An integrated analysis of socioeconomic structures and actors in Indonesian industrial clusters
Ismalina, Poppy

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Appendix I. The Questionnaire

<table>
<thead>
<tr>
<th>Company’s Location</th>
<th>Interview Date (dd/mm/yyyy)</th>
<th>Position in the cluster</th>
<th>Producer (Artisan) ( )</th>
<th>Traders ( )</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td>(control variable)</td>
<td></td>
</tr>
</tbody>
</table>

1. General Information
1.1. Name of enterprise:
1.2. Address:
1.3. Name of respondent:
1.4. Age:
1.5. Educational level:
   (a) did not go to school
   (b) primary school
   (c) junior high school
   (d) senior high school
   (e) academy/university
   (f) Other (specify)

1.6. Position in the enterprise
   (a) Owner
   (b) Manager
   (c) Artisan

1.7. What was your previous occupation?
   (a) Owner of another firm
   (b) Worker in a small firm (less than 20 workers)
   (c) Worker in a firm with more than 20 workers
   (d) Artisan
   (e) Doing non-business activities

1.8. What is your main product (as % of total output):
2. History of the Enterprise
2.1. When was the firm established?
2.2. By whom?
2.3. One year total investment: Rp ________________
2.4. What is your relationship to the founder(s)?
   (a) workshop ( )Yes ( )No
   (b) sales ( )Yes ( )No
   (c) a customer’s order service ( )Yes ( )No
   (d) storage ( )Yes ( )No

3. Performance
3.1. Sales turnover (in value):
3.2. The trend of sales turn-over for the last five years:
   ( ) increasing ( ) no change ( ) decreasing
3.3. The trend of net profit for the last one year:
   ( ) increasing ( ) no change ( ) decreasing
3.4. The trend of sales turn-over for the last one year:
   ( ) increasing ( ) no change ( ) decreasing
3.5. % of exported production:
3.6. Trend of Export over the last 5 years:
   ( ) increasing ( ) flat ( ) decreasing
3.7. Which countries did you export in the past year?:
   (a). EU ( )Yes ( ) No
   (b). Rest of Europe ( )Yes ( ) No
   (c). USA ( )Yes ( ) No
   (d). Japan ( )Yes ( ) No
   (e). Asian Countries ( )Yes ( ) No
   (f). Rest of the world ( )Yes ( ) No
3.8. Number of total product per year
3.9. Trend over the last 5 years: [(increasing); (flat); (decreasing)]
3.10. Specify to whom you sell your products as a percentage of total sales:
   (a). directly to the customer ( )Yes ( ) No
   (b). direct to the small, medium, large retailers ( )Yes ( ) No
   (c). direct to the factory ( )Yes ( ) No
   (d). through an agent ( )Yes ( ) No
   (e). through a consortium with other manufacturers ( )Yes ( ) No
3.11. Indicate the manufacturing and marketing capability of your firm:

(a) labor skills
   ( ) improved ( ) no change ( ) decreased
(b) degree of specialization
   ( ) improved ( ) no change ( ) decreased
(c) marketing strategy (advertising, network, etc)
   ( ) improved ( ) no change ( ) decreased

4. Labor Force
4.1. Number of workers:
   (a) Skilled (artisan):
   (b) Unskilled:

4.2. Number of workers:
   (a) Family:
   (b) Non-Family:

4.3. Number of workers:
   (a) from cluster:
   (b) from outside cluster:

5. SUBCONTRACTING (the relationship between trader(s) and subcontractor/artisan(s))
5.1. Indicate to what extent each stage of production is put out to other enterprises:
   (a). designing ( )Yes ( ) No
   (b). production process ( )Yes ( ) No
   (b). finishing 1 ( )Yes ( ) No
   (c). finishing 2 ( )Yes ( ) No

5.2. Where are your subcontractors?
   (a) local (internal cluster) ( )Yes ( ) No
   (b) district ( ) Yes ( ) No
   (c) national ( )Yes ( ) No
   (d) abroad ( )Yes ( ) No

5.3. % of subcontracted production of your total products?

5.4. Do you visit your subcontractor’s workshop? ( )Yes ( ) No
5.5. What is the most important reason for choosing the firm’s subcontractors?
(1: the highest to 5: the lowest)
(a) Price [1 2 3 4 5]
(b) Quality [1 2 3 4 5]
(c) Speed and punctual delivery [1 2 3 4 5]
(d) Close proximity [1 2 3 4 5]
(e) Trust [1 2 3 4 5]

5.6. What happens when a new subcontractor offers you a lower price than your present subcontractor(s)?
(a) move to cooperate with a new partner
(b) still cooperate with a current partner
(c) start cooperating with a new partner but still cooperate with a present partner
(d) other: (specify)

5.7. Why do you engage in the subcontracting of these operations?
(a) irregular demand ( )Yes ( ) No
(b) savings on premises and machinery ( )Yes ( ) No
(c) subcontracting yields a better quality ( )Yes ( ) No
(d) greater efficiency of subcontractor ( )Yes ( ) No
(e) trust ( )Yes ( ) No
(f) reciprocal relationship ( )Yes ( ) No

6. RELATIONSHIPS WITH SUPPLIERS
6.1. Do you buy inputs from the following sources?

<table>
<thead>
<tr>
<th></th>
<th>Local (internal cluster)</th>
<th>Province</th>
<th>National</th>
<th>Abroad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Materials</td>
<td>( )Yes</td>
<td>( )Yes</td>
<td>( )Yes</td>
<td>( )Yes</td>
</tr>
<tr>
<td>New Machines</td>
<td>( )Yes</td>
<td>( )Yes</td>
<td>( )Yes</td>
<td>( )Yes</td>
</tr>
<tr>
<td>Second-hand machines</td>
<td>( )Yes</td>
<td>( )Yes</td>
<td>( )Yes</td>
<td>( )Yes</td>
</tr>
<tr>
<td>Other Components</td>
<td>( )Yes</td>
<td>( )Yes</td>
<td>( )Yes</td>
<td>( )Yes</td>
</tr>
</tbody>
</table>
6.2. What kind of problems do you have in the relationships with your suppliers?

<table>
<thead>
<tr>
<th></th>
<th>Availability</th>
<th>Price</th>
<th>Quality</th>
<th>Time Delivery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Raw Materials</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
</tr>
<tr>
<td></td>
<td>( ) No</td>
<td>( ) No</td>
<td>( ) No</td>
<td>( ) No</td>
</tr>
<tr>
<td>New Machines</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
</tr>
<tr>
<td></td>
<td>( ) No</td>
<td>( ) No</td>
<td>( ) No</td>
<td>( ) No</td>
</tr>
<tr>
<td>Second-hand machines</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
</tr>
<tr>
<td></td>
<td>( ) No</td>
<td>( ) No</td>
<td>( ) No</td>
<td>( ) No</td>
</tr>
<tr>
<td>Other components</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
<td>( ) Yes</td>
</tr>
<tr>
<td></td>
<td>( ) No</td>
<td>( ) No</td>
<td>( ) No</td>
<td>( ) No</td>
</tr>
</tbody>
</table>

7. WORKING AS A SUPPLIER AND/OR A SUBCONTRACTOR (the relationship between a supplier/a subcontractor and a trader)

7.1. Do you work as a subcontractor for?
   (a) design ( ) Yes ( ) No
   (b) production process ( ) Yes ( ) No
   (c) finishing ( ) Yes ( ) No

7.2. % of total production as an ORDER from other traders:

7.3. How many are traders (shops) ordered your products for the last five years?

7.4. Where are your main traders located?
   (a) within the cluster ( ) Yes ( ) No
   (b) other village/suburbs in the same municipal ( ) Yes ( ) No
   (c) other municipal ( ) Yes ( ) No
   (d) other cities ( ) Yes ( ) No
   (e) other countries ( ) Yes ( ) No

7.5. What are the reasons for choosing the firm’s trader? (1: the highest to 5: the lowest)
   (a) High Buying Price [1 2 3 4 5]
   (b) On-time Payment [1 2 3 4 5]
   (c) Trust [1 2 3 4 5]
   (d) Close-proximity [1 2 3 4 5]
   (e) Order from Trader(s) [1 2 3 4 5]
8. **INNOVATION**

8.1. Over the last 5 years, how has the quality of your products been?  
( ) improved  ( ) decreased  ( ) no change

8.2. Over the past 5 years, has the standard of your equipment been improved:  
( ) improved  ( ) decreased  ( ) no change

8.3. Generally, where does technical innovation come from?  
(a) develop internally  ( ) Yes  ( ) No  
(b) in cooperation with other local producers  ( ) Yes  ( ) No  
(c) Government Assistance  ( ) Yes  ( ) No  
(d) Non-Government Institution Assistance  ( ) Yes  ( ) No  
(e) Association Assistance  ( ) Yes  ( ) No

8.4. Is your product-design based on:  

a. for products that are sold directly to the consumer:  
(a) design by customer (tailor-made design)  
(b) design by own-preference  
(c) design by outside designer  
(d) copy from other firms within a cluster  
(e) copy from other firms outside a cluster  
(f) Magazine or Catalog

b. for products that are ordered by the certain wholesalers  
(a) design by traders/wholesalers  
(b) design by own-preference  
(c) design by outside designer  
(d) copy from other firms within a cluster  
(e) copy from other firms outside a cluster  
(f) Magazine or Catalog

9. **INTER-FIRM COMPETITION**

9.1. Where are your main competitors located?  
(a) within the cluster  
(b) other village/suburbs  
(c) other municipal  
(d) other cities

9.2. What are your main competitors?  
(a) large firms?  ( ) Yes  ( ) No  
(b) medium firms?  ( ) Yes  ( ) No  
(c) small firms?  ( ) Yes  ( ) No
9.3. In order to out-compete your rivals, what is the most important factor? (give the rank: 3: the highest to 1: the lowest)

(a) Lower Price [1 2 3]
(b) High Quality [1 2 3]
(c) Speed Time Delivery [1 2 3]

10. INTER-FIRM COOPERATION

10.1. Do you have any equity share at other firms? If yes, please indicate the type of firm:
   (a) backward-linked firms ( )Yes ( )No
   (b) forward-linked firms ( )Yes ( )No
   (c) firms in an unrelated sector ( )Yes ( )No

10.2. Do other firms own any equity share at your firm? ( )Yes ( )No

10.3. Do you have any formal agreements with other firms? ( )Yes ( )No

10.4. Do you cooperate with local partners in your industry in the following ways:
   (a) technology development ( )Yes ( )No
   (b) sharing machinery ( )Yes ( )No
   (c) marketing ( )Yes ( )No
   (d) artisan exchange ( )Yes ( )No
   (e) other (specify) ( )Yes ( )No

10.5. What are the main reasons for cooperating with other firms?
   (a) increase in specialization ( )Yes ( )No
   (b) improvement in quality ( )Yes ( )No
   (c) increase in the availability of information ( )Yes ( )No
   (d) access to new markets ( )Yes ( )No
   (e) trust ( )Yes ( )No
   (f) reciprocal relationship ( )Yes ( )No

10.6. How frequently do you meet and talk to other partners in this cluster?
   (a) never (b) occasionally (c) regularly (d) very frequently
10.7. In case entrepreneurial subjects are discussed, which ones?

<table>
<thead>
<tr>
<th>(Material) Inputs</th>
<th>( ) Yes</th>
<th>( ) No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>( ) Yes</td>
<td>( ) No</td>
</tr>
<tr>
<td>Equipment and components</td>
<td>( ) Yes</td>
<td>( ) No</td>
</tr>
<tr>
<td>Markets &amp; customer wants</td>
<td>( ) Yes</td>
<td>( ) No</td>
</tr>
<tr>
<td>Government or NGO assistance</td>
<td>( ) Yes</td>
<td>( ) No</td>
</tr>
<tr>
<td>Subcontracting</td>
<td>( ) Yes</td>
<td>( ) No</td>
</tr>
<tr>
<td>Recruitment and sharing of workers</td>
<td>( ) Yes</td>
<td>( ) No</td>
</tr>
<tr>
<td>Other: (specify)</td>
<td>( ) Yes</td>
<td>( ) No</td>
</tr>
</tbody>
</table>

10.8. Do you believe that the possibility of having easy and friendly contacts with other local firms is an important asset for your firm?

( ) Yes    ( ) No

10.9. How do your informal relationships usually come about?

(a) family ties   ( ) Yes    ( ) No
(b) neighbors or spatial proximity   ( ) Yes    ( ) No
(c) social occasions   ( ) Yes    ( ) No
(d) meetings organized by the local business associations   ( ) Yes    ( ) No
(e) other (specify)   ( ) Yes    ( ) No

10.10. Could you obtain the same results as you now get if you were not located in this area?

( ) Yes    ( ) No

10.11. Between you and other local firms in a cluster, is there:

(a) over-benefiting
(b) reciprocal
(c) under-benefiting relationships

10.12. Among you and other firms in business organizations in a cluster, is there:

(a) over-benefiting
(b) reciprocal
(c) under-benefiting relationships
10.13. Do you get those benefits from your location in this cluster? (the clustering effects)
(a) availability of skilled labor ( ) Yes ( ) No
(b) cheap labor cost ( ) Yes ( ) No
(c) availability of inputs and components ( ) Yes ( ) No
(d) access to information on technology ( ) Yes ( ) No
(e) access to information on products ( ) Yes ( ) No
(f) access to information on markets ( ) Yes ( ) No
(g) institutional support (business associations; informal groups of firms; non-business organizations) ( ) Yes ( ) No
(h) access to credit ( ) Yes ( ) No
(i) other (specify) ( ) Yes ( ) No

10.14. Do you trust your partners within a cluster as a friend since they generally do not lie and do what they promise to you? ( ) Yes ( ) No

10.15. Do you trust your partners within a cluster since they would keep mutual cooperation in the future? ( ) Yes ( ) No

10.16. Do you trust your partners within a cluster since they can accomplish your assignments or your order? ( ) Yes ( ) No

10.17. Do you trust your partners within a cluster since you can with complete confidence rely on them to keep promises made to you based on past experience? ( ) Yes ( ) No

10.18. Is there any firm in clusters that take advantage of interfirm relationships while seeking business profits, regardless of the other parties' losses? ( ) Yes ( ) No

10.19. Is there any firm in clusters which imitate others' product designs without contributing anything to product development process? ( ) Yes ( ) No

11. INSTITUTIONS

11.1. How frequently do you involve in the process of decision making within this cluster?
(a) never (b) occasionally (c) regularly (d) very frequently

11.2. Do you join the local producers association or any groups within a cluster? ( ) Yes ( ) No
11.3. How many people are members of that group/association?

11.4. Is the association for:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint marketing of goods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Search for new markets or customers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint recruitment and sharing of workers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint purchasing of inputs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exchange of machines/equipment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Information exchange</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R &amp; D: new products or processes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lobbying with the Government</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advice in legal matters</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Courses and Seminars</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bargaining with Other External Institutions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maintaining Social Ties</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

11.5. Who are reputed leaders in this group/business association?

1. ........
2. ........
3. ........

11.6. Do you have any contact with the following external institutions?

(a) Government institutions ( ) Yes ( ) No
(b) Non-government institutions ( ) Yes ( ) No

12. VIEWS ON STRATEGIC LEADERSHIPS

12.1. Put on the list the leaders in your formal/informal business association based on his/her capability in the decision-making process:

1.
2.
3.
4.
5.
6.

12.2. Do they define rules (for themselves, group, and/or the organization), and allocate task responsibility and resources towards the accomplishment of personally identified goals? ( ) Yes ( ) No

12.3. Do they make a relationship or network with other institutions from outside clusters? ( ) Yes ( ) No
Appendix II. List of questions for in-depth interviews

I. Inter-firm relationships

- How does the typical relationship begin and develop over time?
- What is the history behind this relationship? How long has it been going?
- Are there any social/family ties that exist with this firm/agent? How does this influence the relationship?
- Are agreements with the firm/agent of a formal or informal nature?
- Whose assistance has been most effective for its business? from internal or external institution of cluster? from insider or outsider (government)?

  Internal Assistance (Assistance Embedded):
  - Technological assistance: guidance; instruction in machinery use/jig use; providing machinery/tools; quality control; worker training/engineer dispatch
  - Financial assistance: capital participation; investment loans; advance payment; machinery leasing;
  - Other assistance: providing raw materials; information/guidance on market.

  External assistance: from order providers; government (ministry of industry and commerce or state-owned corporations); private institutions, e.g. private companies (other than order providers), industrial associations; foreign institutions, universities or research institutes; cooperatives, the local industrial cooperatives; banks or other financial institutions
  - Technological assistance
  - Financial assistance
  - Managerial assistance

- Do you cooperate with other producers in a task-group aiming at entrepreneurial goals?
• How many producers participate in that group? Is that group a formal business association? Or informal group in a cluster?
• Which activities have been undertaken so far? (put the lists of activities, e.g. joint marketing of output, search for new markets or customers, joint purchasing of inputs, joint purchasing of machines, exchange of machines/equipment, exchange of workers, information exchange, etc).
• Over the past five years, have been there some changes in those joint activities?

II. Inter-firm interaction: competition and social embeddedness
• Do you visit your partner’s factory or shop? In what way do you reward good performance?
• What happens when a new partner offers you a lower price than you present partner(s)?
• What sanctions do you apply if the partner breaks the agreement (for instance in terms of quality, late delivery)?
• Will the same sanctions be applied to the partner by other producer firms as well?
• If you are dissatisfied with the quality of the products/services you obtain from the partner, do you look for an alternative source, or do you collaborate with the existing one to improve quality?
• Do you know if the partner undertakes tasks for other customers (producers/firms)?
• Do you receive information about your competitors from the partner?
• Are you afraid that the partner shares information about you and your production activities with your competitors?
• In what organizations (formal and/or informal) do you and other participants have rules regarding inter-firm relationships within a cluster?
• What kind of rules do you have? How can you and others follow the rules?
• Is there any sanction (economic and non-economic sanction) if someone breaks the rules?
• How could the rules influence the development of firms and a cluster? Is there a period in which the rules changed to adopt the new situation faced by firms and a cluster?

III. Questions in the questionnaire
Appendix III. List of interviewees

The interviews were conducted from August 2007 until May 2008.

I. Individual firm in-depth interview

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Cluster</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mrs. Setiyani Djazuli</td>
<td>Kotagede</td>
<td>Owner/artisan/trader</td>
</tr>
<tr>
<td>2</td>
<td>Mr. R.M. Mulyo Wiryono</td>
<td>Kotagede</td>
<td>Owner/trader without a workshop</td>
</tr>
<tr>
<td>3</td>
<td>Miss. Novi</td>
<td>Kotagede</td>
<td>Shopkeeper</td>
</tr>
<tr>
<td>4</td>
<td>Mr. Samiono</td>
<td>Kotagede</td>
<td>Worker/artisan</td>
</tr>
<tr>
<td>5</td>
<td>Mr. Istiadi</td>
<td>Kotagede</td>
<td>Owner/artisan/trader</td>
</tr>
<tr>
<td>6</td>
<td>Mr. Sardjimin</td>
<td>Kotagede</td>
<td>Owner/artisan</td>
</tr>
<tr>
<td>7</td>
<td>Mr. Samidi</td>
<td>Kotagede</td>
<td>Owner/artisan/trader</td>
</tr>
<tr>
<td>8</td>
<td>Mr. Jamal</td>
<td>Kotagede</td>
<td>Owner/trader with a workshop</td>
</tr>
<tr>
<td>9</td>
<td>Mr. Suryadi</td>
<td>Kotagede</td>
<td>Owner/trader with a workshop</td>
</tr>
<tr>
<td>10</td>
<td>Mr. Ismunandar</td>
<td>Kotagede</td>
<td>Public Relation</td>
</tr>
<tr>
<td>11</td>
<td>Mrs. Isnaeni</td>
<td>Manding</td>
<td>Owner/trader</td>
</tr>
<tr>
<td>12</td>
<td>Mr. Wahyudin and Mrs. Pandit</td>
<td>Kotagede</td>
<td>Owner/trader without a workshop</td>
</tr>
<tr>
<td>13</td>
<td>Mrs. Dina and Mr. Purwanto</td>
<td>Kotagede</td>
<td>Owner/trader with a workshop</td>
</tr>
<tr>
<td>14</td>
<td>Mr. Sukanto</td>
<td>Kotagede</td>
<td>Owner/trader without a workshop</td>
</tr>
<tr>
<td>15</td>
<td>Mrs. Purwanti</td>
<td>Manding</td>
<td>Worker/artisan</td>
</tr>
<tr>
<td>16</td>
<td>Mrs. Sony, Mr. Waluyo, Mrs. Ani</td>
<td>Kotagede</td>
<td>PR and employee</td>
</tr>
<tr>
<td>17</td>
<td>Mr. Chandra</td>
<td>Kotagede</td>
<td>Owner/trader without a workshop</td>
</tr>
<tr>
<td>18</td>
<td>Mr. Yono</td>
<td>Manding</td>
<td>Owner/artisan/trader</td>
</tr>
<tr>
<td>19</td>
<td>Mr. Alono</td>
<td>Kotagede</td>
<td>Owner/artisan/trader</td>
</tr>
<tr>
<td>20</td>
<td>Mr. Sunardi</td>
<td>Kotagede</td>
<td>Owner/artisan/trader</td>
</tr>
<tr>
<td>21</td>
<td>Mr. Dhohir</td>
<td>Kotagede</td>
<td>Owner/trader without workshop</td>
</tr>
<tr>
<td>22</td>
<td>Mr. Jayadi and Mbak Mimi</td>
<td>Kasongan</td>
<td>Owner/artisan/trader</td>
</tr>
<tr>
<td>23</td>
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II. In-depth interview with local formal leaders and informal leaders

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III. Participatory observations and focus discussion groups

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Appendix IV. Quantitative evidence

1. Descriptive Statistics
2. Correlations

Variables Name:

D1 : Active clusters (a cluster’s classification)
D2 : Manufacturers (respondents’ classification)
D3 : Retailers who do not have their own workshops (respondents’ classification)
D4 : Members of local business associations
X1 : Quality-based competition
X2 : Price-based competition
X3 : Firm-level reciprocity
X4 : Cluster-level reciprocity
X5 : Inter-organizational trust
X6 : Interpersonal trust
X7 : Opportunism problems
X8 : Inward-looking behaviour
X9 : Free-riding problems
X10 : Total workers
X11 : Firm age
X12 : One year investment
Table IV.2. Correlations

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**Correlation is significant at the 0.01 level (2-tailed)
Correlation is significant at the 0.05 level (2-tailed)**
