# ASSESSING BUSINESS STUDENT INTEREST IN WITNESSING PRODUCTION PROCESSES IN THE MARKETPLACE 

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#### Abstract

Undergraduate business students were polled as to their interest in witnessing production processes in the marketplace. The types preferred varied by age, race, and gender.


## INTRODUCTION

Dorothy Sayers laments the "modern" techniques of educating in her powerful address at Oxford University in 1947 entitled "The Lost Tools of Learning":
"Is not the great defect of our education today. . . that although we often succeed in teaching our pupils 'subjects,' we fail lamentably on the whole in teaching them how to think: they learn everything, except the art of learning".

She continues her speech with the example of teaching a child to play a piano piece without ever teaching him/her to read music or to play scales. The student has memorized the selection and performed it perfectly to smiling parents at the Spring Recital: but, has not been given the tools to play a new musical piece on his own. Education's most basic requirement should be to give students the tools of learning that may be transferred from one situation to the next. A failure to do this merely makes parrots of the students, where they simply play back to the teacher the information given them.

Experiential learning goes beyond the process of students’ regurgitating information fed them by their instructors to "focus on learning through reflection on one's personal experience" [McCarthy, 1987]. "Through reflection, students link concrete experience to theoretical understanding. The process serves as a framework to guide future action and helps students advance from passive learners to active doers" [Goby and Lewis, 2000]. Today, educators are enhancing their teaching techniques by supplementing passive learning (i.e. traditional lecture format) with active learning techniques. Active learning encourages students to become more involved in their subject matter by "applying theory to real-life situations" [Hamer, 2000]. Finding creative teaching tools that relate to more students is a constant goal for the conscientious instructor.

It is suggested here that greater use of Consumer Experience Tourism (i.e., manufacturing plant tours, company visitor centers, and company museums) is one such instructional tool. The purpose of this manuscript is to discuss the growing use of Consumer Experience Tourism in the marketplace and to suggest how today's business educators may better utilize this phenomenon to supplement traditional classroom activities. Further, student interest in witnessing the production processes of a variety of products is assessed. This analysis permits an evaluation of the influence of demographic factors on student interest. Ultimately,
instructors can improve student performance by selecting class projects, field trips, internship partners, and other experiential learning opportunities that best meet the interest of their particular student audience.

## BUSINESS EDUCATORS AND CONSUMER EXPERIENCE TOURISM

Consumer Experience Tourism provides an excellent opportunity for business educators to include active learning in their course offerings. In particular, college-sponsored field trips to manufacturing plant tours, company museums, or company visitor centers provide an effective hands-on learning experience that is embraced by the student and provides an effective learning experience for students of all learning styles. It provides experiential learning at its best. An added bonus to experiential learning comes in discovering areas of special interest to particular students. It is understood that students learn better and retain more when studying information that genuinely interests them. A study evaluating student preferences in field trip choices reveals valuable information for business educators seeking to select the appropriate locations or destinations for his/her class. This is the focus of the remainder of this manuscript.

## METHODS

Students enrolled in Consumer Behavior at a medium sized state university in the southeast United States worked with their instructor to create the questionnaire used in this study. An extensive review of the literature was conducted to better understand current practices within this tourism segment. Further, a review of existing sites served as the starting point to identify product categories for evaluation. The completed questionnaire included the following directions:

Thank you for agreeing to participate in this research study. The purpose of this study is to evaluate your level of interest in watching products being produced. Specifically, assuming you could take a tour and watch an item being produced, would you be interested in doing so? The results of your questionnaire will be kept confidential. Only overall research results will be evaluated and reported.

Directions: Below is a list of product categories. Please circle your level of interest in witnessing the item's production process using the following 1-5 scale:

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1 = Very Interested
2 = Moderately Interested
3 = Somewhat Interested
4 = Very Little Interest
5= Not Interested At All
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A total of forty-one product categories are evaluated in this study. Further, a series of demographic questions was included to profile respondents and to evaluate possible influences on response.

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Table 1: Sample Composition ( $\mathrm{n}=291$ )

| Gender: | Male $=131(45 \%)$ | Female $=160(55 \%)$ |
| :--- | :--- | :--- |
| Ethnic Group: | Caucasian $=214(73.5 \%)$ <br> Asian American $=10(3.4 \%)$ | African American $=46(15.8 \%)$ <br> Latin American $=6(2.1 \%)$ <br>  <br>  <br> Other $=2(0.7 \%)$ |
| Foreign National $=13(4.5 \%)$ |  |  |
| Age Group: | $24<219(75.3 \%)$ |  |
|  | $35-44=7(2.4 \%)$ | $25-34=56(19.2 \%)$ |
|  | $55-64=1(0.3 \%)$ | $45-54=7(2.4 \%)$ |
|  |  | 65 and over $=1(0.3 \%)$ |

Table 2: Interest in Product Categories Mean Scores Ranked in Order of Interest for All Respondents ( $\mathrm{n}=291$ )

| Variable (Product Category) | Mean <br> Response | Standard <br> Deviation |
| :--- | :--- | :--- |
| V4 = Automobiles (cars, trucks, heavy trucks, etc.) | 2.215 | 1.138 |
| V14 = Communications Media (radio and television <br> studios) | 2.235 | 1.158 |


| V17 = Entertainment Facilities (arenas, theatres, etc.) | 2.297 | 1.215 |
| :---: | :---: | :---: |
| V8 = Beverages (Alcoholic) | 2.416 | 1.282 |
| ```V16 = Consumer Electronics (televisions, stereos, etc.)``` | 2.507 | 1.276 |
| V33 = Photographic Equipment (cameras, film, etc.) | 2.588 | 1.227 |
| V15 = Computer Hardware | 2.653 | 1.248 |
| V7 = Beverages (Non-Alcoholic) | 2.663 | 1.269 |
| V13 = Clothing / Garments | 2.742 | 1.339 |
| V32 = Pharmaceuticals (ointments, pills, etc.) | 2.745 | 1.258 |
| V40 = Toys | 2.783 | 1.285 |
| V38 = Recreational Vehicles (boats, campers, etc.) | 2.816 | 1.363 |
| V19 = Food Products (baked goods, frozen foods, snacks, etc.) | 2.828 | 1.288 |
| V2 = Aircraft Production and Maintenance | 2.841 | 1.375 |
| V37 = Printing Process (books, magazines, newspapers, etc.) | 2.934 | 1.247 |
| V3 = Athletic Equipment (balls, racquets, clubs, etc.) | 2.979 | 1.248 |
| V35 = Pottery and China | 2.990 | 1.333 |
| V20 = Furniture | 3.072 | 1.196 |
| V10 = Candles | 3.076 | 1.357 |
| V21 = Glass and Glass Products (crafts, jars, etc.) | 3.182 | 1.236 |
| V18 = Eyewear (glasses, contact lens, etc.) | 3.216 | 1.253 |
| V31 = Personal / Household Products (cleaners, cosmetics, etc.) | 3.226 | 1.290 |
| V5 = Automobile Parts (brakes, engines, seats, etc.) | 3.255 | 1.304 |
| V24 = Home Furnishing (comforters, drapes, linens, etc.) | 3.385 | 1.266 |
| V34 = Plastics / Plastic Molded Products | 3.414 | 1.197 |
| V30 = Paper and Paper Products | 3.436 | 1.197 |
| V11 = Carpeting and Rugs | 3.467 | 1.178 |
| V36 = Power Generating Equipment (turbines, relays, etc.) | 3.479 | 1.370 |
| V12 = Cloth Weaving | 3.485 | 1.247 |
| V25 = Household Appliances (washers, dryers, ranges, etc.) | 3.493 | 1.206 |
| V6 = Automobile Tires | 3.540 | 1.258 |
| V39 = Steel and Aluminum Production | 3.601 | 1.240 |
| V9 = Building Supplies (wood, concrete, etc.) | 3.606 | 1.203 |
| V22 = Hand Tools (drills, sanders, etc.) | 3.657 | 1.156 |
| V28 = Mining (rock, gravel, etc.) | 3.667 | 1.199 |
| V27 = Metal Crafts (iron, pewter, etc.) | 3.691 | 1.232 |
| V23 = Home Fixtures (lighting, plumbing, etc.) | 3.697 | 1.119 |
| V29 = Mobile or Modular Homes | 3.753 | 1.224 |
| V1 = Agricultural / Lawn and Garden Equipment | 3.763 | 1.227 |
| V41 = Warehousing (storage and movement of goods) | 3.801 | 1.181 |


| V26 $=$ Machining (bearings, coils, plating, etc.) | 3.872 | 1.132 |
| :--- | :--- | :--- |

Table 3: Interest in Product Categories --- Influence of Gender

| Variable | Male <br> Responde <br> nts $(\mathrm{n}=131)$ | Female <br> Responde <br> nts $(\mathrm{n}=160)$ | T-Value | P-Value |
| :---: | :---: | :---: | :---: | :---: |
| V1 = Agricultural / Lawn and Garden Equipment | 3.4809 | 3.9938 | -3.62 | 0.000** |
| V2 = Aircraft Production and Maintenance | 2.3769 | 3.2201 | -5.44 | 0.000** |
| V3 = Athletic Equipment (balls, racquets, clubs, etc.) | 2.6923 | 3.2125 | -3.60 | 0.000** |
| V4 = Automobiles (cars, trucks, heavy trucks, etc.) | 1.9612 | 2.4188 | -3.46 | 0.000** |
| V5 = Automobile Parts (brakes, engines, seats, etc.) | 2.9308 | 3.5188 | -3.91 | 0.000** |
| V6 = Automobile Tires | 3.2385 | 3.7862 | -3.77 | 0.000** |
| V7 = Beverages (Non-Alcoholic) | 2.8702 | 2.4938 | 2.54 | 0.012** |
| V8 = Beverages (Alcoholic) | 2.3053 | 2.5063 | -1.33 | 0.184 |
| V9 = Building Supplies (wood, concrete, etc.) | 3.3846 | 3.7862 | -2.86 | 0.005** |
| V10 = Candles | 3.8295 | 2.4688 | 9.76 | 0.000** |
| V11 = Carpeting and Rugs | 3.7328 | 3.2500 | 3.55 | 0.000** |
| V12 = Cloth Weaving | 3.8015 | 3.2250 | 4.03 | 0.000** |
| V13 = Clothing / Garments | 3.2366 | 2.3375 | 6.04 | 0.000** |
| V14 = Communications Media (radio and television studios) | 2.1615 | 2.2956 | -0.98 | 0.328 |
| V15 = Computer Hardware | 2.3435 | 2.9063 | -3.92 | 0.000** |
| V16 = Consumer Electronics (televisions, stereos, etc.) | 2.1154 | 2.8250 | -4.89 | 0.000** |
| V17 = Entertainment Facilities (arenas, theatres, etc.) | 2.2923 | 2.3000 | -0.05 | 0.957 |
| V18 = Eyewear (glasses, contact lens, etc.) | 3.3817 | 3.0813 | 2.05 | 0.042** |
| V19 = Food Products (baked goods, frozen foods, snacks, etc.) | 3.0229 | 2.6688 | 2.35 | 0.019** |
| V20 = Furniture | 3.1538 | 3.0063 | 1.05 | 0.297 |
| V21= Glass and Glass Products (crafts, jars, etc.) | 3.2443 | 3.1313 | 0.78 | 0.439 |
| V22 = Hand Tools (drills, sanders, etc.) | 3.1908 | 4.0443 | -6.71 | 0.000** |
| V23 = Home Fixtures (lighting, plumbing, etc.) | 3.4198 | 3.9245 | -3.64 | 0.000** |
| V24 = Home Furnishing (comforters, | 3.6412 | 3.1750 | 3.17 | 0.002** |


| drapes, linens, etc.) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| V25 = Household Appliances (washers, dryers, ranges, etc.) | 3.3664 | 3.5975 | -1.63 | 0.105 |
| V26 = Machining (bearings, coils, plating, etc.) | 3.4923 | 4.1813 | -5.40 | 0.000** |
| V27 = Metal Crafts (iron, pewter, etc.) | 3.3817 | 3.9438 | -3.97 | 0.000** |
| V28 = Mining (rock, gravel, etc.) | 3.3511 | 3.9250 | -4.18 | 0.000** |
| V29 = Mobile or Modular Homes | 3.5038 | 3.9563 | -3.19 | 0.002** |
| V30 = Paper and Paper Products | 3.5115 | 3.3750 | 0.97 | 0.334 |
| V31 = Personal / Household Products (cleaners, cosmetics, etc.) | 3.6923 | 2.9188 | 5.31 | 0.000** |
| V32 = Pharmaceuticals (ointments, pills, etc.) | 2.7846 | 2.7125 | 0.48 | 0.628 |
| V33 = Photographic Equipment (cameras, film, etc.) | 2.6031 | 2.5750 | 0.19 | 0.847 |
| V34 = Plastics / Plastic Molded Products | 3.2977 | 3.5094 | -1.50 | 0.134 |
| V35 = Pottery and China | 3.3130 | 2.7250 | 3.83 | 0.000** |
| V36 = Power Generating Equipment (turbines, relays, etc.) | 2.8636 | 3.9874 | -7.61 | 0.000** |
| V37 $=$ Printing Process (books, magazines, newspapers, etc.) | 3.1069 | 2.7911 | 2.16 | 0.032** |
| V38 = Recreational Vehicles (boats, campers, etc.) | 2.4574 | 3.1069 | -4.13 | 0.000** |
| V39 = Steel and Aluminum Production | 3.1603 | 3.9625 | -5.79 | 0.000** |
| V40 = Toys | 2.8473 | 2.7296 | 0.78 | 0.438 |
| V41 = Warehousing (storage and movement of goods) | 3.6260 | 3.9438 | -2.30 | 0.022** |

Table 4: Interest in Product Categories --- Influence of Ethnicity

| Variable | Caucasian <br> Responde <br> nts <br> (n=214) | African <br> American <br> Responde <br> nts (n=46) | T-Value | P-Value |
| :--- | :--- | :--- | :--- | :--- |
| V1 = Agricultural / Lawn and Garden <br> Equipment | 3.7196 | 3.9565 | -1.21 | 0.227 |
| V2 = Aircraft Production and <br> Maintenance | 2.7453 | 3.4565 | -3.24 | $\mathbf{0 . 0 0 1 * *}$ |
| V3 = Athletic Equipment (balls, racquets, <br> clubs, etc.) | 2.9906 | 3.0870 | -0.47 | 0.638 |
| V4 = Automobiles (cars, trucks, heavy <br> trucks, etc.) | 2.2441 | 2.2222 | 0.12 | 0.908 |
| V5 $=$ Automobile Parts (brakes, engines, <br> seats, etc.) | 3.3286 | 3.0217 | 1.46 | 0.145 |


| V6 = Automobile Tires | 3.6009 | 3.2889 | 1.52 | 0.129 |
| :---: | :---: | :---: | :---: | :---: |
| V7 = Beverages (Non-Alcoholic) | 2.7196 | 2.3478 | 1.79 | 0.075 |
| V8 = Beverages (Alcoholic) | 2.2944 | 2.8261 | -2.60 | 0.010** |
| V9 = Building Supplies (wood, concrete, etc.) | 3.6038 | 3.4783 | 0.64 | 0.522 |
| V10 = Candles | 3.1509 | 2.8478 | 1.36 | 0.174 |
| V11 = Carpeting and Rugs | 2.5140 | 3.2609 | 1.30 | 0.194 |
| V12 = Cloth Weaving | 3.5701 | 3.1957 | 1.83 | 0.069 |
| V13 = Clothing / Garments | 2.9813 | 1.8696 | 5.32 | 0.000** |
| V14 = Communications Media (radio and television studios) | 2.3832 | 1.9111 | 5.32 | 0.000** |
| V15 = Computer Hardware | 2.8598 | 2.0435 | 4.08 | 0.000** |
| V16 = Consumer Electronics (televisions, stereos, etc.) | 2.6854 | 1.9565 | 3.60 | 0.000** |
| V17 = Entertainment Facilities (arenas, theatres, etc.) | 2.3832 | 2.0222 | 1.84 | 0.067 |
| V18 = Eyewear (glasses, contact lens, etc.) | 3.3972 | 2.6304 | 3.95 | 0.000** |
| V19 = Food Products (baked goods, frozen foods, snacks, etc.) | 2.9953 | 2.2174 | 3.81 | 0.000** |
| V20 = Furniture | 3.1596 | 2.7174 | 2.30 | 0.022** |
| V21= Glass and Glass Products (crafts, jars, etc.) | 3.2009 | 3.1087 | 0.46 | 0.647 |
| V22 = Hand Tools (drills, sanders, etc.) | 3.6887 | 3.5870 | 0.54 | 0.587 |
| V23 = Home Fixtures (lighting, plumbing, etc.) | 3.7324 | 3.5217 | 1.10 | 0.273 |
| V24 = Home Furnishing (comforters, drapes, linens, etc.) | 3.4486 | 2.9783 | 2.32 | 0.021** |
| V25 = Household Appliances (washers, dryers, ranges, etc.) | 3.5915 | 3.1739 | 2.18 | 0.030** |
| V26 = Machining (bearings, coils, plating, etc.) | 3.9108 | 3.9130 | -0.01 | 0.990 |
| V27 = Metal Crafts (iron, pewter, etc.) | 3.6495 | 3.9348 | -1.42 | 0.156 |
| V28 = Mining (rock, gravel, etc.) | 3.5561 | 4.1739 | -3.22 | 0.001** |
| V29 = Mobile or Modular Homes | 3.8551 | 3.4783 | 1.92 | 0.056 |
| V30 = Paper and Paper Products | 3.5047 | 3.3291 | 1.39 | 0.167 |
| V31 = Personal / Household Products (cleaners, cosmetics, etc.) | 3.3879 | 2.9130 | 2.29 | 0.023** |
| V32 = Pharmaceuticals (ointments, pills, etc.) | 2.8364 | 2.4000 | 2.12 | 0.035** |
| V33 = Photographic Equipment (cameras, film, etc.) | 2.7617 | 2.3043 | 2.30 | 0.022** |
| V34 = Plastics / Plastic Molded Products | 3.5023 | 3.2826 | 1.15 | 0.252 |
| V35 = Pottery and China | 3.0467 | 2.8913 | 0.71 | 0.475 |
| V36 = Power Generating Equipment | 3.5187 | 3.6444 | -0.56 | 0.573 |


| (turbines, relays, etc.) |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| V37 $=$ Printing Process (books, <br> magazines, newspapers, etc.) | 2.9906 | 2.7174 | 1.36 | 0.174 |
| V38 $=$ Recreational Vehicles (boats, <br> campers, etc.) | 2.7453 | 3.0889 | -1.54 | 0.126 |
| V39 = Steel and Aluminum Production | 3.6075 | 3.6957 | -0.44 | 0.661 |
| V40 = Toys | 2.8598 | 2.4348 | 2.07 | $\mathbf{0 . 0 3 9 * *}$ |
| V41 $=$ Warehousing (storage and <br> movement of goods) | 3.8551 | 3.7609 | 0.49 | 0.624 |

Table 5: Interest in Product Categories --- Influence of Age

| Variable | Responde <br> nts 24 and <br> under <br> (n=219) | Responde <br> nts 25 and <br> older <br> $(\mathbf{n = 7 2 )}$ | T-Value | P-Value |
| :--- | :--- | :--- | :--- | :--- |
| V1 = Agricultural / Lawn and Garden <br> Equipment | 3.8447 | 3.5169 | 2.00 | $\mathbf{0 . 0 4 7 * *}$ |
| V2 $=$ Aircraft Production and <br> Maintenance | 2.9078 | 2.6389 | 1.44 | 0.151 |
| V3 = Athletic Equipment (balls, racquets, <br> clubs, etc.) | 2.9498 | 3.0704 | -0.71 | 0.480 |
| V4 = Automobiles (cars, trucks, heavy <br> trucks, etc.) | 2.2615 | 2.0704 | 1.23 | 0.220 |
| V5 = Automobile Parts (brakes, engines, <br> seats, etc.) | 3.3073 | 3.0972 | 1.19 | 0.236 |
| V6 = Automobile Tires | 3.6359 | 3.2500 | 2.27 | $\mathbf{0 . 0 2 4 * *}$ |
| V7 = Beverages (Non-Alcoholic) | 2.6849 | 2.5972 | 0.51 | 0.612 |
| V8 = Beverages (Alcoholic) | 2.4110 | 2.4306 | -0.11 | 0.911 |
| V9 = Building Supplies (wood, concrete, <br> etc.) | 3.7339 | 3.2113 | 3.23 | $\mathbf{0 . 0 0 1 * *}$ |
| V10 = Candles | 3.1014 | 3.0000 | 0.55 | 0.584 |
| V11 = Carpeting and Rugs | 3.5616 | 3.1806 | 2.40 | $\mathbf{0 . 0 1 7 * *}$ |
| V12 = Cloth Weaving | 3.5616 | 3.2500 | 1.85 | 0.066 |
| V13 = Clothing / Garments | 2.6667 | 2.9722 | -1.69 | 0.093 |
| V14 = Communications Media (radio and <br> television studios) | 2.2166 | 2.2917 | -0.48 | 0.634 |
| V15 = Computer Hardware | 2.7260 | 2.4306 | 1.75 | 0.081 |
| V16 = Consumer Electronics (televisions, <br> stereos, etc.) | 2.4725 | 2.6111 | -0.80 | 0.425 |
| V17 = Entertainment Facilities (arenas, <br> theatres, etc.) | 2.2477 | 2.4444 | -1.19 | 0.234 |
| V18 = Eyewear (glasses, contact lens, <br> etc.) | 3.2009 | 3.2639 | -0.37 | 0.712 |
| V19 = Food Products (baked goods, | 2.8858 | 2.6528 | 1.33 | 0.183 |
|  |  |  |  |  |


| frozen foods, snacks, etc.) |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| V20 = Furniture | 3.1239 | 2.9167 | 1.28 | 0.203 |
| V21= Glass and Glass Products (crafts, jars, etc.) | 3.2329 | 3.0278 | 1.22 | 0.223 |
| V22 = Hand Tools (drills, sanders, etc.) | 3.7752 | 3.2958 | 3.08 | 0.002** |
| V23 = Home Fixtures (lighting, plumbing, etc.) | 3.8402 | 3.2535 | 3.66 | 0.000** |
| V24 = Home Furnishing (comforters, drapes, linens, etc.) | 3.5114 | 3.0000 | 3.01 | 0.003** |
| V25 = Household Appliances (washers, dryers, ranges, etc.) | 3.6073 | 3.1408 | 2.87 | 0.004** |
| V26 = Machining (bearings, coils, plating, etc.) | 3.9128 | 3.7500 | 1.03 | 0.291 |
| V27 = Metal Crafts (iron, pewter, etc.) | 3.7717 | 3.4444 | 1.96 | 0.050** |
| V28 = Mining (rock, gravel, etc.) | 3.7078 | 3.5417 | 1.02 | 0.309 |
| V29 = Mobile or Modular Homes | 3.7671 | 3.7803 | 0.35 | 0.724 |
| V30 = Paper and Paper Products | 3.4658 | 3.3472 | 0.73 | 0.467 |
| V31 = Personal / Household Products (cleaners, cosmetics, etc.) | 3.2752 | 3.2361 | 0.22 | 0.824 |
| V32 = Pharmaceuticals (ointments, pills, etc.) | 2.7385 | 2.7639 | -0.15 | 0.882 |
| V33 = Photographic Equipment (cameras, film, etc.) | 2.5708 | 2.6389 | -0.41 | 0.684 |
| V34 = Plastics / Plastic Molded Products | 3.4312 | 3.3611 | 0.43 | 0.668 |
| V35 = Pottery and China | 3.0822 | 2.7083 | 2.08 | 0.039** |
| V36 = Power Generating Equipment (turbines, relays, etc.) | 3.5917 | 3.1389 | 2.45 | 0.015** |
| V37 = Printing Process (books, magazines, newspapers, etc.) | 2.9541 | 2.8732 | 0.47 | 0.636 |
| V38 $=$ Recreational Vehicles (boats, campers, etc.) | 2.8750 | 2.6389 | 1.27 | 0.204 |
| V39 = Steel and Aluminum Production | 3.7123 | 3.2639 | 2.69 | 0.008** |
| V40 = Toys | 2.7798 | 2.7917 | -0.07 | 0.946 |
| V41 = Warehousing (storage and movement of goods) | 3.8813 | 3.5556 | 2.04 | 0.042** |

