

Article

Socialization Patterns and Work Perceptions: Evidence from Programming Students at the University of Malaya

Page | 381

¹Chi, Jie Yang

¹Department of Anthropology and Sociology, Malaysia

CITATION

. (2026). Socialization Patterns and Work Perceptions: Evidence from Programming Students at the University of Malaya, *Intercontinental Social Science Journal*. 3(1), 381-401. <https://doi.org/10.62583/7rvkv346>

Received 19 Dec 2025

Accepted: 16 Jan 2026

COPYRIGHT



Copyright © 2024 by author(s).

Intercontinental Social Science Journal, published by Pierre Online Publications Ltd. This work is licensed under the [Creative Commons Attribution \(CC BY\) license](https://creativecommons.org/licenses/by/4.0/).

Abstract: Socialization is an important aspect that shapes values, attitudes, and behavioural orientations of individuals towards work and professional responsibility. In modern knowledge economies like Malaysia, the knowledge of these influences has become of utmost significance especially in students who are about to embark on a career in technology related -industries. The study aims to examine the connection between the socialisation patterns and development of cognitive and social perceptions of work among the students of programming and computer science at the University of Malaya. The research design adopted in the study was quantitative descriptive research design in which a structured questionnaire was used to gather data on a sample of the undergraduate students. The instrument measured the three key patterns of socialization, which include authoritarian, permissive, and democratic, and how these patterns affect the perception of work among students. The relationships between the variables of the study were analysed using descriptive statistics and correlation analysis to understand the relationship between the variables. The findings indicated that the most common pattern of socialization was the democratic or balanced one which was related positively to the positive work related- attitudes such as responsibility, independence and initiative. Conversely, socialization patterns such as authoritarian and permissive were linked with relatively unfavourable attitudes towards work, including the limited confidence in decision-making or poor self-discipline. The research has also added to the body of sociological literature by providing insights on how the socialization process of the family can influence the work-related attitude of the university students studying technology-oriented subjects. The findings provide insights that can guide universities, families and policymakers in ensuring that they inculcate positive work values and professional preparedness in future graduates.

Keywords: *Family, Socialization patterns, work perceptions, university students, Malaysia*

Introduction

Socialization is among the most basic processes whereby individuals learn the values, norms as well as the patterns of behaviour required to operate in society (Saras, 2018; Grusec, 2021). From early childhood to adulthood, the social expectations become embedded in people as they engage with their most important social institutions including family, educational systems, peer groups, and the overall culture. All these institutions play a role in building attitudes, perceptions, and behavioural orientations of people on different issues in life including work and professional responsibility (Arnett, 1995; Parke & Buriel, 2008; Jaiswal, 2025).

In the context of sociological literature, socialization is not simply considered as a means of imparting knowledge; however, This is a complex process in which individuals come to acquire cognitive systems that serve to shape their social behaviour and decision making (Karpov, 2016; Myers, 2010). These theories are important in determining how people value work, construct an understanding of what work means, and how much they engage in professional practices (Shahr, 2019; Valutis et al., 2012).

The family as one of the core agents of socialization plays a key role in passing social norms of discipline, responsibility, and success (Saputra et al., 2023; Jaiswal, 2025). Young people acquire behavioural patterns that shape their behavioural attitudes to education, employment and social life through their daily interpersonal interactions with parents and other family members (Loughlin & Barling, 2001). The educational institutions play a key role in this process as well, as they help to strengthen the work-related values of commitment, perseverance, and cooperation (Khojanazarova, 2022; White, 2010).

In modern societies, the phenomenon of rapid economic change and advancements in technology have increased the need to understand of the way in which young people form opinions towards work (Khatun & Saadat, 2022; Omarova ET AL., 2024) . Malaysia, similar to other emerging economies, is rapidly transitioning towards a knowledge-based and technology-intensive economy (Mustapha & Abdullah, 2004; Elhini & Mourad, 2022). Such a transformation has contributed to the high demand of well skilled graduates particularly in programming and computer science. This has made the study of the effectiveness of the workforce-preparation process as primarily influenced by socialization processes an important issue to educational institutions and policymakers aiming to enhance workforce preparedness (Ramasamy, N., & Rowley, 2013).

University students are also an important part of the society since they are the age group who is undergoing a transition period between education and career life. Their work perceptions do not only affect their career inclinations but also their motivation, productivity and long-term professional interest (Sari, 2018; Tsaousides & Jome, 2008).

It is on this basis that this study investigates the the relationship between socialization patterns and development of the cognitive and social perceptions of work among programming students in the University of Malaya. The analysis on the effect of various patterns of family socialization on developing perceptions of work among students will aim at contributing insights that can be helpful in enhancing positive work values among university students in the Malaysian society.

Significance of the Study

This study is significant because of the theoretical and practical contributions to sociological studies in the field of socialization and work-related attitudes.

Theoretically, the research adds to the growing body of literature that investigates the effect of socialization processes on the perception of social roles and professional duties by individuals. With the interest in the university students, the study points out the continuation of the influence of the early family experiences in work-related attitudes to later stages of the educational development.

Practically, the results can be of help to universities and educational policymakers to identify the social variables that shape the professional orientations of the students. The role of universities in equipping students with the necessary skills to operate in the modern labour markets is increasingly becoming significant in the context of providing academic knowledge.

Moreover, the research offers an insight that can guide families and educators to appreciate the need to ensure socialization practices are balanced to encourage responsibility and independence among the youth and develop positive work attitudes.

Lastly, the research addresses a gap in sociological research on the association between socialization tendencies and work perception among technology-related major students in the Malaysian context of higher educational institutions.

Research Problem

Work is one of the key aspects of social identity and economic involvement. Nevertheless, there are significant differences in how individuals value work, their degree of commitment to professional duties, and their readiness to work productively (Grusec & Davidov, 2019).

According to previous studies, these differences are usually developed based on socialization in the family and in school settings. The socialization patterns determine the way in which people internalize values like discipline, responsibility, independence, and achievement. These values later influence the perception of work and the role of the people in the labour market (Sjamsir et al., 2024; Chiu et al., 2018).

Although employability and professional preparedness have increasingly become the key factors of graduate performance in universities, limited attention has been given to the roles of socialization patterns on the perceptions of work by students especially those studying the technology-based academic programmes.

The students of programming and computer science will become one of the main segments of the digital workforce in Malaysia. Understanding how their socialization experiences influence their attitudes toward work can be valuable for improving education practices and career preparation programs.

Based on this, it is possible to formulate the main research problem of the given study as follows: How do socialisation patterns affect the development of cognitive and social perceptions of work by students of the University of Malaya studying programming?

Research Objectives

The following objectives are expected to be met in this study:

To identify the prevailing patterns of socialization among programming students in the University of Malaya.

To examine the relationship between socialization patterns and mental and social image of work among university students.

To examine the hypothesis of variation in perception of work based on the demographic variables that are chosen e.g. gender.

Research Questions

The questions that the study aims to respond to are as follows:

1. What are the prevailing trends of socialization among the University of Malaya programming students?
2. What is the impact of socialization patterns on the mental and social perceptions of work among the students?

Research Hypothesis

H₀: There is no statistically significant relationship between socialisation patterns and the cognitive and social perceptions of work among programming students at the University of Malaya.

Literature Review

Previous studies which have investigated the connection between socialization and work-related attitudes can broadly be grouped into two strands. The former deals with family and educational socialization concerning values, responsibility, and professional orientations of individuals. The second one looks at the way institutional and organizational settings shape the perceptions of work, career expectations, and professional engagement of people.

In the family socialization field, several studies have highlighted the role of parenting styles in forming the behavioural orientations and attitudes of young people towards responsibility and work. To illustrate, as illustrated by Baumrind (1991), the democratic parenting styles will most likely encourage independence, responsibility, and self-regulation in the youths, whereas authoritarian parenting will not allow young individuals to initiate and be more certain with their decisions. In a similar study, Pinquart (2017) concluded that balanced parental support and explicit behavioural expectations have a beneficial effect on academic engagement and responsibility of students.

Besides family factors, it is evident that educational background and institutional conditions are also influential factors in formation of work-related attitudes. Organizational and educational sociological research proposes that institutional contexts that are supportive to positive professional identities and enhanced commitment to work roles are likely to emerge (Eccles and Wigfield, 2002; Mortimer, 2010). These factors are especially applicable in the context of higher education where students are moving away and out of the academic sphere and into the preparation of their professional career.

More recent research studies within Asian contexts have also highlighted the importance of structured socialization processes in the development of employability as well as professional behaviour. Indicatively, Ng et al., (2024) observed that, among Malaysian graduates, employability and organizational commitment were greatly enhanced with effective socialisation strategies. Equally, Bauer et al., (2007) also found that organizational socialization has a beneficial impact on proactive behaviour and innovative performance of employees by improving their confidence and assimilation in professional settings.

Moreover, the current body of research shows an increasing role of digital and social media spaces on the process of socialization of youth. It is possible to say that the social media is playing an increasingly

important role in influencing the values, aspirations, and the vision of work and professional success in students (Twenge and Campbell, 2012).

Although the research on socialization and the work values has increased, there is a scarcity of empirical that have been conducted to determine the way family socialization patterns affect mental and social image of work in university students in technology-oriented fields of higher education in Asian contexts. This gap is particularly relevant in the fast growing knowledge economies like Malaysia where the students of programming and technology are the crucial audience of the future workforce. In this regard, the study will aim at discussing the effects of various patterns of family socialization on the development of work-related perception among programming students of the University of Malaya.

Theoretical Framework

The current study draws on three significant theoretical perspectives to explain how socialisation influences individuals' attitudes towards work.

Bourdieu's Theory of Social Capital

Bourdieu (1986) asserts that people learn about the social structures by having a habitus, which is a system of dispositions as influenced by family background and cultural experiences. These dispositions shape how people perceive opportunities and how they are inclined towards learning and employment.

Parsons' Social Systems Theory

Parsons (1951) emphasises the importance of social institutions in passing social norms, as well as equipping people to play their part in the society. Values like responsibility, discipline, and cooperation are some values inherited by individuals through socialization and which help them in their involvement in the economic life.

Social Learning Theory

According to the Social Learning Theory (1977) of Bandura, behavioural patterns are learned by observing and imitating the role models. The values that young people incorporate in their work are often based on the expectations and behaviours of the parents and teachers as well as their peers.

The combination of these theoretical viewpoints describes the way in which the experiences of socialization shape the perception people have about work and their professional behaviour.

Research Gap

Despite the past studies which have investigated the significance of socialization in the development of individual behaviour, there are various gaps in the literature available.

To begin with, numerous researches are mostly dedicated to organizational socialization of the employees, but not to the formation of perceptions of work in the older age of university students in its initial phases.

Second, the literature on the topic has mainly been carried out in the West context, with little research touching on the connection between socialization and work perceptions in students of the Asian higher education systems.

Thirdly, little attention has been given to the students in the technology-related fields including programming and computer science even when they are becoming relevant in the knowledge based economies.

This research thus adds to the literature through the investigation of the effect of socialization patterns on the work perception of the programming students at the University of Malaya.

Methodology

Research Design

The research design in this study is quantitative descriptive research design with an application of the social survey method to examine the relationship between socialization patterns and the development of cognitive and social perceptions of work among the university students. The survey strategy suits the study as it enables the development of a systematic gathering and examination of data on a specified population to determine patterns, associations and tendencies of the variables under study.

A structured questionnaire was that would help to collect information about the current patterns of socialization and how it may affect the perceptions of students towards work. The instrument was aimed at measuring three main patterns of socialization such as the authoritarian, permissive and democratic and how these patterns help to shape the mental and social perceptions of work among the students.

The purpose of the research and the voluntary nature of the participation were informed to the participants before they received the questionnaire. The respondents were promised that their responses would be kept confidential and they would be used to conduct academic research only.

Population and Sample

Students in the Programming and Computer Science Department of the University of Malaya, Kuala Lumpur, Malaysia, are the population of the study. Programming and computer science students form a significant portion of the workforce of the online economy. Their academic preparation and professional training are directly related to technological innovation, problem solving and demands of

global labour market. As such, it is specifically important to investigate their views on work and how social influences influence these views.

The participants of the target population were selected using a stratified random sampling method to make sure that they are properly represented in terms of significant demographic variables. The last research sample was comprised of 57 undergraduates.

The sample consisted of male and female students having different demographic features including the age, family size, and academic level. It was diversity that made it possible to understand the connection between the patterns of socialization and how students viewed work in a more comprehensive way.

According to the data, there were more male students, 52.6% of the sample, and female students, 47.4% of the sample; therefore, there was a relatively equal representation of genders.

Demographic Features of the Sample

Displays the demographic structure of the study participants based on the choice of personal variables.

Table 1

Distribution of the Study Sample According to Demographic Variables

Variable	Category	Frequency	Percentage
Gender	Male	30	52.6%
	Female	27	47.4%
	Total	57	100%
Age	18–21 years	26	45.6%
	22–25 years	27	47.4%
	26 years and above	4	7.0%
	Total	57	100%
Family Size	Less than 4 members	19	33.3%
	5–8 members	36	63.2%
	9 members or more	2	3.5%
	Total	57	100%

According to the data in table 1, there were more male students, 52.6% of the sample, and female students, 47.4% of the sample; therefore, there was a relatively equal representation of genders. In terms of age, most of the respondents fell within the age bracket 22-25 years (47.4), 18-21 years (45.6) and the remaining 7.0 were aged 26 years and above. This implies that the majority of the respondents are of the normal undergraduate age. In relation to the number of members in the family, most of the respondents were in families of between 5 and 8 (63.2), and next to this were small families of less than four (33.3). The sample had little representation of larger families. All in all, the demographic data of the sample are rather balanced in terms of gender and age groups, which gives an adequate background to examine the study variables.

Research Instrument

In order to collect the required data on this study, a structured questionnaire was used, which was developed specifically to investigate the nature and effect of socialization patterns on the mental and social image of work in university students.

The questionnaire had two major parts. Section One: Demographic Information The first section of the questionnaire consisted of demographic information. The area was the basic demographic data of participants which included: Gender and Age and Family size. These variables were employed in order to describe the sample features and to investigate any possible variance in the responses of the various demographic groups.

Section Two: This section was structured under two major dimensions. The former dimension was the patterns of socialization which had three parenting styles Authoritarian socialization, Permissive socialization and Democratic (balanced) socialization. The individual styles were assessed by a series of statements that indicated family interactions, decision making patterns and parental guidance.

The second dimension was the effect of socialization patterns on the mental and social image of work which consisted of items pertaining to: responsibility towards work, initiative and independence, commitment to work and self-discipline and time management. The respondents were told to express the degree of their agreements with each statement.

Validity of the Instrument

To achieve the content validity of the questionnaire, a panel of academic scholars who specialised in the subject of sociology and social psychology reviewed the instrument. The reviewers assessed the clarity, relevance and suitability of the items contained in the questionnaire with regard to the study aims. Some changes were also made in accordance with the feedback obtained to enhance the phrasing of the wording of some statements and to make sure that the items captured the intended constructs.

Instrument Reliability.

Cronbach's Alpha coefficient to determine the internal consistency was used to determine the reliability of the questionnaire.

Table 2

Internal Consistency Reliability of the Questionnaire

Dimension	Number of Items	Cronbach's Alpha
Overall Instrument	30	0.983

The table 2 results show that the reliability coefficient ($\alpha = 0.983$) is very high and surpasses the normal accepted value of 0.70 in a social science research. It implies that the questionnaire has a high degree of internal consistency and can be analysed using data.

Measurement Scale

The responses of the participants to a statement of the questionnaire were measured using a five-point Likert scale. The scale was on a scale of 1(strongly disagree) to 5(strongly agree).

Table 3

Likert Scale Classification

Response Level	Numerical Range
Low	1.00 – 2.33
Moderate	2.34 – 3.67
High	3.68 – 5.00

Such classification interpreted the mean scores that were gained through the answers of the participants.

Statistical Analysis

The data collected was analysed by using several statistical methods. Frequencies and percentages were employed to describe the demographic characteristics of the participants, to begin with.

Second, the mean and standard deviations were computed, in order to find out the degree of agreement with each questionnaire item and the type of patterns of socialization that prevail among students.

Third, the reliability of the questionnaire was tested with the help of Cronbach's Alpha. Lastly, Pearson correlation test and descriptive comparisons were used to investigate the relationships between work mental and social image and socialization patterns among students.

Results

The section provides the statistical results of the research based on the research questions and hypothesis. The dominating socialization patterns among students were revealed by descriptive statistics, means, and standard deviations, which allowed to investigate their impact on mental and social image of work.

Findings to the First Research Question.

What are the current trends of socialization among the programming and computer science learners in the University of Malaya?

In order to provide the answer to this question, the means and standard deviations of the three patterns of socialization authoritarian, permissive and democratic were calculated.

Table 4
Means and Standard Deviations for the Authoritarian Socialization Pattern

Item	Mean	Standard Deviation
I am strongly criticized when I violate family rules or fail to meet expectations.	4.21	0.959
My family tells me what to do without discussion or explanation.	4.16	0.996
I sometimes feel unable to express my opinion within the family.	4.09	0.969
I am required to follow strict rules without personal freedom.	4.02	1.077
Important decisions in my academic or personal life are made without my participation.	4.00	1.150
Overall Mean	4.09	0.968

According to the findings in Table 4, it is possible to conclude that the authoritarian socialization pattern was observed at a high level among the participants with the total mean score of 4.09. It implies that a good number of students had family settings which were authoritative and with minimal involvement in decision-making. The highest mean was distinguished in respect of the item that denoted strong criticism when family rules are broken ($M = 4.21$), then the item that expressed that families make decisions without discussing ($M = 4.16$). These results indicate that the impact of authoritarian family practices is still likely to affect early socialization experiences of students, which may affect their attitudes to the authority and responsibility.

Table 5
Means and Standard Deviations for the Permissive Socialization Pattern

Item	Mean	Standard Deviation
I am given complete freedom to make personal decisions.	4.21	0.901
I can change rules or decisions easily without consequences.	4.19	0.895
My family allows me to do what I want without clear limits.	4.18	0.984
The responsibilities expected of me are limited or unclear.	4.02	1.110
I am rarely guided when I make mistakes.	4.00	1.069
Overall Mean	4.12	0.968

Table 5 shows that the level of permissive socialization pattern was also high, and the mean score was 4.12. This indicates that a number of students felt that their family backgrounds were facilitative and provided a lot of freedom and autonomy and with minimal supervision. The greatest average score was achieved in the item that referred to the total freedom in making personal decisions ($M = 4.21$). Such results can be indicative of family patterns which emphasize individual autonomy but also could mean less behavioural control and direction to students.

Table 6
Means and Standard Deviations for the Democratic Socialization Pattern

Item	Mean	Standard Deviation
I feel capable of taking responsibility and showing initiative in my academic and personal life.	4.39	0.648
My family encourages cooperation while respecting my personal freedom.	4.37	0.645
My family encourages me to express my opinion and participate in decision-making.	4.30	0.731
Support and guidance are provided when I make mistakes.	4.30	0.731
Family rules are explained clearly with their reasons.	4.26	0.695
Overall Mean	4.32	0.968

Table 6 indicates that the democratic socialization pattern is the one that registered the largest mean out of the three patterns with an average mean score of 4.32. It means that the most common among the participants is the democratic or balanced parenting style. The maximum mean score was made in the item that was linked to the requirement to be able to take responsibility and initiative (M = 4.39). These results indicate that a good number of students were brought up in families where there was a form of dialogue, support, and joint decision making. All in all, the findings show that the exposure to various patterns of socialization was reported to have happened to the students but the democratic pattern looks to be the most dominant.

Results Related to the Second Research Question

How do socialization patterns affect mental and social image of work among the programming students of University of Malaya?

In order to address this, means and standard deviations were computed to investigate the effects of every socialization pattern on the perceptions of work among students.

Table 7
Impact of the Authoritarian Pattern on Work Perceptions

Item	Mean	Standard Deviation
My approach to work is influenced by strict family directives.	4.26	0.791
My thinking about work tends toward strict rule-following.	4.23	0.866
I feel pressure when tasks require independent decision-making.	4.18	0.947
I feel less able to take initiative due to family restrictions.	4.12	0.965
I sometimes avoid responsibility for fear of criticism.	4.12	0.996
Overall Mean	4.18	0.941

The results show that there is a significant impact of authoritarian socialization on the perception of students towards work (M = 4.18). Students who are brought up in a more restrictive family setting have been found to be more rule adherents, though may lack in independent decision making and initiative.

Table 8
Impact of the Permissive Pattern on Work Perceptions

Item	Mean	Standard Deviation
I sometimes lack seriousness in dealing with academic tasks.	4.12	0.908
I find it difficult to manage my time effectively.	4.09	0.950
I sometimes make hasty decisions.	4.07	0.979
I lack self-discipline in study or work.	4.00	1.052
I deal with responsibilities in an unorganized manner.	3.95	1.109
Overall Mean	4.04	0.941

The findings show that allowing socialization can adversely affect work attitudes both with regard to discipline, time management and responsibility.

Table 9
Impact of the Democratic Pattern on Work Perceptions

Item	Mean	Standard Deviation
My balanced upbringing helps me take responsibility.	4.32	0.686
I can make academic and work decisions confidently.	4.32	0.711
My family support strengthened my work values.	4.30	0.755
I can organize my time effectively.	4.28	0.796
Family encouragement motivates creativity and initiative.	4.25	0.763
Overall Mean	4.29	0.941

The results show that democratic socialization positively affects perceptions of students towards work in the strongest way (M = 4.29). Students who are brought up in supportive families are able to become more responsible, independent and committed to work.

Results Related to the Study Hypothesis

The hypothesis was as follows: no statistically significant differences in the impact of the patterns of socialization on the work perceptions based on the gender.

Table 10
To test this hypothesis, an Independent Samples T-Test was conducted

Pattern	Gender	N	Mean	Std. Deviation
Authoritarian	Male	30	4.17	0.625
	Female	27	4.01	1.190
Permissive	Male	30	4.21	0.676
	Female	27	4.01	1.120
Democratic	Male	30	4.31	0.631
	Female	27	4.34	0.676

Findings indicate that these gender disparities between male and female learners are quite low in all socialization patterns. The average scores are quite similar indicating that gender does not play a major

role in determining the correlation between patterns of socialization and work perceptions among the respondents.

Discussions

This study was conducted with a view of investigating how the socialization patterns relate to the establishment of the mental and social image of work by the programming and computer science students, at the University of Malaya. Findings made are significant as they help to explain the role of family socialization practices in developing student attitudes towards work, responsibility and professional involvement.

Discussion of the First Research Question

The findings showed that the three patterns of socialization such as authoritarian, permissive, and democratic were found among the participants in a relatively high level. Nevertheless, the democratic or the balanced pattern turned out to be the most prevalent socialization among the students. This observation implies that a significant segment of students have been brought up in families that are marked by discourse, encouragement and mutual decision making.

The modern social and educational changes that have been observed in modern societies such as Malaysia including the presence of democratic socialization may be linked to the above pattern. The growing awareness of contemporary educational practices on the part of parents and the growing stress on student autonomy and critical thinking could have motivated families to switch to more participatory parenting styles. Students are frequently on the one hand guided to voice their views in such environments, accept responsibility of what they do and become confident in their decision making skills.

These results go in line with the sociological theories that focus on the significance of balanced socialization in the development of individual behaviour. Based on the theory of social systems, Parsons argues that socialization is a process by which social norms and expectations are internalized by individuals, and they use these mechanisms to regulate their involvement in a society. Democratic family set up can thus help in bringing socially responsible individuals who would be more equipped to take up professional jobs.

Meanwhile, authoritarian and permissive socialization pattern scores are moderately high, which indicates that the practice of family socialization is, in most cases, complicated and many-sided. Parenting strategies can be combined in students depending on the family structure, cultural

requirements, and parental personal attitudes. Such diversity is a feature of dynamism of the process of socialization, and it also demonstrates family diversity in the case of university students.

The Second Research Question Discussion

The findings also indicated that patterns of socialization play an important role in the mental and social image of work among the students of the university. The democratic socialization style out of the three patterns analysed was the one that had the best positive impact on the attitude of students towards work. Students indicating that they had experienced democratic families were more anticipated to have positive attitudes towards work, such as responsibility, independence, initiative and confidence in decision-making. Such results give a reason to believe that the presence of positive and equal relations in the family can lead to the cultivation of positive working values that are critical towards academic and professional achievements.

This finding supports the idea of Bourdieu on habitus where it is argued that individuals incorporate behavioural dispositions by the time they reach early social life. Students who have been brought up in an environment that promotes communication, responsibility and cooperation are likely to be able to form positive views towards work and professional involvement.

Conversely, authoritarian socialization seemed to affect work perceptions to the contrary. Regardless of the benefits of strict family environment, which encourages discipline and rule-following behaviour, it also restricts creativity and autonomy of the students. Excessive parental control can lead to it as students learn to be too dependent on the external authority to make their own decisions, and thus, they fail to act independently in both school and work life.

On the same note, the permissive socialization was linked to low work related- attitudes, specifically in self-discipline, time management and responsibility. This can be attributed to absence of specific behavioural norms in lenient family set ups. Although these environments can offer a great level of freedom, they can also decrease the chances of students to form organized habits and sense of responsibility.

Combined, these results indicate that a balanced family socialization is extremely important in positive work attitude development among students of universities. In more constructive disciplines like programming and computer science, where problem-solving, creativity, and independence of thought are crucial, students that learn to be highly self-regulated and responsible will have a better chance to succeed not only in school but also in their jobs.

Discussion on the Study Hypothesis

The differentiation of the male and female gender showed that no significant differences existed between the male and female students in regards to how socialization patterns affected their views regarding work. Mean scores of both groups were rather similar in all socialization patterns, which means that gender did not have such an issue influence in determining the connection between family upbringing and work attitudes in this sample.

The reason could be that the students in university who are taking the related courses in technology tend to have similar experiences in their studies and their career goals, irrespective of gender. Professional culture can be developed in a common ground in support of programming and computer science education, focusing on competence, problem-solving, and technical proficiency, as opposed to gender differences.

Moreover, modern education is becoming more and more open in allowing both male and female students to have equal opportunity, especially in the institutions of higher education. Consequently, both groups can adopt common values in terms of responsibility, academic performance, and professional involvement.

On the whole, the results indicate that the socialization patterns have the same effect on the perceptions of work among both male and female students, which proves the validity of the family upbringing as the primary factor defining the work-related attitudes.

Conclusion

This paper analysed the interdependence of the socialisation patterns and creation of the mental and social image of work among programming and computer science students at University of Malaya. The results indicate the great role that family socialization has in determining the values, attitudes and behavioural orientations of students with regard to work and professional responsibility.

The findings showed that democratic or balanced socialization was the most beneficial pattern among the respondents and had a close relationship with positive perceptions of work. Students with reported positive family conditions described as dialogue and involvement in decision-making processes and positive guidance showed responsibility, independence and initiative in their academic and professional undertakings.

Conversely, the authoritarian and permissive socialization patterns were also observed to impact the work perceptions differently. Authoritarian socialization seemed to promote strict compliance with regulations but might as well inhibit innovativeness and freedom of choice. On the other end,

permissive socialization was linked to less self-discipline and low responsibility commitment towards work and study.

These results stress the idea that balanced family environments that involve both guidance and autonomy seem to be the most effective in developing the constructive work values in university students. These socialization practices contribute to the acquisition of significant skills like being responsible, self-regulating, and initiative which is especially significant to students who are about to join highly competitive and technology-focused labour markets.

In general, the research can add to the knowledge on the role of family socialization in shaping the perception of work among students in the framework of higher education. Through the emphasis of the need to have balanced parenting styles, the study has brought about information that can be used by the families and learning institutions to ensure that the youths grow up to have positive work related-attitudes.

Limitations of the Study

In spite of the useful insights given by this study, there are a number of limitations that should be noted. To begin with, the research was carried out using a relatively small sample which comprised of the students of programming and computer science at the University of Malaya. Thus, it is possible that the results are not applicable to all students of the university in Malaysia or to the students of other academic fields.

Second, self-reported data that was gathered by a questionnaire was used in the study. The responses of the participants could have been affected by the social desirability bias, individual interpretation of the questions or the preference to deliver the socially acceptable opinion about the family upbringing and the work attitudes.

Third, the research design was founded on the descriptive approach, which does not allow forming causal connections between the patterns of socialization and the perceptions of work. In a study, future research can be improved by adopting longitudinal or experimental research design to gain a better insight into the causal processes behind these relationships.

Lastly, the processes of socialization are complicated and dependent on several factors that are not related to upbringing in the family, but educational institutions, peer groups, media influences, and even general cultural settings. These aspects were not completely analysed in the given work.

Recommendations

With regards to the results of the research, it is possible to make several recommendations.

To start with, families must be urged to enjoy democratic and balanced parenting styles that will support responsibility, independence, and open communication between the youths. These strategies seem to have a positive effect on the students in terms of their work and professional responsibility.

Second, universities are supposed to prepare programs that enhance the personal and professional growth of students by training them on the aspects of making decisions, managing time and responsibility both in academics and work related settings.

Third, schools must work with families to establish positive motivational environments that will promote initiative, creativity, and confidence in students, especially those who work in areas that pertain to the use of technology and innovation.

Fourth, parental awareness and seminars could assist in promoting contemporary socialization styles that balance parenting and autonomy in the rearing of young adults.

Lastly, the study should in the future discover the connection between the patterns of socialization and other valuable variables like academic success, employability competencies and career orientation. Comparison of studies in various universities, academic fields and cultural background could also offer more insight on how socialization can lead to the work related- attitudes among the youth.

Conflict of Interest: The author declare that there is no conflict of interest related to the publication of this research.

Funding Statement: This research received no specific grant from any funding agency, institution, or organisation.

Data Availability Statement: The data supporting the findings of this study are available from the corresponding author upon reasonable request.

References

- Arnett, J. J. (1995). Broad and narrow socialization: The family in the context of a cultural theory. *Journal of Marriage and the Family*, 617-628. <https://doi.org/10.2307/353917>
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, 11(1), 56-95. <https://doi.org/10.1177/0272431691111004>
- Bauer, T. N., Bodner, T., Erdogan, B., Truxillo, D., & Tucker, J. (2007). Newcomer adjustment during organizational socialization: A meta-analytic review of antecedents, outcomes, and methods. *Journal of Applied Psychology*, 92(3), 707-721. <https://doi.org/10.1037/0021-9010.92.3.707>

Chiu, W. C. K., Lun, V. M. C., & Bond, M. H. (2018). Engaging in creative work: the influences of personal value, autonomy at work, and national socialization for self-directedness in 50 nations. *Journal of Cross-Cultural Psychology*, 49(2), 239-260. <https://doi.org/10.1177/0022022116651336>

Elhini, M., & Mourad, Y. (2022). The relationship between knowledge-based economies and economic growth: an empirical analysis on the Asia-Pacific region 2011-2018. *Journal of Chinese Economic and Foreign Trade Studies*, 15(2), 171-192. <https://doi.org/10.1108/JCEFTS-09-2021-0052>

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109-132. <https://doi.org/10.1146/annurev.psych.53.100901.135153>

Jaiswal, A. (2025). Understanding Gender Socialization: The Role of Family, School, and Society in Shaping Gender Norms. *International journal of Emerging Voices in Education*, 1(3), 13-23. <https://doi.org/10.59828/ijeve.v1i3.12>

Grusec, J. (2021). Socialization Processes. In *Encyclopedia of Evolutionary Psychological Science* (pp. 7776-7781). Cham: Springer International Publishing. https://doi.org/10.1007/978-3-319-19650-3_2399

Grusec, J. E., & Davidov, M. (2019). Parent socialization and children's values. In *Handbook of parenting* (pp. 762-796). Routledge. <https://doi.org/10.4324/9780429433214-22>

Khatun, F., & Saadat, S. Y. (2020). Fourth industrial revolution, technological advancement and youth employment: A South Asian perspective. *South Asia Economic Journal*, 21(1), 58-75. <https://doi.org/10.1177/1391561420914187>

Karpov, A. O. (2016). Socialization for the knowledge society. *International Journal of Environmental and Science Education*, 11(10), 3487-3496. <https://doi.org/10.51314/2073-2635-2016-1-10-32>

Khojanazarova, N. (2022). The essence of socialization of children in preschool educational institutions on the basis of a systematic approach. *European Journal of Humanities and Educational Advancements*, 3(2), 21-23.

Loughlin, C., & Barling, J. (2001). Young workers' work values, attitudes, and behaviours. *Journal of occupational and organizational Psychology*, 74(4), 543-558. <https://doi.org/10.1348/096317901167514>

Mortimer, J. T. (2010). The benefits and risks of adolescent employment. *The Prevention Researcher*, 17(2), 8-11. <https://doi.org/10.1037/e540552010-004>

Mustapha, R., & Abdullah, A. (2004). Malaysia transitions toward a knowledge-based economy. *The Journal of Technology Studies*, 30(3), 51-61. <https://doi.org/10.21061/jots.v30i3.a.8>

Myers, K. K. (2010). Socializing organizational knowledge: informal socialization through workgroup interaction. In *Communication and Organizational Knowledge* (pp. 307-325). Routledge. <https://doi.org/10.4324/9780203874509-25>

Ng, E. S., Schweitzer, L., & Lyons, S. T. (2010). New generation, great expectations: A field study of the millennial generation. *Journal of Business and Psychology*, 25(2), 281-292.

<https://doi.org/10.1007/s10869-010-9159-4>

Omarova, A., Niyazov, M., Turekulova, A., Turekulova, D., Mukhambetova, L., & Mukhambetov, Y. (2024). Socio-economic development of youth policy in the context of digital transformation. *Montenegrin Journal of Economics*, 20(1), 197-208.

Parke, R. D., & Buriel, R. (2008). Socialization in the family: Ethnic and ecological perspectives. *Child and adolescent development: An advanced course*, 95-138.

<https://doi.org/10.1002/9780470147658.chpsy0308>

Pinquart, M. (2017). Associations of parenting styles and dimensions with academic achievement in children and adolescents: A meta-analysis. *Educational Psychology Review*, 29(3), 475-493.

<https://doi.org/10.1037/dev0000295>

Ramasamy, N., & Rowley, C. (2013). Workforce development and skill formation in Malaysia: Pushing for a knowledge-based economy?. In *Workforce development and skill formation in Asia* (pp. 210-237). Routledge.

Saputra, G. W., Dzauharoh, S., Johan, A., Kusumawardana, M. F., & Susilawati, S. (2023). Socialization for the Formation of Young Generation Discipline. *TGO Journal of Community Development*, 1(2), 70-76. <https://doi.org/10.56070/jcd.2023.012>

Saras, E. D., & Perez-Felkner, L. (2018). Sociological perspectives on socialization. *Oxford Bibliographies in Sociology*. <https://doi.org/10.1093/obo/9780199756384-0155>

Sarı, U., Alıcı, M., & Şen, Ö. F. (2018). The effect of STEM instruction on attitude, career perception and career interest in a problem-based learning environment and student opinions. *The Electronic Journal for Research in Science & Mathematics Education*, 22(1).

Shahr, H. S. A., Yazdani, S., & Afshar, L. (2019). Professional socialization: an analytical definition. *Journal of medical ethics and history of medicine*, 12, 17.

Sjamsir, H., Rozie, F., Dewi, S. A., & Liana, H. (2024). Parental Role: Internalization of the Development of Independent, Disciplined, and Responsible Character Values for Children Aged 5-6 Years. *JPUD-Jurnal Pendidikan Usia Dini*, 18(1), 18-29. <https://doi.org/10.21009/JPUD.181.02>

Tsaousides, T., & Jome, L. (2008). Perceived career compromise, affect and work-related satisfaction in college students. *Journal of Vocational Behavior*, 73(2), 185-194.

<https://doi.org/10.1016/j.jvb.2008.04.003>

Twenge, J. M., & Campbell, S. M. (2012). Who are the Millennials? Empirical evidence for generational differences in work values, attitudes and personality. *Managing the New Workforce: International Perspectives on the Millennial Generation*, 1-19.

<https://doi.org/10.4337/9780857933010.00006>

Valutis, S., Rubin, D., & Bell, M. (2012). Professional socialization and social work values: Who are we teaching?. *Social Work Education*, 31(8), 1046-1057.

<https://doi.org/10.1080/02615479.2011.610785>

White, P. A. (2010). Socialization and education. In *Education and the development of reason (international library of the philosophy of education Volume 8)* (pp. 84-97). Routledge.

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal. This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution