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***Research article***

**Uncovering the behavioral determinants behind private car purchase intention during the new normal of COVID-19:** **An empirical investigation in China**

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**Appendix A. Constructs, items, and sources**

|  |  |
| --- | --- |
| **Construct and items** | **Adopted from** |
| ***Perceived Severity (PS)*** | Bults [71] |
| PS1: COVID‐19 is a severe disease. |
| PS2: COVID‐19 is very harmful to my health. |
| ***Perceived Vulnerability (PV)*** | Bults [71]; Zhang et al.[74] |
| PV1: It is likely for me to be infected if someone around me gets COVID-19. |
| PV2: It is likely for me to be infected if an infectious disease similar to COVID-19 breaks out. |
| PV3: It is likely for me to be infected with COVID-19 if the epidemic keeps getting worse. |
| ***Response Efficiency (RE)*** | Bults [71] |
| RE1: Owning a private car allows me to stay away from crowded people when traveling, thereby reducing the possibility of infecting COVID-19.  |
| RE2: Owning a private car allows me to take anti-epidemic measures (such as installing an air purifier, and disinfecting on time.) according to my situation, which is safer than public transportation. |
| PE3: Owning a private car can provide me with a relatively safe and hygienic independent space when traveling, thereby reducing the possibility of infecting COVID-19. |
| ***Reactance*** | Otterbring [83] |
| Reactance1: COVID-19 has limited the way I travel, which makes me eager to travel. |
| Reactance2: The limited range of travel caused by COVID-19 makes me want to travel more. |
| Reactance3: COVID-19 forced me to travel less, which made me want to travel more. |
| ***Threat to freedom (TF)*** | Dillard and Shen [77] |
| TF1: COVID-19 prevented me from traveling freely. |
| TF2: COVID-19 made me feel that my activity space was restricted. |
| TF3: COVID-19 made me feel inconvenient to travel. |
| ***Health Value (HV)*** | Zhang et al. [109] |
| HV1: Good health is vital to me. |
| HV2: I think good health is the most precious thing. |
| HV3: I am willing to consume for my health. |
| ***Conditional Value (CV)*** | Teoh and Nor Azila [93] |
| CV1: After the outbreak of COVID-19, I would buy a private car when the government’s subsidies for car purchases meet my expectations. |
| CV2: After the outbreak of COVID-19, I would buy a private car when the discount given by the automobile enterprise meets my expectations. |
| CV3: After the outbreak of COVID-19, I would buy private cars when the promotion of private cars meets my expectations. |
| ***Fear*** | Ronald C. and Nick [95]; Mesch and Schwirian [96] |
| Fear1: When I think about the prevalence of COVID-19, I am terrified. |
| Fear2: I am terrified that COVID-19 would not be relieved in China. |
| Fear3: I am afraid that people from high-risk areas would bring viruses of COVID-19 into my cities. |
| Fear4: I am afraid that people infected with COVID-19 abroad would bring the virus into China. |
| ***Cost Factors (CF)*** | Dong et al. [33] |
| CF1: I think the price of fuel and parking costs are high. |
| CF2: I think the cost of private car maintenance is high. |
| CF3: I think the price of a private car is high. |
| CF4: I think the cost of a private car insurance is high. |
| ***Pro-car-purchasing Attitude (PA)*** | Huang and Ge [32] |
| PA1: COVID-19 made me feel that buying a private car is very important. |
| PA2: This outbreak of epidemic makes me think it is necessary to buy private cars. |
| PA3: COVID-19 made me think it is wise to buy a private car. |
| ***Purchase Intention (PI)*** | Huang and Ge [32] |
| PI1: COVID-19 made me plan to buy a private car in the future. |
| PI2: COVID-19 made me have the idea of buying a private car in the future. |
| PI3: The outbreak of the epidemic has made me plan to buy a private car in the future. |
| ***Perceived Behavioral Control (PBC)*** | Huang and Ge [32] |
| PBC1: After experiencing COVID-19, I could decide by myself whether to buy a private car. |
| PBC2: After experiencing COVID-19, if I want to, I could buy a private car. |
| PBC3: Although COVID-19 has occurred, I have the ability to buy a private car. |

**Appendix B. Reliability and convergent validity test of the constructs**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Latent variable | Item | Factor loading | Cronbach’s *α* | AVE | Construct reliability |
| Perceived severity (PS) | PS1 | 0.81 | 0.74 | 0.60 | 0.85 |
| PS2 | 0.74 |
| Perceived vulnerability (PV) | PV1 | 0.76 | 0.76 | 0.52 | 0.82 |
| PV2 | 0.76 |
| PV3 | 0.65 |
| Response efficiency (RE) | RE1 | 0.72 | 0.78 | 0.55 | 0.87 |
| RE2 | 0.71 |
| RE3 | 0.79 |
| Reactance | Reactance1 | 0.69 | 0.85 | 0.68 | 0.87 |
| Reactance2 | 0.91 |
| Reactance3 | 0.85 |
| Threat to freedom (TF) | TF1 | 0.80 | 0.82 | 0.60 | 0.78 |
| TF2 | 0.78 |
| TF3 | 0.74 |
| Health value (HV) | HV1 | 0.82 | 0.79 | 0.58 | 0.91 |
| HV2 | 0.83 |
| HV3 | 0.61 |
| Conditional value (CV) | CV1 | 0.71 | 0.80 | 0.59 | 0.91 |
| CV2 | 0.83 |
| CV3 | 0.76 |
| Fear | Fear1 | 0.73 | 0.85 | 0.59 | 0.85 |
| Fear2 | 0.67 |
| Fear3 | 0.83 |
| Fear4 | 0.79 |
| Cost factors (CF) | CF1 | 0.78 | 0.87 | 0.64 | 0.89 |
| CF2 | 0.81 |
| CF3 | 0.87 |
| CF4 | 0.73 |
| Pro-car-purchasing Attitude (PA) | PA1 | 0.82 | 0.84 | 0.65 | 0.85 |
| PA2 | 0.82 |
| PA3 | 0.70 |
| Purchase intention (PI) | PI1 | 0.85 | 0.90 | 0.75 | 0.87 |
| PI2 | 0.89 |
| PI3 | 0.83 |
| Perceived behavioral control (PBC) | PBC1 | 0.77 | 0.85 | 0.66 | 0.83 |

1. [↑](#footnote-ref-1)