

## **Effects Of Parents' Work Conditions On Children's School Achievement: A Study of Dual-Earner Families**

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*The purpose of this study is to analyse direct and indirect relationships between parental (dual-earner families) work conditions ( work conditions, work hours, work tempo), parenting styles (parenting styles and parental involvement), children's task engagement behaviour and school achievement. This study takes account the demographic changes in Malaysian families as result of urbanization and industrial-economic based. The study was conducted using survey method approach based on human ecology theory and 200 dual-earner families as sample. Using path model analysis, for both models, the study indicates number of consistent relationships between demographic variables, parenting styles, children's task engagement behaviour and school achievement. Overall, parental work conditions, parental authoritarianism, parental authoritativeness, parental involvement, socioeconomic status and children's task engagement behaviour had strong effects on children's school achievement.*

Field of Research: Educational Psychology

### **1. Introduction**

Research interest in family processes and their relation to children behavior and school achievement has been active in the past few decades in the western societies but not in Malaysia, although it is an examination oriented society. In 1908s there was a massive migration of rural people to urban centres in Malaysia due to great demand of labour from an industrial areas. In 2004, about 54.6 % Malaysian lived in the urban areas. High cost of living in the urban areas have forced Malaysian mothers to leave their children for employment. At present 62.8 % of mothers with children below 15 years of age working full-time. (Malaysia, 2004). This phenomenon has created dual-earner families in Malaysia especially in the urban areas. The

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traditional families where fathers only a bread-winner is slowly disappearing. The main issue here is how these families cope with their children especially among the Malay families who were new migrants in the urban areas and furthermore they have more children than other ethnics for example Chinese families. At the same time, in the Malaysian context, education is still being regarded as a tool for social mobility and most parents aspire their children to perform well in school. The question is, how could children perform well in school if they lack of supervision and other needs since both parents are working? Consistent with the present development, this study aims to examine the relationship between parental works conditions, parenting styles and children's school achievement. There are two directions of relationships examined : direct relationship between seven suggested variables in the model and children's school achievement (SES , parental work conditions, parenting styles, parental monitoring, parental beliefs on their self-efficacy and children's social skills and children's task engagement behaviour), and indirect relationships between parental work conditions, parenting styles, children's task engagement behaviour and children's school achievement (see Figure 1).

### **2. Literature Review**

Research on parental employment on children's outcomes has proliferated over the past 40 years. However , the majority of these research studies were conducted on maternal employment and emphasized two major areas : effects of maternal employment on family well-being (i.e marital satisfaction, family happiness, family conflicts) and effects of maternal employment on emotional and personality development (Menaghan and Parcel, 1990, Gottfried, Gottfried and Bathurst, 1994). Research studies conducted to examine effects of maternal employment on the child's development is limited and conducted using a cross-sectional approach leaving everything in between to the imagination. It is suggested that future research on children development must include parents' work conditions and family processes (Bronfenbrenner and Crouter, 1982; Gottfried, Gottfried, and Bathurst, 1995, Foster and Kalil, 2005 ). At the same time there were changes in the family structure, where more families became nuclear and dual-earner based. Number of mothers working full-time keeps increasing and their role in family development becomes more important (Foster, 2002; Hill et al, 2005). Since mothers are working, more fathers became actively involved in doing house works and performed other responsibilities as well such as taking care of children or responsibilities related to children development (Aldous, et al. 1998; Glass, 1998; Bulanda, 2004). The present study attempts to narrow down the gap between the previous research studies' limitations and the new trends related to the family development. By taking account of all suggestions, this study is focused on dual-earner families and emphasize on family processes, parental work conditions and children's school achievement.

### **3. Methodology**

The study was conducted following a survey method which involved parents' responses to questionnaires. The approach of this study is based on cultural-ecology model developed by Bronfenbrenner (1979). On the basis of an ecological approach this study postulated a hierarchical model specifying three level of factors : family background (microsystem), parental involvement (macrosystem) and parental work conditions (exosystem). Research study was

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conducted in twelve months between August 2005 to August 2006 . Researcher was helped by school teachers in choosing sample, conducting test and gathering other information needed for this study. Research for this study was carried out in the state of Negeri Sembilan (NS) in the Malay Peninsula. NS was chosen because its demographic, social and economic backgrounds were consistent with the study's model background : urbanized and industrialized, and has multicultural communities which reflects Malaysia's community as a whole. In 2004 , NS has about 900,000 people (52.6% Malay, 29.7% Chinese and 17% Indian and Others. NS has 160 primary schools with about 54,000 children in Year 1 thorough Year 3 (Primary 1, 2, 3).

### 3.1 Sample of the Study

This study involved 200 intact Malay families which comprised 200 full-time working mothers and 200 full-time working fathers, 200 school children and 45 teachers. The study only focused on Malay dual earners families because majority of them are new in the urban environment as compared to another major ethnic in urban Malaysia, the Chinese group. Most families were nuclear based, had children between 2- 7, had of monthly income between RM1500 - RM6000 and about 47% had full-time maid. Mean of mother's and fathers' age in the study were between 39-40 years and had various educational and occupational background and most of them worked 44 hours a week and many of them had day time working hours. There were altogether 200 children in the study selected from 15 school in urban areas, 50% (100) males and 50% were females and had age ranges between 7 – 9 years. Children's background was provided with their school achievement based on there major subjects : Reading (Mean =80.4%, SD= 15.37), Malay Language (Mean 80.70%, SD = 16.30) and Mathematics (Mean 77.20%, SD= 19.56). There were 45 teachers involved in the study.

### 3.2 Research Instruments

Research design of the present study comprises of four panels of variables as in indicated in Figure 1 and Figure 2. Panel 1 : child sex, socio-economic status, parents' work conditions, work tempo and help hours family received from maid or family helper. Panel 2: parenting styles : parenting styles (authoritarian, permissive, authoritative); parental self efficacy, parental monitoring of children's school activities, and parental beliefs on children's self management and social skills. Panel 3: children's task engagement behaviour. The last Panel 4 is children's school achievement. Relationships between variables from Panel 1, Panel 2 and Panel 3 were tested direct and indirectly using path analysis approach . There were eleven types of measures in the study and were tested in the pilot study using 80 families. Measures were taken or adapted from previous researchers' instruments. Overall the cronbach alpha coefficients of all measures were between 0.65 to 0.85 : Work Conditions adapted from Smith, Kendall and Hulin (1969) and Job Descriptive Index, Roznowski, (1989) (Job Demand 0.85; Job Supervision 0.81, Job Promotion 0.85); Parenting Styles adapted from Lamborn et al. (1991) and Dornbusch et al. (1987) ( Authoritarian 0.65, Permissive 0.62, Authoritative 0.68); Parental Monitoring 0.84 taken from Milne et al. (1986) ; Parents' Self-Efficacy 0.81 adapted from Gibson and Denbom (1984); and Parents' Beliefs in Children's Social Skills 0.83; Parents' Beliefs in Child's Self-Management Skills 0 .83, all taken from Okagaki and Sternberg (1993). The last measure in Panel 4 is Children's Task-Engagement Behaviour 0.86, taken from Fincham, Hakoda and Sanders (1989).

## 4. Findings

The analyses for this research study consisted of a series of path models testing (LISREL Version 8.50, Scientific Software International 2001) for the direct and indirect links between (a) demographic variables (i.e parental work conditions, socio-economic status, amount of home help received and child sex), and (b) parenting variables and parental involvement) and children's task engagement behaviour and school achievement. Path analysis is appropriate to analyze the data because it could explain direct and indirect relationships between variables. Two criteria used in determining which of the path coefficients should be retained for interpretation. First, statistical significance was judged on the basis of t-value of greater than 1.96 or less than -1.96 ( $\alpha = 0.05$  for  $df > 120$ ). However, several researchers have noted that statistical significance can be misleading criterion in path analysis (Pedhazur, 1997), urging that the absolute magnitude of the coefficients greater than 0.10 were retained for interpretation in this case.

*Mothers versus Fathers.* The correlation matrices for fathers and mothers appear in Table 1 and Table 2, respectively. The corresponding path diagrams, showing standardized coefficients for the model parameters are shown in Figure 1 and Figure 2.

*Effects on Parenting Style and Beliefs.* As indicated, for both mothers and fathers in the sample, SES was negatively related to authoritarianism ( $p = -0.39$ ,  $t = -5.98$ ;  $p = -0.32$ ,  $t = -4.75$ , respectively) but positively related to authoritativeness ( $p = 0.31$ ,  $t = 4.55$ ;  $p = 0.32$ ,  $t = 4.70$ ). For mothers, there were also significant positive relationships between child sex and authoritarianism ( $p = -0.19$ ,  $t = -2.99$ ), and between SES and self-efficacy ( $p = 0.18$ ,  $t = 2.40$ ), along with a negative relationship between help hours and beliefs in social skills ( $p = -0.15$ ,  $t = -2.11$ ). For fathers, on the other hand, SES had significant positive effect on beliefs in the importance of self-management ( $p = 0.19$ ,  $t = 2.52$ ).

*Effects on Task Engagement Behaviour.* For mother and fathers, task engagement was negatively related to authoritarianism ( $p = -0.16$ ,  $t = -2.29$ ;  $p = -0.22$ ,  $t = -3.25$ ), but positively related to child sex ( $p = 0.17$ ,  $t = 2.54$ ). For mothers, task engagement was also positively related to work conditions ( $p = 0.25$ ,  $t = 3.70$ ), whereas for fathers, engagement was related negatively to parental monitoring ( $p = -0.14$ ,  $t = -2.11$ ) and positively related to child sex ( $p = 0.20$ ,  $t = 2.98$ ). Also, for fathers, task engagement was indirectly related (through the parenting style variables) to SES ( $p = 0.10$ ,  $t = 2.54$ ).

*Effects on School Achievement.* For mothers and fathers, school achievement was related positively to task engagement behaviour ( $p = 0.41$ ,  $t = 7.61$ ;  $p = 0.44$ ,  $t = 8.14$ , respectively) child sex ( $p = 0.11$ ,  $t = 2.12$ ;  $p = 0.13$ ,  $t = 2.53$ , respectively), SES ( $p = 0.16$ ,  $t = 2.69$ ;  $p = 0.21$ ,  $t = 3.62$ , respectively), the latter effect also reflected in indirect effects through the parenting style and task engagement variables ( $p = 0.19$ ,  $t = 4.00$ ;  $p = 0.21$ ,  $t = 4.39$ , respectively). For mother and fathers, achievement was negatively related to authoritarianism ( $p = -0.18$ ,  $t = -3.46$ ;  $p = -0.23$ ;  $t = -4.31$ , respectively) and help hours received ( $p = -0.14$ ,  $t = -2.89$ ;  $p = -0.18$ ,  $t = -3.53$  respectively).

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For mothers, achievement was also positively related to authoritativeness ( $p=0.15$ ,  $t = 3.09$ ), and work conditions ( $p = 0.13$ ,  $t = 2.53$ ). The latter effect was also reflected in a significant indirect effect through the task engagement variable ( $p = 0.19$ ,  $t = 3.18$ ). For fathers, both child sex and authoritarianism had significant indirect effects on achievement through the parenting style and task engagement variables ( $p = 0.14$ ,  $t = 3.56$ ;  $p = -0.10$ ,  $t = -3.02$ , respectively).

### 5. Conclusion

For both models, directly, Malay children's school achievement was influenced by children's task-engagement behaviour, families' socio-economic status background, parental authoritativeness, parental authoritarianism (negative), and the extent of help hours the family received. Several variables were thus influential for children school achievement, but family socio-economic status was positively linked with school achievement directly or indirectly through other variables in the model such as parenting styles, parental involvement and children's task-engagement behaviour. Indirect effects of variables from panel one of the study model (work conditions, work tempo, socio-economic status, help hours family received and child sex) on children's school achievement were largely mediated through two variables in the second panel: parenting style (authoritarian, permissive, authoritative) and parental involvement (monitoring, parents' beliefs in the importance of social skills, beliefs in the importance of self-management skills, and parental self-efficacy) and one variable in the third panel of the study (children's task-engagement behaviour). SES appeared to be major variable in determining children's school achievement through direct and indirect effects on parenting styles, parental involvement and monitoring and children's task engagement behaviour.

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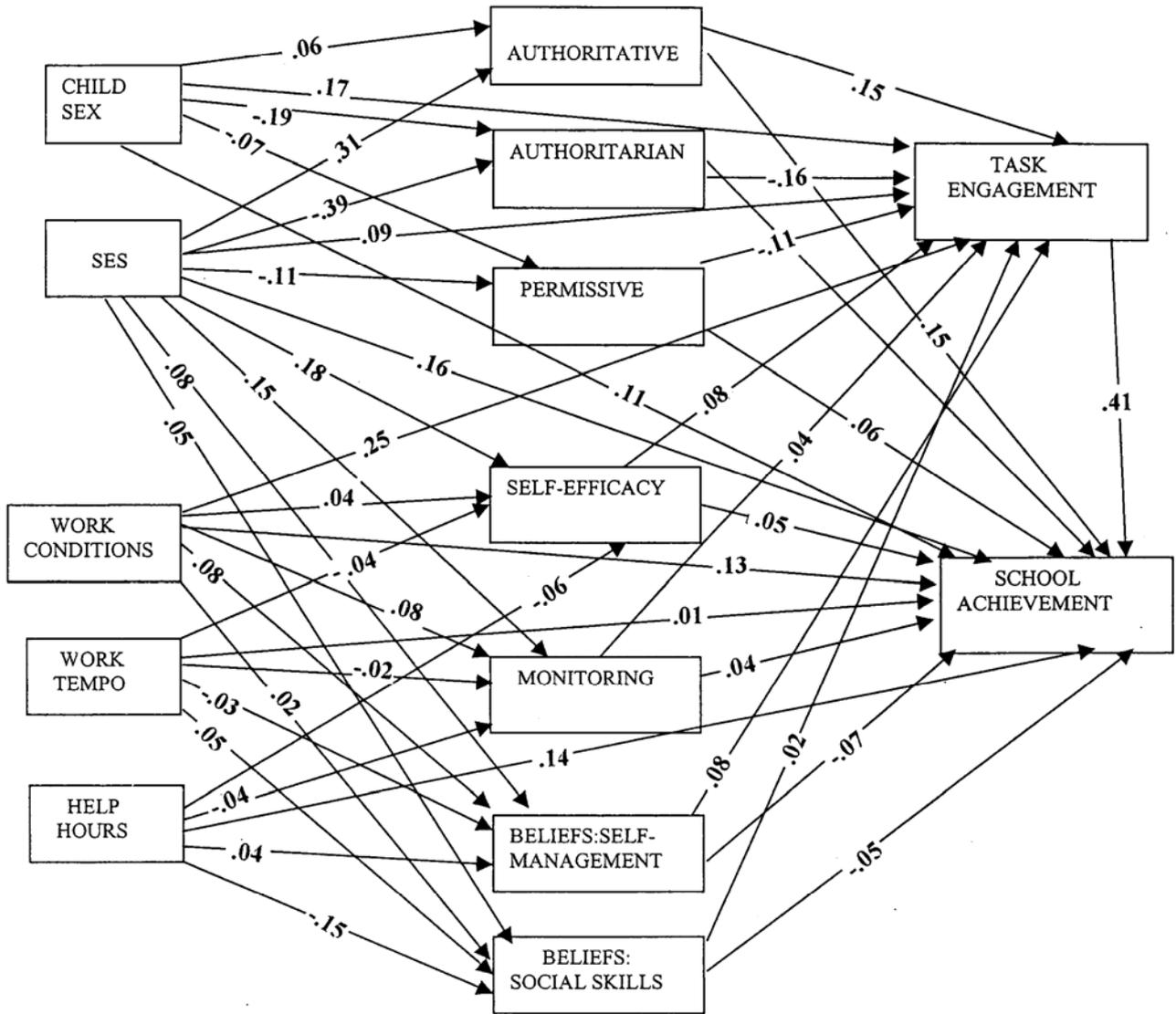


Figure 1 : Path Diagram for Malay Mothers Sample

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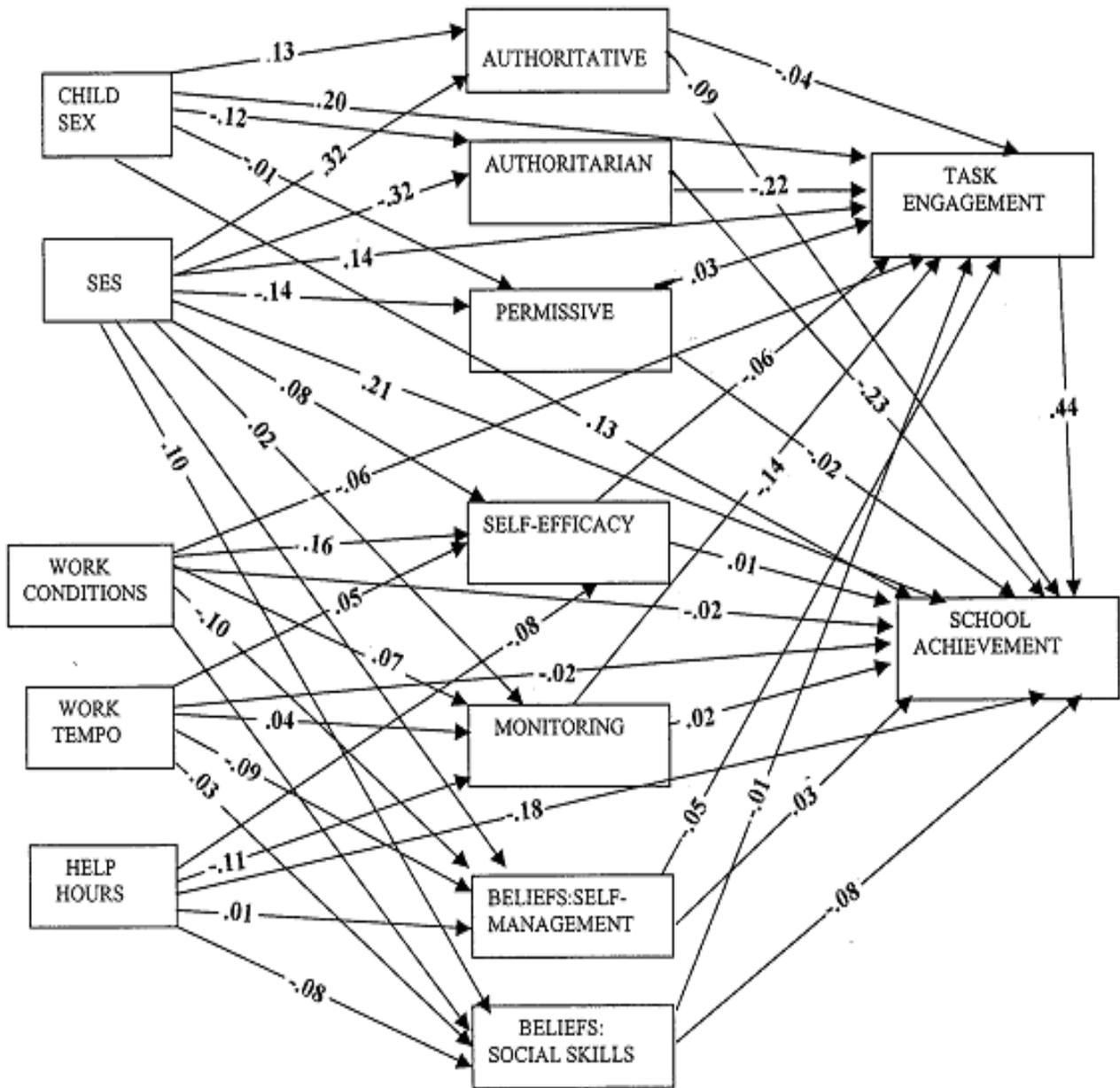


Figure 2 : Path Diagram for Malay Fathers

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Table 1. Correlation Matrix for Malay Mothers

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Child Sex	1.00												
2. Socio-economic status	-0.05	1.00											
3. Help hours received	0.15	0.12	1.00										
4. Work Conditions	0.12	0.35	0.01	1.00									
5. Authoritarian	-0.18	-0.38	-0.09	-0.36	1.00								
6. Permissive	-0.06	-0.11	-0.07	-0.20	0.24	1.00							
7. Authoritative	0.05	0.31	0.01	0.23	-0.42	-0.23	1.00						
8. Monitoring	-0.08	0.17	-0.02	0.14	-0.07	-0.02	0.18	1.00					
9. Beliefs in self-management	-0.04	0.10	-0.03	0.11	0.06	0.00	0.15	0.45	1.00				
10. Beliefs in social skills	-0.10	0.04	-0.14	0.04	0.15	0.05	0.05	0.43	0.50	1.00			
11. Self-efficacy	0.08	0.19	-0.04	0.10	-0.18	0.03	0.20	0.53	0.49	0.40	1.00		
12. School achievement	0.22	0.40	-0.08	0.44	-0.50	-0.07	0.40	0.13	0.01	-0.04	0.17	1.00	
13. Task engagement	0.21	0.24	0.03	0.37	-0.32	-0.03	0.24	0.07	0.04	0.00	0.06	0.61	1.00

Table 2 Correlation Matrix for Malay Fathers

	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Child Sex	1.00												
2. Socio-economic status	-0.05	1.00											
3. Home help hours	0.15	0.12	1.00										
4. Work Conditions	0.10	0.34	0.12	1.00									
5. Authoritarian	-0.11	-0.32	-0.15	-0.28	1.00								
6. Permissive	-0.01	-0.14	-0.17	-0.28	0.30	1.00							
7. Authoritative	0.12	0.31	0.03	0.29	-0.45	-0.27	1.00						
8. Monitoring	0.04	0.03	-0.10	0.06	0.00	0.12	0.14	1.00					
9. Beliefs in self-management	-0.09	0.16	0.01	-0.02	0.10	0.03	0.03	0.24	1.00				
10. Beliefs in social skills	-0.07	0.06	-0.08	-0.06	0.06	-0.02	0.18	0.34	0.38	1.00			
11. Self-efficacy	0.08	0.13	-0.05	0.17	-0.11	-0.10	0.24	0.41	0.36	0.48	1.00		
12. School achievement	0.22	0.40	-0.08	0.26	-0.47	-0.17	0.36	0.01	0.01	-0.04	0.12	1.00	
13. Task engagement	0.21	0.24	0.03	0.18	-0.32	-0.15	0.23	-0.07	0.02	0.01	0.11	0.61	1.00