
**Psychological Well-being and Academic Achievement of Minang Students viewed from Family Structure and Living Arrangements**

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Abstract. Previous research has proven that individuals raised in intact family structures have better psychological well-being and academic achievement than those raised in non-intact families. However, these findings emphasize only the nuclear family and have not considered the living arrangement factor that allows social support from extended families such as those in the Minang community. This study involved N = 201 students of Minang ethnicity from intact families (n = 160) and non-intact families (n = 41) who lived with nuclear families (n = 162) and extended families (n = 39). The sampling technique was carried out with convenient sampling. The instrument used is the translated Ryff’s PWB (Psychological Well-Being) scale with a reliability of 0.912. Meanwhile, data on academic achievement was obtained through the participants’ IPK (cumulative grade point index). Family structure data is obtained from participants’ answers to the marital status of biological parents. The living arrangement data is obtained from the answer to whom the participants live with to determine the presence/absence of extended family members in their home. The analysis showed no differences in psychological well-being and academic achievement regarding family structure and living arrangements. However, the interactions between groups showed differences in PWB between groups of participants from intact families and groups of non-intact families who lived with only nuclear families. This research shows the importance of paying attention to the context of the participants’ socio-cultural environment, producing different conclusions from previous findings

Keywords: academic achievement; extended family; intact family; Minang; non-intact family; nuclear family; psychological well-being.

INTRODUCTION

Psychological well-being (PWB) and academic achievement show the functioning and optimal development of an individual. PWB indicates an individual’s ability to adapt to stressors Wulandari (2016) so as to avoid psychological pressure (Aulia & Panjaitan, 2019). PWB is essential for an individual’s mental health as a whole since it shows the capacity of the individual to encounter various life challenges (Ryff, 2014). Academic achievement itself has been known as a predictor of individual success in achieving further education, getting a more prestigious job with higher income, and having a better physical and mental health (Gaydosh & McLanahan, 2021; Marmot
& Bell, 2012). Hence, it makes the achievement of these two variables important for the individual to strive for.

The achievement of psychological well-being is inseparable from the family interaction (Dewi & Soekandar, 2019; Nayana, 2013), as well as academic achievement (Novianti et al., 2018). However, one’s life journey with family does not always live without obstacles, one of which is the change in family structure. The family structure is generally divided into two; intact family and non-intact family. An intact family is a family structure where two biological parents are still married, while in a non-intact family, parents are no longer together. Non-intact family may due to death, divorce, or no prior nuptials.

Previous research results provide empirical evidence showing that individuals raised in a non-intact family structure tended to have lower scores on measures of psychological well-being (Bjarnason et al., 2012; Guo, 2019; Shek & Liu, 2014). They were more vulnerable to experience psychological disorders such as depression (Agerup et al., 2015; Park & Lee, 2020; Yu et al., 2015), suicidal thought (Park & Lee, 2020; Samm et al., 2010; Zaborskis et al., 2016), and affect problems (Paclikova et al., 2019; Papachristou et al., 2020). Besides having psychological problems, children raised in non-intact families were also observed to experience problems in academic and educational activities (Bernardi & Boertien, 2016; Chau et al., 2013; Francesconi et al., 2010; Havermans et al., 2014; Mance & Yu, 2010; Park & Lee, 2020). Research in Indonesia comparing the two groups also consistently showed the negative impact of non-intact family structures on problematic behavior at school (Azis, 2015; Harsanti & Verasari, 2013), and apprehensive academic behavior (Hidayatulloh, 2010; Rakhamawatiningtyas, 2013).

Parental absence is a perspective used to explain the impact of different family structures on children’s well-being. This perspective assumes that cooperation between two biological parents can improve the quality of attention so that children can grow and develop optimally (Gähler & Palmtag, 2015). The absence of one parent may reduce the quality of attention, which ultimately has an effect on the psychological well-being of children (Landers-Potts et al., 2015; Moore & Buehler, 2011; Teubert & Pinquart, 2010; Whiteside & Becker, 2000). Children who later lived with stepfamilies after remarriage cases did not actively show the same function as the intact family structure (Dunn et al., 1998; Roe et al., 2006). However, current researches on participants from non-intact families have considered living arrangements with extended families, even though the composition of the residence is quite general in collectivistic countries, including Indonesia (Goodwin & Giles, 2003).

The presence of extended families as a support system has been documented in several previous studies. Large families comprising grandparents/uncles/aunts have shown an increase in educational achievement of children from families with low socioeconomic levels (Cross, 2018; Crozier & Davies, 2006; Jæger, 2012) and increased the level of family happiness (Schwarz & Winkelmann, 2011). It happens as extended families can function as a source of social support when it is needed Cross et al. (2018) and Taylor et al. (2017) like a single mother who requires support for taking care of children (Lin, 2018; Palma & Scott, 2020; Shin, 2013; Sterrett et al., 2010). The function of the extended family as a social support system in Indonesia, especially in education and health, has been proven by LaFave & Thomas (2017) and Schueler (2007).

Large family support which is relevant to children’s well-being oftentimes comes from mother (Attar-Schwartz et al., 2009; Griggs et al., 2009; Westphal et al., 2015). The intimacy of the child to the mother’s family is a protective factor that alleviates the change impact of the family structure from intact to non-intact due to divorce, for instance. Children who have a close relationship with grandparents in post-divorce have better self-adjustment Lussier et al. (2002)
and psychological functioning Henderson et al. (2009) better than those raised by a single mother without support of a large family. The intimacy of the child to the mother’s family shares the matrilineal kinship as found in the Minangkabau community in West Sumatra.

The matrilineal kinship is claimed to place women in a more favorable position as they have the right to manage the inheritance from generation to generation based on matrilineality, which ensures the women and children’s well-being. This system also appoints the mother’s brother (mamak) instead of the biological father, to act as the sociological “father” who will be responsible for his nephew’s well-being that is the child of his sister (Amir M. S, 2003; Blackwood, 1999; Munir, 2015). If there is a change in the family structure, the child’s well-being is assumed to be maintained because it has been supported by the extended family of matrilineality. However, researches by Bonate (2017) and Stark (2013) revealed that there was a diminished trend of matrilineal kinship system following the empowerment of nuclear family bonds, which might be due to the changes in living arrangements. Meanwhile, in the past, children lived and were raised by their mother’s relatives in the family’s inheritance “rumah-gadang” (big house) that was passed down from generation to generation, but nowadays the children are mostly raised in houses of their biological parents, containing only nuclear family members. The role of Mamak and mother’s relatives as the part of the extended family has been replaced by the biological father as the person in charge of the family, as commonly depicted by the nuclear family (Handayani & Pinasti, 2018). Since no research has provided empirical evidence for this assumption, this study aims to examine the role of family structures (intact and non-intact) and living arrangements, whether individuals live with only nuclear families or with extended families towards psychological well-being and academic achievement in the Minangkabau culture.

Given this description, researchers propose several hypotheses: 1. There are differences in psychological well-being and academic achievement between those who grew up in an intact family structure and those who grew up in a non-intact family structure; 2. Those living in the extended family will have higher psychological well-being and academic achievement than those living in the nuclear family.

METHOD

This study utilized a quantitative research approach using a survey by distributing questionnaires as a data collection method. This study compares the measurement of well-being in groups with certain characteristics according to the research objectives.

Participants

This study involved second-year students (18 to 25 years), Minang ethnicity drawn from matrilineality. Participants included were 201 students grouped into intact (n = 160) and non-intact (n = 41) categories based on family structure, and the nuclear family (n = 162) and extended family (n = 39) categories based on living arrangements. The sampling technique used is convenient sampling with maximum variation encompassing four universities in Padang. The selection of students as participants in this study was based on the consideration of the correspondence between the age of the participants and the measurement of psychological well-being that requires abstraction abilities. Besides, research on the effect of family structure on children’s well-being has remained until adulthood (Amato & Keith, 1991; Sands et al., 2017).

Instrument
The instrument used to measure the psychological well-being of respondents is the Psychological Well-Being (PWB) Scale developed by Ryff (2014). Ryff defines PWB as an effort to achieve perfection in realizing the true potential of an individual. This concept refers to the concept of eudaemonic happiness, in which happiness appears after the individual manages to do the best of oneself for the sake of others. In contrast with a hedonic concept, which is happiness that one feels subjective. PWB is characterized by the presence of six aspects within the individual: self-acceptance, personal growth, environmental mastery, autonomy, positive relationships with others, and life purpose.

This study used a modified instrument from Ryff which had been translated by Rakhmawatiningtyas (2013) with reliability of 0.912 and was retried on the population group in the study. The instrument used had passed the EFA test (exploration factor analysis) with the value of KMO = 0.809 (good) and the CFA test (confirmatory factor analysis) RMSEA = 0.837 (p <0.00) with the assistance of the "FACTOR" factor analysis program. The EFA test suggested eliminating items in the "personal growth" and "life purpose" factors so that the measurement of psychological well-being in this study only involved four factors: autonomy (4 items), environmental mastery (3 items), positive relations (2 items) and self-acceptance (3 items), with a total of 12 items.

Academic achievement

Because all participants were in the same level of education, academic achievement in this study was observed based on the cumulative grade point average ranging from 0 to 4. The cumulative grade point average was obtained from the participants’ responses to questions in regards to this.

Family structure

Family structure was obtained from the participants’ responses to the marital status of their biological parents, be it married/divorced or widow/remarried. The answers were then categorized into two; intact family and non-intact family. Intact families are those with both biological parents who are still married at the time of the research, while non-intact families are those with biological parents who are no longer together, either due to a divorce, widowed, or remarriage in a stepfamily formation. Data results are in nominal data.

Living arrangements

Participants were asked to fill in information about the people living with them permanently (not just visiting). Participants' answers were categorized into a nuclear family living arrangement if they only live with parents and siblings, and extended family living arrangement, if there are family members outside parents and siblings (ignoring the number). Data results are in nominal data.

Analysis

Data were analyzed using the two-way Anova test, either for psychological well-being or academic achievement. The analysis process was conducted using the SPSS 22 program.

RESULTS AND DISCUSSION

Table 1 shows the distribution of participants’ PWB scores which globally have a normal distribution, in which most of the respondents had PWB mean scores at medium and high levels. The group of participants with the highest to lowest scoring order is the group of intact family
structure living with the extended family (x = 41.48), group of intact family structure living with the nuclear family (x = 41.21), group of non-intact structure with extended family (39.71) and a group of non-intact family with nuclear family (37.48).

The distribution of academic achievement scores also showed a normal distribution with the highest to lowest scores: group of non-intact family structure living with extended family (x = 3.26), group of intact family living with extended family (3.25), group of intact family with nuclear family (3.25), and the lowest is a group of non-intact family with nuclear family (3.17).

<p>| Table 1. Score Distribution of Psychological Well-being and Academic Achievement |
|---------------------------------|------------------|-----------------|</p>
<table>
<thead>
<tr>
<th><strong>Family Structure</strong></th>
<th><strong>Living arrangement</strong></th>
<th><strong>Psychological Well-being</strong></th>
<th><strong>Academic achievement</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intact</td>
<td>Nuclear</td>
<td>41.2148</td>
<td>135</td>
</tr>
<tr>
<td></td>
<td>Extended</td>
<td>41.4800</td>
<td>25</td>
</tr>
<tr>
<td>Non-intact</td>
<td>Nuclear</td>
<td>37.4815</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Extended</td>
<td>39.7143</td>
<td>14</td>
</tr>
</tbody>
</table>

Globally, it can be determined that both PWB (psychological wellbeing) and academic achievement scores were obtained by groups living with extended family, both intact (PWB) and non-intact (academic), and the lowest scores were consistently obtained by those with non-intact family structures living with a nuclear family, both PWB score and academic achievement. However, after analyzing data using Anova, it turned out that there was no difference between these groups, both in PWB and academic achievement. The results are presented in the following Table 2.

| Table 2. Two-way ANOVA Test Results |
|-------------------------------------|------------------|-----------------|
| **Factor**                          | **Psychological wellbeing** | **Academic achievement** |
|                                     | **F**            | **Sig.**        | **F**            | **Sig.**        |
| Living arrangement (LA)             | 0.799            | 0.372           | 0.330            | 0.566           |
| Family Structure (SK)               | 3.875            | 0.051           | 0.191            | 0.663           |
| LA*SK                               | 0.496            | 0.482           | 0.243            | 0.623           |

The next step is to find the interaction table between groups as presented in Table 3. In this table, it is known that there was a difference in PWB scores between groups of participants from intact family living with nuclear family and participants from non-intact family living with nuclear family, in which participants from non-intact family had lower scores. However, there was no difference in PWB scores in the group of participants living with extended family.

<p>| Table 3. Interactions of psychological well-being and academic achievement based on living arrangements and family structure |
|---------------------------------------------------------------------------------------------------------------------------------|------------------|-----------------|</p>
<table>
<thead>
<tr>
<th><strong>Family structure</strong></th>
<th><strong>Living arrangement</strong></th>
<th><strong>Psychological Well-being</strong></th>
<th><strong>Academic Achievement</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Intact</td>
<td>Nuclear</td>
<td>41.215</td>
<td>40.013</td>
</tr>
</tbody>
</table>
Some of the findings of this study are consistent with previous studies discovering that individuals raised in an intact family structure had a higher PWB score than those raised in a non-intact family structure (Bjarnason et al., 2012; Guo, 2019; Shek & Liu, 2014), but only in the group of participants living with nuclear family. Yet, the findings of this study may exhibit a different situation for participants living with extended family.

This situation can be explained by the nature of the matrilineal kinship system which places the children’s well-being and education as a collective responsibility of the extended family of matrilineality and mother’s relatives (Lowes, 2018). Though Handayani & Pinasti (2018) found a role shifting in the matrilineal kinship system, it is in an unfavorable situation due to changes in family structure (either due to divorce/death of one of the parents), the extended family can take the role as an alternative source of social support so that participants’ psychological well-being and academic become more maintained.

This shows that the matrilineal kinship system shares the characteristics of Asian societies that possess high kinship, as found by Walton and David (2010) in Asian immigrant families in America. In this study, it was found that those living with extended family had a lower psychological distress level compared to when they did not live with extended family.

Several studies have found that the quality of the relationship between grandparents and grandchildren would affect grandchildren’s psychological adjustment ability, especially once their parents divorce (Attar-Schwartz et al., 2009; Henderson et al., 2009). Another study involving younger adolescents (11-16 years) also found a significant correlation between the involvement of grandparents and grandchildren’s well-being (Griggs et al., 2009). Bengtson (2001) offers an idea about the importance of involving extended family to maximize the function of the family in America that will accommodate the changes in the modern nuclear family model. Modern family allows married couples to work outside the home, while grandparents have a longer life expectancy and can take the role of parents for their grandchildren. It appears that Bengtson’s concept has already been passed down to families in Asia, including the Minang community.

Unfortunately, this study did not anticipate the perception of whether or not the participants received relative support and only simplified the role of extended family in living arrangements. it is because social support from extended families can be obtained despite live separately (LaFave & Thomas, 2017). This study also did not calculate the distance between the family and extended family because Minangkabau has a tradition of building houses that are separate from rumah gadang (a house where a family of one line lives) yet it is close to each other (Blackwood, 1999), so it still allows them to help each other.

Suggestion for future research is to conduct further exploration of the acceptance of social support from matrilineal relatives as a potential protection factor in Minang community that experiences changes in family structure.

### CONCLUSION

This study shows that in a society with a matrilineal kinship system, psychological well-being and academic achievement were not influenced by family structure (intact/non-intact) or...
living arrangements (nuclear/extended). That is, this study shows that non-intact family structure always mirrors a negative impact on an individual’s psychological well-being and academic achievement when participants’ socio-cultural environmental factor (i.e. living arrangements) is taken into account.

REFERENCES


