8. RESULTS AND INTERPRETATIONS
(Continued)
8. RESULTS AND INTERPRETATIONS (CONTINUED)

8.1. Factors Significantly Contributing to All Ten Life Skills and Overall Psychosocial Competence of Adolescents:

Ha$_{10}$: Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their all ten life skills and Overall psychosocial competence.

Further, from the above hypothesis many specific hypotheses (Ha$_{10,1}$ to Ha$_{10,11}$) for each life skill and Overall psychosocial competence are drawn and tested.

Stepwise Multiple Regression$^4$ analysis is applied to determine the significance of contribution of various demographic factors collectively as well as individually on ten life skills as well as Overall psychosocial competence of adolescents.

8.1.1. Factors Significantly Contributing to Problem Solving Skill of Adolescents:

Ha$_{10,1}$: Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their Problem Solving Skill.

$^4$ The obtained ‘R’ Value in this analysis indicates the correlation between the criterion and predictor variables. The square of this correlation ($R^2$) gives the proportion of variance, which can be predicted. For example, $R^2=0.90$ would imply that, 90% of the variance in the Y scores can be predicted on the basis of $X_1$, $X_2$, $X_3$.......$X_n$ scores. To test the significance of overall prediction, F-ratio is computed. The significance of this F ratio suggests that the amount of overall variance ($R^2$) is predicted through regression equation is significant. Similarly, t-test is used to test the significance of individual regression (b) weights. That is to know whether the predictor variables can individually predict the criterion significantly or not.
Table 8.01: Results of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing to the Problem Solving Skill of Adolescents (N=2025)

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed R²</th>
<th>‘t’ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Female Gender</td>
<td>0.2012</td>
<td>0.5747</td>
<td>0.0405</td>
<td>2.85**</td>
</tr>
</tbody>
</table>

Overall Adjusted $R^2 = 0.036$  
Overall F Ratio = 2.85; $P<0.01$

The observation of Table 8.01 reveals that out of many demographic factors, only gender contributed significantly to problem solving skill of the adolescents. Its contribution amounts to 4.05% of variance which is found to be highly significant ($F=2.85$, $P<0.001$). That is, with high degree of confidence, 4.05% variance on problem solving skill can be predicted on the basis of gender factor. Further, it can also be noted that gender alone has contributed ($t=2.85$, $P<0.01$) to variance in Problem solving scores of adolescents.

The above stated facts show that Problem solving skill is significantly related to gender of the adolescents. Thus, it can be inferred that female adolescents have significantly lower Problem solving skill than male adolescents.

8.1.2. Factors Significantly Contributing to Decision Making Skill of Adolescents:

$H_{a10.2}$: Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their Decision Making Skill

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5 To carry out this analysis, the subjects of control and experimental group are clubbed together and their scores at pre test phase are subjected to this analysis.
Table 8.02: Results of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing to the Decision Making Skill of Adolescents

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed R²</th>
<th>‘t’ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Father’s Occupation- Govt, employee, bank and professionals</td>
<td>-0.1391</td>
<td>0.6516</td>
<td>0.0200</td>
<td>-1.98*</td>
</tr>
<tr>
<td>2</td>
<td>Type of Family- Joint</td>
<td>0.1880</td>
<td>1.7126</td>
<td>0.0205</td>
<td>2.04*</td>
</tr>
</tbody>
</table>

Overall Adjusted $R^2 = 0.0454$ *P<0.05 Significant
Overall F Ratio = 4.08; $P<0.01$ **P<0.01 Highly Significant

It can be noted from the above table that, two demographic factors such as father's education, and type of family have emerged as significantly contributing factors for Decision making skill of adolescents.

That is their collective contribution amounts up to 4.54% of variance on Decision making skill of adolescents ($F=4.08, P<0.01$), which is highly significant. Individually father’s occupation contributed to 2% of variance but negatively ($t=-1.98; P<0.05$), and type of family contributed to 2% of variance ($t=2.04, P<0.05$) on Decision making skill of adolescents, which is observed to be significant.

Hence, it can be stated with very high degree of confidence that adolescents' Decision making skill is significantly related to the demographic factors such as father’s occupation, and type of family. In other words, adolescents with father’s whose occupation is either professional, bank or government institution employee, and those living in nuclear families report significantly higher Decision making skill than their counter parts.

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6 As the psychosocial competence scale has negative scoring pattern lower score indicates higher skill and vice versa. Similarly, negative contribution is to be interpreted as positive contribution and vice versa.
8.1.3. Factors Significantly Contributing to Critical Thinking Skill of Adolescents:

Hₐ₁₀.₃: Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their Critical Thinking Skill

Table 8.03: Results of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing to the Critical Thinking Skill of Adolescents

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed R²</th>
<th>'t' Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type of family-joint</td>
<td>0.1470</td>
<td>1.4661</td>
<td>0.0216</td>
<td>2.07*</td>
</tr>
</tbody>
</table>

Overall Adjusted R² = 0.0165 *P<0.05 Significant
Overall F Ratio = 2.07; P<0.05

It is obvious from Table 8.03 that, only the type of family has emerged as significantly contributing factor to Critical thinking skill of adolescents. It has contributed to 2.16% of the variance on Critical thinking skill, which is found to be significant (t=2.07; P<0.05). In other words, the variance on Critical thinking skill of adolescents can be predicted with high degree of confidence on the basis of type of family alone.

Thus, it can be inferred that, adolescents living in joint family showed significantly lower Critical thinking skill than their counterparts living in nuclear type of family.

8.1.4. Factors Significantly Contributing to Creative Thinking Skill of Adolescents:

Hₐ₁₀.₄: Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education,
occupation, income of father and health problems of adolescents significantly influence their Creative Thinking Skill

The results for this life skill can not be obtained because in some of the factors under consideration for regression analysis had less than five observations in them. Therefore, conclusion regarding which demographic factors influence this skill can not be made.

8.1.5. Factors Significantly Contributing to Empathy Skill of Adolescents:

Ha.05: Demographic factors such as sex, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their Empathy Skill

Table 8.04: Results of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing to the Empathy Skill of Adolescents

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed R^2</th>
<th>‘t’ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type of Family- Joint</td>
<td>0.2545</td>
<td>1.9217</td>
<td>0.0205</td>
<td>3.09**</td>
</tr>
<tr>
<td>2</td>
<td>Currently living with- Relatives</td>
<td>-0.2128</td>
<td>2.8049</td>
<td>0.0329</td>
<td>-2.58**</td>
</tr>
</tbody>
</table>

Overall Adjusted R^2 = 0.0534 **P<0.01 Highly Significant
Overall F Ratio = 5.42; P<0.01

The above table shows that type of family and currently living with whom significantly contributed to Empathy skill of adolescents. More specifically, both the above mentioned demographic factors together contributed to 5.34% of variance, which is found to be significantly high (F=5.42; P<0.01). It means 5.34% of the variance on Empathy skill of adolescents can be predicted with high degrees of confidence on the basis of collective operation of two factors type of family and
currently living with whom. Individually, type of family (Joint) contributed to 2.05% of variance (t=3.09; P<0.01) and currently living with whom (relatives) contributed to 3.29% of variance, but negatively (t=-2.58, P<0.01) to Empathy skill of adolescents. Both are found to be influencing Empathy skill at significantly high levels.

Thus, it can be concluded from the above facts that adolescents living in joint families have significantly lower Empathy skill whereas those living with relatives showed high Empathy skill than their respective counter parts.

8.1.6. Factors Significantly Contributing to Self Awareness Skill of Adolescents:

H10.6: Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their Self awareness Skill

Table 8.05: Results Of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing To the Self Awareness Skill of Adolescents

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed R²</th>
<th>t' Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender- Female</td>
<td>0.1639</td>
<td>0.780</td>
<td>0.0220</td>
<td>2.32*</td>
</tr>
<tr>
<td>2</td>
<td>Type of Family-Joint</td>
<td>0.1629</td>
<td>1.688</td>
<td>0.0263</td>
<td>2.30*</td>
</tr>
</tbody>
</table>

Overall Adjusted R² = 0.0483 *P<0.05 Highly Significant
Overall F Ratio = 4.88; P<0.01

Table 8.06 clearly demonstrates that, out of many demographic factors, like gender and type of family significantly contributed to Self awareness skill of adolescents. The collective contribution of these two variables i.e. gender and type of family amounts up to 4.83% variance on Self awareness skill of adolescents, it is found to be significantly high (F=4.83; P<0.01). Therefore, 4.83% of variance on
Self awareness of adolescents can be predicted with high degree of confidence on the basis of collective operation of both these factors. When seen separately, the demographic variable gender is contributing to 2.2% of variance and type of family (joint) is contributing to 2.63% of variance to the self awareness skill of the adolescents. These variables viz, gender (t=2.32; P<0.05) and type of family (t=2.30; P<0.05) are found to be significantly influencing this life skill-self awareness.

Hence, based on the above facts, it can be stated that female adolescents and those living in joint family have significantly lower Self awareness skill than their respective counterparts.

8.1.7. Factors Significantly Contributing to Coping with Emotions Skill of Adolescents:

$H_{a_{0.7}}$: Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their Coping with Emotions Skill

Table 8.06: Results of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing to the Coping with Emotions Skill of Adolescents

<table>
<thead>
<tr>
<th>Sl.No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed $R^2$</th>
<th>‘t’ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Father’s Education (Up to PUC)</td>
<td>-0.2090</td>
<td>0.662</td>
<td>0.0441</td>
<td>-3.04**</td>
</tr>
<tr>
<td>2</td>
<td>Currently Living with Whom (Grand parents)</td>
<td>-0.1515</td>
<td>2.438</td>
<td>0.0204</td>
<td>-2.07*</td>
</tr>
</tbody>
</table>

Overall Adjusted $R^2 = 0.0896$  
Overall F Ratio = 6.26; P<0.001

*P<0.05 Significant  
**P<0.001 Highly Significant
The above table reveals that, two demographic factors—educational qualifications of father, and currently living with whom contributed significantly to Coping with emotions skill of adolescents.

The above mentioned demographic factors contributed collectively contributed to 8.96% of variance on Coping with emotions skill of adolescents which is significantly very high (F=6.26, P<0.001). In other words 8.96% of the variance on Coping with emotions skill can be predicted with very high degree of confidence on the basis of father’s education and currently living with whom. Individually father’s educational qualification—(up to puc) negatively contributed to 4.41% of variance (t=-3.04, P<0.01), and currently living with whom (grand parents) too negatively contributed to 2.04% of variance (t=-2.07, P<0.05) on the Coping with emotions skill of adolescents, which is found to be significant.

Thus, it can be inferred from the stated facts that, adolescents whose fathers are educated up to puc, and those living with grand parents have significantly higher Coping with emotions skill than their cohorts.

8.1.8. Factors Significantly Contributing to Coping with Stress Skill of Adolescents:

Ha10.8 : Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their Coping with Stress Skill
Table 8.07: Results of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing to the Coping with Stress Skill of Adolescents

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed R²</th>
<th>‘t’ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type of Family-(Joint)</td>
<td>0.2390</td>
<td>1.801</td>
<td>0.0571</td>
<td>3.42***</td>
</tr>
</tbody>
</table>

Overall Adjusted R² = 0.0571 ***P<0.01 Very Highly Significant
Overall F Ratio = 3.42; P<0.001

It can be noted from the above table that demographic factor- type of family (Joint) alone made significant contribution to the life skill-Coping with stress of adolescents. It solely contributed to 5.71% of variance (t=3.42, P<0.001) on Coping with stress skill, which is found to be very highly significant. That is to say, 5.71% of the variance on Coping with stress skill of adolescents can be predicted with very high degrees of confidence on the demographic factor i.e. – type of family alone. Thus, it can be stated that adolescents of joint family have significantly lower Coping with stress skill than their cohorts.

8.1.9. Factors Significantly Contributing to Interpersonal Relations Skill of Adolescents:

**Ha109**: Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their **Interpersonal Relations Skill**

Table 8.08: Results of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing to the Interpersonal Relations Skill of Adolescents

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed R²</th>
<th>‘t’ Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type of Family-(Joint)</td>
<td>0.1550</td>
<td>1.615</td>
<td>0.0240</td>
<td>2.18*</td>
</tr>
</tbody>
</table>

Overall Adjusted R² = 0.0240 *P<0.05 Significant
Overall F Ratio = 2.18; P<0.05
Table 8.09 shows that type of family was the lone demographic factor that contributed to Interpersonal relations skill of adolescents. 2.4% is the total amount of variance contributed by this factor which is found to be significant \((t=2.18, P<0.05)\), on Interpersonal relations skill. In other words, with significant degree of confidence the variance on Interpersonal relation skill of adolescents can be predicted on the basis of type of family factor alone. Therefore, it can be stated that adolescents living in joint families have significantly lower Interpersonal relations skill than their cohorts.

8.1.10. Factors Significantly Contributing to Effective Communications Skill of Adolescents:

\( \text{Ha}_{10.10} \): Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their **Effective Communications Skill**

The results for this life skill can not be obtained because in some of the factors under consideration for regression analysis had less than five observations in them. Therefore, conclusion regarding which demographic factors influence this skill can not be made.

8.1.11. Factors Significantly Contributing to Overall Psychosocial Competence of Adolescents:

\( \text{Ha}_{10.11} \): Demographic factors such as gender, number of siblings, order of birth, type of family, currently living with whom, education, occupation, income of father and health problems of adolescents significantly influence their **Overall Psychosocial Competence**
Table 8.09: Results of Stepwise Multiple Regression Analysis of the Factors Significantly Contributing to the Overall Psychosocial Competence of Adolescents

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Factors</th>
<th>Beta Coefficients</th>
<th>Standard Error</th>
<th>Contributed R²</th>
<th>'t' Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Type of Family (Joint)</td>
<td>0.3310</td>
<td>12.672</td>
<td>0.0326</td>
<td>3.61***</td>
</tr>
</tbody>
</table>

Overall Adjusted R² = 0.0638 **P<0.01 Highly Significant
Overall F Ratio = 3.61; P<0.001 ***P<0.01 Very Highly Significant

It can be seen from Table 8.10 that type of family alone contributed to the Overall psychosocial competence of adolescents.

The contribution of type of family factor to the variance on Overall psychosocial competence of adolescents is 6.38% which is found to be very highly significant. (F=3.61, P<0.001). Therefore, in other words it can be stated with very high degree of confidence that 6.38% variance on Overall psychosocial competence can be predicted on type of family only.

Thus, it is obvious from the above stated fact that adolescents living in nuclear families have significantly high Overall psychosocial competence than their counterparts.

8.2. Interpretation: Factors Contributing Significantly to All Ten Life Skills and Overall Psychosocial Competence of Adolescents:

It can be understood from the results presented that, out of 9 demographic factors only 5 factors viz, gender, type of family, currently living with whom and father’s education and occupation emerged as significantly contributing factors to all ten life skills as well as Overall psychosocial competence of adolescents.

Adolescents belonging to male gender showed significantly higher Problem solving and Self awareness skills than female adolescents. This may be due
to fact that girls perceive puberty more negatively than boys and it is of short duration in them. They require more time and support to adjust to the number of changes taking place. Consequently developments affect the self-concept and confidence of female adolescents due to drastic changes in appearance and role expectations, therefore girls' competence are limited in certain life skills like Problem solving and Self awareness. It can also be attributed to the fact that female adolescents are not given as much freedom and opportunities to explore the world as the boys are given, they are discouraged from independent thinking and limit their exposure, hence girls become more dependent on elders in Indian context.

Individually, type of family has emerged as the most significantly contributing demographic factor to number of life skills such as – Decision making, Critical thinking, Empathy, Self awareness, Coping with stress, Interpersonal relations skills and Overall psychosocial competence. Nuclear type of family has significant role to play, as it is found that adolescents living in nuclear families showed significantly higher Decision making, Critical thinking, Empathy, Self awareness, Coping with stress, Interpersonal relations skills, and also Overall psychosocial competence. Nuclear families are where children have lot of autonomy and direct supervision of parents. As parents assume primary responsibility for the child’s behaviour, the kind of disciplining provided helps the adolescent to be self motivated to improve his/her behaviour and strive to live up to parents expectations. Due to increasing awareness and growing abilities of adolescents their activeness levels are high, hence parents who value autonomy and at the same time involve in setting firm limits and discipline the adolescents consistently are able to help them
grow into well adjusted adulthood. This finding is in support of Baumrind's (1987) findings that well adjusted adolescents have been brought up in authoritative style of parenting, where parents are warm, provide opportunities to grow, lay down clear rules and help adolescents live up to their realistic expectations.

Adolescents living with grand parents only have shown significantly higher coping with emotions than their counterparts. Grand parents with more experience in parenting are able to relate to their grand children better. They have more time and wisdom in handling behaviours of adolescents. The significantly positive influence of grandparents is universally recognised and well documented by Barber and Tremblay (2007). Hence, in this study adolescents living with grand parents for schooling purposes are well supervised by their grand parents, who are surrogate parents as well as grandparents. In case of empathy skill, adolescents living with relatives showed higher levels of this particular skill. In other words, adolescents living with parents and grand parents have significantly lower empathy. Living away from parental / grand parental home provides adolescent with opportunities for adaptation to an environment where he/ she is not primary/ significant family member. By force the adolescent may learn to look at things from others perspectives, thereby develop higher empathy skill. In other words, the ego centrism, a hall mark of early adolescence is reduced in these individuals, hence makes adaptation easier.

Adolescents, whose fathers are educated up to puc, showed significantly higher Coping with emotion skill. With limited education, fathers may be involved in occupations that permit them to spend lot of time with their families, hence adolescents reported better Coping with emotions. It may also be because of
the fact that, fathers facilitate the adolescent to achieve what he himself had been unable to achieve.

Father’s occupation played a significant role in case of Decision making skill. Adolescents whose fathers are professionals or working in government institutions and banks showed significantly higher Decision making skill. Higher education and secure income of father significantly influence adolescents’ quality of schooling and social network. Therefore, when they are provided with opportunities and stimulating environment, in the back ground of higher levels of awareness, they are able to develop skills and competencies required for daily life. This finding supports the findings of Entwhistle (1990) who found that parental affluence is related to higher aspirations of adolescents.

8.3. Highlights:

1. Male adolescents showed significantly higher levels of Problem solving and Self awareness skills.

2. Adolescents belonging to nuclear type of family have shown significantly higher Decision making, Critical thinking, Empathy, Self awareness, Coping with stress, Interpersonal relations skill as well as Overall psychosocial competence.

3. Adolescents currently living with relatives have higher Empathy skill than their counterparts.

4. Currently living with grand parents only has been found to be beneficial for Coping with emotions skill.
5. Adolescents whose father’s have limited education have better Coping with emotions skill.

6. Adolescents whose fathers are professionals, or working in government institutions or banks are found to be having better Decision making skill.