

Statistics for Marketing MGT 6469

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SPSS Case #3 Knit Shop Assignment

Question: Please conduct the following analyses, and describe in words what they mean for the Yarn Shop:

1. Please run a correlation matrix for all the scale variables in the dataset (amount purchased, store satisfaction, yarn selection satisfaction, salespeople satisfaction, and recommendation likelihood).
2. Highlight the significant results, then describe in words which correlations are significant (and how you know that) and the direction of the relationship (and how you know that).

Be sure to include a managerially relevant interpretation of what these results mean, that is, how can they be used by the store owners to make the yarn shops more profitable? Your managerial insights can be brief (as in a sentence or two per finding).

Answer 1: Correlation matrix for all the scale variables in the dataset (amount purchased, store satisfaction, yarn selection satisfaction, salespeople satisfaction, and recommendation likelihood).

Correlations						
		Amount Purchased	Store Satisfaction	Yarn Selection Satisfaction	Satisfaction with Salespeople	Willing to Recommend
Amount Purchased	Pearson Correlation	--				
	N	100				
Store Satisfaction	Pearson Correlation	.786**	--			
	Sig. (2-tailed)	<.001				
	N	100	100			
Yarn Selection Satisfaction	Pearson Correlation	.816**	.821**	--		
	Sig. (2-tailed)	<.001	<.001			
	N	100	100	100		
Satisfaction with Salespeople	Pearson Correlation	.627**	.629**	.694**	--	
	Sig. (2-tailed)	<.001	<.001	<.001		
	N	100	100	100	100	
Willing to Recommend	Pearson Correlation	.679**	.672**	.672**	.559**	--
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	100	100	100	100	100

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

Answer 2: The significant results are highlighted as follows:

Correlations						
		Amount Purchased	Store Satisfaction	Yarn Selection Satisfaction	Satisfaction with Salespeople	Willing to Recommend
Amount Purchased	Pearson Correlation	--				
	N	100				
Store Satisfaction	Pearson Correlation	.786**	--			
	Sig. (2-tailed)	<.001				
	N	100	100			
Yarn Selection Satisfaction	Pearson Correlation	.816**	.821**	--		
	Sig. (2-tailed)	<.001	<.001			
	N	100	100	100		
Satisfaction with Salespeople	Pearson Correlation	.627**	.629**	.694**	--	
	Sig. (2-tailed)	<.001	<.001	<.001		
	N	100	100	100	100	
Willing to Recommend	Pearson Correlation	.679**	.672**	.672**	.559**	--
	Sig. (2-tailed)	<.001	<.001	<.001	<.001	
	N	100	100	100	100	100

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

There exists a significant positive relationship between store satisfaction and amount purchased as $r=0.786$ and $p < 0.001 < 0.05$.

There exists a significant positive relationship between yarn selection satisfaction and amount purchased as $r=0.816$ and $p < 0.001 < 0.05$

There exists a significant positive relationship between yarn selection satisfaction and store satisfaction as $r=0.821$ and $p < 0.001 < 0.05$

There exists a significant positive relationship between satisfaction with salespeople and amount purchased as $r=0.627$ and $p < 0.001 < 0.05$

There exists a significant positive relationship between satisfaction with salespeople and store satisfaction as $r=0.629$ and $p < 0.001 < 0.05$

There exists a significant positive relationship between satisfaction with salespeople and yarn selection satisfaction as $r=0.694$ and $p < 0.001 < 0.05$

There exists a significant positive relationship between willingness to recommend and amount purchased as $r=0.679$ and $p < 0.001 < 0.05$

There exists a significant positive relationship between willingness to recommend and store satisfaction as $r=0.672$ and $p < 0.001 < 0.05$

There exists a significant positive relationship between willingness to recommend and yarn selection satisfaction as $r=0.672$ and $p < 0.001 < 0.05$

There exists a significant positive relationship between willingness to recommend and satisfaction with salespeople as $r=0.559$ and $p < 0.001 < 0.05$

Note:

Here, r =Karl Pearson's Correlation Coefficient/Pearson Correlation

1. If $r = +ve$, there exists a positive relationship between both variables (Since all the r values here were $+ve$, there exists a positive relationship between said variables)
2. If $r = -ve$, there exists a negative relationship between both variables
3. The more r is closer to 1, the higher is the strength of relationship between both variables.

Alternatively, we can also find the significant results by simply looking at Pearson correlation values with double asterisks **.

Managerial Recommendation

Every single variable here has a positive correlation with each other – however, since correlation does not imply causation, there is not much the manager can do with this data. All he gains from this analysis is the fact that certain variables tend to move together e.g. Store satisfaction and yarn selection satisfaction, but the underlying cause which causes both move up can be different than just each other.

Therefore, there is nothing I can recommend just based of this data. The only thing I can recommend is for the store owner to perform further analysis such as regression analysis to actually find the magnitude of change that occurs by changing one variable.