

## Empowering Mothers Against a Malaysian Societal Convention: An Islamic Perspective

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### ABSTRACT

A significant way-forward to Malaysia's development is to increase economic opportunities for women. Having greater women participations in the workforce potentially enhances the country's prospects for growth. Various agencies work towards increasing women's participations in the labour force. Malaysian society has also grown to expect that women 'work' to contribute to the family's economy, and to the nation's—the belief that has somewhat become a convention. However, it is observed that the race to get women to 'roll-up her sleeves' economically, is not without worrying downside trends, even at the current rate of only 55.5% of Malaysian women in the labour force. Are we overlooking an important and crucial factor in the equation for Nation-building? This paper attempts to examine the fundamental aspects of motherhood, especially early motherhood, as an important and crucial factor that is under-emphasized. The paper will also deliberate on how the above has affected individuals' and families' well-beings, thus putting constrains and conflicts in the family, society, and the Nation at large. The paper employs analyses of relevant news and journal articles, observations of day-to-day realities and social media feeds to discover the situation at hand. Finally, it draws guidance from references in the Qur'an and Prophetic tradition to propose a more realistic, well-balanced approach. The demand to get women's economic participation towards National growth is real. However, this must be in such ways as to *not* endanger and threaten personal, familial, and societal holistic well beings. The roles of motherhood, especially early motherhood *must* be included in the equation. Thus, the necessity to empower women to reconsider their priorities—be it against societal convention. Afterall, Nation-building requires far more than economic prosperity.

**Keywords:** women empowerment, motherhood, children upbringing, holistic wellbeing, Islamic perspective.

### INTRODUCTION

A significant way-forward in the development of Malaysia is to increase economic opportunities for women. It is argued that having greater women participations in the workforce potentially enhances the country's prospects for growth. An article in the Education section of the IMFBlog dated April 2<sup>nd</sup>, 2018, "Chart of the Week: Malaysia Needs More Women in the Workforce" states,

Malaysia, a country well on its way to achieving high income status, can increase the number of women in the labor force by implementing key labor market reforms. And the country should, because our research shows that more women in the workforce benefits the economy.... According to IMF analysis, the contribution of female employment to Malaysia's economic growth has increased at a faster pace in recent years—on average from 4 percent from 2001 to 2008, of real GDP growth, to 14 percent from 2011 to 2016.<sup>1</sup>

Sharifah Nabilah Syed Salleh and Norma Mansor raise the following issues in their article "Women and Labour Force Participation in Malaysia", by quoting the Department of Statistics Malaysia for the year 2022, that, despite Malaysia's robust industrialisation and advancements in education, the 2021 rate of women's participation

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<sup>1</sup> No author, "Chart of the Week: Malaysia Needs More Women in the Workforce", in Education, IMFBlog, April 2<sup>nd</sup> 2018, retrieved September 29<sup>th</sup> 2023, from <https://www.imf.org/en/Blogs/Articles/2018/04/02/chart-of-the-week-malaysia-needs-more-women-in-the-workforce>.

in labour force was 55.5%, compared to men's at 80.9% for men. Their concern is the still widening gender gap, despite rapid global economic growth and progress in women's education.<sup>2</sup>

The April 21<sup>st</sup>, 2020, worldbank.org report in its What We Do section on Results Briefs, "Toward Better Economic Opportunities for Women: Lessons from Malaysia" states.

[Malaysia] has a reversed gender gap in school enrolment at all levels and in educational attainment. In this context, increasing the number of women who are able to access productive jobs has been a core development objective in its own right, but also holds the promise for Malaysia's continued economic growth. Macroeconomic simulations have implied that closing gaps between men's and women's economic opportunities could boost Malaysia's income per capita by 26.2 percent—an average annual income gain of about US\$2,230 for each Malaysian.<sup>3</sup>

A recent IMFBlog feed dated September 27<sup>th</sup>, 2023, maintains, "Empowering women economically is a powerful engine of inclusive growth". It further asserts,

Countries must step up efforts to break down barriers to women's participation in the labor market—such as limited access to education, health, assets, finance, land, legal rights, and care services. They should systematically take account of how macroeconomic, structural, and financial policy packages impact women. The IMF's gender strategy aims to assist member countries in these efforts.<sup>4</sup>

Various agencies - government related bodies, non-government organisations, and private sectors - work towards increasing women's participations in the labour force, with various initiatives introduced, like "increased investments in childcare", "incentives to encourage female labor force participation" and "the constitution of an interministerial working group on improved childcare provision"<sup>5</sup>. These include "increasing the duration of maternity leave for the private sector to 90 days to match that of the public sector", "a minimum of 30 percent participation of women in boards of government-linked companies and investment companies", and "personal income tax exemptions on a maximum of 12-months consecutive salary for women, with a career break of at least two years"<sup>6</sup>.

As such, Malaysian society has grown to expect that women 'work' to contribute to the family's economy, and to the nation's—the belief that has somewhat become a convention. This is clearly exhibited in our day-to-day observations and experiences, what more with high female tertiary education enrolment rates as seen over the years<sup>7, 8</sup>. On August 26<sup>th</sup>, 2022, Arina Sofiah reports in ResourcesOnline.net's Talent Management, the former Prime Minister Ismail Sabri as saying,

<sup>2</sup> Sharifah Nabilah Syed Salleh and Norma Mansor, "Women and Labour Force Participation in Malaysia", *Malaysian Journal of Social Sciences and Humanities* (MJSSH), (e-ISSN : 2504-8562), 2022, Volume 7, Issue 7, e001641, retrieved December 1<sup>st</sup>, 2022 from DOI: <https://doi.org/10.47405/mjssh.v7i7.1641>.

<sup>3</sup> No Author, "Toward Better Economic Opportunities for Women: Lessons from Malaysia", in Knowledge & Research: The Malaysia Development Experience Series, World Bank Group: September 2019, retrieved September 29<sup>th</sup>, 2023, from <https://www.worldbank.org/en/results/2020/04/21/toward-better-economic-opportunities-for-women-lessons-from-malaysia>.

<sup>4</sup> Antoinette M. Sayeh, Alejandro Badel and Rishi Goyal, "Countries That Close Gender Gaps See Substantial Growth Returns - Empowering women economically is a powerful engine of inclusive growth", in Gender, IMFBlog, September 27<sup>th</sup>, 2023, retrieved September 29<sup>th</sup>, 2023, from <https://www.imf.org/en/Blogs/Articles/2023/09/27/countries-that-close-gender-gaps-see-substantial-growth-returns>.

<sup>5</sup> Ibid.

<sup>6</sup> "Malaysia Needs More Women in the Workforce", IMFBlog, April 2<sup>nd</sup>, 2018.

<sup>7</sup> Women enrolment to tertiary education recorded at 48% compared with 38% for men in 2018. Retrieved December 1<sup>st</sup> 2022 from <https://www.malaymail.com/news/malaysia/2019/11/07/malaysia-ranks-high-in-womens-educational-attainment-says-dr-wan-azizah/1807845>.

<sup>8</sup> Women enrolment to tertiary education recorded 49.9% compared with 40.7% for men in 2021. Retrieved December 1<sup>st</sup> 2022 from <https://www.nst.com.my/opinion/columnists/2022/04/787562/womens-issues-require-national-attention>.

Although women made up 47.7% of the Malaysian population in 2020, only 55.5% of women are participating in the labour force as of last year... Government-linked companies and government-linked investment companies were also instructed to have at least 30% of women board members before their annual general meeting in 2023. To date, approximately 210 out of 900 private limited companies have over 30% of women on their board of directors. ...

“I hope that the National Council of Women's Organisations will continue to be a strategic partner in the development of the country, and I call on all women to continue working together with the Government to develop this beloved Malaysia.”<sup>9</sup>

However, it is as well observed that the race to get women to ‘roll-up their sleeves’ economically, is not without worrying downside trends, even at the current rate of only slightly more than 55% of Malaysian women in the labour force. The question is, are we overlooking an important and crucial factor in the equation for Nation-building?

## THE PLIGHT OF MOTHERS<sup>10</sup> AND CHILDREN IN THE RAPIDLY DEVELOPING NATION OF MALAYSIA

The writing of the columnist Syida Lizta Amirul Ihsan in the New Straits Times on July 6<sup>th</sup>, 2018 illustrates the daily situation faced by scores of working mothers.

Every day before we go to work, my husband and I drop our six-month-old son at the babysitter [...]. Tens of thousands of working mothers share our arrangement, sending their babies and children to these women, mostly housewives, who look after babies to supplement their household income [...]. Not all office buildings are equipped with daycare centres. Not all offices have lactation rooms, despite the Health Ministry’s recommendation of exclusive breastfeeding for the first six months of a baby’s life. And let’s not even talk about flexible working hours because [...] even in this digital age [...] employers still expect workers to clock in and clock out physically [...].<sup>11</sup>

Early dawn rush to avoid morning traffic jams sees streets full of young mothers/parents driving their babies – still sleeping – to care takers. At the end of each weekday, these parents head out from their workplaces to fetch their children late in the day before dusk, to avoid evening traffic jams. In both cases, the children are either sleeping, or fatigued. This is the daily routine. Many do not have much time during weekdays at home due to their job-related commitments. Hence, most house chores are relegated to the weekends. To calm the naggings of their attention seeking attention-deficit children, most resort to occupying their children’s time with entertainments on television and smart phones, while they attend to the needed piled up household tasks.

Mothers today are generally more educated than those of their parents’ generation, yet they are compelled to leave their young at day cares. At the day care centres or homes of care takers, the ratio of children to care takers are too high to be healthy and wholesome. Many of these care takers may not have the education, the trainings, the experiences, the love and the patience sufficient to ensure their wards’ healthy growth and upbringing. We have read many cases of neglect and abuse of young children in day cares, leaving the children seriously bruised, and in some cases dead. For these reasons, some working parents opt to leave their young children to their aging parents, usually mothers, in the hope for better care for their young. Are grandmothers able

<sup>9</sup> Arina Sofiah, “Participation of women in Malaysia's labour market is still low: PM Datuk Seri Ismail”, HumanResourcesOnline.net, retrieved September 29<sup>th</sup> 2023, from <https://www.humanresourcesonline.net/participation-of-women-in-the-malaysia-s-labour-market-is-still-low-pm-datuk-seri-ismail>.

<sup>10</sup> As the paper focuses on mothers, hence it uses the word ‘mothers’ more than the use of ‘parents’. This is not to be taken as a dismissal of the roles of fathers.

<sup>11</sup> Syida Lizta Amirul Ihsan, “Working parents’ dilemma”, the New Straits Times, July 6<sup>th</sup>, 2018 @ 11:40 a.m., retrieved December 5<sup>th</sup>, 2022 from <https://www.nst.com.my/opinion/columnists/2018/07/387862/working-parents-dilemma>.

to provide what is needed for their grandchildren's wholesome care on a day-to-day basis while their children attend to their day-jobs? Our observations say most probably not, as grandparents no more have sufficient energy to adequately meet the physical demands of caring for the very young. Furthermore, these grandparents are the ones requiring care from their children. Yet again, the task usually falls onto their daughters – who most often are mothers themselves.

For many young working mothers, especially in urban and suburban settings, the home is only to sleep in. Home-cooked meals have become a rarity. Many young schooling children stay alone at home after school. The more fortunate ones have some home-cooked meals left by their mothers for them, or after-school 'transit' service before being fetched home. The less fortunate ones only find some money to buy their meals with. Loneliness is filled with screen time or frolicking with peers in the streets or parks—both unsupervised. Today, the notion of '*rumah ku – syurga ku*' or 'my home – my heaven' has lost its lure. Driven by guilt, many parents shower their attention deficit children with luxuries – whether with excessive screen times or material things. The Malaysian Reserve reports on March 31<sup>st</sup>, 2017,

Most mothers will have to cope with the guilt of having to leave their newborn child at home, as they return to work, says Jasmin. For many women, the choice of not working to raise a family is a financial luxury that not many can afford, and they end up doing double duty as wage-earner and mother. [...] According to surveys, many women dream of becoming full-time mothers and leaving the workforce even though they have valuable skills to contribute.<sup>12</sup>

In the effort to be with their young children, many mothers juggle motherhood with working from home—a scenario all too common especially during the covid pandemic, and to a certain degree, extending in the post-covid situation at present. According to Amanda Yeo,

work-from-home (WFH) arrangements during the Covid-19 pandemic increased the burden of childcare, housework, cooking and other domestic chores among working parents [...] disproportionately affects working women [...] in a WFH environment. [...] The ongoing stress from family responsibilities and the high-pressure environment of confinement has contributed to a rise in domestic violence during the pandemic. Working parents became riled or frustrated with each other easily. [...] Women, Family and Community Development Minister Datuk Seri Rina Harun revealed in September 2021 that 9,015 police reports came under domestic violence since the lockdown measures for the Covid-19 pandemic started in March 2020. Out of 1,708 suicides between January 2019 and May 2021, 83.5 per cent (1,427) involved women.<sup>13</sup>

In such situations as illustrated above, apart from mothers, the most vulnerable are children. Children are often left being vulnerable to negative inputs and influences from peers, and social media, and displaced pampering by their guilt-driven parents. In describing a related scenario from personal observation, Mahmudul Hassan points out in a column of the New Straits Times on December 5<sup>th</sup>, 2022,

The [...] voiceless human being in the family was the toddler who could not say that she needed to be cared for primarily by her parents and family members, not by an outsider. There seems to be a race between certain fathers and mothers in spending time outside the house and leaving their children with domestic helps. They appear to treat their children as objects to be kept somewhere with someone and to be collected at their convenience. Is it the new world we have entered or is it a consequence of feminist interventions in domestic life? What about parental love and care for children? [...] In an interview with

<sup>12</sup> No Author, "Women dilemmas - careers and/or motherhood?", News | Talent A Human Capital, The Malaysian Reserve, March 31<sup>st</sup>, 2017, retrieved December 5<sup>th</sup>, 2022 from <https://themalaysianreserve.com/2017/03/31/women-dilemmas-careers-andor-motherhood>.

<sup>13</sup> Amanda Yeo, "Women's issues require national attention", New Straits Times, April 10<sup>th</sup>, 2022, retrieved December 5<sup>th</sup>, 2022 from <https://www.nst.com.my/opinion/columnists/2022/04/787562/womens-issues-require-national-attention>.

the Guardian book club in the UK during the 2000s, among many questions the late Doris Lessing (1919-2013) discussed with her readers was: “What about the effects on children of the changing relationships between the sexes?”<sup>14</sup>

In addition, a 2022 nationwide survey on the prevalence of undernutrition and associated factors in young children in Malaysia was conducted, with the following findings:

Of the 15,331 children surveyed, prevalence of stunting and at risk of stunting [...] 20.0%, severe and moderate wasting [...] 6.1%, while 21.1% was at risk of underweight. Prevalence of and at risk of overweight [...] 7.3% [...]. One in fifth (25.0%) children had at least one form of undernutrition (stunting and/or underweight/wasting). Of the 1,412 (13.2%) children reported to have risk factors of undernutrition, 47.2% had feeding difficulties, 44.8% had poor dietary intake and 8.0% had both. [...] <sup>15</sup>

There is no direct correlation made between undernutrition and working mothers, though the questions in the survey did include distractions “during mealtime by electronic gadgets, television, etc., being picky with food, limited variety of food”<sup>16</sup>, etc. It is quite reasonable to see possible correlations between the factors for children undernutrition and the concerns at hand.

A quantitative study based on a survey among 306 young offenders between 18 to 21 years old undergoing Community Service Order was done and published in August 2020. Responses were given voluntarily. The study, which serves as an indication to the Malaysian Social Welfare Department to understand the crime pattern among young offenders in Malaysia, yielded “datasets of demographic profile and perpetrator experience in committing crime among young offenders in Malaysia”<sup>17</sup>. According to the study, 94.4% of these young offenders were single, and 49.7% unemployed. A staggering 90.5% of the 306 young offenders were Malays<sup>18</sup> [and presumably Muslims].

Studies done in Malaysia reveal the population of male-to-female transgenders to be around 50,000<sup>19</sup>. The majority of transgenders in Malaysia are Malays (about 80%) and are also Muslims<sup>20, 21</sup>. In Malaysia, about 24,000 *mak nyahs* are sex workers<sup>22</sup>. Another demographic study conducted in November 2010 on 26 pregnant adolescents aged between 12 and 18 residing in a government shelter home in Kuala Lumpur revealed the

<sup>14</sup> Md. Mahmudul Hasan, “Negligence, abuse: Is parenthood in crisis?”, New Straits Times, December 5<sup>th</sup>, 2022, retrieved December 5<sup>th</sup> 2022 from <https://www.nst.com.my/opinion/columnists/2022/12/857980/negligence-abuse-parenthood-crisis>.

<sup>15</sup> Way Seah Lee et al., “Prevalence of undernutrition and associated factors in young children in Malaysia: A nationwide survey”, Front Pediatr. 2022 Aug 18;10:913850. DOI: 10.3389/fped.2022.913850. PMID: 36061396; PMCID: PMC9433651, retrieved October 3<sup>rd</sup>, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9433651/>.

<sup>16</sup> Ibid.

<sup>17</sup> Tharshini NK, Ibrahim F, Zakaria E., “Datasets of demographic profile and perpetrator experience in committing crime among young offenders in Malaysia”, Data Brief, 2020 Jul 2;31:105958. Doi: 10.1016/j.dib.2020.105958. PMID: 32676530; PMCID: PMC7352070, PMC PubMed Central, National Center for Biotechnology Information, National Library of Medicine, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7352070/>, accessed December 12<sup>th</sup>, 2022.

<sup>18</sup> Data from Table 1, *ibid.*,

<sup>19</sup> Ng E., “Malay transsexual loses court bid to change gender Kuala Lumpur, Malaysia”, Yahoo! News; 2011 [cited 2016 27<sup>th</sup> August, 2016], retrieved July 22<sup>nd</sup> 2020 from <https://www.yahoo.com/news/malay-transsexual-loses-court-bid-change-gender-053645639.html>.

<sup>20</sup> The, Y.K., “HIV-related needs for safety among male-to-female transsexuals (mak nyah) in Malaysia”, SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance, 2008, 5(4):178-85.

<sup>21</sup> Wei CL, Baharuddin A, Abdullah R, Abdullah Z, Ern KPC, Transgenderism in Malaysia, *Journal of Dharma*, 2012, (1) (PDF), “Mak nyahs in Malaysia: Does HIV/AIDS knowledge really reduce HIV-related risk behaviours?”, retrieved Jul 20<sup>th</sup> 2020 from [https://www.researchgate.net/publication/329568909\\_Mak\\_nyahs\\_in\\_Malaysia\\_Does\\_HIVAIDS\\_knowledge\\_really\\_reduce\\_HIV-related\\_risk\\_behaviours](https://www.researchgate.net/publication/329568909_Mak_nyahs_in_Malaysia_Does_HIVAIDS_knowledge_really_reduce_HIV-related_risk_behaviours).

<sup>22</sup> M.O.H. National Strategic plan: Ending AIDS 2016-2030. Ministry of Health Malaysia, Putrajaya: 2015.

following data: 92.0% (23) unmarried, 73.1% (19) from urban areas, 69.3% (18) school dropouts, 57.7% (15) lived with both parents, and 96.2% (25) were Malay and Muslim<sup>23</sup>.

Another study, conducted between 2020 and 2021 on 382 Malaysian high school students (13- to 17-year-old) from 10 schools under MOE (in the Petaling Perdana district), among others, revealed the following. 159 (41.6%) have watched pornographic videos, 137 (35.9%) have read pornographic materials, 16 (4.2%) have experienced sexual intercourse, and 2 (.5%) have been pregnant. 89% agreed that women should avoid pre-marital sex, but 47.6% “were unsure or disagreed” if the same holds for men. 24.6% agreed and 15.2% were not sure that “hugs, and kisses are permissible”.<sup>24</sup>

Several issues can be highlighted here. First, children lacking attention and safe care. Second, children’s early upbringing and inculcation of values. What kind of upbringing, physical, intellectual, emotional, spiritual and social nurturing can be guaranteed, when it is substituted by caregivers whose education background can be questionable? What kind of values are ingrained in the children? Can mothers’ duty and love for early childhood care be substituted well? How about the children’s physical health, safety, and overdependence on peers, gadgets and social media? Third, the lack of real support for mothers from spouses, employers and authorities. Fourth, mothers as sandwich caretakers – caring for the very young and the very old. Without proper and sufficient support, these leave many mothers, especially those who are working to suffer from extreme fatigue, distress and depression. Serious questions may be asked relating to the future of the nation and the Muslim *Ummah*. Issues concerning instability, conflicts and crises in the family, affect the young and will eventually affect the nation and *Ummah* negatively with disastrous consequences.

## EMPOWERING MOTHERS – AN ISLAMIC PERSPECTIVE

Should economic considerations *alone* suffice in the agenda for National Development and Progress? What about the quality of the future generation, the future of the nation and that of the *Ummah*? Among whom are usually the ones involved with the following issues: *Rempit*, substance abuse, petty crimes, pre-marital sex and pregnancies, rape and incest, baby dumping, LGBTQ, bribery, misuse of funds, and corruption? As disconcerting as the statistics are, a revisit to the relevant Islamic concepts – which, within its limitation, this paper will only touch a few – is deemed necessary to address the issues. We need to equip women, especially mothers of young children with the proper awareness, knowledge and skills, to enable and empower them to reset their priorities, make the right choices and be forthright confident with their well-informed and well-thought of decisions, so that they may play their maternal roles in giving their time and attention to their children, nurturing and guiding them—unbridled by the pressures and issues related with earning financially.

It is notable that the Qur’an refers to the husband and wife as such:

“*And among His Signs is this, that He created for you mates from among yourselves, that ye may dwell in tranquillity with them, and He has put love and mercy between your (hearts): verily in that are Signs for those who reflect*” (Q. 30:21).

<sup>23</sup> Tan, P. et. Al, “A study on pregnant adolescents residing in a government home: common characteristics and their views on the pregnancy”, *Malays Fam Physician*, 2012 Apr 30;7(1):11-5, DOI: 10.4066/MFP.2012.1710. PMID: 25606239; PMCID: PMC4170443, retrieved October 4<sup>th</sup>, 2023, from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4170443/>.

<sup>24</sup> Abdul Rahman Zulkarnain et. al, “Awareness, knowledge, attitude, and practices towards sexual and reproductive health among secondary school students in Malaysia”, *International Journal of Education, Psychology and Counselling (IJEPC)*, volume 6 Issue 42 (September 2021) PP. 399-412, DOI 10.35631/IJEPC.642031, retrieved October 5<sup>th</sup>, 2023 from <http://www.ijepe.com/PDF/IJEPC-2021-42-09-49.pdf>.

They are, as the Qur'an mentions, garments to one another, "*They are your garments and ye are their garments*" (Q. 2:187)<sup>25</sup>. The "garment" metaphor indicates reciprocal mutual comfort, chastity, beauty, respect, understanding, acknowledgement and protection. Furthermore, the Qur'an states,

*"And We have enjoined on man (to be good) to his parents: in travail upon travail did his mother bear him, and in years twain was his weaning: (hear the command), "Show gratitude to Me and to thy parents: to Me is (thy final) Goal"."* (Q. Luqman 31: 14).

According to a Prophetic *ḥadīth*, it was narrated from Mu'awiyah bin Jahimah As-Sulami, that Jahimah came to the Prophet (ﷺ) and said:

"O Messenger of Allah! I want to go out and fight (in *Jihad*) and I have come to ask your advice." The Prophet (ﷺ) said, "*Do you have a mother?*" He said, "Yes". The Prophet (ﷺ) said, "*Then stay with her, for Paradise is beneath her feet.*"<sup>26</sup>

In another *ḥadīth*, Abu Hurairah reported that a person said:

"Allah's Messenger, who amongst the people is most deserving of my good treatment?" The Prophet (ﷺ) said, "*Your mother*", again "*Your mother*", again "*Your mother*", then "*Your father, then your nearest relatives according to the order (of nearness)*".<sup>27</sup>

One may ask, why such precedence for the mother? Such honour comes with due responsibilities. In Islamic tradition and understanding, among the roles of a father are to earn for the family, to feed and clothe his wife and children as best as he possibly can, to put a roof of safety and to care for them, to cherish, sustain, and provide education and training for his children up until they reach puberty (and up-to marriage in the case of daughters), and to ensure the holistic wellbeing of his wife and children. These roles are in line and in harmony with the *fiṭrah* - innate nature as ingrained by God - in men. From Islamic tradition, among the roles of a mother, in line and in harmony with her *fiṭrah* of loving, caring and nurturing with patience, and perseverance—is that she is her child's first *madrasah*. While the father takes charge of the external affairs of the family, the mother is fully equipped – physically, physiologically, emotionally, psychologically, spiritually and intellectually – to take care of the wellbeing of the family and internal affairs of the home.<sup>28</sup> A well-educated mother who invests her

<sup>25</sup> Abdullah Yusuf Ali commented, ... they are for mutual support, mutual comfort, and mutual protection, fitting into each other as a garment fits the body. A garment also is both for show and concealment.

Retrieved October 10<sup>th</sup>, 2023, from [https://www.islamicity.org/quransearch/index.php?q=2%3A187#id\\_COMMENTARY](https://www.islamicity.org/quransearch/index.php?q=2%3A187#id_COMMENTARY).

<sup>26</sup> Grade: *Sahih* (Darussalam), Reference: *Sunan an-Nasa'i* 3104. In-book reference: Book 25, Hadith 20, English translation : Vol. 1, Book 25, Hadith 3106, retrieved accessed Dec. 12<sup>th</sup>, 2022, from <https://sunnah.com/nasai:3104>.

<sup>27</sup> Grade: *Sahih*, Reference: *Translation of Sahih Muslim*, Book 32, number 6181, *Kitab Al-Birr wa al-Salat-i-wa'l-Adab* (The Book of Virtue, Good Manners and Joining of the Ties of Relationship), Chapter 1: "Politeness Towards Parents and Their Right To It". In-book reference: Book 32, Number 6180, retrieved December 12<sup>th</sup>, 2022 from [https://www.iium.edu.my/deed/hadith/muslim/032\\_smt.html#:~:text=Book%2032%2C%20Number%206181%3A,the%20order%20\(of%20nearness\)](https://www.iium.edu.my/deed/hadith/muslim/032_smt.html#:~:text=Book%2032%2C%20Number%206181%3A,the%20order%20(of%20nearness)).

<sup>28</sup> An online feed state, Not only is it an all-important task, only women are uniquely qualified to do it. It is not by accident that pregnancy and nursing are purely feminine tasks. Allah has given women the special talents and psychological makeup needed to take care of children. There is no substitute for mother's milk or mother's love. No one can extract a bottle of motherly compassion. Her patience, kindness, willingness to sacrifice her own comforts, and her natural affinity for children — and the children's natural affinity for the mother— are the key to successful upbringing of children. A mother understands the children's problem even when they cannot express it. She can uniquely sense their needs, both physical and emotional. She can satisfy some of these herself. For others, children need the father. But even he needs her insights in discharging his responsibilities in this area. No day care center or nursery can make up for the absence of the mother and father.

Mothers are the silent workers who are indispensable for building character of the next generation. A believing mother who understands the crucial nature of her responsibility will imbue her children with faith and moral values, as much as she can. She will raise children with courage, honesty, truthfulness, patience and perseverance, love and kindness, faith and self-confidence. On the other hand, a society without mothers and home-makers will produce at-risk youth.

education and training in the nurturing, guiding and upbringing of her children is the most noble duty for her as a mother. With sincerity, the noble duties of the husband and wife and as parents are considered as *jihād*, a noble striving in the Path of Allah. The burden of the duty to earn for the family in normal circumstances is specifically not on her. This falls squarely on the shoulders of her husband. After her husband, this falls onto the shoulders of her male relatives, from the nearest to the furthest, in that order, and to the state.

One may ask again, why such precedence for the mother? According to an online feed by a Montessori website, AIM, “Why Your Child’s Brain is like a Sponge”, for the first six years, the child absorbs practically everything. Mary Ellen Maunz states that,

“The absorbent mind is one of the most important ideas in early childhood education. The absorbent mind makes our adult lives possible.”<sup>29</sup>

George Lucas Educational Foundation’s Edutopia states,

Children’s brains develop in spurts called critical periods. The first occurs around age 2, with a second one occurring during adolescence. At the start of these periods, the number of connections (synapses) between brain cells (neurons) doubles. Two-year-olds have twice as many synapses as adults. Because these connections between brain cells are where learning occurs, twice as many synapses enable the brain to learn faster than at any other time of life. Therefore, children’s experiences in this phase have lasting effects on their development.<sup>30</sup>

Hence, women’s roles as mothers, especially for the very young children between birth and the age of 7 are crucial. This does not mean that the full attention of mothers for their children in the years beyond are unimportant. It is worthy of note the 2-year suckling period for the infant as prescribed by the Qur’an (Q. 2: 233). The merits of mothers’ milk and the mother-infant bond so-created during this breast-feeding period are crucial in early childhood, with lasting effects. Whatever these young children observe, experience, live to hear and see in their early years become permanently etched in them and become part of who they are. Schooling children need to come home from school to a safe, sound, and reassuring environment at home. A healthy, stable, organised, loving, caring, nurturing and well-structured home is essential to ensure their healthy well-being, wholesome upbringing and character moulding. These in turn will ensure wholesome traits of the next generation, the nation and the *Ummah*.

The *full and undivided* role of mothers for their children and the internal affair in their home is indispensable. Thus, every effort must be made—personal, extended families, society, private organisations, NGOs and government—to support them in their functions, especially when their children are still very young. In this respect, the initiatives of the Swedish government for example, in providing parental allowance and child benefits for stay-at-home mothers<sup>31</sup> must be studied and emulated. They must be empowered to have the confidence to choose as stay-home mothers, as long as necessary, without the expectation and urge and compulsion for them to earn their living or contribute to the family financially. Fathers must be made to realise

No author, “Muslim Woman’s Role as a Mother”, in IslamOnline, retrieved October 3<sup>rd</sup>, 2023, from <https://fiqh.islamonline.net/en/muslim-womans-role-as-a-mother/>.

<sup>29</sup> No author, no date, retrieved December 6<sup>th</sup> 2022, from <https://aimmontessoriteachertraining.org/why-your-childs-brain-is-like-a-sponge/>.

<sup>30</sup> Rishi Sriram, “Brain-Based Learning: Why Ages 2-7 Matter So Much for Brain Development”, Rich experiences—from play to the arts and relationships—fundamentally shape a young child’s development, June 24<sup>th</sup>, 2020, retrieved Dec. 12<sup>th</sup>, 2022 from <https://www.edutopia.org/article/why-ages-2-7-matter-so-much-brain-development/>.

<sup>31</sup> See Secretary-General of the OECD, “Family-friendly policy recommendations for Canada, Finland, Sweden and the United Kingdom” in *Babies and Bosses - Reconciling Work and Family Life (Volume 4): Canada, Finland, Sweden and the United Kingdom*, Paris: Organisation for Economic Co-Operation and Development, 2005, p.13, available at [https://read.oecd-ilibrary.org/social-issues-migration-health/babies-and-bosses-reconciling-work-and-family-life-volume-4\\_9789264009295-en#page5](https://read.oecd-ilibrary.org/social-issues-migration-health/babies-and-bosses-reconciling-work-and-family-life-volume-4_9789264009295-en#page5), and <https://doi.org/10.1787/9789264009295-en>.

that the onus of earning for the family – his wife and his children – and providing for them fall squarely on their shoulders—even if they must hold multiple jobs. No one can sufficiently substitute mothers for a healthy and wholesome childhood upbringing. Men must be educated through all channels possible – government, NGOs and private entities to understand that it is unbecoming of manliness to put this burden also on their wives. In the Islamic understanding, the duties of the husband and the wife as described briefly above are divinely prescribed, and as such are sacrosanct and accountable by God.

## CONCLUSION

Surely, for the growth of the Nation, women's contributions to the economy are needed, together with those of men. However, not only in terms of the economy, but women's contributions are also specifically crucial for the well-being, stability and wholesomeness of the family, especially during the early childhood period of their children. We cannot afford to compromise on this, as evidence are glaringly clear in the data availed from studies, some of which are quoted above. To empower women, men need to realise that the duty of earning for the family is squarely on their shoulders. In the case that this is not possible, then this duty falls onto the adult Muslim *'aṣabah* (consanguine relatives), as the *walī* (guardian) to undertake the role of the father in cherishing, sustaining, educating and training, including financially taking care of the necessities. Parents need to know and act upon the value of motherhood, and priorities must be given for it especially for young children. Pre-Marriage courses must emphasise on the above.

The government, leaders, and society need to realise the importance of mothers' influence in raising physically, emotionally, psychologically, intellectually, socially and spiritually healthy citizens, which in turn will support the nation's internal stability. Government authorities, non-governmental organisation, private entities and society must facilitate mothers in spending undivided time in nurturing their young children, through extended maternity leave, encouragement to be stay-at-home mothers for the crucial early years of the child, and encouragements to welcome them back after an extended period of leave. These are part of the investments needed to secure a bright future for the nation and *Ummah*.

One may argue that such measures will push women back into the kitchen despite their increasing levels of excellence in education, training, and performance, often surpassing those of men—a seemingly paradoxical proposition in the effort to hoist Malaysia forward. On the contrary, these measures are indeed very futuristic. They are futuristic in three ways. Firstly, perhaps the phenomena of women outperforming men has caused the latter to feel unobliged. It is time that women let their spouses to exert themselves, take due charge to be fully functioning and chivalrous and live up to the Qur'anic expectation of them.

*“Men are the protectors and maintainers of women, because Allah has given the one more (strength) than the other, and because they support them from their means”* (Q. 4: 34).

When this returns as the norm of society, then we may be able to see balance in enrolment and performance in education, instead of males being outperformed by females, a disparity since more than a decade ago<sup>32</sup>.

<sup>32</sup> See, for example,

Bernama, “Women's achievement surpasses men's in educational attainment, says DOSM”, New Straits Times, December 22, 2022 @ 7:29pm, <https://www.nst.com.my/news/nation/2022/12/863509/womens-achievement-surpasses-mens-educational-attainment-says-dosm>.

Zalizan Mohd Jelasa, Hazariah M. Dahanb, “Gender and Educational Performance: The Malaysian Perspective”, International Conference on Learner Diversity 2010, *Procedia - Social and Behavioral Sciences*, Volume 7, (2010), Pages 720-727, ISSN 1877-0428, <https://doi.org/10.1016/j.sbspro.2010.10.098>. (<https://www.sciencedirect.com/science/article/pii/S1877042810021026> )

Wan Chang Da, “The Changing Gender Disparity in Malaysian Higher Education: Where are the boys?”, Bulletin, National Higher Education Research Institute, Universiti Sains Malaysia, (no date), [http://eprints.usm.my/34889/1/BULLETIN\\_20\\_PART\\_2.pdf](http://eprints.usm.my/34889/1/BULLETIN_20_PART_2.pdf).

Secondly, empowering women to prioritise and to make the right course of actions for the sake of their children will indeed secure the integrity and wholesomeness of the family. Societies and nations stand on the foundation of their basic nuclei, namely the family institution. It cannot be denied that families' wholesome well-being, sound growth and integrity will likewise secure wholesome well-being, sound growth and integrity of the Nation and her future, and the future of the *Ummah*. Thirdly, raising holistically healthy, well-balanced, sound, caring and responsible children are parents' most crucial investments not only for the society and nation, but also for their own future. These children will in turn take full responsibility in caring for them in their feeble old age. In Islamic tradition, the above indeed constitutes as part of parents' most valuable investments with benefits that furnish them to the hereafter. Reported by Abu Hurayrah (may Allah be pleased with him), the Messenger of Allah (ﷺ) said,

*“When a man [or a woman] dies, his [or her] deeds come to an end except for three things: Sadaqah Jariah (ceaseless charity); a knowledge which is beneficial, or a virtuous descendant who prays for him [or her] (for the deceased for his well-being after-life).”*<sup>33</sup>

We all need the prayers of our good children and their good deeds based on the nurturing and knowledge that we instil in them since their infancy for our inevitable future.

## REFERENCES

- Abdul Rahman Zulkarnain et. al. (September 2021). “Awareness, knowledge, attitude, and practices towards sexual and reproductive health among secondary school students in Malaysia”. *International Journal of Education, Psychology and Counselling* (IJEPC). Volume 6 Issue 42 (September 2021) PP. 399-412. DOI 10.35631/IJEPC.642031. <http://www.ijepe.com/PDF/IJEPC-2021-42-09-49.pdf>. Accessed October 5<sup>th</sup>, 2023.
- Abdullah Yusuf Ali. (No date). Commentary, Islamicity Qur'anSmartSearch. [https://www.islamicity.org/quransearch/index.php?q=2%3A187#id\\_COMMENTARY](https://www.islamicity.org/quransearch/index.php?q=2%3A187#id_COMMENTARY). Accessed October 4<sup>th</sup>, 2023.
- Arina Sofiah. (August 26<sup>th</sup>, 2022). “Participation of women in Malaysia's labour market is still low: PM Datuk Seri Ismail”. Human Resources Online.net. <https://www.humanresourcesonline.net/participation-of-women-in-the-malaysia-s-labour-market-is-still-low-pm-datuk-seri-ismail>. Accessed Dec. 1<sup>st</sup>, 2022.
- Bernama. (2019). “Malaysia ranks high in women's educational attainment, says Dr Wan Azizah”. Malay Mail. <https://www.malaymail.com/news/malaysia/2019/11/07/malaysia-ranks-high-in-womens-educational-attainment-says-dr-wan-azizah/1807845>. Accessed December 1<sup>st</sup>, 2022.
- Bernama. (December 22, 2022). “Women's achievement surpasses men's in educational attainment, says DOSM”. New Straits Times, @ 7:29pm. <https://www.nst.com.my/news/nation/2022/12/863509/womens-achievement-surpasses-mens-educational-attainment-says-dosm>. Accessed October 5<sup>th</sup>, 2023.
- Da, W.C. (No date). “The Changing Gender Disparity in Malaysian Higher Education: Where are the boys?”. *Bulletin*. National Higher Education Research Institute, Universiti Sains Malaysia. [http://eprints.usm.my/34889/1/BULLETIN\\_20\\_PART\\_2.pdf](http://eprints.usm.my/34889/1/BULLETIN_20_PART_2.pdf).
- Hasan, M.M. (December 5, 2022). “Negligence, abuse: Is parenthood in crisis?”. New Straits Times. <https://www.nst.com.my/opinion/columnists/2022/12/857980/negligence-abuse-parenthood-crisis>. Accessed Dec 5<sup>th</sup>, 2022.

<sup>33</sup> *Sahih Muslim*, from The Book of Knowledge, *Riyad as-Salihin* 1383, In-book reference: Book 12, *Hadith* 8, retrieved October 4<sup>th</sup>, 2023 from <https://sunnah.com/riyadussalihin:1383>.

- International Monetary Funds (April 2, 2018). IMF Blog. “Chart of the Week: Malaysia Needs More Women in the Workforce”. <https://www.imf.org/en/Blogs/Articles/2018/04/02/chart-of-the-week-malaysia-needs-more-women-in-the-workforce>. Accessed December 1<sup>st</sup>, 2022.
- Lee, W.S. et al. (August 2022). “Prevalence of undernutrition and associated factors in young children in Malaysia: A nationwide survey”. *Front Pediatr.* 2022 Aug 18;10:913850. DOI: 10.3389/fped.2022.913850. PMID: 36061396; PMCID: PMC9433651. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9433651/>. Accessed October 3<sup>rd</sup>, 2023.
- M.O.H. (2015). National Strategic plan: Ending AIDS 2016-2030. Ministry of Health Malaysia, Putrajaya.
- Ng E. (2011). “Malay transsexual loses court bid to change gender Kuala Lumpur, Malaysia”, Yahoo! News. [Cited 27<sup>th</sup> August 2016]. <https://www.yahoo.com/news/malay-transsexual-loses-court-bid-change-gender-053645639.html>. Accessed July 22<sup>nd</sup>, 2020.
- No Author. (April 2<sup>nd</sup>, 2018). “Chart of the Week: Malaysia Needs More Women in the Workforce”. In Education. IMFBlog. <https://www.imf.org/en/Blogs/Articles/2018/04/02/chart-of-the-week-malaysia-needs-more-women-in-the-workforce>. Accessed October 3<sup>rd</sup>, 2023.
- No Author. (April 2<sup>nd</sup>, 2018). “Malaysia Needs More Women in the Workforce”. IMFBlog. <https://www.imf.org/en/Blogs/Articles/2018/04/02/chart-of-the-week-malaysia-needs-more-women-in-the-workforce>. Accessed December 11<sup>th</sup>, 2022.
- No Author. (March 31st, 2017). “Women dilemmas - careers and/or motherhood?”. News | Talent A Human Capital, The Malaysian Reserve, <https://themalaysianreserve.com/2017/03/31/women-dilemmas-careers-andor-motherhood/>. Accessed Dec. 5<sup>th</sup>, 2022.
- No Author. (No date). “Why Your Child’s Brain is like a Sponge”. AIM. Authentic Institute of Montessori. <https://aimmontessoriteachertraining.org/why-your-childs-brain-is-like-a-sponge/>. Accessed 7<sup>th</sup> Dec 2022.
- No Author. (September 2019). “Toward Better Economic Opportunities for Women: Lessons from Malaysia”. In Knowledge & Research: The Malaysia Development Experience Series. World Bank Group. <https://www.worldbank.org/en/results/2020/04/21/toward-better-economic-opportunities-for-women-lessons-from-malaysia>. Accessed September 29<sup>th</sup>, 2023.
- OECD. (2005). “Family-friendly policy recommendations for Canada, Finland, Sweden and the United Kingdom” in *Babies and Bosses - Reconciling Work and Family Life (Volume 4): Canada, Finland, Sweden and the United Kingdom*. Paris: Organisation for Economic Co-Operation and Development. Available at [https://read.oecd-ilibrary.org/social-issues-migration-health/babies-and-bosses-reconciling-work-and-family-life-volume-4\\_9789264009295-en#page5](https://read.oecd-ilibrary.org/social-issues-migration-health/babies-and-bosses-reconciling-work-and-family-life-volume-4_9789264009295-en#page5) and <https://doi.org/10.1787/9789264009295-en>.
- Rishi Sriram. (June 24, 2020). “Brain-Based Learning: Why Ages 2-7 Matter So Much for Brain Development, George Lucas Educational Foundation, <https://www.edutopia.org/article/why-ages-2-7-matter-so-much-brain-development/>. accessed Dec. 12<sup>th</sup>, 2022.
- Riyad as-Salihin, Kitab al-'Ilm* (The Book of Knowledge). Book 12, Hadith 8. <https://sunnah.com/riyadussalihin:1383>. Accessed October 4<sup>th</sup>, 2023.
- Sahih Muslim, Kitab al-Birr wa al-Salat-i-wa'l-Adab* (The Book Of Virtue, Good Manners And Joining Of The Ties Of Relationship), Book 32, Number 6180, [https://www.iium.edu.my/deed/hadith/muslim/032\\_smt.html#:~:text=Book%2032%2C%20Number%206181%3A,the%20order%20\(of%20nearness](https://www.iium.edu.my/deed/hadith/muslim/032_smt.html#:~:text=Book%2032%2C%20Number%206181%3A,the%20order%20(of%20nearness). Accessed Dec. 12<sup>th</sup>, 2022.

- Sayeh, A.M., Badel, A. and Goyal, R. (September 27<sup>th</sup>, 2023). “Countries That Close Gender Gaps See Substantial Growth Returns - Empowering women economically is a powerful engine of inclusive growth”. In Gender. IMFBlog. <https://www.imf.org/en/Blogs/Articles/2023/09/27/countries-that-close-gender-gaps-see-substantial-growth-returns>. Accessed September 29<sup>th</sup>, 2023.
- Sharifah Nabilah Syed Salleh and Norma Mansor. (2022). “Women and Labour Force Participation in Malaysia, Malaysian Journal of Social Sciences and Humanities”. (MJSSH) (e-ISSN : 2504-8562) 2022, Volume 7, Issue 7, e001641, DOI: <https://doi.org/10.47405/mjssh.v7i7.1641>. Accessed December 1<sup>st</sup>, 2022.
- Sunan an-Nasa'i* 3104, Book 25, Hadith 20, English translation : Vol. 1, Book 25, Hadith 3106, <https://sunnah.com/nasai:3104>. Accessed December 12<sup>th</sup>, 2022.
- Sunan an-Nasa'i* 3104. In-book reference: Book 25, Hadith 20. English translation: Vol. 1, Book 25, Hadith 3106. <https://sunnah.com/nasai :3104>. Accessed Dec. 12<sup>th</sup>, 2022.
- Syida Lizta Amirul Ihsan. (July 6, 2018). “Working parents' dilemma”. New Straits Times. <https://www.nst.com.my/opinion/columnists/2018/07/387862/working-parents-dilemma>. Accessed December 5<sup>th</sup>, 2022.
- Tan, P. et. Al. (April 2012). “A study on pregnant adolescents residing in a government home: common characteristics and their views on the pregnancy”. Malays Fam Physician. 2012 Apr 30;7(1):11-5. DOI: 10.4066/MFP.2012.1710. PMID: 25606239; PMCID: PMC4170443. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4170443/>. Accessed October 4<sup>th</sup>, 2023.
- Teh, Y.K. (January 2009). “HIV-related needs for safety among male-to-female transsexuals (*mak nyah*) in Malaysia”. *SAHARA: Journal of Social Aspects of HIV/AIDS Research Alliance*, 5(4):178-85. DOI: 10.1080/17290376.2008.9724917. Available at [https://www.researchgate.net/publication/23981001\\_HIV-related\\_needs\\_for\\_safety\\_among\\_male-to-female\\_transsexuals\\_mak\\_nyah\\_in\\_Malaysia](https://www.researchgate.net/publication/23981001_HIV-related_needs_for_safety_among_male-to-female_transsexuals_mak_nyah_in_Malaysia).
- Tharshini NK, Ibrahim F, Zakaria E. (July 2020). “Datasets of demographic profile and perpetrator experience in committing crime among young offenders in Malaysia”. Data Brief. 31:105958. DOI: 10.1016/j.dib.2020.105958. PMID: 32676530. PMCID: PMC7352070. PMC PubMed Central, National Center for Biotechnology Information, National Library of Medicine. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7352070/>. Accessed December 12<sup>th</sup>, 2022.
- The World Bank. (April 21, 2020). IBRD.IDA. “Toward Better Economic Opportunities for Women: Lessons from Malaysia”. <https://www.worldbank.org/en/results/2020/04/21/toward-better-economic-opportunities-for-women-lessons-from-Malaysia>. Accessed Dec. 1<sup>st</sup>, 2022.
- Translation of Sahih Muslim*. Book 32, number 6181. *Kitab Al-Birr wa al-Salat-i-wa 'l-Adab* (The Book of Virtue, Good Manners and Joining of the Ties of Relationship). Chapter 1: “Politeness Towards Parents and Their Right To It”. In-book reference: Book 32, Number 6180. [https://www.iium.edu.my/deed/hadith/muslim/032\\_smt.html#:~:text=Book%2032%2C%20Number%206181%3A,the%20order%20\(of%20nearness\)](https://www.iium.edu.my/deed/hadith/muslim/032_smt.html#:~:text=Book%2032%2C%20Number%206181%3A,the%20order%20(of%20nearness)). Accessed December 12<sup>th</sup>, 2022.
- Wei CL, Baharuddin A, Abdullah R, Abdullah Z. (2012). Ern KPC, Transgenderism in Malaysia, Journal of Dharma, 2012, (1) (PDF), “Mak nyahs in Malaysia: Does HIV/AIDS knowledge really reduce HIV-related risk behaviours?”. [https://www.researchgate.net/publication/329568909\\_Mak\\_nyahs\\_in\\_Malaysia\\_Does\\_HIVAIDS\\_knowledge\\_really\\_reduce\\_HIV-related\\_risk\\_behaviours](https://www.researchgate.net/publication/329568909_Mak_nyahs_in_Malaysia_Does_HIVAIDS_knowledge_really_reduce_HIV-related_risk_behaviours). Accessed July 20<sup>th</sup>, 2020.

- Yeo, A. (April 10, 2022). “Women's issues require national attention”. New Straits Times. <https://www.nst.com.my/opinion/columnists/2022/04/787562/womens-issues-require-national-attention>. Accessed December 5<sup>th</sup>, 2022.
- Zalizan Mohd Jelasa, Hazadiah M. Dahanb. (2010). “Gender and Educational Performance: The Malaysian Perspective”. International Conference on Learner Diversity 2010. *Procedia - Social and Behavioral Sciences*. Volume 7: 720-727. ISSN 1877-0428. <https://doi.org/10.1016/j.sbspro.2010.10.098>. (<https://www.sciencedirect.com/science/article/pii/S1877042810021026>.)