronger views with regards to gender roles, whether more traditional or more egalitarian, appear to be more satisfied with their marriages as compared to respondents holding ambivalent views on gender roles.

Table 5: Polynomial Regression Predicting Marital Satisfaction with Gender Role Ideology and demographic variables as covariates

Covariate	Beta
Gender Role Ideology	-0.69***
Square of Gender Role Ideology	0.75***
Gender	
Male	REF

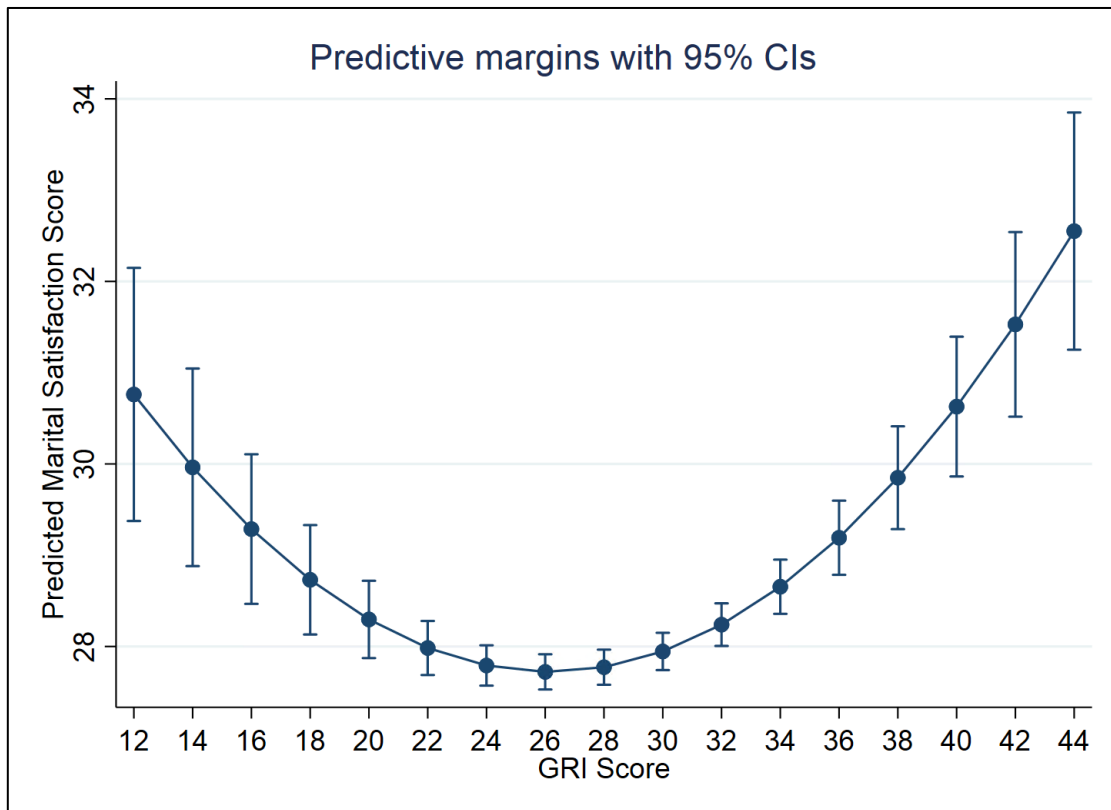
Female	-0.13***
Race	
Chinese	REF
Malay	0.11***
Indian	0.03*
Other	0.03 ^t
Education	
Primary/none	REF
Secondary	0.08**
Post-secondary without University	0.08**
Post-secondary with University	0.09***
House type	
HDB 1-3 Room	REF
HDB 4-5 Room or EC	0.07**
Private apartment or property	0.14***
Age	0.01
Adjusted R-Squared	0.07
N	3,298

^t $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Note: The lower sample size for this model is due to the restriction of the sample to married respondents only.

The significance of the polynomial relationship between GRI and marital satisfaction among our respondents was subsequently examined through a polynomial regression model. The results are presented in [Table 5](#). As can be seen, GRI is found to significantly predict the marital satisfaction of our respondents.

Figure 3: Predicted values of Marital Satisfaction at levels of GRI based on polynomial regression model (see Table 5)



To confirm the polynomial relationship between GRI and marital satisfaction, the predicted values of marital satisfaction at levels of GRI based on the polynomial regression model were plotted (in other words, [Figure 3](#) plots the relationship between marital satisfaction and GRI *after* controlling for the various demographic indicators included in the model). A polynomial relationship is observed, confirming that respondents with GRI scores that depart from the mean (either negatively or positively) were likely to score higher in terms of marital satisfaction. Additionally, respondents with more egalitarian views of gender roles were more likely to have higher marital satisfaction scores relative to respondents with more traditional views of gender roles.

Discussion

Demographic Distribution of GRI

Our results showed that women were more likely to score higher in their GRI scores and thus more likely to hold egalitarian views than men – a result that is consistent with previous studies that compared the gender role ideologies of women and men (Bolzendahl and Myers, 2004; McDaniel, 2008). A possible explanation for the gender differentiation in views on gender roles can be found in interest-based approaches to explain these relationships. According to this perspective, when a person's defined interests benefit from gender equity ideology, that individual should be more likely to hold egalitarian views. For instance, it has been found that women, on average, favor egalitarianism more than men since it seeks to provide direct benefits to women (Davis & Robinson, 1991).

It was also found that respondents who attained post-secondary with tertiary education were more likely to hold egalitarian views as compared to respondents with lower education levels, a result consistent with Crompton and Lyonette (2005) and Lackey (1989), two papers that confirmed the association between egalitarian GRI and higher educational attainment. This has been argued to be due to the fact that higher levels of education may reduce prejudice and promote egalitarianism (Baudelot et al., 2005; Hastie, 2007).

Finally, significant differences in GRI were found across races, with Malay and Indian respondents being more likely to hold traditional views of gender roles as compared to Chinese respondents, and 'Other' respondents being more likely to hold egalitarian views. This implies that differences in GRI may possibly be attributed to differences in cultural beliefs. Further research should be carried out to confirm this possibility among older adults in Singapore.

GRI and Mental Well-being

In terms of the relationship between GRI and mental well-being among our respondents, the results suggest that the higher an individual's GRI score, the lower their score on the depression scale. That is, individuals with more traditional gender role ideologies were associated with higher depression scores, and thus poorer mental well-being. This coheres with Read and Grundy (2011) and Sweeting et al.'s (2014) findings that egalitarian gender role ideologies are associated with improved mental health and fewer life stressors. This may be due to the fact that, especially among women, having social roles beyond the household – within the labour force, for example – may help negate the stress felt from performative gender roles, as predicted by activity theory and role enhancement theory, which states that multiple role involvement in late life is related to greater psychological well-being (Adelmann, 1994). As more egalitarian views on gender roles would be associated with the belief that

women should have social roles beyond the household, this may thus possibly explain the relationship between GRI and mental well-being among women. Other explanations with regards to the effect that GRI has on mental well-being may be found in the relationship between GRI and marital satisfaction.

GRI and Marital Satisfaction

In terms of the relationship between GRI and marital satisfaction, we find that the marital satisfaction of respondents tended to be higher at more extreme values of GRI (i.e., when respondents either held more traditional or egalitarian gender attitudes). This contradicts a majority of literature on the relationship between GRI and marital satisfaction that has found that individuals GRI scores are positively associated with marital satisfaction - that is, that more egalitarian individuals report higher marital satisfaction as having more egalitarian attitudes may result in a more equal distribution of household labour, which lightens the work overload and struggles of married women (Amato et al. 2007). This finding thus warrants further research to understand why this particular relationship between GRI and marital satisfaction may exist among older adults in Singapore.

Conclusion

Overall, the findings of the current report indicate that GRI is an important concept to ensure the well-being of older adults. The findings lend support for efforts to encourage more egalitarian views of gender roles, given the positive association that such views have with mental well-being among older adults in the SLP. However, the current report also indicates that further research will need to be done in order to better understand the various pathways through which GRI may impact or shape the well-being of older adults, as we observe a polynomial relationship between GRI and marital satisfaction. This is a novel finding that deserves further attention in future research.

While the findings do provide exciting insights into the importance of GRI for the well-being of older adults, the authors reiterate that the findings in their current state are preliminary and will need further investigation. The ROSA team will be working hard on this and will publish subsequent follow-up reports that explore this issue more comprehensively and that extend the analysis that is currently presented in this paper.

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Appendix

Table A1: 11 survey questions that were fielded for Gender Role Ideology module in Wave 69, April 2021.

No.	Question
1	<p>It is better for the husband to be the breadwinner and the wife to be the homemaker.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
2	<p>Preschool children are likely to suffer if their mother is employed.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
3	<p>Ideally, the mother should take care of her children full-time.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
4	<p>No matter how hard they try, men will never be good at housework.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
5	<p>Women are too emotionally inclined to make good employees.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>

6	<p>Even if the wife works, her job should be supplementary to her husband's.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
7	<p>A good wife is one who takes good care of her husband, her children, and her home.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
8	<p>A good husband is one who is able to provide well for his family financially.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
9	<p>If both the wife as well as husband are employed, the wife's job is just as important as the husband's job.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
10	<p>It is perfectly fine if a wife works and her husband stays home to take care of the children.</p> <p>1 Strongly Disagree 2 Disagree 3 Agree 4 Strongly Agree 99 Don't Know</p>
11	<p>A woman is not complete unless she has children of her own.</p> <p>1 Strongly Disagree 2 Disagree</p>

	3 Agree 4 Strongly Agree 99 Don't Know
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Table A2: 9 survey questions that were fielded for Marital Satisfaction module in Wave 65, December 2020.

No.	Question
1	I worry a lot about my marriage. 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree 99 Don't know
2	My life would seem empty without my marriage. 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree 99 Don't know
3	I have definite difficulty confiding in my spouse. 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree 99 Don't know
4	Most of the time, my spouse understands the way I feel. 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree 99 Don't know
5	Ever since I got married, I lost my personal freedom. 1 Strongly agree 2 Agree 3 Disagree

	4 Strongly disagree 99 Don't know
6	I become upset, angry, or irritable because of things that occur in my marriage. 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree 99 Don't know
7	I feel that I am fully able to handle the demands of my marriage. 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree 99 Don't know
8	I have to look outside my marriage for those things that make life worthwhile and interesting. 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree 99 Don't know
9	Overall, I am very satisfied with my marriage. 1 Strongly agree 2 Agree 3 Disagree 4 Strongly disagree 99 Don't know

Table A3: 4 survey questions that are fielded for Depression module on a monthly basis.

No.	Question
1	I felt stressed. 1 None of the time 2 A little of the time 3 Some of the time 4 A good bit of the time

	5 Most of the time 6 All of the time
2	I felt sad. 1 None of the time 2 A little of the time 3 Some of the time 4 A good bit of the time 5 Most of the time 6 All of the time
3	I felt happy. 1 None of the time 2 A little of the time 3 Some of the time 4 A good bit of the time 5 Most of the time 6 All of the time
4	I felt lonely. 1 None of the time 2 A little of the time 3 Some of the time 4 A good bit of the time 5 Most of the time 6 All of the time

Research Team

1. Nadya Haifan

Research Assistant, Centre for Research on Successful Ageing (ROSA)

2. Erra Natalia Binte Sayri

Research Assistant, Centre for Research on Successful Ageing (ROSA)

3. Micah Tan

Research Associate, Centre for Research on Successful Ageing (ROSA)

4. Tadai Mindy Eiko

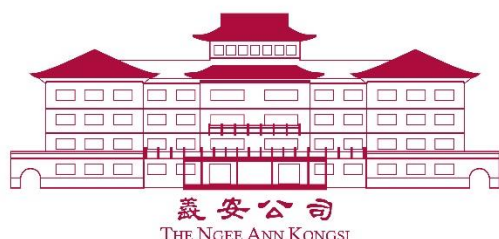
Research Assistant, Centre for Research on Successful Ageing (ROSA)

Please contact the ROSA team at rosa@smu.edu.sg for any questions or queries regarding this report.

About the Centre for Research on Successful Ageing (ROSA)

ROSA is a multidisciplinary research centre based in SMU. It was established with an MOE Tier 3 social sciences research grant, as well as the generous support of The Ngee Ann Kongsi. Research at ROSA seeks to define and measure a holistic construct of well-being and to identify the factors that impact Singaporeans' well-being as they progress through the later phases of life. Through close collaboration with government and other partner agencies, ROSA also aims to translate research insights into policy innovations that advance the well-being of older adults holistically and promote successful ageing in Singapore. ROSA brings together a diverse team of leading international and local researchers in ageing and age-related issues from various disciplines. Through empirical evidence derived from a longitudinal methodological approach, the multidisciplinary and multi-institutional research team advances propositions that promote successful ageing in Singapore.

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