Multimedia Appendix 3: Statistical Analyses

Validation of the Research Model

Effect Sizes, Predictive Relevance, and Goodness of Fit

The research model of this study was further examined by calculating the effect sizes for model paths, predictive relevance, and goodness of fit (GoF). Table 1 presents the effect sizes for total effects. Table 2 presents the cross validated redundancy ($Q^2$) for the endogenous variables in the research model of this study. $Q^2$ was used to examine the predictive relevance of the structural model. $Q^2>0$ implies the model has predictive relevance, whereas $Q^2<0$ represents a lack of predictive relevance [1]. GoF of the model refers to the overall (both measurement and structural levels) prediction performance of the model. The absolute GoF for the proposed model was 0.610 indicating a high fit of the model. The absolute GoF values of 0.36, 0.25, and 0.1 are considered high, medium, and low fit respectively [2, 3]. The relative GoF was calculated to be 0.921. A value above 0.9 speaks in favor of the fit of the model [4].

Table 1. Effect sizes for total effects (Rows: independent variables, Columns: dependent variables)

|     | BI | PU | CPLX | BNS |
|-----|----|----|------|-----|
| PU  | .571 |    |      |     |
| CPLX| .206 | .168 |      |     |
| SE  | .110 | .116 | .361 |     |
| BNS | .038 | .063 | .040 |     |
| ACO | .015 | .027 | .020 | .239 |
| PAS | .009 | .012 | .009 | .280 |

Table 2. Cross validated redundancy ($Q^2$) for dependent variables

|     | $Q^2$ |
|-----|------|
| BI  | .615 |
| CPLX| .292 |
| PU  | .221 |
| BNS | .340 |
### Measurement Model Evaluation

Table 3: Results of individual item reliability assessment for the first order model

| Construct          | Item   | Item Loading | Corrected Item-total Correlation |
|--------------------|--------|--------------|----------------------------------|
| BI                 | BI1    | .981         | .957                             |
|                    | BI2    | .975         | .943                             |
|                    | BI3    | .979         | .952                             |
| PU                 | PU1    | .945         | .902                             |
|                    | PU2    | .955         | .919                             |
|                    | PU3    | .934         | .883                             |
|                    | PU4    | .953         | .915                             |
| CPLX               | CPLX1  | .856         | .759                             |
|                    | CPLX2  | .867         | .740                             |
|                    | CPLX3  | .868         | .780                             |
|                    | CPLX4  | .887         | .772                             |
| SE                 | SE1    | .690         | .538                             |
|                    | SE2    | .885         | .804                             |
|                    | SE3    | .898         | .817                             |
|                    | SE4    | .773         | .655                             |
|                    | SE5    | .892         | .807                             |
| BNS-Autonomy       | BNS_A1 | .670         | .555                             |
|                    | BNS_A3 | .844         | .643                             |
|                    | BNS_A4R| Item dropped |                                   |
|                    | BNS_A5 | .821         | .541                             |
|                    | BNS_A6 | .575         | .506                             |
|                    | BNS_A7R| .589         | .501                             |
| BNS-Competence     | BNS_C1R| .686         | .473                             |
|                    | BNS_C2 | .686         | .536                             |
|                    | BNS_C3 | Item dropped |                                   |
|                    | BNS_C4 | .638         | .441                             |
|                    | BNS_C5R| .678         | .447                             |
|                    | BNS_C6R| .820         | .64                              |
| BNS-Relatedness    | BNS_R1 | .908         | .828                             |
|                    | BNS_R2 | .881         | .770                             |
|                    | BNS_R3R| Item dropped |                                   |
|                    | BNS_R4 | .585         | .495                             |
|                    | BNS_R5 | .895         | .849                             |
|                    | BNS_R6R| Item dropped |                                   |
|                    | BNS_R7R| .608         | .433                             |
ACO is a personality index with 12 items. The score for this variable should be the sum of its 12 items [5]. Consequently, this variable should be estimated in PLS with equal weights (i.e., 1) for each of the 12 items. As a result, individual item reliability, AVE, and CR do not apply to this variable. Nevertheless, Cronbach’s alpha was estimated to be .803 for the 12 items which is above the threshold of 0.7 indicating acceptable construct reliability. Reliability of this scale is established many times in the literature [6].

* “R”: item was negatively worded, and it was reverse coded for the analysis.

BI: Behavioral Intention; PU: Perceived Usefulness; CPLX: Complexity; SE: PHR Self-Efficacy; BNS: Basic Needs Satisfaction; BNS_A: Basic Needs Satisfaction (Autonomy); BNS_R: Basic Needs Satisfaction (Competence); BNS_R: Basic Needs Satisfaction (Relatedness); PAS: Physician Autonomy Support; ACO: Autonomous Causality Orientation.

Conducting individual item reliability tests resulted in eliminating five items that did not meet the acceptance criteria of corrected item-total correlations>0.4; and item loadings>0.5 [7].

Table 4: Results of construct reliability assessment

| Construct          | AVE | Composite Reliability (CR) | Cronbach’s Alpha |
|--------------------|-----|----------------------------|------------------|
| BI                 | .957| .985                       | .977             |
| PU                 | .896| .972                       | .961             |
| CPLX               | .756| .925                       | .893             |
| SE                 | .692| .917                       | .885             |
| BNS-Autonomy       | .502| .831                       | .761             |
| BNS-Competence     | .501| .830                       | .743             |
| BNS-Relatedness    | .635| .910                       | .877             |
| ACO                | N/A | N/A                        | .803             |
| PAS                | .831| .967                       | .959             |

All the constructs in the study met the acceptance criteria of construct reliability (Average Variance Extracted (AVE)>0.5; Composite Reliability (CR)>0.7; Cronbach’s Alpha>0.7) suggesting that reliability holds for all the variables in this study [8-10].
Table 5: Assessment of validity of the first order model (Matrix of loadings & cross-loadings for the 1st-order measurement model, all loadings sig. at 0.001)

|        | BI    | PU    | CPLX1 | SE    | BNS-A | BNS-C | BNS-R | ACO  | PAS  |
|--------|-------|-------|-------|-------|-------|-------|-------|------|------|
| BI1    | .981  | .784  | -.472 | .352  | .149  | .214  | .204  | .186 | .118 |
| BI2    | .975  | .773  | -.478 | .314  | .107  | .219  | .175  | .191 | .096 |
| BI3    | .979  | .773  | -.500 | .367  | .134  | .231  | .214  | .198 | .128 |
| PU1    | .780  | .945  | -.443 | .342  | .198  | .228  | .216  | .261 | .134 |
| PU2    | .791  | .955  | -.405 | .290  | .198  | .276  | .255  | .274 | .121 |
| PU3    | .699  | .934  | -.487 | .405  | .245  | .295  | .298  | .345 | .130 |
| PU4    | .736  | .953  | -.444 | .372  | .199  | .237  | .228  | .244 | .058 |
| CPLX1  | -.498 | -.403 | .855  | -.438 | -.115 | -.257 | -.162 | -.212 | -.112 |
| CPLX2  | -.365 | -.350 | .867  | -.627 | -.157 | -.368 | -.144 | -.329 | -.042 |
| CPLX3  | -.455 | -.419 | .867  | -.450 | -.193 | -.299 | -.249 | -.281 | -.170 |
| CPLX4  | -.408 | -.460 | .888  | -.610 | -.179 | -.292 | -.201 | -.338 | -.152 |
| SE1    | .349  | .292  | -.458 | .690  | .161  | .171  | .236  | .273 | .061 |
| SE2    | .239  | .287  | -.569 | .885  | .168  | .243  | .178  | .302 | -.025 |
| SE3    | .279  | .287  | -.551 | .898  | .147  | .238  | .157  | .209 | -.020 |
| SE4    | .211  | .282  | -.551 | .773  | .132  | .237  | .189  | .196 | -.022 |
| SE5    | .375  | .387  | -.584 | .892  | .131  | .228  | .166  | .204 | -.001 |
| BNS_A1 | .079  | .095  | -.023 | .143  | .670  | .423  | .336  | .261 | .270 |
| BNS_A3 | .098  | .180  | -.159 | .135  | .844  | .501  | .468  | .483 | .403 |
| BNS_A5 | .170  | .239  | -.168 | .114  | .821  | .377  | .491  | .374 | .510 |
| BNS_A6 | -.074 | .038  | -.010 | .066  | .575  | .246  | .189  | .104 | .150 |
| BNS_A7R* | .074 | .133  | -.204 | .168  | .589  | .436  | .458  | .247 | .288 |
| BNS_C1R | .216 | .198  | -.413 | .296  | .229  | .686  | .223  | .173 | .200 |
| BNS_C2 | .192  | .202  | -.107 | .116  | .418  | .686  | .443  | .291 | .241 |
| BNS_C4 | .230  | .284  | -.149 | .136  | .444  | .638  | .472  | .303 | .284 |
| BNS_C5R | .070 | .111  | -.223 | .176  | .469  | .678  | .412  | .373 | .294 |
| BNS_C6R | .107 | .176  | -.311 | .209  | .438  | .820  | .399  | .404 | .245 |
| BNS_R1 | .147  | .178  | -.165 | .191  | .391  | .480  | .908  | .461 | .578 |
| BNS_R2 | .164  | .225  | -.258 | .254  | .450  | .501  | .881  | .481 | .566 |
| BNS_R4 | .200  | .166  | -.038 | .059  | .297  | .236  | .585  | .168 | .375 |
| BNS_R5 | .151  | .229  | -.124 | .124  | .377  | .450  | .895  | .449 | .562 |
| BNS_R7R | .217 | .252  | -.225 | .196  | .386  | .442  | .608  | .473 | .392 |
| BNS_R8 | .126  | .210  | -.185 | .188  | .390  | .460  | .832  | .511 | .514 |
| ACO    | .196  | .296  | -.336 | .284  | .462  | .443  | .499  | 1.000 | .311 |
| PLS1   | .144  | .155  | -.133 | .025  | .442  | .304  | .491  | .298 | .890 |
| PLS2   | .075  | .048  | -.107 | -.035 | .415  | .271  | .505  | .269 | .914 |
| PLS3   | .134  | .138  | -.149 | .022  | .500  | .402  | .518  | .322 | .896 |
| PLS4   | .094  | .114  | -.073 | -.074 | .472  | .322  | .490  | .264 | .891 |
To assess validity, first, a matrix of item loadings and cross-loadings was generated and used to examine discriminant validity. The loading of each item on its associated factor was compared to its cross-loadings (loadings on other factors). All items had higher loadings on their associated factors compared to cross-loadings (rows of the matrix). In addition, all factors loaded higher with their associated items compared to other factors (columns of the matrix).

Table 6: Assessment of validity of the first order model (Construct correlation matrix and discriminant validity assessment for the first-order measurement model)

|       | BI   | PU    | CPLX  | SE    | BNS-A | BNS-C | BNS-R | ACO   | PAS  |
|-------|------|-------|-------|-------|-------|-------|-------|-------|------|
| BI    | .978 |       |       |       |       |       |       |       |      |
| PU    | .794 | .947  |       |       |       |       |       |       |      |
| CPLX  | - .494| - .470| .870  |       |       |       |       |       |      |
| SE    | .352 | .371  | - .627| .832  |       |       |       |       |      |
| BNS-A | .133 | .222  | - .186| .177  | .709  |       |       |       |      |
| BNS-C | .226 | .273  | - .350| .269  | .568  | .707  |       |       |      |
| BNS-R | .202 | .263  | - .217| .219  | .687  | .550  | .797  |       |      |
| ACO   | .196 | .296  | - .336| .284  | .462  | .443  | .549  | 1.000 |      |
| PAS   | .117 | .117  | - .136| - .003| .503  | .359  | .674  | .311  | .912 |

BI: Behavioral Intention; PU: Perceived Usefulness; CPLX: Complexity; SE: PHR Self-Efficacy; BNS: Basic Needs Satisfaction; BNS_A: Basic Needs Satisfaction (Autonomy); BNS_R: Basic Needs Satisfaction (Relatedness); PAS: Physician Autonomy Support; ACO: Autonomous Causality Orientation.

The square root of the AVE of each construct was compared with correlations of that construct with other constructs in the model. As shown in Table 6, all construct are more strongly correlated with their own measures than other constructs indicating confidence in the discriminant validity of the items and the factors of the first-order measurement model.

Table 7: Reliability assessment for the second order model (Results of individual item reliability assessment for the second-order model – Basic Needs Satisfaction)

| Construct | Item | Loading | Corrected Item-total Correlation |
|-----------|------|---------|---------------------------------|
| BNS       | BNS1 | .871    | .712                            |
Table 8: Reliability assessment for the second order model (Construct reliability for the second-order measurement model – Basic Needs Satisfaction)

|     | AVE  | Composite Reliability (CR) | Cronbach's Alpha |
|-----|------|----------------------------|------------------|
| BI  | .957 | .985                        | .977             |
| PU  | .896 | .972                        | .961             |
| CPLX| .756 | .925                        | .893             |
| SE  | .692 | .917                        | .885             |
| BNS | .734 | .892                        | .819             |
| ACO | 1.000| N/A                         | .803             |
| PAS | .831 | .967                        | .959             |

BI: Behavioral Intention; PU: Perceived Usefulness; CPLX: Complexity; SE: PHR Self-Efficacy; BNS: Basic Needs Satisfaction; PAS: Physician Autonomy Support; ACO: Autonomous Causality Orientation

Table 9: Validity assessment for the second order model (Matrix of loadings and cross-loadings for the second-order measurement model – All loadings significant at 0.001)

| Items ↓ | Constructs
|---------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|         | BI              | PU              | CPLX            | SE              | BNS             | ACO             | PAS             |
| BI1     | .981            | .785            | -.472           | .352            | .221            | .186            | .118            |
| BI2     | .979            | .773            | -.478           | .314            | .195            | .191            | .096            |
| BI3     | .979            | .773            | -.500           | .367            | .227            | .198            | .128            |
| PU2     | .791            | .955            | -.405           | .290            | .284            | .274            | .121            |
| PU3     | .699            | .934            | -.487           | .405            | .327            | .345            | .130            |
| PU4     | .736            | .953            | -.445           | .372            | .258            | .244            | .058            |
| CPLX1   | -.498           | -.403           | .856            | -.438           | -.205           | -.212           | -.112           |
| CPLX2   | -.365           | -.350           | .866            | -.667           | -.251           | -.328           | -.043           |
| CPLX3   | -.455           | -.419           | .868            | -.450           | -.287           | -.281           | -.170           |
| CPLX4   | -.408           | -.460           | .888            | -.610           | -.258           | -.338           | -.152           |
| SE1     | .349            | .292            | -.458           | .690            | .225            | .273            | .061            |
| SE2     | .239            | .287            | -.568           | .885            | .226            | .302            | -.025           |
| SE3     | .279            | .287            | -.550           | .898            | .207            | .209            | -.020           |
| SE4     | .211            | .282            | -.422           | .773            | .216            | .196            | -.022           |
| SE5     | .375            | .387            | -.583           | .892            | .202            | .204            | -.001           |
| BNS1    | .133            | .222            | -.186           | .177            | .871            | .462            | .504            |
| BNS2    | .226            | .273            | -.350           | .269            | .805            | .443            | .359            |
| BNS3    | .202            | .263            | -.217           | .219            | .893            | .549            | .674            |
| ACO     | .196            | .296            | -.336           | .284            | .570            | 1.000           | .311            |
| Items ↓ | Constructs                  |
|--------|-----------------------------|
|        | BI  | PU  | CPLX | SE  | BNS | ACO | PAS |
| PAS1   | .144 | .155 | -.134 | .025 | .543 | .298 | .890 |
| PAS2   | .075 | .048 | -.108 | -.035 | .528 | .269 | .913 |
| PAS3   | .134 | .138 | -.149 | .022 | .614 | .322 | .897 |
| PAS4   | .094 | .114 | -.074 | -.074 | .550 | .264 | .891 |
| PAS5   | .106 | .086 | -.141 | -.001 | .581 | .264 | .944 |
| PAS6   | .082 | .097 | -.138 | .045 | .521 | .277 | .934 |

BI: Behavioral Intention; PU: Perceived Usefulness; CPLX: Complexity; SE: PHR Self-Efficacy; BNS: Basic Needs Satisfaction; PAS: Physician Autonomy Support; ACO: Autonomous Causality Orientation.

Table 10: Validity assessment for the second order model (Construct correlation matrix and discriminant validity assessment for the second-order measurement model)

|        | BI  | PU  | CPLX | SE  | BNS | ACO | PAS |
|--------|-----|-----|------|-----|-----|-----|-----|
| BI     | .978|     |      |     |     |     |     |
| PU     | .794| .947|      |     |     |     |     |
| CPLX   | -.494| -.470| .870|      |     |     |     |
| SE     | .352| .371| -.627| .832|     |     |     |
| BNS    | .219| .295| -.288| .257| .857|     |     |
| ACO    | .196| .296| -.336| .284| .570| 1.000|     |
| PAS    | .117| .117| -.137| -.003| .612| .311| .912|

BI: Behavioral Intention; PU: Perceived Usefulness; CPLX: Complexity; SE: PHR Self-Efficacy; BNS: Basic Needs Satisfaction; PAS: Physician Autonomy Support; ACO: Autonomous Causality Orientation

Table 11: Descriptive Statistics for Model Constructs

| Items   | Mean  | SD    |
|---------|-------|-------|
| BNS_A1  | 5.509 | 1.242 |
| BNS_A3  | 5.472 | 1.152 |
| BNS_A5  | 5.044 | 1.352 |
| BNS_A6  | 4.818 | 1.550 |
| BNS_A7R*| 5.642 | 1.375 |
| BNS_C1R | 5.440 | 1.403 |
| BNS_C2  | 4.428 | 1.380 |
| BNS_C4  | 4.610 | 1.445 |
| BNS_C5R | 5.038 | 1.373 |
| BNS_C6R | 5.459 | 1.413 |
| BNS_R1  | 5.283 | 1.264 |
| BNS_R2  | 5.421 | 1.219 |
| BNS_R4  | 4.044 | 1.608 |
| BNS_R5  | 5.189 | 1.269 |
| Items   | Mean | SD  |
|---------|------|-----|
| BNS_R7R | 6.132| 1.091|
| BNS_R8  | 5.434| 1.145|
| ACO     | 67.535| 8.597|
| BI_1    | 4.918| 1.518|
| BI_2    | 4.969| 1.486|
| BI_3    | 4.874| 1.542|
| PU1     | 5.421| 1.214|
| PU2     | 5.365| 1.285|
| PU3     | 5.535| 1.101|
| PU4     | 5.428| 1.161|
| CPLX1   | 3.642| 1.628|
| CPLX2   | 2.799| 1.409|
| CPLX3   | 3.610| 1.587|
| CPLX4   | 2.887| 1.449|
| SE1     | 5.390| 1.267|
| SE2     | 5.352| 1.186|
| SE3     | 5.409| 1.197|
| SE4     | 5.308| 1.263|
| SE5     | 5.509| 1.190|
| PAS1    | 5.384| 1.311|
| PAS2    | 5.465| 1.330|
| PAS3    | 5.403| 1.212|
| PAS4    | 5.340| 1.475|
| PAS5    | 5.371| 1.399|
| PAS6    | 5.252| 1.359|

* "R" indicates that the item was negatively worded, and it was reverse coded for the analysis.

**Assessment of Common Methods Bias**

In order to minimize common methods variance (CMV), the following actions were taken. First, the survey of this study was divided into two parts, and each part was completed by participants in a separate sitting. The time between completing the two parts of the survey for each participant ranged from 12 hours to 8 days, with an average of 36 hours in between completing the two parts of the survey. Such a temporal separation of measurement [11] reduces the possibility of participants’ responding to Part 2 questions based on what they remember from Part 1 questions, thus reducing the effect of consistency motif on the responses.

Consistency motif is suggested to be a source of CMV [11] [12]. Second, the survey questions were ordered such that the questions for the endogenous variables were presented to participants before the questions for the exogenous variables. Such counterbalancing of the order of questions is suggested to reduce the threat of CMV [11]. Third, participants of this study were informed that data collection for this study was being conducted anonymously.
Protecting respondent anonymity and reducing evaluation apprehension is another factor that is suggested to reduce CMV [11]. Fourth, the risk of CMV was believed to be lessened by the inclusion of a number of negatively worded items in the measurement instrument of this study [13].

Although all attempts were made to alleviate the threat of CMV in this study based on guidelines suggested by Podsakoff, MacKenzie [11], the influence of CMV on the results of the study was assessed [14] using Harman’s one factor test [12] and an unmeasured latent marker construct technique [11, 15]. Results of conducting these two tests were not suggestive of the presence of CMB in this study. Details of the two tests are presented below.

**Harman’s One Factor Test**

All 26 items in the research model of this study were entered in a factor analysis. The unrotated solution to the PCA suggested 5 factors with eigenvalue greater than 1. The first factor accounted for 35.360 percent of the variance and the 5 factors together accounted for 78.224 percent of the variance in data. The eigenvalue of the last factor was 1.155. Several items loaded on components other than the first extracted factor. As a result, it was concluded that the study items do not load on a single general factor (i). Next, a factor analysis with one factor was performed and it explained 35.360 percent of the variance, while the 5 factor solution explained 78.224 percent of the variance. Concisely, the one factor solution did not explain more than half of the variance in the data set items (ii).

**Unmeasured Latent Marker Construct Technique**

The second technique used in this study to assess the presence of CMB was the unmeasured latent marker construct technique [11]. Following Liang, Saraf [15], this technique was implemented in this study using Partial Least Squares (PLS). As such, a new factor was added to the PLS model of this study in order to capture method influence. The indicators of this new factor (i.e., common method factor) consisted of all the indicators of other variables in the research model of this study. In addition, the common method factor was linked to all other factors in the model. In order to investigate for the presence of CMB [16], PLS results must be reviewed as follows. While Chin et al. [17] acknowledge that running this technique using PLS is common in the IS literature, they also question the usefulness of it in detecting CMB. Nevertheless, it was decided to employ this technique as conducting an additional test would increase the likelihood of detecting CMB in the event that it was present in the data set of this study.

First, statistical significances of factor loadings of the common method factor must be examined. Second, for each indicator, the variance explained by its principal factor must be compared to the indicator’s variance explained by the method factor. Following Liang et al. (2003), the squared loadings of principal constructs were interpreted as the variance explained caused by the principal constructs ($R_i^2$), whereas the squared values of the method factor loadings were interpreted as the variance explained by method ($R_m^2$). CMB is unlikely to be a serious problem if the method factor loadings are statistically insignificant, and the indicators' principal variances are substantially greater than their method variances [11, 15, 16].
Results of employing the technique are presented in Table 12. As seen in the table, none of the method factor loadings are statistically significant. In addition, the average variance explained by the principal factors is 0.814, while the average variance explained by the common method factor is 0.003. The ratio of 248:1 shows a very small magnitude of variance explained by the method compared to variance explained by the principal constructs. Consequently, CMB is unlikely to be a concern for this study.

Table 12: Results of conducting the unmeasured latent marker construct technique for the assessment of common methods bias

| Construct | Indicator | Principal Factor Loading | R² | Method Factor Loading | R² |
|-----------|-----------|--------------------------|----|-----------------------|----|
| BI        | BI1       | .978***                  | .957 | .003 n.s.     | .000 |
|           | BI2       | .989***                  | .977 | -.038 n.s.   | .001 |
|           | BI3       | .953***                  | .907 | .034 n.s.  | .001 |
| PU        | PU1       | .932***                  | .868 | .015 n.s.  | .000 |
|           | PU2       | .992***                  | .984 | -.047 n.s. | .002 |
|           | PU3       | .865***                  | .748 | .088 n.s.   | .008 |
|           | PU4       | .997***                  | .994 | -.055 n.s. | .003 |
| CPLX      | CPLX1     | .898***                  | .807 | .048 n.s.  | .002 |
|           | CPLX2     | .888***                  | .788 | -.003 n.s. | .000 |
|           | CPLX3     | .872***                  | .760 | -.078 n.s. | .006 |
|           | CPLX4     | .823***                  | .678 | .036 n.s.  | .001 |
| SE        | SE1       | .585***                  | .342 | .141 n.s.   | .020 |
|           | SE2       | .921***                  | .849 | -.051 n.s. | .003 |
|           | SE3       | .940***                  | .884 | -.062 n.s. | .004 |
|           | SE4       | .828***                  | .686 | -.068 n.s. | .005 |
|           | SE5       | .848***                  | .718 | .064 n.s.  | .004 |
| BNS       | BNS1      | .940***                  | .883 | -.101 n.s.  | .010 |
|           | BNS2      | .780***                  | .608 | .055 n.s.  | .003 |
|           | BNS3      | .851***                  | .724 | .048 n.s.  | .002 |
| PAS       | PAS1      | .870***                  | .757 | .047 n.s.  | .002 |
|           | PAS2      | .938***                  | .880 | -.054 n.s. | .003 |
|           | PAS3      | .867***                  | .753 | .055 n.s.  | .003 |
|           | PAS4      | .907***                  | .822 | -.036 n.s. | .001 |
|           | PAS5      | .948***                  | .898 | -.007 n.s. | .000 |
|           | PAS6      | .938***                  | .880 | -.004 n.s. | .000 |
| ACO       | ACO1      | 1.000***                 | 1.000 | .000 n.s. | .000 |
| Average   |           | .814                   | .814 | .003    |    |

*** p<.001; n.s. non-significant; Average ratio = 248:1; BI: Behavioral Intention; PU: Perceived Usefulness; CPLX: Complexity; SE: PHR Self-Efficacy; BNS: Basic Needs Satisfaction; PAS: Physician Autonomy Support; ACO: Autonomous Causality Orientation.
Assessment of possible effects of control variables

Two different procedures were conducted using PLS in order to analyze the responses to these questions regarding individual characteristics and control variables, as explained below. The first procedure was conducted to investigate the impact of these variables on the research model in terms of the effect size of each of the variables on $R^2$ of the endogenous constructs in the research model. To this end, for each individual characteristic/control variable, one controlled model was created by adding the variable with paths leading to all constructs in the model. Each effect size is calculated by comparing the $R^2$ of the endogenous constructs in the uncontrolled model and in the controlled model [18]. Table 13 presents the results of this analysis. The second procedure was conducted to examine the relationship between individual characteristics/control variables and all the factors in the research model of this study. To this end, in PLS, individual characteristics/control variables were linked to every factor in the model one at a time. Table 13 presents the results of the conducted PLS analyses.

After conducting the above analyses, all the variables (individual characteristics and control variables) with significant paths to any of the variables in the proposed model of this study were subject to further analysis in PLS as follows. Following Liang, Saraf [15], first, the variables were added to the proposed model one by one, and each time the significant links from Table 13 were established and PLS algorithm was run. In no case were the results (significances) of the hypotheses of this study changed. Second, instead of adding the variables one by one, all the variables were added to the research model at once having established all the significant paths from Table 13. Similarly, running the PLS algorithm did not result in any changes to the results of the hypotheses of this study.

Table 13: Effect of control variables on $R^2$ of dependent variables ($f^2$)

| Variable                                    | BI   | PU   | CPLX | BNS  |
|---------------------------------------------|------|------|------|------|
| **Individual Char.**                        |      |      |      |      |
| Age                                         | .000 | .003 | .000 | .000 |
| Gender (1=Female, 2=Male)                   | .012 | .003 | .000 | .002 |
| Internet Usage Hours per Day                | .003 | .007 | .005 | .002 |
| Internet Experience in Years                | .000 | .054 | .000 | .011 |
| Education Level                             | .000 | .019 | .012 | .002 |
| Perceived Health Status                     | .000 | .007 | .017 | .092 |
| Chronic Illness (1=Y, 2=N)                  | .000 | .001 | .021 | .004 |
| Frequency of Doctor Visit                   | .014 | .001 | .000 | .018 |
| Years with Doctor                           | .000 | .001 | .000 | .000 |
| Family Health Responsibility (1=Y, 2=N)     | .000 | .022 | .003 | .000 |
| Use of Paper Records (1=Y, 2=N)             | .009 | .014 | .014 | .002 |
| Information Privacy Concerns                | .012 | .063 | .164 | .002 |
| Information Security Concerns               | .036 | .122 | .054 | .011 |
| Household Income                            | .000 | .003 | .014 | .000 |
| Retired (1=Y, 2=N)                          | .003 | .005 | .000 | .011 |

Bold values indicate considerable effects ($f^2>.02$).
BI: Behavioral Intention; PU: Perceived Usefulness; CPLX: Complexity; SE: PHR Self-Efficacy; BNS: Basic Needs Satisfaction.

Table 14: Impact of control variables on model constructs

| Variable                        | Stat. | BI  | PU  | CPLX | SE   | BNS  | PAS  | ACO  |
|---------------------------------|-------|-----|-----|------|------|------|------|------|
| **Constant**                    |       |     |     |      |      |      |      |      |
| **Individual Characteristics**  |       |     |     |      |      |      |      |      |
| Age                             | β     | -.009 | -.044 | .003 | -.138 | .021 | .331 | .288 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | .001 | .001 |
| Gender (1=Female, 2=Male)       | β     | .067 | -.039 | -.008 | .133 | -.047 | -.160 | -.176 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | .050 | .050 |
| Internet Use: Hours per Day     | β     | .040 | .070 | .061 | .133 | .041 | -.107 | -.125 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | n.s. | n.s. |
| Internet Experience in Years    | β     | .020 | -.196 | .022 | -.031 | .080 | .080 | .032 |
|                                 | p< n.s. | .010 | n.s. |      | n.s. |      | n.s. | n.s. |
| Education Level                 | β     | -.029 | .116 | .096 | .030 | .044 | -.071 | .175 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | n.s. | .010 |
| Perceived Health Status         | β     | -.012 | -.076 | .111 | .306 | .215 | -.045 | .196 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | n.s. | n.s. |
| Chronic Illness (1=Y, 2=N)      | β     | -.020 | .016 | .115 | .111 | .048 | -.015 | -.120 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | n.s. | n.s. |
| Frequency of Doctor Visit       | β     | .070 | .029 | -.018 | -.067 | -.106 | .123 | .176 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | n.s. | .050 |
| Years with Family Doctor        | β     | .013 | -.031 | -.018 | -.024 | -.003 | .171 | .021 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | n.s. | .010 |
| Family Health Responsibility (1=Y, 2=N) | β     | -.026 | -.126 | .048 | -.062 | .024 | -.044 | .033 |
|                                 | p< n.s. | n.s. | .050 |      | n.s. |      | n.s. | n.s. |
| Use of Paper Records (1=Y, 2=N) | β     | -.054 | -.101 | .092 | -.026 | .026 | -.060 | -.117 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | n.s. | n.s. |
| Information Privacy Concerns    | β     | -.076 | -.236 | .307 | -.301 | -.036 | -.136 | -.100 |
|                                 | p< n.s. | n.s. | .010 |      | .001 |      | n.s. | n.s. |
| Information Security Concerns   | β     | -.122 | -.313 | .191 | -.339 | -.079 | -.158 | -.043 |
|                                 | p< n.s. | n.s. | .001 |      | .010 |      | n.s. | n.s. |
| Household Income                | β     | .026 | .036 | -.088 | .042 | .021 | -.065 | .015 |
|                                 | p< n.s. | n.s. | n.s. |      | n.s. |      | n.s. | n.s. |
| Retired (1=Y, 2=N)              | β     | -.044 | .064 | -.014 | .151 | -.075 | -.178 | -.175 |
|                                 | p< n.s. | n.s. | n.s. |      | .050 |      | n.s. | .010 |
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