

General Attitudes Towards Marriage Scale:

Psychometric Properties in Malaysian Adolescents of Divorced Families

Jia Yuin Fam

Sunway University

Siti Nor Yaacob, Rumaya Juhari, Zarinah Arshat, Firdaus Mukhtar

Universiti Putra Malaysia

### Abstract

Attitudes towards marriage in adolescence may influence the relationship quality in later years. There exist many measures of attitudes towards marriage which were validated among adolescents from two-parent family in the Western context. There is a need to validate measure of attitudes towards marriage in different countries. This study examined the psychometric properties of the Malay version of General Attitudes towards Marriage Scale (GAMS) in a sample of 480 adolescents from divorced families in Malaysia. Exploratory factor analysis yielded a two-factor structure of GAMS, which explained for 60% of the variance. Additionally, the two-factor structure of GAMS demonstrated good fit to data in the confirmatory factor analysis (TLI=.941, CFI=.958, RMSEA=.087, and  $\chi^2/df = 4.615$ ). Overall, the GAMS exhibited good internal consistency ( $\alpha = .901$ ), which supports the reliability of the instrument. The significant relationships between GAMS and other constructs also provided evidences to the convergent validity ( $r = .761, p < .001$  with intent to marry,  $r = -.170, p < .001$  with overt inter-parental conflict, and  $r = .523, p < .001$  with mother-adolescent relationship). Significant gender difference was found in the report of GAMS ( $t = -2.265, p < .05$ ). Thus, the translated GAMS is a reliable, valid, and practical instrument to measure attitudes towards marriage among Malaysian adolescents in divorced family setting.

*Keywords:* attitudes towards marriage, psychometric, adolescent, divorced family, General Attitudes towards Marriage Scale (GAMS)

## Introduction

Research on marriage and family life has become an emerging topic in previous literature. A considerable body of cross-sectional and longitudinal study have documented evidences of married individuals' higher financial earnings (Chun & Lee, 2001), physical health (Wood, Goesling, & Avellar, 2007), mental health benefits (Hill, Reid, & Reczek, 2013), and life satisfaction (Mikucka, 2016). For instance, in the longitudinal study from National Survey of Families and Households (NSFH), Kim and McKenry (2002) demonstrated the significant effects of marital status on psychological well-being, where the married group reported higher levels of psychological well-being than their counterparts with other marital status. Further, these psychological benefits of getting married are not granted to those of cohabiting relationships, evidencing the protection effect of marriage (Kim & McKenry, 2002).

Despite the wide arrays of potential benefits from getting married, marital pattern has undergone changes in recent years, such as higher global prevalence of divorce, marriage postponement, and non-marriage (Jones & Yeung, 2014; Tey, 2007). For instance, in accordance to Department of Statistics Malaysia (2013), the total number of divorce cases in Malaysia increases tremendously from year 29373 cases in 2008 to 38273 cases in 2012. This portrays the greater social acceptance of divorce in Malaysia. In fact, these negative changes of marital patterns can give harmful effects to individuals in term of infertility (Saleem, Chaudhry, Jabbar, & Mishal, 2015), physical health problems (Bronselaeer, De Koker, & Van Peer, 2008), and mental distress (Blekesaune, 2008).

The detrimental effect of the changing marital pattern spur many researchers to study the attitudes towards marriage across various populations, including adolescents (Martin, Specter, Martin, & Martin, 2003), young adults (Goslin, 2014), undergraduates (Wang, 2009), single women (Azmawati, Hashim, & Endut, 2015), and married individuals (Amato & Rogers, 1999). Despite the substantial amount of research on this issue, few research have examined the attitudes towards marriage among adolescents from divorced families (Hewitt, Skrbis, & Western, 2007). Likewise, the attitudes towards marriage amongst Malaysian adolescents remains unexplored. In fact, past research have repeatedly reported the intergenerational transmission of divorce from parents to offspring, indicated that adolescents from divorced families are at greater risk of dissolving their marriage in later years (Amato & Booth, 2001; Sodermans, Bastaits, Vanassche, Matthijs, & Peer, 2008; Teachman, 2002). From a sample of 6680 adolescents, Hewitt et al. (2007) demonstrated a strong positive relationship between parental divorce and adolescents' expectation to getting divorced in future. Furthermore, a 20-year longitudinal study showed that divorce of grandparents can gives impacts on the grandchildren who were not yet born at the time of the divorce, evidencing the long reach of divorce across generations (Amato & Cheadle, 2005).

Having concerns on the intergenerational transmission of divorce, Cui and Fincham (2010) proposed attitudes towards marriage as one possible mechanism for the relationship. This indicates the early experience of parental divorce will influence the attitudes towards marriage amongst offspring, which may later deteriorate their future relationship quality (Cui & Fincham, 2010). Therefore, this suggests the need for assessment of attitudes towards marriage among offspring from divorced families,

especially for adolescent-aged children who are evidenced as vulnerable to parental divorce (Huang & Lin, 2014). Given the increasing divorce rates in Malaysia, a large number of adolescents may be affected and this research area deserves greater investigations.

In essence, attitudes towards marriage refers to adolescents' perception and desirability towards marriage (Wood, Avellar, & Goesling, 2008). Those with positive attitudes towards marriage tend to express strong support for marriage and expect to get married one day (Wood et al., 2008). Studies on adolescents' attitudes towards marriage have generally found a high preference towards marriage and undesirability towards divorce (Bachman, Johnston, & O'Malley, 2014; Martin et al., 2003). Nonetheless, there is no single conclusion that can be made on the adolescents' attitudes towards marriage following parental divorce (Tasker & Richards, 1994). While one group of adolescents from divorced families have become anti-marriage and chose to remain single (e.g., Dronkers & Härkönen, 2008); another group of adolescents demonstrates pro-marriage tendency and involve in early marriage (e.g., Frimmel, Halla, & Winter-Ebmer, 2016). Clearly, this indicates that there is a need for further research in attitudes towards marriage among adolescents of divorced families.

However, without a valid instrument of attitudes towards marriage for this specific group of adolescents from divorced families, it is difficult to initiate further research in this areas. In search of the literature, it is notable that researchers have examined the attitudes towards marriage through various approaches, ranging from numerical item response (e.g., Schulenberg, Bachman, Johnston, & O'Malley, 1994) to open-ended interview questions (e.g., Vu, 2013), including a number of validated

instruments. Yet, many of the existing instruments, such as Marital Attitude Scale (Braaten & Rosén, 1998) and Attitudes towards Marriage Scale (Kinnaird & Gerrard, 1986), were developed decades ago but lack of support in the context of divorced families. Although most of them report excellent psychometric properties, the content of these instruments may be outdated due to the recent changes in marital pattern. For instance, the Attitudes towards Marriage Scale was psychometrically validated using a sample of female university students (Kinnaird & Gerrard, 1986). Therefore, it is plausible that the inconsistency in the previous findings on attitudes towards marriage among adolescents of divorced families might due to the lack of validated measure.

In light of this consideration, a more recent instrument developed by Park and Rosén (2013), General Attitudes towards Marriage Scale (GAMS), which appears to be an appealing psychometric measure for attitudes towards marriage. In a sample of 516 participants, aged between 17 and 41 years old, the GAMS demonstrates remarkable factor structure, internal consistency, and construct validity (Park & Rosén, 2013). Additionally, the GAMS has recently been translated into Persian language, adding evidences to the psychometric properties of this instrument (see Fallahchai, Fallahi, & Park, 2016). The difference between GAMS and the existing measures which are lengthy or designed specifically for certain groups is that the GAMS does not limit itself and can be applied to almost all individuals (Park & Rosén, 2013). For this reason, we chose the GAMS to be translated and validated in the Malaysian context. To date, the psychometric properties and factor structure of GAMS have not been assessed with samples from Malaysia. Moreover, to the best of our knowledge, there is no existing evidence of attitudes towards marriage among Malaysian adolescents. The purpose of the current

study is to assess the psychometric properties of the Malay version of GAMS in Malaysia context, particularly for adolescents from divorced families. Further, we seek to offer a validated measurement of attitudes towards marriage suitable for Malaysia or other Malay-speaking populations, inviting further research in this area. It is thus the aim of the current study to: (1) explore the factor structure and psychometric properties of GAMS and (2) examine the reliability and validity of GAMS among adolescents from divorced families in Malaysia.

## **Method**

### **Participants**

The participants for this study consisted of 480 adolescents, aged between 13 to 17 years old, from four states in Malaysia, namely Selangor, Kedah, Johor and Pahang. Of the 480 adolescents, there are 208 males (43.3%) and 272 females (56.7%). As our focus is on adolescents of divorced families, the entry criteria for participants were that they (1) come from divorced families, (2) live with divorced mother, and (3) mother remain single. We excluded adolescents who live with father in consideration of contextual difference.

### **Procedure**

The participants were identified through multistage sampling technique. For this purpose, permission was obtained from the Ministry of Education Malaysia and State Education Department as the standard procedures for data collection at secondary school in Malaysia. With the help from school counsellors, name lists of students who meet the study criteria were obtained from the identified schools. All listed students were gathered in the related schools and were invited to participate in this study. Anonymous self-

administered questionnaire with informed consent was filled in by all identified students in the classroom setting. The questionnaires were collected on the spot when completed.

### **Measures**

General Attitudes towards Marriage Scale (GAMS). The attitudes towards marriage of adolescents was measured with the 10 items GAMS (Park & Rosén, 2013). The GAMS is part of the Marital Scales. The Marital Scales consist of a set of three scales which was designed to measure intent, attitudes, and aspects of marital relationships. The GAMS examines individuals' perception towards marriage using a 7-point likert scale, ranging from 0 (Strongly disagree) to 6 (Strongly agree). The content of GAMS includes positive attitudes, negative attitudes, as well as fears and doubts towards marriage. Higher total score upon adjusting for reverse scoring indicates more positive attitudes towards marriage. The GAMS demonstrated good internal consistency ( $\alpha = .84$ ) and construct validity in the original article.

Intent to Marry Scale (IMS). The 3 items IMS was developed alongside with GAMS in the Marital Scales (Park & Rosén, 2013). The IMS attempts to examine individuals' intention to get married in future. The IMS employs the same item response of GAMS, ranging from 0 to 6, and higher adjusted total score indicates greater intention to marry. Comparably, internal consistency of IMS is remarkably good ( $\alpha = .91$ ) and valid.

Overt Marital Conflict. The 10 items Overt Marital Conflict was originally developed as a measurement for mother reported overt marital hostility (Porter & O'Leary, 1980). Participants responded to questions in relation to how frequent inter-parental conflict occur in front of them. The items' responses are reversely scored,



ranging from 1 (Very often) to 5 (Never), with higher total score indicates more frequent argument between parents. This instrument has relatively good test-retest reliability ( $\alpha = .96$ ) and convergent validity (Porter & O'Leary, 1980).

The revisited version of Inventory for Parent and Peer Attachment (revisited IPPA). The revisited IPPA is a three separable inventories which is intended to capture adolescents' relationship quality with both parents and peer (25 items each; Armsden & Greenberg, 1987). As only mother-adolescent relationship is of concern in the present study, the participants were instructed to rate the occurrence of 25 potential mother-offspring interactions from 1 (Almost never or never true) to 5 (Almost always or always true). The total score was summed up after adjusting for inverse scores, with higher total score indicates more positive relationship with mother. The psychometric properties of revisited IPPA was well-tested in various settings (Guarnieri, Ponti, & Tani, 2010; Gullone & Robinson, 2005).

### **Translation and Back-Translation**

Three bilingual experienced lecturers in the related field translated the GAMS into Malay language by following back-translating procedure (Gudmundsson, 2009). The back-translated version is identical to original version. Then, the Malay version of GAMS was subjected to pilot testing on 35 secondary school students. Results of the pilot study revealed an acceptable level of internal consistency ( $\alpha = .55$ ).

### **Data Analyses**

The psychometric properties of GAMS were assessed using SPSS 20.0 and Amos 18. We conducted exploratory factor analysis (EFA) using principal axis factoring with promax rotation. The extracted factors were then examined using confirmatory factor

analysis (CFA). As recommended by Jackson, Gillaspay, and Purc-Stephenson (2009), we utilized a series of fit indices to assess model fit, including non-normed fit index (TLI), comparative fit index (CFI), root mean square error of estimation (RMSEA), and relative chi-square ( $\chi^2/df$ ). As a rule of thumb, the cut-off point for good model fit is set as .9 for TLI and CFI, while .06 for RMSEA. The average variance extracted (AVE) and construct reliability (CR) are calculated to test on the instrument's reliability. Furthermore, bootstrapping was performed to further examine the stability of the factor structure. In search for evidence of convergent validity, we performed Pearson correlation analysis to investigate how GAMS correlates with other constructs. Lastly, the independent t-test was performed to examine the gender difference in attitudes towards marriage among the participants.

## **Result**

The means, standard deviations, and correlations among the items of GAMS are presented in Table 1. The results reveal that all items are significantly correlated with each other. While none of the correlation coefficient is overly strong by exceeding .9, we are confident that multicollinearity is not an issue for these data. On the other hand, it is notable that the values of skewness and kurtosis for all items are within the acceptable range of  $\pm 2$  (Pallant, 2010), hence, the normality assumption was met.

### **Exploratory Factor Analysis (EFA)**

As the purpose of the current study is psychometric evaluation, following the suggestions by Fabrigar, Wegener, MacCallum, and Strahan (1999), we perform EFA using principal axis factoring with promax rotation to examine the factor structure of

GAMS. The favourable values of Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (KMO value = .897) and Bartlett's Test of sphericity (Test value = 2779.875,  $p < .001$ ) indicate that EFA is appropriate for this data.

Examination of eigenvalues and scree plot supports a two-factor structure of GAMS, explaining 60% of the total variance (Table 2). As reflected in Table 3, with all items well-loaded to factor 1 (range between .675 and .851) and factor 2 (range between .668 and .804). However, the original authors suggested a three-factor structure of GAMS, namely positive attitudes, negative attitudes, and fear/doubts (Park & Rosén, 2013). A closer inspection on the item details found that factor 1 consists of all items from positive attitudes and Item 6 from fear/doubts, where all of them are positive wording items. On the other hand, factor 2 consists of all items from negative attitudes and two items from fear/doubts (Items 2 and 4), which are items with negative wordings. Hence, both factors are named accordingly to its attributes, namely positive attitudes towards marriage and negative attitudes towards marriage. Not surprisingly, the results also indicated a significant negative zero correlation between the two factors ( $r = -.618$ ,  $p < .000$ ). Hence, both factor structures are named accordingly to its attributes.

Additionally, the GAMS ( $\alpha = .901$ ), positive attitudes ( $\alpha = .898$ ), and negative attitudes ( $\alpha = .854$ ) demonstrate strong internal consistency, indicating the reliability of the scale.

### **Confirmatory Factor Analysis (CFA)**

Based on the result of EFA, we proceeded to conduct the psychometric examination with confirmatory factor analysis (CFA). Each item was allowed to load into a single factor only as extracted from EFA. The two-factor latent model of GAMS revealed satisfactory fit to data, where TLI = .941, CFI = .958, RMSEA = .087, and  $\chi^2/df$

= 4.615 (Table 3). However, it is noteworthy that the RMSEA value is higher than the preset cutoff point of good fit, which sits on the range of mediocre fit (MacCallum, Browne, & Sugawara, 1996). This slight misfit might be tracked back to the two-factor structure of the current study, as opposed to the original three-factor structure. Identical to the EFA model, all the items are well-loaded to the respective factor, where standardized factor loadings of positive attitudes (range between .686 and .855) and negative attitudes (ranging range.592 and .823) are within the acceptable range. Again, both of the positive and negative attitudes towards marriage subscales significantly correlates against each other ( $r = -.676$ ,  $p < .001$ ). Subsequently, we performed bootstrapping using 5000 bootstrap samples. The bootstrap result does not contain zero in 95% BC confidence interval and significant at .001 level.

Concerning the reliability of the instrument, the values for AVE and CR of the current study are reasonably high for both positive attitudes (AVE = .645, CR = .833) and negative attitudes towards marriage (AVE = .535, CR = .832). Overall, the CFA result suggested that the factor structure of GAMS is stable and reliable (see Figure 1 for graphical presentation of the CFA model).

### **Convergent Validity**

Next, we examine the convergent validity of GAMS using Pearson correlation (Table 4). The results revealed that GAMS total score and positive attitudes scale score are significantly correlated with Intent to Marry Scale, Inter-Parental Conflict Scale, and revisited IPPA (Mother scale). Albeit the inverse patterns, the negative attitudes scale score is also significantly correlated with all other instruments. In sum, the direction of

relationships are consistent with past studies, indicating the excellent convergent validity of GAMS.

### **Gender Difference in Attitudes Towards Marriage**

The results of independent t-test were presented in Table 5. Overall, females (mean=38.8, SD=11.52) reported better attitudes towards marriage than males (mean=35.9, SD=15.22). Specifically, both gender reported similar level of positive attitudes towards marriage ( $t\text{-value}=-1.464, p=.144$ ), while males (mean=13.0, SD=8.52) generally reported higher negative attitudes towards marriage than females (mean=11.2, SD=6.75).

### **Discussion**

The present study is intended to evaluate the psychometric properties of the Malay version of GAMS in a sample of adolescents from divorced families in Malaysia, which ultimately enhance research of this area in Malaysia context. For this purpose, a series of analyses, involving exploratory factor analysis, confirmatory factor analysis, and Pearson correlation analysis, were carried out on the Malay version of GAMS. Overall, the results demonstrate excellent psychometric properties of GAMS in relation to factor structure, reliability, and validity.

In particular, the results of EFA reflect the initial expectation of two-factor structure of GAMS by the original authors, namely “positive attitudes towards marriage” and “negative attitudes towards marriage”, with 5 items loaded into each factor. Overall, both of these correlated factors demonstrate great internal consistency and accounted for 60% of the total variance, which appears to be satisfactory.

Additionally, the two-factor structure of GAMS extracted from EFA was further tested using CFA. Identical to the EFA model, all items load well to the respective factor, with each standardized factor loading higher than .5. Not unexpectedly, the model shows good fit to the data across a set of fit indices recommended by Jackson et al. (2009). In advance, the two-factor structure of GAMS were further tested with bootstrapping technique on its stability. The result of the bootstrapping method using 5000 bootstrap samples reports stable factor structure, evidencing the remarkable psychometric properties of GAMS. Although the results generally support the factor structure of GAMS, it is noteworthy that the RMSEA value indicates for mediocre fit. Hence, it is recommended for future study to further examine the factor structure of GAMS. For instance, comparison of 2-factor and 3 factor structure of GAMS will fortify the psychometric evidences of factorial validity.

With regards to the issue of reliability, both of the two factors yield AVE and CR values above the preset cut-off point suggested by previous researchers (Fornell & Larcker, 1981; Kline, 2011), indicating that the instrument is reliable. Given the stable and reliable factor structure of GAMS, we now turn to investigate the convergent validity of GAMS using Pearson correlation analysis. For this purpose, we examine the correlations between GAMS and several constructs, including Intent to Marry Scale, Inter-Parental Conflict Scale, and revisited IPPA (Mother scale). Echoing the findings from Park and Rosén (2013), the result once again reports significant positive relationship between GAMS and Intent to Marry Scale. This indicates that those who express positive attitudes towards marriage are also likely to report higher intent to marry.

Besides, past research generally suggest that exposure to intense inter-parental conflict will destroy adolescents' marital prospects and expectations, which will in turn result in negative attitudes towards marriage (Michael & Spiegel, 2003; Tasker & Richards, 1994; Valerian, 2001). Moreover, it is evidenced that mother-adolescent relationship is positively correlated with attitudes towards marriage, where inability to maintain affectionate relationship with mothers will negatively affect attitudes towards marriage among adolescents (Petani, 2011). Supporting the past literatures, the current study affirms significant relationship between GAMS, inter-parental conflict, and mother-adolescent relationship in the expected correlation pattern. Collectively, the results support the convergent validity of GAMS.

Consistent with previous study (Pretorius, le Roux, & Meyer, 1991), significant gender difference was found in GAMS, where females generally reported more positive attitudes towards marriage than males. This gender difference might be the outcome of the absent of father figurine in divorced families, which may greatly increase the difficulty of adjustment among male offspring (Brown & Portes, 2006).

Altogether, the current findings provide psychometric evidences to the structure of the Malay version of GAMS. Hence, the instrument can be used confidently as a measurement for attitudes towards marriage among adolescents from divorced families, particularly in Malay-speaking populations. Given the lack of research in this issue, future research is recommended to utilize the Malay version of GAMS in assessing attitudes towards marriage among adolescents from divorced families, where the result can be valuable input for planning and developing interventions to lessen the probability of intergenerational transmission of divorce.

### **Limitations**

One prominent limitation of the current study deserve for extra care – the sample was recruited from four states in Malaysia. Undeniably, the generalizability of the research findings should not go beyond this scope. To further progress the development of GAMS in related research areas, we invite the replication of the current findings in representative sample of offspring from divorced families in other Malay-speaking populations, including unschooled and school dropouts. Such research would provide extended data regarding the psychometric properties of GAMS, while creating opportunity for a new line of investigation in measurement invariance across different samples. Another possible line of research is studies focusing on low scorers of GAMS, aiming at improving their relationship quality or relationship engagement. This will in turn provides an invaluable input for counsellors and therapies who are concerned with adolescents from divorced families.

While most of the current findings are favourable, we believe that the factorial structure of GAMS deserves further investigations. As opposed to the previous studies which commonly agreed on the three-factor structure of GAMS (Fallahchai et al., 2016; Park & Rosén, 2013), the current study yielded a two-factor structure of GAMS with slight misfit in terms of RMSEA. Hence, further analysis on the factorial structure of GAMS is needed to strengthen the psychometric evidences of GAMS.

On the other hand, the psychometric assessments used in the current study are mainly stand on the ground of test-level assessment, where several item-level issues such as item discrimination and item difficulty were not taken into account. As a breakthrough to these limitations, it is recommended that future research should examine the



psychometric properties of this instrument using item response theory (IRT). Contrary to the current study which focused on test-level information, IRT approach can evaluate instruments at item-level, such as item discrimination parameters. Given the different approach between classical test theory and IRT, we believe that the additional information from IRT approach will strengthen and fortify the psychometric evidences in the GAMS literature.

### **Compliance with Ethical Standards**

**Conflict of Interest** The authors declare that they have no competing interest.

**Ethical Approval** Ethical approval was obtained from Ethics Committee for Research involving Human Subjects of Universiti Putra Malaysia (JKEUPM).

**Informed Consent** Informed consent was obtained from all participants in this study.

### **References**

- Amato, P. R., & Booth, A. (2001). The legacy of parents' marital discord: Consequences for children's marital quality. *Journal of Personality and Social Psychology*, *81*(4), 627-638. doi: 10.1037/0022-3514.81.4.627
- Amato, P. R., & Cheadle, J. (2005). The long reach of divorce: Divorce and child well-being across three generations. *Journal of Marriage and Family*, *67*(1), 191-206.
- Amato, P. R., & Rogers, S. J. (1999). Do attitudes toward divorce affect marital quality? *Journal of Family Issues*, *20*(1), 69-86. doi: 10.1177/019251399020001004
- Armsden, G. C., & Greenberg, M. T. (1987). The inventory of parent and peer attachment: Individual differences and their relationship to psychological well-being in adolescence. *Journal of Youth and Adolescence*, *16*(5), 427-454. doi: 10.1007/BF02202939

- Azmawati, A. A., Hashim, I. H. M., & Endut, N. (2015). "Don't marry, be happy!" - How single women in Malaysia view marriage. Paper presented at the SHS Web of Conferences.
- Bachman, J. G., Johnston, L. D., & O'Malley, P. M. (2014). *Monitoring the future: Questionnaire responses from the nation's high school seniors, 2012*. Ann Arbor, MI: Institute for Social Research.
- Blekesaune, M. (2008). Partnership transitions and mental distress: Investigating temporal order. *Journal of Marriage and Family*, 70(4), 879-890. doi: 10.1111/j.1741-3737.2008.00533.x
- Braaten, E. B., & Rosén, L. A. (1998). Development and validation of the Marital Attitude Scale. *Journal of Divorce & Remarriage*, 29(3-4), 83-91. doi: 10.1300/J087v29n03\_05
- Bronselaer, J., De Koker, B., & Van Peer, C. (2008). The impact of divorce on the health status of ex-partners. *Archives of Public Health*, 66, 168-186.
- Brown, J. H., & Portes, P. R. (2006). Understanding gender differences in children's adjustment to divorce: Implications for school counselors. *Journal of School Counseling*, 4(7). Retrieved from: <http://eric.ed.gov/?id=EJ901143>
- Chun, H., & Lee, I. (2001). Why do married men earn more: Productivity or marriage selection? *Economic Inquiry*, 39(2), 307-319. doi: 10.1111/j.1465-7295.2001.tb00068.x
- Cui, M., & Fincham, F. D. (2010). The differential effects of parental divorce and marital conflict on young adult romantic relationships. *Personal Relationships*, 17(3), 331-343. doi: 10.1111/j.1475-6811.2010.01279.x

Department of Statistics Malaysia. (2013). *State/District Social Statistics Malaysia 2013*.

Putrajaya: Jabatan Perangkaan Malaysia.

Dronkers, J., & Härkönen, J. (2008). The intergenerational transmission of divorce in cross-national perspective: Results from the Fertility and Family Surveys.

*Population Studies*, 62(3), 273-288. doi: 10.1080/00324720802320475

Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological Methods*, 4(3), 272-299. doi: 10.1037/1082-989X.4.3.272

Fallahchai, R., Fallahi, M., & Park, S. S. (2016). Factorial validity and psychometric properties of the Marital Scales–The Persian Version. *Journal of Divorce & Remarriage*, 57(4), 266-279. doi: 10.1080/10502556.2016.1160481

Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50. doi: 10.2307/3151312

Frimmel, W., Halla, M., & Winter-Ebmer, R. (2016). *How does parental divorce affect children's long-term outcomes?* (IZA Discussion Paper No. 9928). Retrieved from <http://eds.b.ebscohost.com/eds/pdfviewer/pdfviewer?sid=0b0e81a7-33f3-4a79-8e6f-7c7ee2337c64%40sessionmgr120&vid=0&hid=108>

Goslin, O. (2014). *Gender differences in attitudes towards marriage among young adults*. (Bachelor), DBS School of Arts.

Guarnieri, S., Ponti, L., & Tani, F. (2010). The Inventory of Parent and Peer Attachment (IPPA): A study on the validity of styles of adolescent attachment to parents and

peers in an Italian sample. *TPM-Testing, Psychometrics, Methodology in Applied Psychology*, 17(3), 103-130.

- Gudmundsson, E. (2009). Guidelines for translating and adapting psychological instruments. *Nordic Psychology*, 61(2), 29-45. doi: 10.2719/1901-2276.61.2.29
- Gullone, E., & Robinson, K. (2005). The Inventory of Parent and Peer Attachment—Revised (IPPA-R) for children: A psychometric investigation. *Clinical Psychology & Psychotherapy*, 12(1), 67-79. doi: 10.1002/cpp.433
- Hewitt, B., Skrbis, Z., & Western, M. (2007). *The association between parental divorce and adolescents' expectations of divorce*. Paper presented at the Australian Sociological Association & Sociological Association of Aotearoa New Zealand Joint Conference 2007.
- Hill, T. D., Reid, M., & Reczek, C. (2013). Marriage and the mental health of low-income urban women with children. *Journal of Family Issues*, 34(9), 1238-1261. doi: 10.1177/0192513X12441347
- Huang, Y. C., & Lin, S. H. (2014). Attitudes of Taiwanese college students toward marriage: A comparative study of different family types and gender. *Journal of Comparative Family Studies*, 45(3), 425-438.
- Jones, G. W., & Yeung, W. J. J. (2014). Marriage in Asia. *Journal of Family Issues*, 35(12), 1567-1583. doi: 10.1177/0192513X14538029
- Kim, H. K., & McKenry, P. C. (2002). The relationship between marriage and psychological well-being a longitudinal analysis. *Journal of Family Issues*, 23(8), 885-911. doi: 10.1177/019251302237296

- Kinnaird, K. L., & Gerrard, M. (1986). Premarital sexual behavior and attitudes toward marriage and divorce among young women as a function of their mothers' marital status. *Journal of Marriage and the Family*, *48*, 757-765. doi: 10.2307/352568
- Kline, R. B. (2011). *Principles and practice of structural equation modeling*. New York, NY: The Guilford Press.
- MacCallum, R. C., Browne, M. W., & Sugawara, H. M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, *1*(2), 130-149. doi: 10.1037//1082-989X.1.2.130
- Martin, P. D., Specter, G., Martin, D., & Martin, M. (2003). Expressed attitudes of adolescents toward marriage and family life. *Adolescence*, *38*(150), 359-367.
- Michael, E., & Spiegel, A. (2003). Parental conflict and intimacy: Do our perceptions influence the formation of personal relationships? *Colgate University Journal of the Sciences*, *35*, 147-156.
- Mikucka, M. (2016). The life satisfaction advantage of being married and gender specialization. *Journal of Marriage and Family*, *78*(3), 759-779. doi: 10.1111/jomf.12290
- Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS*: McGraw-Hill International.
- Park, S. S., & Rosén, L. A. (2013). The Marital Acales: Measurement of intent, attitudes, and aspects regarding marital relationships. *Journal of Divorce & Remarriage*, *54*(4), 295-312. doi: 10.1080/10502556.2013.780491

Petani, R. (2011). Correlation between family interaction and adolescents' attitudes.

*Andragoška spoznanja: The Andragogic Perspectives*, 3, 10-22. doi:

10.4312/as.17.3.10-22

Porter, B., & O'Leary, K. D. (1980). Marital discord and childhood behavior problems.

*Journal of Abnormal Child Psychology*, 8(3), 287-295. doi: 10.1007/BF00916376

Pretorius, G. A., le Roux, J. A., & Meyer, J. C. (1991). Differing attitudes of adolescents

towards marriage expectations. *McGill Journal of Education/Revue des sciences*

*de l'éducation de McGill*, 26(1), 41-52. doi: 10.1.1.1003.4495

Saleem, H., Chaudhry, A. G., Jabbar, A., & Mishal, S. (2015). Late marriages and

infertility: An anthropological analysis on health. *The Explorer Islamabad:*

*Journal of Social Sciences*, 1(7), 246-250.

Schulenberg, J., Bachman, J. G., Johnston, L. D., & O'Malley, P. M. (1994). *Historical*

*trends in attitudes and preferences regarding family, work, and the future among*

*American adolescents: National data from 1976 through 1992*: Institute for Social

Research.

Sodermans, A. K., Bastaits, K., Vanassche, S., Matthijs, K., & Peer, C. v. (2008). *The*

*influence of family type and parental conflict on adolescent's attitudes towards*

*marriage and divorce: the role of family integration*. Paper presented at the

Meeting of the European Network for the Sociological and Demographic study of

Divorce, Oslo (Norway).

Tasker, F. L., & Richards, M. P. (1994). Adolescents' attitudes toward marriage and

marital prospects after parental divorce: A review. *Journal of Adolescent*

*Research*, 9(3), 340-362. doi: 10.1177/074355489493004

- Teachman, J. D. (2002). Childhood living arrangements and the intergenerational transmission of divorce. *Journal of Marriage and Family*, 64(3), 717-729. doi: 10.1111/j.1741-3737.2002.00717.x
- Tey, N. P. (2007). Trends in delayed and non-marriage in Peninsular Malaysia. *Asian Population Studies*, 3(3), 243-261. doi: 10.1080/17441730701746391
- Valerian, A. (2001). *The relationship between the family of origin processes and attitudes towards marriage and the likelihood to divorce among college students*. (Doctor of Philosophy), Seton Hall University.
- Vu, T. T. (2013). Attitudes to marriage of young married people in Vietnam. Retrieved from: <https://www.tasa.org.au/wp-content/uploads/2013/11/Vu.pdf>
- Wang, M. P. (2009). A Study on undergraduates' attitudes towards marriage and love. *Journal of Shandong Teachers' University (Humanities and Social Sciences)*, 4. Retrieved from: [http://en.cnki.com.cn/Article\\_en/CJFDTotalsDSS200904014.htm](http://en.cnki.com.cn/Article_en/CJFDTotalsDSS200904014.htm)
- Wood, R. G., Avellar, S., & Goesling, B. (2008). *Pathways to adulthood and marriage: Teenagers' attitudes, expectations, and relationship patterns*. Princeton, NJ: Mathematica Policy Research.
- Wood, R. G., Goesling, B., & Avellar, S. (2007). *The effects of marriage on health: a synthesis of recent research evidence*. Washington, DC: Mathematica Policy Research.

Table 1. Means, Standard Deviations, and Correlations among Items in General Attitudes towards Marriage Scale

Item	Mean	SD	Skew	Kur	Correlation															
					(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)						
1. Marriages make people happy.	4.04	1.65	-.51	-.66	–															
2. I am fearful of marriage.	2.75	1.96	-.03	-1.25	-.32	–														
3. People should not marry.	1.75	1.89	.76	-.74	-.48	.51	–													
4. I have doubts about marriage.	2.78	1.97	.03	-1.28	-.35	.65	.57	–												
5. Marriage is a “good idea”.	3.78	1.70	-.42	-.74	.68	-.30	-.40	-.30	–											
6. I do not have fears of marriage.	3.39	1.88	-.16	-1.18	.53	-.44	-.32	-.40	.62	–										
7. Marriage makes people happy.	4.12	1.70	-.58	-.74	.66	-.32	-.50	-.35	.69	.57	–									
8. Most marriages are unhappy situations.	2.61	1.84	.06	-1.16	-.37	.42	.48	.49	-.34	-.29	-.42	–								
9. Marriage is important.	4.22	1.77	-.71	-.62	.67	-.33	-.50	-.32	.67	.57	.75	-.41	–							
10. Marriage makes people unhappy.	2.13	1.91	.47	-1.01	-.49	.46	.61	.55	-.41	-.39	-.51	.65	-.55	–						

Note. All relationships are significant at .001 level.



Table 2. Exploratory Factor Analysis of General Attitudes towards Marriage Scale

Item	Rotated Factor		Communalities
	Loading		
	Positive Attitudes	Negative Attitudes	
1. Marriages make people happy.	<b>.796</b>	-.516	.635
5. Marriage is a “good idea”.	<b>.832</b>	-.448	.700
6. I do not have fears of marriage.	<b>.675</b>	-.483	.462
7. Marriage makes people happy.	<b>.850</b>	-.537	.723
9. Marriage is important.	<b>.851</b>	-.541	.724
2. I am fearful of marriage.	-.404	<b>.703</b>	.496
3. People should not marry.	-.547	<b>.730</b>	.548
4. I have doubts about marriage.	-.410	<b>.804</b>	.658
8. Most marriages are unhappy situations.	-.459	<b>.668</b>	.450
10. Marriage makes people unhappy.	-.589	<b>.771</b>	.615
Eigenvalues	4.966	1.045	
Percent of variance	49.658	10.446	60.104
Cronbach’s alpha, $\alpha$	.898	.854	.901

Table 3. Goodness of Fit Statistics of Attitudes towards Marriage Scale

Model	TLI	CFI	RMSEA	$\chi^2$	$\chi^2/df$
Initial model	.941	.958	.087	147.669	4.615

Construct	Item	Standardized Factor Loadings (95% BC CI)	AVE	CR
Positive Attitudes	Item 1	.797 (.741-.848 )	.645	.833
	Item 5	.813 (.760-.862)		
	Item 6	.686 (.623-.746)		
	Item 7	.855 (.803-.900)		
	Item 9	.853 (.811-.890)		
Negative Attitudes	Item 2	.592 (.520-.662)	.535	.832
	Item 3	.788 (.716-.853)		
	Item 4	.678 (.612-.738)		
	Item 8	.753 (.688-.814)		
	Item 10	.823 (.771-.869)		

Table 4. Intercorrelations for GAMS total score and subscales with Intent to Marry Scale, Overt Marital Conflict, and The revisited IPPA (Mother Scale)

Variables	Intent to Marry Scale	Overt Marital Conflict	Revisited IPPA (Mother scale)
Total GAMS	.761***	-.170***	.523***
Positive Attitudes	.738***	-.105*	.431***
Negative Attitudes	-.619***	.195***	-.499***

Table 5. Gender difference in attitudes towards marriage, positive attitudes towards marriage, and negative attitudes towards marriage

Scale	Mean (SD)		t-value	p
	Male	Female		
Attitude towards marriage	35.9 (15.22)	38.8 (11.52)	-2.265	.024
Positive attitudes towards marriage	19.0 (8.33)	20.0 (6.46)	-1.464	.144
Negative attitudes towards marriage	13.0 (8.52)	11.2 (6.75)	-2.566	.011

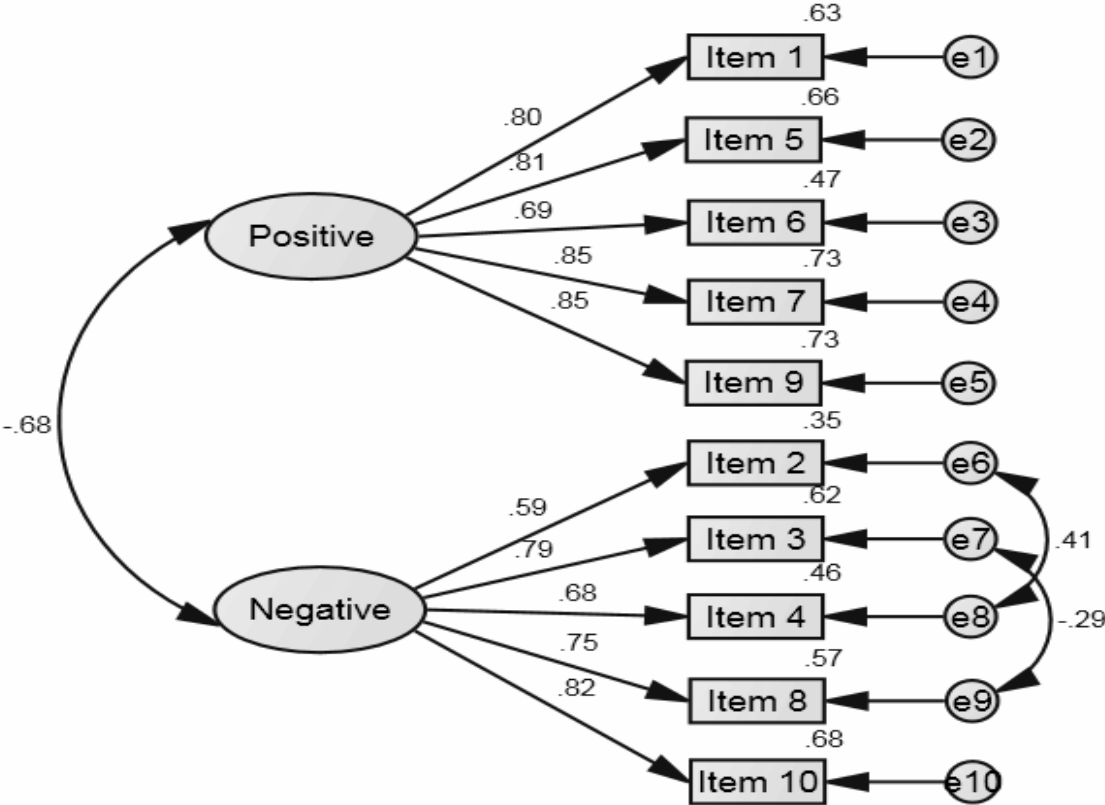


Figure 1. Standardized Factor Loading for General Attitudes towards Marriage Scale