

# Understanding perception of wood household furniture: application of a policy capturing approach

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## Abstract

Consumer and retailer perceptions of wood household furniture were modeled using a policy capturing approach. A sample of consumers and retailers evaluated four pictures of wood furniture on eight visual cues deemed representative of the furniture purchasing environment. These cues were then regressed on respondents' judgment of willingness to pay for each furniture piece. The framework for analysis was the Brunswik lens model, which posits that the way an individual sees an object is determined by the cues the individual uses, and the importance of those cues, to process the stimulus. The results suggested that males and females employed different policies for integrating the cues associated with wood furniture, as did consumers and retailers. Species differences between oak and cherry also were detected. An implication of the study is the need for adaptive marketing strategies: to emphasize design quality to both male and females and to focus on character-marks and natural blemishes for males and grain consistency for females. Retailers seemed to use an entirely different set of cues. The findings provide further support for the notion that consumers are at least indifferent toward, and often agreeable to, character-marked products.

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## Background and significance

With shifts in the popularity of domestic species and styles, and increasing volumes of imported woods entering the United States, there is considerable interest in understanding how consumers perceive hardwood products. Research has investigated numerous potential factors, including design, finish, species, and visual wood characteristics such as coloration and texture (Broman 1995). Many of these attributes have been included in studies of the acceptance of character-marked products. Aldo Leopold (1928) was perhaps the first to discuss the environmental benefits of including more character in wood products. Buehlmann et al. (1999) and Bumgardner et al. (2000) identified some of the challenges associated with manufacturing, developing and marketing character-marked products; however, despite the challenges, character-marked products are gaining popularity in the marketplace (Weekly Hardwood Review 2005, 2006). According to the merchandising executive from a large furniture company that recently introduced a character-marked group, "To create that look, we had to use new technology. So new technology is used to create an old, timeworn look" (Steenbergen 2002).

## Previous studies of acceptance of character

Bumgardner et al. (2001) interviewed Virginia and North Carolina retailers and asked them to evaluate 20 oak furniture

products, based on a wood sample and a designer's color rendition of the entire piece. The results of the study, based on a conjoint analysis of part grade (no knots, small knots, large knots), finish (clear, medium cherry, distressed), style (Shaker, French Provincial), and aspect (vertical, horizontal) attributes, revealed that part grade was the most important predictor of buying consideration, accounting for 55 percent of the decision. However, when asked separately from the conjoint exercise to provide self-reported importance values, style emerged as the most important attribute (nearly 45%). For part grade, no knots received the highest conjoint utility score (0.35) and large knots received the lowest utility score (-0.37); the utility score for small knots was near zero (-0.02).

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Wang et al. (2004) also conducted a conjoint analysis on the acceptance of character-marks, asking consumers to judge various products. Individuals from seven cities in four north-eastern states were asked to evaluate chair combinations comprising four major attributes: design (rocking chairs, arm chairs, type I office chairs, and type II office chairs), price (\$300, \$375, \$450, and \$525), density of character-marks (clear, medium, and heavy), and guarantee policy (1-year guarantee and unconditional guarantee). The density of character-marks was found to have only a 5.38 percent impact on the respondents' ratings of the chairs (the highest impact on rating was caused by design, followed by price and guarantee policy), and it was only slightly negatively predictive (-0.039) of the chairs' overall ratings.

Donovan and Nicholls (2003) applied contingent valuation techniques (CVT) to evaluate the amount a consumer was willing to pay for Alaskan birch cabinet doors that varied in the type and level of character-marks. CVT are used by asking consumers how much more they are willing to pay for their preferred product choice when compared with their second preference. These authors found that consumers were willing to pay more for doors that had more knots and color variation (i.e., more character-marks) than for doors with fewer character-marks. In addition, females were more likely to prefer doors with fewer character-marks while men preferred doors with more character-marks.

These studies offer both similar and contrasting results regarding evaluation of hardwood furniture and cabinets. There are similarities in that design (or style) seems to be important to perceptual and product evaluations, although this may be dependent on the analytical method employed. Females also seem to value fewer character-marks in wood than males. However, there is some inconsistency in terms of the relative importance of character to product evaluations and the nature of this relationship (whether positive, negative, or neutral). Other questions also arise. Does species have an impact on the overall evaluation of wood products? Is there a consistent gender difference in assessment? Does the evaluation of character-marked furniture differ for retailers and consumers? Ultimately, it should be consumers' actual "purchase [of] character-marked products in sufficient quantities and at a sufficient price [that should] justify production" (Bumgardner et al. 2000).

### An alternate method to assess furniture attributes—the Lens Model

Most studies on the acceptance of character-marks have used conjoint analysis. Although this method allows researchers to look at how different attributes (e.g., stain, character-mark density) are evaluated, it is limited in scope. Conjoint analysis typically includes a small number (3 to 4) and few levels (3 to 4) of each attribute to assess relative attribute importance; it does not allow for a more refined assessment of attributes.

Egon Brunswik (see Hammond and Stewart 2001 for a compilation of Brunswik's papers) developed an approach called the lens model to examine the manner in which an individual (or group of individuals) combines information to arrive at an overall judgment. Brunswik's approach has two unique features. First, it allows for representative designs, i.e., the selection of conditions/cues/attributes in a judgment task (or in an experiment) that represent the conditions or cues

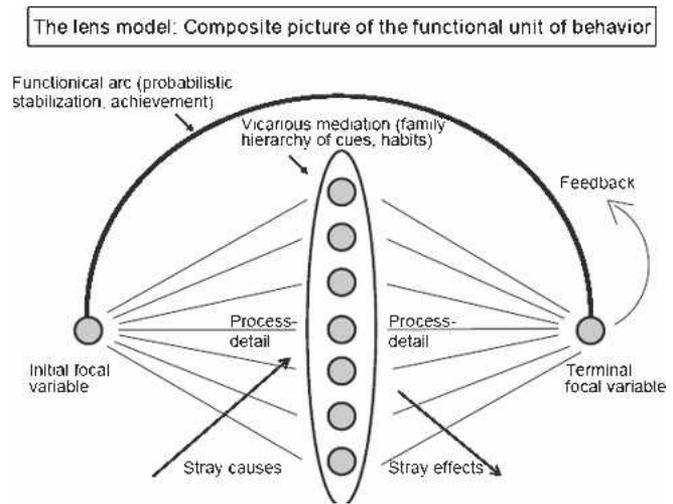


Figure 1. — Diagram of the original lens model (Wolf 2005).

outside the study. Second, it allows for the comparison of two decision models. Typically, researchers compare a model that represents the relationships among the cues/attributes and some outcome construct (e.g., salary, willingness to pay) in the natural environment with a model that represents the relationship between an individual's perceptions of the cues/attributes and the outcome variable. One can also compare the models derived from different market segments, such as males and females, or different participants in furniture purchasing—retailers and consumers. The intent of these comparisons is to identify differences between the two decision models, and, when appropriate, to train people to better understand another decision model. For instance, if the decision models between retailers and consumers are different, retailers can be trained to better understand the cues that are important to consumers when they evaluate a wood product. Brunswik developed the notion of ecological validity to reflect the correspondence between the cues/attributes as perceived by the individual and the cues/attributes as represented in the environment with an outcome measure.

The lens model, as a framework for analyzing judgment policies, focuses on selecting stimuli and attributes that are representative of the environment rather than the systematic (and artificial) creation of stimulus combinations (as found in a conjoint analysis) that deliberately display a product as composed of certain levels of a small number of attributes. The lens model posits that the way an individual perceives a stimulus is determined by the cues the individual uses, and the importance of those cues, to process the stimulus (Fig. 1). It has been used to model decision-making in several fields, including medicine, meteorology, management, and resource procurement (Alderman et al. 2004).

By using the lens model, we can examine the difference between two perspectives that view a set of cues (attributes) and then impute a judgment about the stimulus (e.g., furniture). For example, we can contrast a retailer's conceptual model (or underlying policy for integrating the cues associated with the wood product) with a consumer's perception of the same set of cues. We can contrast a consumer's evaluation of different species using the same set of cues, or we can contrast differences between male and female perceptions of a set of cues and their overall judgment (evaluation) of a product.

One aim of this policy capturing analysis was to identify differences in the weights assigned to each cue by retailers and consumers. If retailers weigh cues differently from consumers, one of two steps would be appropriate: educate consumers to weigh the cues in the same way as the retailer or educate the retailer to weigh the cues in the same way as the consumer. The former perspective is consistent with a more production-oriented manufacturing strategy: that is, build it and persuade the consumer regarding the desirable attributes. The latter perspective is consistent with a more consumer-oriented manufacturing process: that is, determine what consumers' value and build to their needs.

### Research objective

There is some ambiguity in the empirical findings concerning the impact of character-marks and other visual attributes on consumers' and retailers' evaluation of wood products and the amount they are willing to pay. To date, conjoint analysis has been the primary method of such research. The limitations of conjoint analysis, however, are the limited number of attributes, and levels of those attributes, and the limited representativeness of these cues to those used in the environment). The objective of this study was to apply a policy capturing perspective to examine the cues associated with perception of solid wood furniture.

This approach addresses the shortcomings of conjoint analysis and allows us to contrast the underlying decision model used by different market segments (e.g., consumers and retailers, males and females); that is, we can capture the policy (decision rules) used by the segments when they combine the wood attributes to make an overall judgment about how much they would pay for the product. If the segments use different decision rules, one marketing strategy would be to tailor promotional material to focus on those attributes that are important to that market segment when they evaluate the product. For example, if character-marks are more positive to males than females (as is suggested in past research), then promotional strategies would differ for males and females.

### Methods

We examined both consumer and retailer perceptions of solid wood furniture using pictures of an oak dresser and dining room table and a cherry dresser and dining room table, available on request from the authors. We identified the cues (attributes) to include in the instrument in three stages. First, we conducted interviews with six consumers who were likely to purchase solid hardwood furniture in the next 6 months and asked them to describe the cues (attributes) that were important to them when deciding what furniture to buy. We specifically instructed the consumers to focus on characteristics of the furniture and not the price when identifying key attributes. Second, we reviewed the literature on character-marks (see Wiedenbeck et al. 2004 for a detailed review of veneer attributes) and identified a set of cues (attributes) typically used to describe these marks (e.g., bird pecks, gum marks). We then pretested both the attributes from our interviews and these more technical terms in a pilot study with a small (15 people) group of consumers and found the technical terms had little meaning. Finally, we revised the technical terms into language more relevant to the customer (e.g., natural blemishes) and found in a second pilot study with 10 people that consumers were able to understand the meaning of this revised cue. The final list contained eight cues.

### Sampling strategy and sample characteristics

We surveyed approximately 250 consumers and 28 retailers in the summer and fall of 2005. We surveyed the consumers at a midlevel furniture store (whose product line included La-Z-Boy, Thomasville, Vaughan, Hooker, Berkline) over a 4-week period during summer months. These consumers were approached by interviewers as they were leaving the store to avoid interfering with their shopping experience. The overall response rate was approximately 50 percent. The sample was: 60 percent female, 57 percent home owners, 52 percent parents of at least one child, and 55 percent married. The median household income for respondents was between \$40,000 and \$60,000.

We surveyed the retailers during market week in High Point, North Carolina, in October 2005. Market week was selected to increase the likelihood that we would find a wide range of retailers who were responsible for making the purchase decisions for furniture lines at their stores. We would expect these retailers to understand consumer perceptions and to purchase furniture that aligned with these perceptions. Retailer respondents were predominately both store managers and buyers (93%) with approximately 16 years of experience.

### Measures

The survey contained a series of questions that assessed consumers' evaluations of a picture of an oak dresser, an oak dining room table, a cherry dresser, and a cherry dining room table on a set of eight cues (i.e., naturalness, natural blemishes, natural wood character-marks, finish, grain consistency, design, color, and color consistency) and then asked consumers to indicate how much they would pay for the pieces. The furniture stimuli were selected to be similar in style (shaker/craftsman-like) and price (approximately \$500).

We used a seven-point semantic differential scale to allow the respondents to evaluate each piece of furniture on each of the eight cues. The adverb qualifiers for each scale point were selected to provide equal-appearing intervals. The scale anchors were "Good" and "Bad" with scale points for "Extremely," "Quite," and "Slightly" on each side and a "Neither" point in the center; each point had a space for a mark and was separated by a colon (Brinberg and Axelson 2002). Consumers were then asked to indicate their willingness to pay for each piece of furniture by responding to the following question, "With all characteristics considered, how much are you willing to pay for this product?"

## Results

### Descriptive statistics

Prior to conducting the multivariate analyses, we examined the distributional characteristics of the consumer and retailer sample. The data were structured so that each row of data represented a consumer (or retailer) response to a specific product-species combination. Thus, each respondent had four rows of data (i.e., one for each product-species combination picture). Although this data structure potentially created some level of dependencies, past research (Alderman et al. 2005) suggests the potential dependency does not influence the overall interpretation of the analyses. **Table 1** contains a summary of the predictor and outcome variables for the consumer and retailer samples.

With the exception of dollar estimates, all skewness and kurtosis values were less than 2, indicating that the data did

Table 1. — Summary statistics of predictor and outcome variables for consumers and retailers.<sup>a</sup>

Variable	Consumers			Retailers		
	N	Mean	SD	N	Mean	SD
Dollars	751	264.40	201.43	110	464.04	242.94
Dollars_trim	619	247.92	132.15	85	373.98	140.59
Naturalness	998	5.24	1.43	112	5.49	1.21
Natural blemishes	997	4.97	1.40	109	5.17	1.22
Natural wood character-marks	993	5.26	1.39	110	5.61	1.21
Finish (light reflection)	992	4.90	1.55	111	4.99	1.45
Grain consistency	989	4.96	1.49	111	5.16	1.48
Design	996	4.71	1.64	111	5.04	1.35
Color	997	4.68	1.69	112	4.96	1.45
Color consistency	996	4.73	1.67	112	4.98	1.43
Valid N	601			80		

<sup>a</sup>The evaluation of the attributes were measured on a 7-point extremely good (7) to extremely bad (1) scale.

not deviate substantially from normality. The dollar estimates for willingness to pay did deviate from normality, in large part, because of the presence of outliers at both ends of the distribution. For example, some consumers indicated that they would not pay any money for the product, while others indicated a willingness to pay more than \$1,000 for the product. We used a trimmed means approach to adjust the data. We trimmed 5 percent of the willingness to pay responses from both ends of the distribution (a total trim of 10%) in both the consumer and the retailer data sets to eliminate unrealistic responses. The skewness and kurtosis values for the trimmed mean (Dollars\_trim) reflect a normal distribution. The subsequent regression analyses that we report are conducted using the trimmed dollar values. Additionally, all statistical values for tolerance, a measure of the degree of correlation among the independent variables, were greater than 0.20, suggesting that multicollinearity was not a problem.

### Relative importance of cues on willingness to pay

We conducted several analyses to assess the relationship between each cue and willingness to pay for the product. We first report the regression analyses that contrast the perceptions of the eight cues for all consumers on all products with the retailers' perceptions of all eight cues on all products. We then contrast consumers' perceptions of the eight cues for oak products with consumers' perceptions of the eight cues for cherry products. Our final set of analyses contrasts male and female consumer perceptions of the eight cues on all products.

*Aggregate-level comparisons.* — The overall model regressing the eight cues onto willingness to pay (dollars\_trimmed) was significant ( $R = 0.342$ ;  $F = 9.82$ ;  $df = 8, 592$ ;  $p < 0.01$ ) for consumers but non-significant for retailers ( $F = 0.69$ ;  $df = 8, 71$ ;  $p = 0.70$ ). None of the cues were significantly related to willingness to pay for the retailers. **Table 2** contains a summary of the regression coefficients for consumers.

Both grain consistency and design were significant predictors of willingness to pay for a solid wood product for consumers. For every one unit change in the evaluation of the product design or grain consistency, consumer willingness to pay increased by \$14.8 and \$11.9, respectively. As will be

Table 2. — Summary of model coefficients for consumers (aggregate-level analysis).

Variable	B (unstand.)	Std. error	Beta (stand.)	t	Sig.
(Constant)	69.513	24.992		2.781	0.006
Naturalness	-7.760	5.730	-0.078	-1.354	0.176
Natural blemishes	9.441	5.859	0.095	1.611	0.108
Natural wood character-marks	8.870	6.187	0.087	1.434	0.152
Finish (light reflection)	-7.376	5.132	-0.083	-1.437	0.151
Grain consistency	11.877	5.180	0.127	2.293	0.022
Design	14.877	4.593	0.177	3.239	0.001
Color	7.359	5.737	0.087	1.283	0.200
Color consistency	-1.187	5.445	-0.014	-0.218	0.827

presented in subsequent analyses, however, this aggregate-level analysis masks subgroup differences in the relationships between these cues and willingness to pay.

*Relationship of cues for oak and cherry products and willingness to pay<sup>1</sup>.* — We regressed the eight cues on consumers' willingness to pay for the oak and the cherry furniture. For the oak furniture, the overall model was significant ( $R = 0.415$ ;  $F = 8.52$ ;  $df = 8, 327$ ;  $p < 0.01$ ). **Table 3** contains a summary of the standardized and unstandardized regression coefficients. For cherry furniture, the overall model also was significant ( $R = 0.302$ ;  $F = 4.22$ ;  $df = 8, 336$ ;  $p < 0.01$ ). **Table 4** contains a summary for the cherry furniture. The percentage of variance accounted for by the oak model was marginally more than the cherry model ( $Z = 1.74$ ,  $p < 0.08$ ). This difference might indicate that factors other than these eight cues are predictive of willingness to pay for cherry.

A consumer's willingness to pay for furniture made from both oak and cherry was significantly related to design. For cherry, for every one unit increase in design quality, consumer willingness to pay increased by \$21.8. For oak furniture, for every one unit increase in design quality, consumer willingness to pay increased by \$13.7. Grain consistency and color were significantly related to willingness to pay for oak furniture but not for cherry. Natural blemishes, however, were significantly related to a consumer's willingness to pay for cherry furniture but not for oak. In general, consumer willingness to pay increased by \$18.2 for cherry furniture that had natural blemishes. It should be noted that the cherry pieces generally had slightly more character present than the oak pieces. As we present in the next section, however, the relationship between blemishes and willingness to pay differed for male and female consumers.

*Relationship of cues for male and female consumers and willingness to pay.* — We regressed the eight cues on male and female consumers' willingness to pay. For the male consumers, the overall model was significant ( $R = 0.413$ ;  $F = 6.44$ ;  $df = 8, 250$ ;  $p < 0.01$ ). For the female consumers, the overall model also was significant ( $R = 0.337$ ;  $F = 5.34$ ;  $df = 8, 333$ ;  $p < 0.01$ ). There was no significant difference in the overall percentage of variance accounted for by the model for male and female respondents. **Tables 5** and **Table 6** contain a sum-

<sup>1</sup> We do not report the regression analyses for male-oak, male-cherry, female-oak, and female-cherry because of the relatively small sample size in these unique groups.

*Table 3. — Summary of model coefficients for consumers' perceptions of oak furniture.*

Variable	B (unstand.)	Std. error	Beta (stand.)	t	Sig.
(Constant)	92.136	38.700		2.381	0.018
Naturalness	-8.826	8.568	-0.076	-1.030	0.304
Natural blemishes	6.245	8.510	0.053	0.734	0.464
Natural wood character- marks	1.546	9.023	0.013	0.171	0.864
Finish (light reflection)	-5.935	7.240	-0.061	-0.820	0.413
Grain consistency	17.225	7.445	0.162	2.314	0.021
Design	13.654	6.532	0.144	2.091	0.037
Color	29.249	8.269	0.311	3.537	0.000
Color consistency	-10.581	7.776	-0.110	-1.361	0.175

*Table 4. — Summary of model coefficients for consumers' perceptions of cherry furniture.*

Variable	B (unstand.)	Std. error	Beta (stand.)	t	Sig.
(Constant)	108.712	31.971		3.400	0.001
Naturalness	-8.582	7.701	-0.089	-1.114	0.266
Natural blemishes	18.194	7.924	0.198	2.296	0.022
Natural wood character- marks	8.947	8.399	0.096	1.065	0.288
Finish (light reflection)	-6.548	7.192	-0.073	-0.910	0.363
Grain consistency	-3.191	6.839	-0.037	-0.467	0.641
Design	21.811	6.314	0.252	3.455	0.001
Color	-8.071	8.366	-0.089	-0.965	0.335
Color consistency	4.408	7.350	0.052	0.600	0.549

*Table 5. — Summary of model coefficients for male consumers.*

Variable	B (unstand.)	Std. error	Beta (stand.)	t	Sig.
(Constant)	-12.946	40.938		-0.316	0.752
Naturalness	-1.853	8.244	-0.017	-0.225	0.822
Natural blemishes	14.572	7.767	0.149	1.876	0.062
Natural wood character- marks	17.315	8.323	0.167	2.080	0.039
Finish (light reflection)	-7.811	6.421	-0.092	-1.216	0.225
Grain consistency	9.194	6.777	0.100	1.357	0.176
Design	16.620	6.271	0.210	2.650	0.009
Color	3.901	7.620	0.047	0.512	0.609
Color consistency	-4.493	6.756	-0.055	-0.665	0.507

mary of the standardized and unstandardized regression coefficients for males and females, respectively.

There are several gender effects to note. First, both males and females valued design; that is, the evaluation of furniture design was significantly related to consumers' willingness to pay. Males and females both were willing to pay similar amounts for quality designs (i.e., for every one unit increase in design quality, males and females were willing to pay an additional \$16.6 and \$12.5, respectively). For males, the natural qualities of the furniture were significantly related to their willingness to pay for the product. Specifically, natural blemishes and natural character-marks were significantly and positively related to willingness to pay for the product; a one

*Table 6. — Summary of model coefficients for female consumers.*

Variable	B (unstand.)	Std. error	Beta (stand.)	t	Sig.
(Constant)	108.862	31.823		3.421	0.001
Naturalness	-12.065	7.940	-0.125	-1.520	0.130
Natural blemishes	3.268	8.706	0.033	0.375	0.708
Natural wood character- marks	5.403	9.068	0.054	0.596	0.552
Finish (light reflection)	-7.667	8.040	-0.085	-0.954	0.341
Grain consistency	17.681	7.797	0.188	2.268	0.024
Design	13.222	6.604	0.151	2.002	0.046
Color	12.547	8.521	0.149	1.472	0.142
Color consistency	-0.672	8.544	-0.008	-0.079	0.937

unit increase in blemishes and character-marks led to a willingness to pay of an additional \$14.5 and \$17.3, respectively. For females, there was no relationship between these cues and willingness to pay, but grain consistency was positively and significantly related to willingness to pay. Females were willing to pay an additional \$17.7 for every one unit increase in the perceived quality of the wood grain.

## Discussion

The application of the lens model to evaluate consumer and retailer perceptions of character-marked furniture provides some insights into the underlying decision models of different market segments. Consistent with the research reported by Wang et al. (2004), product design has the largest effect on consumer willingness to pay. Very simply, good product design matters. One inference from this finding is that manufacturers may benefit from product testing new designs using consumer panels or focus groups to determine, prior to final production, whether the design is viewed positively by the consumer. An alternative inference is that, as part of a customization strategy, manufacturers could enable consumers to become actively involved in the product development process and design their own furniture.

The eight cues used in this study were not significant predictors of retailers' willingness to pay. There are two possible interpretations: 1) these cues are not relevant to the retailer, and, consequently, a completely different set of cues is used by retailers to determine their willingness to pay, or 2) the sample size (28 retailers) was inadequate to detect relationships that did exist between these cues and retailers' willingness to pay. If the former explanation is likely, retailers may have difficulty understanding a consumer's perception of the furniture, and training the retailer to "think like a consumer" may be necessary. If the latter explanation is likely, then a follow-up study that increases the number of retailers would be appropriate. As previous studies involving consumers (Wang et al. 2004, Jahn et al. 2001, Donovan and Nicholls 2003) have indicated greater acceptance of character than those based on retailers (Bumgardner et al. 2001), perhaps there is some support for the former interpretation.

Our aggregate-level analysis of consumers masked some meaningful differences between species and between market segments (specifically males and females). For perceptions of species, product design appears to matter for both oak and cherry. Furthermore, character-marks were a significant,

positive predictor of willingness to pay for the cherry pieces but did not affect willingness to pay for the oak pieces. This finding is significant for two reasons: 1) there were species differences, and 2) character-marks were not a negative predictor of willingness to pay (for oak) and resulted in a willingness to pay a premium for furniture with natural blemishes and character-marks (for cherry). These findings provide further support to the notion that consumers are at least indifferent toward, and often agreeable to, character-marked products. The implication is that manufacturers can shift some of their manufacturing to lower grade wood.

The differences between male and female consumers highlight the value of applying the lens model to different segments. Males viewed natural blemishes and natural character-marks as significant cues to judgments of value; the more positive the evaluation of these features, the more they were willing to pay. Females viewed design and grain consistency positively and results suggest that they may be willing to pay a premium for these features. From a retail perspective, this information suggests the need to use an adaptive sales strategy that emphasizes design quality to both males and females and focuses on character-marks and blemishes for males and grain consistency (or overall look) for females.

### Limitations

There are several limitations in the implementation of this study that restrict its overall generalization. First, the sample was drawn from a narrow geographic region, and the consumer profile does not reflect other regional or urban perceptions. Second, the study would benefit from using actual furniture rather than pictures. Perhaps subtle differences in the background context influenced the results (for the species differences) beyond the wood attributes. Third, a greater array of products (e.g., more species or more sample products of each species) would allow us to examine each individual's decision model in more detail. In addition, a three-dimensional view of the wood product may influence the value placed on each cue. Fourth, a larger retailer sample size would increase the ability to detect relations between the cues and willingness to pay. Despite the limitations noted above, the application of the lens model does provide a theoretical mechanism to examine and understand the relations between environmentally relevant cues and a person's (consumer or retailer) willingness to pay. Future work with a larger, more diverse sample, and a greater range of wood products, will provide more stable estimates of the relationship between these cues and willingness to pay.

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