

UNITED STATES DISTRICT COURT
NORTHERN DISTRICT OF OHIO
EASTERN DIVISION

In re: WHIRLPOOL CORP. FRONT-) Case No. 1:08-WP-65000
LOADING WASHER PRODUCTS) (MDL 2001)
LIABILITY LITIGATION)
) JUDGE CHRISTOPHER A. BOYKO
)
)
)
) ORDER REGARDING
) DAUBERT MOTIONS

CHRISTOPHER A. BOYKO, J.:

Plaintiffs Gina Glazer and Trina Allison bring this action against defendant Whirlpool Corporation on behalf of a class of Ohio purchasers of Duet washing machines. Currently pending are a dozen *Daubert* motions to exclude the opinions and testimony of the parties' experts. For the reasons and to the extent stated below, the Court rules on these motions as follows:

- Whirlpool's motion to exclude the testimony of Dr. David Griffin (docket no. 291) is **DENIED**;
- Whirlpool's motion to exclude the testimony of Dr. Marc Van Audenrode (docket no. 293) is **DENIED**;
- Whirlpool's motion to exclude the testimony of Todd B. Hilsee (docket no. 294) is **GRANTED**;
- Whirlpool's motion to exclude the testimony of Sarah Butler (docket no. 302) is **DENIED**;
- Whirlpool's motion to exclude the testimony of Dr. R. Gary Wilson (docket no. 305) is **DENIED**;
- Plaintiffs' motion to limit and exclude the testimony of Dr. Timothy Bresnahan (docket nos. 295, 296) is **GRANTED in part and DENIED in part**;
- Plaintiffs' motion to exclude the testimony of Dr. Harriet Burge (docket nos. 295, 297) is **DENIED**;
- Plaintiffs' motion to limit and exclude the testimony of Dr. M. Laurentius Marais (docket nos. 295, 299) is **GRANTED**;

- Plaintiffs’ motion to exclude the testimony of Dr. Ned Ostojic (docket nos. 295, 300) is **GRANTED in part and DENIED in part**;
- Plaintiffs’ motion to exclude the testimony of Dr. Itamar Simonson (docket nos. 295, 301) is **GRANTED in part and DENIED in part**;
- Plaintiffs’ motion to exclude the testimony of Dr. Priya Gopalakrishnan (docket nos. 295, 303) is **GRANTED**; and
- Plaintiffs’ motion to limit and exclude the testimony of Dr. Paul M. Taylor (docket nos. 295, 304) is **GRANTED in part and DENIED in part**.

I. Applicable Standards.

Federal Rule of Evidence 702 provides that an expert’s opinion or testimony is admissible if:

(a) the expert’s scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue; (b) the testimony is based on sufficient facts or data; (c) the testimony is the product of reliable principles and methods; and (d) the expert has reliably applied the principles and methods to the facts of the case. The rejection of expert testimony, however, is “the exception, rather than the rule.” *In re Scrap Metal Antitrust Litig.*, 527 F.3d 517, 530 (6th Cir. 2008) (quoting Advisory Committee Notes, 2000 amendments, Fed. R. Evid. 702 (“*Advisory Committee Notes*”)).

In *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579 (1993), the Supreme Court held that expert testimony is admissible under Federal Rule of Evidence 702 only if it is both relevant and reliable, explaining that such a determination requires “a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid and of whether that reasoning or methodology properly can be applied to the facts in issue.” *Id.* at 592-93. The *Daubert* Court suggested a non-exclusive list of factors a court may consider when deciding whether proposed

expert testimony is sufficiently reliable under Rule 702, including: (1) whether the expert's theory or technique "can be (and has been) tested;" (2) "whether the technique or theory has been subjected to peer review and publication;" (3) "the known or potential rate of error" of a technique; (4) "the existence and maintenance of standards controlling the technique's operation;" and (5) whether there has been "general acceptance" of the theory or technique within the "relevant scientific community." *Id.* at 593-94.

When assessing reliability, "the court does not 'determine whether [the expert's opinion] is correct, but rather [determines] whether it rests upon a reliable foundation.'" *United States v. Stafford*, 721 F.3d 380, 393-94 (6th Cir. 2013) (quoting *In re Scrap Metal*, 527 F.3d at 529-30). "The court's focus is 'solely on principles and methodology, not on the conclusions that they generate.'" *Stafford*, 721 F.3d at 393 (quoting *Daubert*, 509 U.S. at 595); *see also Tamraz v. Lincoln Elec. Co.*, 620 F.3d 665, 675 (6th Cir. 2010) ("The important thing is not that experts reach the right conclusion, but that they reach it via a sound methodology.").

The *Daubert* factors, however, "are not dispositive in every case." *In re Scrap Metal*, 527 F.3d at 529 (quoting *Gross v. Comm'r of Internal Revenue*, 272 F.3d 333, 339 (6th Cir. 2001)). Rather, trial courts have "considerable leeway in deciding in a particular case how to go about determining whether particular expert testimony is reliable." *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 152 (1999). Similarly, trial courts have "the same kind of latitude in deciding . . . whether or when special briefing or other proceedings are needed to investigate reliability, as it enjoys when it decides *whether* that expert's relevant testimony is reliable." *Id.* (emphasis in original). Thus, a court is not "required to hold an actual hearing to comply with *Daubert*." *Greenwell v. Boatwright*, 184 F.3d 492, 498 (6th Cir. 1999).

II. Challenges to the Parties' Engineering and Design Experts.

A. Summary of Proffered Expert Testimony.

1. Plaintiffs' Expert.

Plaintiffs have retained R. Gary Wilson as their design expert, to provide testimony in support of their claims that Whirlpool knew or should have known that its Duet washers were designed with inherent defects that cause them to accumulate residue, mold and/or mildew, leading in some cases to accompanying odors.

Wilson is a mechanical engineer and former Director of Laundry Technology at Whirlpool. Wilson has experience in appliance design, including dishwashers and front-loading washers. Wilson opines that the design of Whirlpool's Duets is flawed because the machines fail to self-clean and do not permit consumers to clean them easily. Wilson further opines that Whirlpool should have recognized the design of the machines would lead to mold growth, and there were alternative designs available to avoid the problems posed by Whirlpool's design.

2. Whirlpool's Experts.

In response to Plaintiffs' engineering expert Wilson, Whirlpool designated Drs. Priya Gopalakrishnan, Harriet Burge, Paul Taylor, and Ned Ostojic.¹ A summary of each of their opinions follows.

Gopalakrishnan designed and performed a study that involved operation of a variety of top- and front-loading washing machines, including Duets, to clean soiled laundry for a period of several

¹ Whirlpool also previously designated Jeffrey Hicks, an industrial hygienist. After Plaintiffs moved to exclude Hicks's testimony (*see* docket nos. 295, 298), Whirlpool withdrew its designation of Hicks. *See* docket no. 325.

months. Gopalakrishnan conducted visual inspections and “sniff tests” of the washers, and also performed tear-down inspections and took swab samples of visible residue. Gopalakrishnan concludes that none of the washers she tested developed odors similar to those described by Plaintiffs and that proper care and maintenance prevents or reduces residue buildup.

Ostojic is an analytic chemist, chemical engineer, and odor scientist, with expertise in the field of odor measurement and control. Whirlpool retained Ostojic to review and comment on Wilson’s opinions and to review the odor sampling component of Gopalakrishnan’s washer study. Ostojic opines that the methodology underlying Wilson’s work is unreliable. Ostojic further opines, based on Gopalakrishnan’s odor sampling results, that Duet washers do not emit an unpleasant odor. Ostojic also buttresses Whirlpool expert Taylor’s analysis of Whirlpool’s customer-call data (discussed below) and opines that only a small percentage of customers have problems with odor.

Burge is an aerobiologist, who offers opinions regarding factors that affect the formation of biofilm, including mold and fungal growth, on man-made surfaces such as washing machines. Burge opines on the potential causes of odor in Plaintiffs’ machines, based upon her inspections of Whirlpool front-loading washers and her experience with fungal and bacterial odors. Burge also offers opinions on the methodology Gopalakrishnan employed in conducting her washer study.

Taylor is a mechanical engineer employed by Exponent, Inc., specializing in product analysis in consumer and industrial environments. Whirlpool retained Taylor to inspect Plaintiffs’ washing machines and to rebut the opinion of Plaintiffs’ expert Wilson that design defects in Duet washing machines cause mold and mildew growth and odors. (Taylor also rebuts the analyses of Plaintiffs’ experts Dr. David Griffin and Richard L. Oliver concerning databases of customer service calls, discussed below.) Taylor conducted inspections of Plaintiffs’ Duet washing machines, as well as other

washers, and opines that Plaintiffs' failure to follow the recommended maintenance steps caused their problems with biofilm and odor. Taylor also compared the Duet "Use and Care Guides" ("UCGs") with similar guides for other manufacturers' washing machines and concludes that: (1) no front-loading washing machine is self-cleaning; and (2) many top-loading washing machines also are not self-cleaning. Taylor also analyzed Whirlpool customer-call databases, and concludes that the rate of mold problems for Duet washers is significantly lower than reported by Plaintiffs' experts. Further, to confirm or check his database analysis, Taylor reviewed repair history surveys for front-loading washing machines published in *Consumer Reports*, and opines that Whirlpool's Duet repair rates during the class period were no higher than average.

B. Whirlpool's Challenge to Wilson (docket no. 305).

As noted, R. Gary Wilson is Whirlpool's former Director of Laundry Technology and designed dishwashers and front-loading washers for Whirlpool. Wilson opines the Duets suffered from "design flaws resulting from the neglect of the fundamental principle that a cleaning appliance must be able to clean itself or . . . provide a means whereby the consumer can easily clean [it]," and Whirlpool "should have recognized" that design flaws in their Duets would lead to biofilm and mold growth. Wilson Report at 9-10 (docket No. 305-2); Wilson depo. at 9 (docket no. 305-3).

Whirlpool seeks to exclude Wilson's testimony, arguing that: (a) he is unqualified, (b) his methodology does not rely on scientific testing or analysis, and (c) he ignores evidence that does not support his conclusions. As to qualifications, Whirlpool notes that Wilson's experience at Whirlpool focused on dishwashers and, to the extent Wilson worked with washing machines, his experience was limited to top-loading models. Whirlpool points out that Wilson has "never studied biofilm in home

appliances nor inspected any clothes washer for biofilm.” *See* Whirlpool Motion at 2 (docket no. 305).

As to methodology, Whirlpool argues Wilson’s approach is unreliable because: (a) his opinion that washers must be able to self-clean is an “unwritten design principle” unsupported by any “published literature, industry standard, or government regulation;” and (b) he failed to use objective scientific testing methods to support his opinion. *Id.* at 3. Whirlpool observes that Wilson examined only a small sample of Duets, all of which were used washers “cherry-picked” by Plaintiffs and most of which had been the subject of mold and/or odor complaints. Whirlpool also asserts Wilson failed to conduct any scientific testing of the machines, including sampling for bacteria or fungi or odor. He did not perform any study to determine a “threshold” amount of biofilm accumulation that will produce noticeable moldy odors and did not investigate potential alternative washer designs. Rather, Whirlpool asserts, Wilson simply relied on his own subjective visual examination of top-loading and front-loading machines and his observations of the amount of accumulated residue as support for his opinions of defect.

Whirlpool also notes Wilson did not investigate the owners’ use and care habits, even though he concedes that the amount of biofilm buildup “depends on the use and habits . . . of the consumer.” Depo. at 114 (docket no. 305-3). Whirlpool argues that Wilson’s failure to consider alternative causes of biofilm buildup renders his methodology unscientific and unreliable. Finally, Whirlpool contends Wilson’s methodology is unreliable because he disregards evidence inconsistent with his conclusions, including: (1) the presence of clean plastic tubs and aluminum brackets in the washers of some of Plaintiffs’ front-loading machines; (2) lack of odor in some of Plaintiffs’ machines; and (3) significant accumulation of biofilm in some of the top-loaders he examined.

Plaintiffs respond that Wilson’s experience as a Whirlpool appliance design engineer and as

Whirlpool's own Director of Laundry Technology amply qualifies Wilson to offer opinions on the design of Whirlpool Duets and their potential for mold accumulation. Although Wilson never worked on front-loading washing machines for the consumer market during his 23-year tenure at Whirlpool, he did manage a research-and-development department responsible for designing a front-loading washer for the International Space Station.

Plaintiffs also observe that two other courts have already denied motions to exclude Wilson. *See In re Front Loading Washing Mach. Class Action Litig.*, 2013 WL 3466821 (D.N.J. Jul. 10, 2013) (“*LG*”) (involving LG washers) and *Butler v. Sears*, 2011 U.S. Dist. LEXIS 157499 (N.D. Ill. Sept. 30, 2011) (involving Kenmore washers). In the first of these cases, Wilson opined that “every LG [front-loading washer], regardless of model, year, or platform, fails to self clean, which leads to biofilm accumulation that results in foul odors. *LG*, 2013 WL 3466821 at *3. In the second case, Wilson opined that “the subject washers are defective in design because their basic functional characteristics, including their use of lower water volumes at cooler temperatures than standard machines, makes them unable to rid themselves of residue in the normal wash and rinse cycles and makes them incubators for the growth of bacteria and mold. Wilson concluded that the core design of all of the [Kenmore-brand,] Whirlpool-built front loading high efficiency washers is defective, without regard to any changes made to individual models to attempt to mitigate the problem.” *Butler*, 2011 U.S. Dist. LEXIS 157499, at *10-11.

In the context of class certification motions, both the *LG* and *Butler* courts declined to exclude Wilson's testimony, finding that Wilson was qualified to opine as to the commonality of design flaw. *See LG*, 2013 WL 3466821 *4 (“Dr. Wilson's opinion is based upon the extensive experience he has gained during his more than 20 years as an engineer with Whirlpool, his education, his training, his

technical expertise, as well as his review and analysis of the [front-loading washers] in this and related litigation.”); *Butler*, 2011 U.S. Dist. LEXIS 157499 at *11-12 (“Wilson’s testimony is . . . based upon his knowledge of washer technology and his understanding of the principles that generally keep machines functionally clean, as well as the extent to which the subject machines depart from those principles Wilson is clearly qualified[.]”).

The foundation for Wilson’s expert testimony is the principle that a washer must be able to continually clean itself of residue build-up; it is described by Wilson as a fundamental design principle “which must be observed in order to have a commercially successful cleaning product.” Wilson Report at 13 (docket no. 305-5). Plaintiffs point to American Society of Sanitary Engineering (“ASSE”) standard #1007, adopted by the American National Standards Institutes (“ANSI”) and identified by Wilson in his deposition. Those standards provide that “the washer . . . shall provide a means of flushing all surfaces exposed to wash water . . . ” and “[t]he washing chamber and all components within it shall be designed to minimize the accumulation of soil.” ASSE 1007 at §§ 4.2, 4.3. Although Whirlpool argues Wilson never explicitly cited the ASSE standard in his report, Plaintiffs respond that the principle embodied by the standard “was so ingrained at Whirlpool” that all engineers would have known of the relevant design principle. Response at 4 n.2 (docket no. 324).

With respect to Whirlpool’s assertion that Wilson fails to consider the owners’ use and care habits, Plaintiffs respond that Whirlpool misunderstands Wilson’s opinion. According to Plaintiffs, Wilson concludes that the inherent design flaw of the washers exists regardless of the owner’s use and care of the machine, and that use and care habits impact only the *amount* of mold that develops, not *whether* it develops. In other words, use and care habits “might exacerbate mold growth but [do] not cause it.” *Glazer v. Whirlpool Corp.*, 722 F.3d 838, 848 (6th Cir. 2013) (*Glazer II*). Plaintiffs also

note Whirlpool's internal documents support Wilson's findings in this regard. *See, e.g.*, docket no. 93-3 (email from Whirlpool engineer Anthony Hardaway stating "we are fooling ourselves if we think that we can eliminate mold and bacterial [sic] when our HA wash platforms are the ideal environment for molds and bacterial to flourish [sic]," and "Consumers' habits and practices data . . . show this can occur in as little as 24 hours or take months to start").

Plaintiffs also respond that Wilson's visual field inspection is an appropriate methodology for reviewing product design, and Whirlpool and its experts (including Taylor and Gopalakrishnan) also used this approach. In any event, Plaintiffs maintain, Wilson's decades of experience are an adequate basis on which to base his opinions, even without testing. *See LG*, 2013 WL 3466821, *4 ("The fact that Dr. Wilson has not undertaken his own testing does not disqualify him as an expert for the purposes for which he is proffered.") Plaintiffs further contend Wilson's failure to "quantify" unacceptable amounts of biofilm is consistent with the ASSE standard, which does not include or provide for quantitative measurements.

Finally, Plaintiffs observe that Wilson has examined numerous washers other than Whirlpool Duets, since Wilson also served as an expert in the prior LG litigation. Moreover, Wilson did not "ignore" evidence such as biofilm buildup in top-loading machines; he simply determined that such buildup was less than in the Whirlpool Duets and it was located in areas that were easier for consumers to clean. As to Whirlpool's assertion that Wilson should have examined its complaint rates for Duets, Wilson opines that, based on his experience at Whirlpool, he does not believe Whirlpool's conduct in connection with the biofilm problem was consistent with its reported complaint rates.

Having reviewed the parties' arguments, the Court rejects Whirlpool's challenges and declines to exclude Wilson's testimony. The Court agrees with the *LG* and *Butler* courts that Wilson's

background and experience qualify him to testify as to the commonality of design and inherent design defects in Whirlpool Duets. The Court further concurs with those courts that Wilson's methodology is sufficiently reliable to support admission of his testimony here. Although *LG* and *Butler* considered Wilson's testimony in the context of class certification motions, neither court limited its holding to that context, and this Court discerns no relevant difference here.

Regardless of whether Wilson explicitly cited ASSE #1007 in his Report, the general design principle (the "need to self-clean") that Wilson articulates is consistent with the ASSE standard. Further, Whirlpool's own documents demonstrate that the principle of self-cleaning was incorporated into Whirlpool's research and design work. Wilson's foundational principle enjoys sufficient "general acceptance" within the "relevant scientific community," as required by *Daubert*.

The Court also rejects Whirlpool's arguments that Wilson's methodology is unreliable based on his small and allegedly "unrepresentative" sample size. Particularly given Whirlpool's admissions as to uniformity in design, Wilson's tear-downs and visual inspections of machines are sufficiently reliable to support his opinions. Wilson first reviewed the design of the Duet washers and determined it was inherently flawed; he then examined a sample of washers and found their condition supported this opinion. While Whirlpool is correct that Wilson conducted no scientific testing in the strict sense, such as odor or residue sampling, and did not provide a quantitative measure of biofilm buildup that he would consider "too much," Wilson disassembled and inspected 27 different front-loading washers. He reviewed Whirlpool engineering and design documents, as well as depositions of Duet owners and several experts. Most significantly, Wilson called on *his own experience in washer design for Whirlpool* to support his conclusion that the design of the Duet machines led to a propensity to develop

mold.²

As to Whirlpool's assertions that Wilson: (1) failed to consider consumers' use and care habits; (2) failed to consider alternate causes for mold problems; and (3) ignored evidence that contradicted his conclusions, Wilson provides reasonable explanations for having discounted the opinions of Whirlpool's experts on these issues. Moreover, these challenges ultimately go to the weight, not the admissibility, of Wilson's testimony. *See Daubert*, 509 U.S. at 596 (“[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional means of attacking shaky but admissible evidence”); *In re Southeastern Milk Antitrust Litig.*, 739 F.3d 262, 281 (6th Cir. 2014) (the expert's consideration of some data inputs while omitting others goes to the accuracy of the conclusions, not the reliability of the testimony).

In sum, Whirlpool's motion to exclude Wilson's testimony is denied.

C. Plaintiffs' Challenge to Gopalakrishnan (docket nos. 295, 303).

Gopalakrishnan is an aerospace engineer employed by Exponent, Inc., with experience in evaluation of consumer appliances, including product testing. She has experience in evaluation of consumer appliances, but lists her expertise as “fluid mechanics, combustion, heat transfer, thermodynamics, and fire sciences.” Gopalakrishnan Report, Appx. A at 35 (docket no. 303-1). She

² Courts may consider also whether the expert proposes “to testify about matters growing naturally and directly out of research they have conducted independent of the litigation, or whether they have developed their opinions expressly for purposes of testifying.” *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 43 F.3d 1311, 1317 (9th Cir. 1995). Similarly, it is important to assess whether the expert “is being as careful as he would be in his regular professional work outside his paid litigation consulting.” *Sheehan v. Daily Racing Form, Inc.*, 104 F.3d 940, 942 (7th Cir. 1997); *see Kumho Tire*, 526 U.S. at 152 (*Daubert* requires the trial court to assure itself that the expert “employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field”).

has spent her entire career as a litigation expert.

Whirlpool retained Gopalakrishnan to test Wilson's theory that "all" Duets have the propensity to accumulate biofilm and mold. Accordingly, Gopalakrishnan performed a study of a variety of top- and front-loading washing machines, including Duets. Specifically, Gopalakrishnan obtained a total of fifteen new and used washing machines, refurbished the used machines to "like-new" condition, and contracted temporary employees (whom she called "laundry professionals") to operate the machines for several months. The employees operated the washers five days per week under prescribed conditions and performed periodic inspections of the machines. The inspections included photo documentation of the washers, "sniff tests," and air sample collection to test for machine odors. After several months, Gopalakrishnan conducted "tear-downs" of the machines to inspect their interiors. Gopalakrishnan concludes that: (1) "all the washers in this study experienced an equivalent of six to eight months of average household use with no noticeable or visible mold growth or residue buildup . . .;" (2) "proper use and maintenance significantly reduces or prevents the buildup of laundry residues;" (3) "none of the test washers has an odor with moldy, mildew, sewage, sulfur, rotten or foul characteristics described by the plaintiffs;" and (4) "[t]he test results confirm that the top-loading test washers are not 'self-cleaning' [.]" Report at 28-29 (docket no. 303-1).

Plaintiffs move to exclude all of Gopalakrishnan's testimony, arguing: (1) she is an aerospace engineer and is thus unqualified in the fields of biology and mycology;³ (2) her study failed to comply with the scientific method; (3) she inaccurately reported results and altered data; and (4) her opinions are unhelpful, since she attempted to simulate six to eight months of usage by running an unusually high number of loads in a three-month period.

³ Mycology is the branch of biology devoted to the study of mold and fungi.

Plaintiffs point out that Gopalakrishnan has a limited understanding of biofilm, never tested biofilm prior to this litigation, and testified she does not know what mycology is. Plaintiffs also challenge Gopalakrishnan's testing protocol as novel, untested, and riddled with inconsistencies. As an example of Gopalakrishnan's purportedly "sloppy" methodology, plaintiffs point to an incident where a skunk infiltrated a warehouse area used for storage of her odor-sampling bags. Apparently, neither Gopalakrishnan nor her staff noticed the intrusion until the outside odor sampling facility detected the skunk odor.⁴

Further, Plaintiffs argue Gopalakrishnan altered results and failed to record results unfavorable to Whirlpool. Plaintiffs point to Gopalakrishnan's testimony that she "occasionally" smelled stagnant or unpleasant odors in the washing machines but did not take samples or record those odors. In fact, in November and December 2012, Gopalakrishnan conducted odor sampling with towels, and failed to include those sampling results in any of her subsequent written reports. Finally, Plaintiffs argue that running a large number of loads over a three-month period is not a reliable means of simulating six to eight months of average household use, since running more loads of laundry over a shorter period actually *reduces* the buildup of biological growth.

Whirlpool responds that Gopalakrishnan, although she is not a biologist, has experience in testing appliances, including washing machines and dryers. Whirlpool describes Gopalakrishnan's background in design of experiments and isolating variables to test hypotheses. Whirlpool also maintains Gopalakrishnan's study followed the scientific method and produced reliable data regarding

⁴ Gopalakrishnan used special plastic collection bags to take air samples from inside the machines twice a week. She then forwarded these collection bags to another Whirlpool expert, Ned Ostojic, for sniff-test analysis. Although Gopalakrishnan did not realize a skunk had sprayed in the warehouse where she kept the plastic collection bags, Ostojic realized this when the sniff-test was performed. Gopalakrishnan then excluded the air-sample collections tainted by the skunk from her analysis.

the causes of odor problems in the washers. According to Whirlpool, Gopalakrishnan designed her study to replicate consumers' use of washing machines in the real world, which may be variable.

Whirlpool asserts Gopalakrishnan developed machine use and cleaning protocols based on the named Plaintiffs' reported use of their own machines, and that each machine completed at least 300 wash cycles over a period of at least four months. While Gopalakrishnan cleaned and maintained some washers according to an established schedule, Whirlpool asserts she failed to clean others deliberately, in order to replicate consumer misuse. Whirlpool further argues that research on "normal consumer-soiled laundry" was unnecessary, since Gopalakrishnan obtained *actual* consumer laundry from Exponent employees, and from a senior living facility. Whirlpool argues that Gopalakrishnan's running laundry loads at an accelerated rate does not impact the reliability of her study, because:

- (1) Gopalakrishnan operated the washers within known consumer usage patterns;
- (2) there is no evidence that operating washers on an accelerated schedule impacts residue buildup; and
- (3) Gopalakrishnan operated both the maintained and non-maintained machines on the same accelerated schedule.

Whirlpool also asserts Gopalakrishnan adhered to a standard protocol in collecting air samples and swab samples from the washing machines. According to Whirlpool, the "minor" alterations in protocol identified by Plaintiffs resulted from Gopalakrishnan's attempts to improve the accuracy of the study. Whirlpool argues Plaintiffs exaggerate the skunk incident, which occurred in a separate building from the washer testing lab, and impacted only the storage location for air-sampling bags. Whirlpool claims the skunk odor on the sampling bags was "extremely faint;" however, once the odor laboratory detected the skunk odor in a few samples, Gopalakrishnan appropriately excluded all samples from that date from her study.

Although Gopalakrishnan opined that none of the study machines “developed odors with the biofilm-related characteristics described,” Report at 18 (docket no. 317-1), Whirlpool admits that Gopalakrishnan occasionally detected “temporary” machine odors, although she believed some were “detergent” or “fabric softener” odors. *See* Opposition at 11 (docket no. 317). Gopalakrishnan recorded these machine odors in her notes only if she detected them as part of a scheduled “sniff test.”

The Court finds several of Plaintiffs’ arguments well taken, and accordingly, *grants* Plaintiffs’ motion to exclude Gopalakrishnan’s testimony. First, as Whirlpool acknowledges, Gopalakrishnan’s education and experience are in the areas of aerospace engineering and thermal science. Gopalakrishnan in fact has *no* experience in the field of mycology, has never studied mold or odor (other than in this litigation), and has no particular knowledge of biology. Gopalakrishnan’s *general* experience in experimental design is insufficiently specific to permit Gopalakrishnan to offer the conclusions at issue here—specifically, the opinions that Whirlpool’s washers “do not build up excessive residue within a matter of weeks or months[,]” do not “develop[] odors with the bio-film odor characteristics described by the named plaintiffs[,]” and do not develop “malodors associated with mold or mildew[.]” (Docket no. 303-1, at 28-29). *See, e.g., Buck v. Ford Motor Co.*, 810 F. Supp. 2d 815, 842 (N.D. Ohio 2011) (“Expertise in the technology of fruit is not sufficient when analyzing the science of apples, and courts have excluded the testimony of engineers because their expertise was not particular to the science involved in the case.”).

The Court is further troubled by Gopalakrishnan’s admittedly “novel” methodology, as well as the irregularities in protocol, which render Gopalakrishnan’s study difficult—if not impossible—to duplicate. As Gopalakrishnan admits, she developed the protocol for this study without reviewing any published literature (including any washer testing protocols), and in fact never consulted anyone at

Whirlpool as to whether it had a protocol for testing washers (which it does).

Further, although Gopalakrishnan may have had reasons for making certain protocol shifts (such as the frequency of heavy duty cycles, frequency of cleaning cycles, and the number of loads run per day) during the course of the study, these protocol changes nonetheless render any replication of her study virtually impossible. *See Mike's Train House, Inc. v. Lionel, L.L.C.*, 472 F.3d 398, 408 (6th Cir. 2006) (excluding expert's opinions because expert created methodology solely for purposes of litigation, and there was "no evidence that his methodology had ever been tested, subjected to peer review, possessed a known or potential rate of error, or enjoyed general acceptance.").

Gopalakrishnan's delegation of a significant number of discretionary tasks (including decisions as to how to allocate laundry and how many loads to run) to temporary employees, with no scientific training, magnifies these flaws.

While the alleged skunk contamination in Gopalakrishnan's laboratory affected only a limited number of samples (all of which Gopalakrishnan excluded from her study), the fact of this occurrence nonetheless highlights larger issues bearing on the implementation of controls over Gopalakrishnan's study. In the context of testing *aimed at detecting odor*, the fact that a skunk was able to enter one of Gopalakrishnan's storage areas and contaminate sample bags, and that the contamination was not detected either by Gopalakrishnan or her staff, undermines the reliability of Gopalakrishnan's methods to an extent that casts doubt on her study as a whole.

Finally, Gopalakrishnan's omissions of material results and data from her expert report—including the detection of "occasional" unpleasant odors in the washers—raise significant concerns. While Gopalakrishnan argues these odors were detected outside of scheduled sampling times, she in fact made no notes of these odors at all, and apparently did not consider them in reaching

the conclusions in her report. Even more troubling is Gopalakrishnan's failure to include the results of the odor sampling conducted with towels in November and December 2012 (the results of which, arguably, were unfavorable to Whirlpool) in any of her subsequent written reports.

Perhaps certain of these defects, if present in isolation, might have been appropriately addressed through cross-examination of Gopalakrishnan rather than wholesale exclusion of her testimony. Combined, however, the flaws in her analysis undermine the foundation of her conclusions and render them unreliable. *See J.T. Colby & Co., Inc. v. Apple, Inc.*, 2013 WL 1903883 (S.D.N.Y. May 8, 2013) ("Some of these errors, on their own, may not have been fundamental enough to justify the exclusion of [the expert's] reports and survey results. Taken together with the serious flaws described above, however, they confirm the conclusion that the plaintiffs' expert reports and surveys are inadmissible[.]").

Accordingly, Plaintiffs' motion to exclude Gopalakrishnan's testimony is *granted*.

D. Plaintiffs' Challenge to Ostojic (docket nos. 295, 300).

Ostojic is an analytic chemist and chemical engineer. He is Director of Engineering at Odor Science & Engineering, Inc. ("OS&E"), a company that provides consulting services in odor assessment and control, including the "quantification of odor using sensory and instrumental techniques." Report at ¶ 3 & Exh. A (docket no. 300-1). Whirlpool retained Ostojic to respond to Wilson's opinions and to review the odor sampling component of Gopalakrishnan's washer study.

Broadly speaking, Ostojic's opinions fall into three categories: (1) explaining human perception of odor, and why the presence of mold in a washer does not necessarily mean people will smell bad odors; (2) discussing and agreeing with the results of a study by Whirlpool expert Paul

Taylor regarding complaints made by Duet owners;⁵ and (3) quantifying the air samples collected by Gopalakrishnan during her washer study.

The thrust of Ostojic's first opinion is that Plaintiffs' expert Wilson "fail[ed] to utilize any reliable, scientific methods to support his assertion that . . . biofilms in the Subject Washers cause noticeable odors[.]" (Docket no. 318-1, ¶ 8). Ostojic begins by providing background information regarding the causes of odor in machines and how factors such as machine use and maintenance may affect growth of odor-causing microbes. Ostojic opines that the "potential for development of biofilm related odor could readily vary by a factor of as much as one hundred times or more from one machine to another," Report, ¶24 (docket no. 300-1) and there is also a significant "variability of human perception of odor." *Id.* at ¶27.

Ostojic further opines that Wilson's report's "central weakness" is its failure to recognize that mere evidence of biofilm inside washers "provides no evidence of the presence of odor." *Id.* at ¶53. According to Ostojic, Wilson provides no evidence to support his conclusion that "[o]nce the bacteria and mold begin to grow[,] a pronounced foul odor occurs that infiltrates the articles being washed and often the area surrounding the machine." *Id.* at ¶42. Ostojic also opines: "[T]here is a complete absence of scientific evidence provided in Wilson's report that links biofilms with odor and at the same time, odor appears to be the main avenue for a user to become aware of those biofilms." Depo. at 17 (docket no. 300-4) Instead, Ostojic concludes, a majority of the human population will perceive an odor only if the concentration rises "substantially above the odor threshold level for the most sensitive individuals." Report at ¶53 (docket no. 300-1).

⁵ As discussed below, Taylor analyzed complaints and warranty-service-requests received by Whirlpool and determined only a very small percentage of Duet owners reported mold issues.

The essence of Ostojic's first opinion is that some level of mold is present in all washing machines, but that most people will not detect it. Thus, Ostojic opines, Wilson is wrong in concluding that buildup of biofilm automatically results in washer odor. This opinion is relevant to Plaintiffs' claims here; Plaintiffs do not seriously challenge it, and it is admissible.

In his second opinion, Ostojic supports his position by pointing to the results of Taylor's study. Taylor concluded a very small percentage of Duet owners ever complained about mold or odor. Ostojic states that the variability he describes in "human perception of odor" is "consistent with the established low incidence of reported mold related odors" as reported in Taylor's examination of the Whirlpool call center data. *Id.* at ¶27. Plaintiffs move to exclude Ostojic's testimony pertaining to call center data because: (a) Ostojic is not qualified to examine call center data, or to opine on the percentage of customers with odor complaints; and (b) even if Ostojic were qualified to opine on these issues, he ignores internal Whirlpool documents that contradict its reported complaint rate. Whirlpool responds that Ostojic does not offer opinions regarding the rate of odor complaints to Whirlpool; rather, he reviews and summarizes the analyses of Hardaway and Taylor to "confirm" his own work. Whirlpool also argues Ostojic did not "ignore" Whirlpool's internal documents referencing an odor complaint rate of 35 percent; rather, he found the analyses conducted by Hardaway and Taylor to be more credible.

As to Ostojic's second opinion, the Court *grants* Plaintiffs' motion in part, and *denies* it in part. Ostojic seeks to opine both that (1) Taylor's statistical analysis is valid and correct; and (2) that it supports his own opinion. Ostojic may say the latter but, as a non-statistician, he is unqualified to say

the former.⁶ Ostojic admits he is not an expert in complaints or customer satisfaction, *see* depo. at 27-28 (docket no. 300-4), and his reliance on Taylor's work "does not enlarge . . . [his] fundamental area of expertise." *In re Welding Fume Prods. Liab. Litig.*, 2010 WL 7699456 at *26 (N.D. Ohio Jun. 4, 2010). "A scientist, however well credentialed he may be, is not permitted to be the mouthpiece of a scientist in a different specialty." *Dura Auto. Sys. of Ind., Inc. v. CTS Corp.*, 285 F.3d 609, 614 (7th Cir. 2002). Still, while Ostojic may not parrot or vouch for Taylor's analysis and opinions, he is permitted to state that Taylor's conclusions dovetail with and support his own.

Ostojic's third opinion is based on a "sniff-test" study of the air-samples collected by Gopalakrishnan. He used two "professional sniffers" to measure 160 different air samples for four characteristics:

- Odor character, which describes odor using general descriptors (e.g., "sweet" or "acid") or references to specific odor sources (e.g., "sludge" or "compost");
- Odor concentration, which is the number of dilutions with odor-free air (measured in dilutions to threshold ("D/T")) needed to make an odor undetectable to a given fraction (typically 50%) of a panel of odor observers;
- Odor intensity, which is the perception of intensities of different odors; and

⁶ Many federal courts have stated this last proposition. *See, e.g., Bouygues Telecom, S.A. v. Tekelec*, 472 F. Supp.2d 722, 729 (E.D.N.C. 2007) ("the wholesale adoption of the opinion of another expert verbatim cannot be within the intent of Fed. R. Evid. 702" and the court "performing its gatekeeping function necessarily must ensure that [the expert] is not merely parroting the opinions of others"); *Fowler v. United States*, 2009 WL 2827958, *9 n. 59 (W.D. La. Sept. 1, 2009) ("It is well settled that an expert ... may not simply parrot the work actually done by another expert...."); *St. Paul Fire and Marine Ins. Co. v. Nolen Group, Inc.*, 2005 WL 1168380, *9 (E.D. Pa. May 13, 2005) ("an expert may rely on the work of others, but the expert must be able to testify to the veracity of that work"); *see generally* C. Wright & V. Gold, *29 Federal Practice & Procedure: Evidence* § 6274 (1st ed.) ("A court also may reject expert testimony under Rule 703 where the witness relies on the findings of an expert in a different field and, because the witness is not an expert in that field, can only parrot and not critically evaluate those findings.").

- Hedonic tone, which is the degree of pleasantness or unpleasantness of an odor on a scale typically ranging from -8 (unpleasant) to +8 (most pleasant).

His ultimate conclusions were that: (1) the great majority of air samples revealed only pleasant odors of laundry detergent and fabric softener; and (2) the few air samples that did reveal unpleasant odors had such low concentrations that the average person would not be able to smell them.

Plaintiffs seek to exclude Ostojic's odor study, since: (a) Ostojic's washer panelists were not "blind" and had a financial interest in the outcome of the study; (b) more than 85% of Ostojic's data came from only two odor panelists, and his study methods were unreliable; and (c) the skunk infiltration renders the study unreliable. Plaintiffs challenge the reliability of Ostojic's study because Martha O'Brien (Ostojic's business partner) and Gary Grumley (an OS&E employee) served as the only two odor panelists for three of the four odor measurement parameters.

Whirlpool asserts Ostojic's odor panel was reliable and complied with American Society for Testing Materials ("ASTM") guidelines. Whirlpool further denies that Ostojic's staff knew the purpose of the sniff-test or the desired results. Finally, Whirlpool contends that neither Ostojic's failure to personally visit Exponent's facility nor the isolated incident of skunk contamination warrant exclusion of the odor study.

The Court concludes Plaintiffs' motion to exclude Ostojic's sniff-test results must be granted. Although the Court agrees with Whirlpool that the single incident of skunk contamination (from which Ostojic excluded sample results) is insufficient to invalidate the study, Ostojic's use of only two (arguably biased) panelists poses a more significant problem.

Whirlpool argues Ostojic's testers were appropriately "blind" because they did not know whether an air sample came from a washer where no maintenance was performed or one where maintenance was performed, nor whether it was from a front- or top-loader. But it is fairly obvious

Whirlpool would want any testers to identify *no* bad odors from *any* machine, and at least one of the testers in Ostojic's study knew Whirlpool was funding the study. Moreover, industry rules regarding how to conduct sniff tests state that odor panelists should be unbiased, come from the community at large, reflect a cross section of age and gender, and number at least five and preferably eight or more. See ASTM Guidelines (docket nos. 342-1, 342-2). Ostojic's study did not meet *any* of these requirements.

In any event, Ostojic's sniff-test results address samples taken as part of Gopalakrishnan's study, which the Court has excluded. In this context, Ostojic's analysis of Gopalakrishnan's samples could not be helpful to the jury. Because the methodology underlying Ostojic's odor study is fundamentally flawed, it must be excluded.

For the reasons and to the extent described, Plaintiff's motion to exclude the testimony of Ostojic is *granted* in part and *denied* in part.

E. Plaintiffs' Challenge to Burge (docket nos. 295, 297).

Plaintiffs will introduce testimony from expert Chin Yang, who is a mycologist – a biology expert specializing in mold. Whirlpool did not file a *Daubert* motion addressing Yang. In response to Yang, Whirlpool will offer testimony from Harriet Burge. Burge is an aerobiologist⁷ employed by EMLab P&K; she studies the science of mold and fungal particles on surfaces and in the air, as well as their sources and their effects on health.

Plaintiffs do not object to a number of Burge's opinions regarding mold, such as how long it takes mold to form and whether the conditions in a washer are ripe for mold formation. Plaintiffs do

⁷ An aerobiologist is a biologist specializing in airborne particles.

however, move to exclude several specific opinions as to how mold and fungi accumulate in a machine, given its design. As to these opinions, Plaintiffs argue that Burge is not qualified to render any opinions as to design defects because she: (1) is not an engineer, (2) testified she has no opinions regarding washer design *per se*; and (3) testified she does not know how washing machines work. Plaintiffs further contend Burge's opinions on alternative causes of Plaintiffs' odor complaints are "speculation," since Burge did not do testing or investigation that would support these opinions.⁸

The following three examples illustrate the opinions that Plaintiffs challenge:

[N]either fungi nor bacteria are likely to grow in sufficiently large quantities to produce a noticeable, offensive mold or musty odor in the vast majority of washing machines, providing the consumer periodically cleans the soap dispenser and leaves the door or lid ajar so that the bellow, plastic tub, and steel drum can more quickly and thoroughly dry between uses of the machine My opinion is based on the nature of fungi and bacteria (described above) and their requirements for the presence of water in order to grow, the fact that VOCs [Volatile Organic Compounds] dissipate very rapidly into the atmosphere . . . , and the fact that adequate ventilation inhibits the type of microbial growth that would produce VOCs in the first instance.

December 2009 Report, ¶27 (docket no. 297-2).

In my opinion, it is also extremely unlikely that fungus or bacteria in the plaintiffs' washing machines has "contaminated" the clothing and other items washed in many, much less all, of the machines at issue in this litigation such that the laundry would acquire fungal or bacterial odors constituting a "pronounced foul odor." Virtually all of the small quantities of VOCs produced by the fungi and bacteria, especially where the laundry actually touches the machine, are highly likely to be washed away with warm or hot water and laundry detergent during a normal wash cycle and are even more likely to be washed away during a cleaning cycle. For these reasons, it is my

⁸ Plaintiffs also challenge certain opinions that Burge offers pertaining to the validity of Gopalakrishnan's washer study. Since the Court has excluded Gopalakrishnan's testimony, this issue is moot, and Burge will not be permitted to offer testimony vouching for Gopalakrishnan's methodology or results.

opinion that Dr. Wilson has erred in concluding that the Whirlpool washers' alleged failure to self-clean leads to "a pronounced foul odor" that "infiltrates the articles being washed."

Id., ¶30.

My opinion is that the strong sulfur odor that emanates from [plaintiff Glazer's] laundry room during use of the Duet Sport washer is generated by the flushing of the wash solution through the washer's plastic drain hose, which empties into a wash basin next to the washing machine. The flushing of water through the plastic drain hose and into the open wash basin, rather than into a closed drain pipe in the wall, would flush out the VOCs that are produced by the anaerobic bacteria that reside in her drain hose.

Id. ¶33.

Whirlpool responds, first, that Burge's opinions do not pertain to washer design or engineering, but are based on Burge's expertise in mold, including the tendency of mold to accumulate on a given surface. Additionally, Whirlpool asserts, Burge's opinion that Plaintiffs' expert Wilson failed to follow the scientific method, because he used a statistically unreliable sample, falls within Burge's expertise as a research scientist.

The Court rejects Plaintiffs' arguments and *denies* Plaintiffs' motion to exclude the testimony of Burge. While Plaintiffs assert Burge offers opinions on the design of Whirlpool's front-loading washers, Burge actually does no such thing. As Plaintiffs concede, Burge is an expert in the accumulation of mold on surfaces in given conditions, including surfaces in washers. It is these issues, not design defects, at which Burge's opinions are directed. Further, insofar as Burge's opinions are directed at rebuttal of opinions offered by Plaintiffs' experts, those opinions also appear solidly grounded in her biological background. To the extent that Burge's trial testimony may stray outside this background and into areas of defective design, Plaintiffs may assert objections at the appropriate juncture.

With respect to Burge's opinions as to alternative causes for Plaintiffs' washer odors, Burge indicates she was present for several washer inspections and reviewed photographs of several others. Burge also reviewed literature and studies pertaining to mold and fungi in washing machines. Burge's opinions, including her opinion regarding an alternative cause for the odor associated with Ms. Glazer's machine, appear to be reasonably based on her experience, her review of the literature, and her personal observations during the washer inspections for which she was present. Plaintiffs' criticisms of Burge, including that she did not dismantle the Glazer washing machine nor test it for biological activity, go to the weight of Burge's testimony, not its admissibility.

Accordingly, Plaintiffs' motion to exclude or limit Burge's testimony is *denied*.

F. Plaintiffs' Challenge to Taylor (docket nos. 295, 304).

Taylor is a mechanical engineer employed by Exponent, Inc. Whirlpool retained Taylor to inspect Plaintiffs' washing machines and to rebut the opinion of Plaintiffs' expert Wilson that design defects in Duet washing machines cause mold and mildew growth and odors. Taylor also rebuts the analyses of Plaintiffs' experts Griffin and Oliver concerning databases of customer-service calls. Taylor conducted in-home and offsite inspections of Plaintiffs' Duet washers, as well as inspections of other used washing machines. Taylor also compared Plaintiffs' actual use and care practices with the requirements set out in the UCGs for Duet washing machines.

Plaintiffs move to exclude most, if not all, of Taylor's testimony, arguing that virtually none of Taylor's testimony involves mechanical engineering. Plaintiffs contend Whirlpool proffers Taylor as a "catch-all" rebuttal expert, and that his testimony extends to biology, odor measurement, database

analysis, statistics, and consumer behavior—areas in which he has no expertise, and is unqualified to testify.

The Court examines each of Taylor’s opinions separately, and concludes that Plaintiffs’ motion to exclude Taylor’s testimony should be *granted* in part and *denied* in part. The Court has reviewed each of Taylor’s five separate reports in this action, and has identified, in each report, the inadmissible portions of Taylor’s proposed testimony. Annotated copies of those reports, with highlighting denoting the opinions to be excluded, are attached as Exhibit A to this Order.

Inspection of Plaintiffs’ Washers and Homes

Taylor visited the homes of plaintiffs Allison and Glazer to inspect their washers and laundry rooms, and determine if their odor issues might be caused by something other than their washers. Taylor made a number of observations as to Plaintiffs’ washers, including: (1) whether there was any odor at the time; and (2) whether there were any visible signs of residue.

Taylor also observed that: (1) Glazer did not have high-efficiency (“HE”) detergent in her laundry room, even though she stated that she followed the Duet UCG and used HE detergent; (2) Allison had only a 3-year old package of Affresh washer cleaner, even though she said she used Affresh regularly; and (3) Allison’s washer and house were messy and dirty. Whirlpool offers Taylor’s observations regarding Plaintiffs’ laundry rooms to show Allison and Glazer did not use their washers as directed. Whirlpool offers Taylor’s observations regarding Plaintiff Allison’s home to challenge Allison’s testimony that she always kept her washer very clean.

Plaintiffs argue that Taylor is not an odor scientist or mycologist, and thus should not be permitted to opine as to mold or residue in Plaintiffs’ washers. Further, Plaintiffs assert Taylor should

not be allowed to attack the credibility of Glazer or Allison, and should not be allowed to contradict them as to their use of HE detergent, or Affresh.

Taylor's lack of expertise in mold or odor does not disqualify him from relating simple percipient and relevant observations, for what they are worth. *See Robertson v. Red Rock Canyon School, LLC*, 2008 WL 2989245 at *2 (D. Utah, July 31, 2008) (noting that expert witnesses can also be percipient witnesses); *U.S. v. Sierra Pacific Inds.*, 2011 WL 2119078 (E.D. Cal. May 26, 2011) (same). For the same reasons, although Taylor may not opine as to Plaintiffs' *credibility*, he may relay his observations as to the contents of Plaintiffs' laundry rooms; the jury can draw whatever inference it wants to. Thus, while Taylor may testify as to what he observed in Plaintiffs' laundry rooms—Glazer's lack of HE detergent, or Allison's old packet of Affresh—he may not draw conclusions as to what those findings mean about Plaintiffs' testimony.

To the extent, however, that Taylor seeks to opine regarding the cleanliness of Plaintiffs' homes and/or their cleaning habits in general, this evidence is too tenuously connected to the relevant issues and is not admissible.

Use of Words Mold, Mildew and Bacteria

Plaintiffs' expert Wilson opines that Whirlpool purposely avoided using the words mold, mildew, and bacteria when communicating with customers. Taylor observes that Whirlpool *did* use these terms in its UCGs, in a letter to *Consumer Reports*, and in emails to consumers. Plaintiffs argue that Taylor has no expertise with UCGs or communications, and should not be permitted to opine that Whirlpool's use of these terms was "adequate" to inform consumers of the potential biofilm problem. Whirlpool responds that Taylor reviewed the UCGs as an engineer to determine how manufacturers expected consumers to operate their machines.

While Plaintiffs are correct as to Taylor's lack of expertise regarding the "adequacy" of the communication, Taylor does not appear to offer that opinion. While Taylor may observe that Whirlpool uses the words "mold," "mildew" and "bacteria" in the UCGs, he will not be permitted to offer opinions as to the adequacy of any disclosure to consumers.⁹

User Guide Observations

Plaintiffs' expert Wilson asserts it is a "fundamental principle" that washers should clean themselves or allow consumers to clean them easily, and the Duets are defective because they do not do so. In response, Taylor reviewed UCGs for not only the Duets but also for numerous other front-load washers from competitors. He concludes that all front-loader manufacturers provide similar instructions for manual cleaning and related use and care topics. Taylor also reviewed UCGs for top-loading machines and concludes many top-loaders do not self-clean and the UCGs call for maintenance.

The Court rejects Plaintiffs' assertion that Taylor is unqualified to review and analyze UCGs. As a mechanical engineer with experience in the performance of consumer products, Taylor's qualifications are broad enough to encompass the intended use and operation of washing machines based on his review of UCGs. *See Palatka v. Savage Arms, Inc.*, 535 Fed. Appx. 448, 455 (6th Cir. 2013) (expert's "skill, education, and training in mechanical engineering render him competent to offer opinions on a variety of mechanical topics[.]"). Taylor's opinion is, in any event, much narrower than Plaintiffs assert. Essentially, Taylor points out that UCGs for all sorts of washers are virtually uniform in directing consumers to maintain their machines—that is, they state that washers are not self-cleaning.

⁹ Given the Court's dismissal of Plaintiffs' cause of action for failure to warn, *see* docket no. 391 at 15-21, it is unclear whether such an opinion would be helpful to the jury in any event.

This narrow opinion is an appropriate rebuttal to Wilson; Taylor is qualified to offer it; and it is admissible.

Statistical Analysis of Complaint Rates

As discussed further below, Whirlpool expert Hardaway conducted an analysis of Whirlpool's databases regarding: (1) complaints made to Whirlpool about mold or smell; and (2) warranty service calls for mold or smell. Plaintiffs' expert Griffin then undertook a similar analysis but looked at more data. In response, Taylor did the same thing but engaged in an even more detailed examination. Taylor performed his own analyses of customer service-call databases and concluded the rate of mold problems on Duet washers is significantly lower than reported by Plaintiffs' experts. Taylor also analyzed repair history surveys for front-loading washing machines published in *Consumer Reports*, as "a further check or cross-reference on [his own] data analyses." December 2009 Report, ¶¶38-39 (docket no. 314-2).

Plaintiffs argue that Taylor's background as a mechanical engineer—with no expertise in statistics or database analysis—does not qualify him to undertake a statistical examination of Whirlpool's databases. Even if Taylor were qualified to testify on these subjects, Plaintiffs argue that his testimony is speculative and unhelpful, since the jury can read and weigh *Consumer Reports* data without Taylor's assistance.

Whirlpool responds that Taylor has experience analyzing "warranty and accident databases," and that engineers, including Whirlpool engineers, regularly review service and call databases to determine the scope of a potential problem. Whirlpool further argues that Taylor's review of *Consumer Reports* repair data was appropriate, because Taylor was analyzing "real world evidence" in response to Wilson's opinion that all clothes washers should self-clean.

The Court agrees with Whirlpool that Taylor, as a mechanical engineer, has sufficient knowledge of database review and statistics, and sufficient experience with consumer databases, to offer opinions regarding complaint rates in Whirlpool databases. Further, Whirlpool's databases are the type of data an engineer normally would review and rely upon in formulating an opinion as to design issues and complaint rates. See *Ohio Envtl. Dev. Ltd. P'ship v. Envirotest Sys. Corp.*, 478 F. Supp. 2d 963, 974 (N.D. Ohio 2007) (an "expert is free to give his opinion relying upon the types of data an expert would normally use in forming an opinion in his area of expertise") (quoting *Mannino v. International Mfg. Co.*, 650 F.2d 846, 851 (6th Cir. 1981).

As to Taylor's reliance on *Consumer Reports*, however, the Court reaches a different conclusion. Taylor refers to the magazine surveys to support his assertion that most consumers did not have mold problems, because the rate for serious repairs or problems for Whirlpool washers was low. Taylor knows nothing, however, about how *Consumer Reports* gathered its data or what it meant by its definition of a "serious repair or problem." See, e.g., *In re Aredia & Zometa Prods. Liab. Litig.*, 483 F. Appx. 182, 189 (6th Cir. 2012) (unpublished) (affirming *Daubert* exclusion where proffered expert "had no independent expertise from any other source other than the six articles Plaintiff's counsel gave him"). Moreover, Whirlpool has pointed to no evidence that mechanical engineers typically rely on *Consumer Reports* in determining whether a machine has a defect, and the Court rejects that argument. Taylor relies on data sources that offer more precise support for his opinions and that are of the type

normally relied upon by engineers. His make-weight reliance on *Consumer Reports* articles to support his opinions is unnecessary and unscientific.¹⁰

Opinions on Studies by Ostojic, Burge and Gopalakrishnan

Plaintiffs seek to exclude portions of Taylor's opinions that merely evaluate the work of other experts, including Ostojic, Burge and Gopalakrishnan. Insofar as the Court has excluded the testimony of Gopalakrishnan, and has excluded the results of Ostojic's sniff-tests, Taylor's opinions as to the studies conducted by those experts are moot. With respect to Burge, as well, Taylor will not be permitted to offer testimony merely vouching for her work. *See, e.g., Bouygues Telecom*, 472 F. Supp.2d at 729 (the court "performing its gatekeeping function necessarily must ensure that [the expert] is not merely parroting the opinions of others").

Taylor's Clean Washer Studies

Taylor conducted several studies examining the Clean Washer Cycle ("CWC") that is available on the more-recent Whirlpool Duet models. To test the efficacy of the CWC, Taylor: (1) conducted a "fingerprint study," which tested the CWC's ability to remove fingerprint from the interior of the washer; (2) drilled holes in the machine to see whether the water reached various surfaces; and (3) performed several camera studies, which took video and still pictures of the interior of the washer during the CWC. Plaintiffs contend that all of Taylor's tests, while they may show the flow of water during the CWC, prove nothing about the CWC's ability to remove residue or biofilm.

¹⁰ Notably, while Whirlpool cites no case where an engineering expert was allowed to rely on articles from *Consumer Reports*, Plaintiffs cite a case where such an expert was precluded from doing so. *See Rudder v. K-Mart Corp.*, 1998 U.S. Dist. LEXIS 19976 at *17-18 (S.D. Ala. Oct. 27, 1998) (excluding *Consumer Reports* article that offered conclusions as to the point in time at which auto batteries begin to deteriorate, since "[t]he author cites no research, studies, or learned treatises supporting his conclusion . . . [and] merely states an author's opinion which is not shown to be of an expert nature.").

Plaintiffs do not seriously argue that Taylor, as a mechanical engineer, is unqualified to conduct the Clean Washer Studies, and the Court concludes he is qualified to do so. The Court also finds Taylor's methodology is reasonable; the appropriate means for Plaintiffs to challenge any perceived deficiencies is cross-examination. While "[a]n expert's opinion, where based on assumed facts, must find some support for those assumptions in the record . . . [m]ere 'weaknesses in the factual basis of an expert witness's opinion . . . bear on the weight of the evidence rather than its admissibility.'" *McLean v. 988011 Ontario, Ltd.*, 224 F.3d 797, 800-801 (6th Cir. 2000) (internal cite omitted; quoting *United States v. L.E. Cooke Co.*, 991 F.2d 336, 342 (6th Cir. 1993)). Taylor's Clean Washer Studies are admissible.

Reference to Top-Load Washer Study and to other Used Top-Load Machines

Taylor refers to: (1) a 2008 Whirlpool study of top-load washers and the extent to which they have residue build-up; and (2) his own review of numerous used top-load washers. Taylor opines that many of these top-load washers have mold, mildew, and residue, which contradicts Wilson's contention that top-loaders self-clean and do not suffer biofilm buildup.

Plaintiffs complain this evidence is anecdotal and Taylor's observations were not collected in any scientific way or pursuant to a reliable methodology. This argument fails because evidence that top-loaders do *not* self-clean, contrary to Wilson's assertion, is clearly relevant, and any non-biased sampling of top-load washers proves the point. Taylor's consistent observations of such evidence in samples of top-load machines is reliable enough in light of the rebuttal purpose for which the evidence is offered. This is especially true because Plaintiffs' expert Wilson's "sampling" methodology was essentially the same.

Swab Samples; Air Samples

Taylor took swab samples of various machines (including those of the named Plaintiffs) and sent the samples to a lab for analysis. Plaintiffs argue Taylor is unqualified to take biological samples or to read and analyze lab results. Plaintiffs also complain that Taylor's sampling was random and failed to follow any consistent protocols.

The Court rejects Plaintiffs' arguments and finds Taylor's swab sample results admissible. First, Taylor is sufficiently qualified simply to conduct the sampling; he relied on an independent lab for the results. Second, Taylor's swab sampling of residue is the type of data that a mechanical engineer would reasonably use in forming an opinion about the causes of mold in washing machines. *See Ohio Env'tl. Dev.*, 478 F. Supp. 2d at 974 (an "expert is free to give his opinion relying upon the types of data an expert would normally use in forming an opinion in his area of expertise") (quoting *Mannino*, 650 F.2d at 851). Further, the fact that the locations of his swab samples were not identical on each machine goes at most to weight, not admissibility.

Taylor also took air samples from within various machines (including those of the named Plaintiffs) and sent them to Ostojic's lab for a sniff-test. Notably, Ostojic used an eight-person panel to examine these samples, unlike his two-person panel used to examine the samples from Gopalakrishnan's washer study. While Plaintiffs complain that Taylor is not trained to obtain air samples, nor to read sniff-test results, these results are admissible for the same reasons as Taylor's swab samples.

In addition to taking air and swab samples from the Plaintiffs' washers, however, Taylor also took such samples from other areas within Plaintiffs' homes. As with Taylor's observations as to

Plaintiffs' housekeeping practices, this evidence is far removed from the matters at issue, and is excluded as irrelevant.

For the reasons and to the extent stated above, Plaintiffs' motion to exclude Taylor's testimony is *granted* in part and *denied* in part.

III. Whirlpool's Challenge to Plaintiffs' Warnings Expert Hilsee (docket no. 294).

Hilsee is an expert in the areas of "communications, plain language, readability . . . [and] communications effectiveness." Response at 2 (docket no. 323). He worked with the Federal Judicial Center to draft its "plain language class notice" model forms. Plaintiffs retained Hilsee to study communication issues pertaining to alleged mold issues in Whirlpool Duets and to determine "whether the Mold Problems have been adequately communicated to consumers either before or after purchase of the Washing Machines." Report at ¶2 (docket no. 294-2).

Hilsee reviewed information: (a) available in the media since 1970 regarding front-loading washers in general and mold issues in particular; (b) contained in UCGs from Whirlpool washers for each year between 2001 and 2009; and (c) on Whirlpool's website. Hilsee also evaluated the information Whirlpool retailers provided at the point of sale pertaining to the potential for mold or biofilm buildup. Hilsee concludes Whirlpool's UCGs do not adequately inform consumers of potential mold problems, since consumers do not generally read the UCGs prior to purchase, and the statements in the UCGs are vague and unclear regarding the potential for mold or the need for maintenance. According to Hilsee, Whirlpool's disclosures in the UCGs are "couched in euphemisms like 'washer freshness' that soften[] the communication of any Mold Problems and cloud[] the meaning or import of the Mold Problems among any average readers of the Use and Care Guides." Report at ¶5 (docket

no. 294-2). Similarly, Hilsee opines that Whirlpool's website fails to disclose the problem because "the word 'mold' appears only in a few frequently asked questions, while euphemisms like 'maintaining washer freshness' abound in 'odor' related information." *Id.* at ¶9.

Whirlpool argues Hilsee's opinions should be excluded because: (1) his testimony is relevant only to the failure-to-warn claim, and that claim is dismissed (*see* docket no. 391, at 15-21); (2) his methodology is subjective and unreliable; and (3) he has no expertise regarding consumer behavior or consumer psychology. While the Court rejects the latter two arguments, it finds the first persuasive; accordingly, Whirlpool's motion to exclude Hilsee's testimony is *granted*.

The Court's review of Hilsee's proffered testimony reveals that his opinions focus on Whirlpool's communications to consumers, and information consumers would have known before and after purchasing their washing machines. These topics bear on Plaintiffs' now-dismissed failure to warn claim; they have no relevance either to negligent design or breach of warranty. Plaintiffs' response brief argues, in a single sentence, that Hilsee's testimony remains relevant to rebut the testimony of Whirlpool experts Simonson and Bresnahan regarding Whirlpool's disclosure of the mold problems. Given, however, that the Court has dismissed Plaintiffs' failure-to-warn claim, there is no reason for either Simonson or Bresnahan to address issues pertaining to the adequacy of Whirlpool's disclosures. Thus, there is nothing for Hilsee to rebut.

During the final pretrial conference in this matter, Plaintiffs stated that Hilsee's testimony as to whether Whirlpool adequately communicated use and care instructions in the UCGs remains relevant to the extent Whirlpool expert Taylor offers opinions on the adequacy of those communications. *See* transcript at 15-16 (docket no. 407). Plaintiffs specifically agreed to Hilsee's exclusion in the event Taylor was not permitted to offer such opinions. *See id.* at 16-17. Since the Court has found that

Taylor may *not* opine on the adequacy of communications or disclosures (*see* section II.F., *supra*), Hilsee's testimony is no longer relevant and the Court accepts Plaintiffs' agreement.

The Court notes, however, that in the event Whirlpool does offer (and is permitted to offer) testimony at trial pertaining to the adequacy of Whirlpool's disclosures—whether through Simonson, Bresnahan, or some other witness—it may open the door to Hilsee's testimony in rebuttal.

Accordingly, Whirlpool's motion to exclude Hilsee's testimony is *granted*.

IV. Challenges to the Parties' Damages Experts.

A. Summary of Proffered Expert Testimony.

1. Plaintiffs' Experts.

At trial, Plaintiffs intend to offer expert testimony regarding the appropriate measure of damages based on class members' alleged injuries (a) "at the point of sale upon paying a premium price" for negligently-designed washers, and (b) resulting from Whirlpool's failure "to disclose the Duets' propensity to develop biofilm and mold growth" and the recommended maintenance tasks to avoid mold growth. *Glazer II*, 722 F.3d at 857.

Plaintiffs designated four damages experts – Dr. Allan Taub, Sarah Butler, Dr. Marc Van Audenrode, and Dr. Joshua Gans. A brief summary of their opinions follows.

Taub proposes four separate methods to calculate an aggregate amount of class-wide damages without individual inquiry. Specifically, Taub opines that each Plaintiff's measure of damages is either: (a) the full purchase price of the washer; (b) a pre-determined percentage of the washer's purchase price; (c) the cost of using Affresh to clean the machine monthly for the expected life of the washer; or (d) the benefit conferred on Whirlpool from the sale of washing machines to the plaintiff

class, divided by the number of plaintiffs. Plaintiffs subsequently withdrew Taub as an expert, but his opinions are mirrored in the Reports of other experts.

Butler conducted an Internet survey, or “conjoint study,” of Ohio residents, which presented consumers with a range of hypothetical choices for front- and top-loading washing machines. Butler’s study included machines with various attributes, including attributes related to the required level of mold-related maintenance, and a range of hypothetical purchase prices. Butler concludes from her survey that, if Whirlpool had informed consumers, pre-sale, of the additional maintenance Whirlpool recommends to deter mold-related problems, consumers would have only been willing to pay between \$143 and \$419 less for those front-loading machines.

Van Audenrode created econometric and statistical models that confirmed Butler’s results, and proposes two alternative potential measures of damages: (a) the impact of changes in demand on the prices producers set to maximize profits (“Price Elevation”); and (b) the aggregate difference between the prices paid by consumers and the maximum prices they would be willing to pay (“Consumer Surplus Changes”). Van Audenrode relied on Butler’s data to calculate the Price Elevation and Consumer Surplus Changes that would have resulted from Whirlpool’s pre-sale disclosure of required additional maintenance steps for its Duet washers.

Gans is an economist; he evaluated Butler’s “willingness to pay” determination of \$419 and finds it to be economically reasonable. Gans also independently offers three alternative approaches to calculating damages: (a) “Willingness to Pay,” the difference between what consumers are willing to pay for a washing machine that requires special mold-related maintenance compared to an identical one that does not; (b) “But-for Price,” the difference between the price at which Whirlpool sold its Duet washers and the price at which Whirlpool would have been able to sell them had it disclosed the

mold-related requirements pre-sale; and (c) “Cost of Mitigation,” the cost of the Affresh product over the expected life of a Duet washing machine.

Plaintiffs withdrew their designation of Taub on June 2, 2014. *See* docket no. 319. Whirlpool has moved to exclude Butler’s and Van Audenrode’s expert testimony, but has not challenged Gans’s proposed testimony.

2. Whirlpool’s Experts.

To rebut Plaintiffs’ damages experts, Whirlpool designated Drs. M. Laurentius Marais, Itamar Simonson, and Timothy Bresnahan. A summary of their opinions follows.

Marais rejects Taub’s determination that aggregate class damages could be calculated without individualized inquiry. Specifically, Marais opines there is no basis for Taub’s conclusions that:

(a) Plaintiffs are entitled to recover the *entire* purchase price of the washers as damages; or (b) a set fraction of the purchase price could be uniformly established as a damages measure on a class-wide basis. Marais further opines that the cost of using Affresh is inappropriate as a damages model, since (a) Whirlpool introduced Affresh only in 2007, well into the class period; and (b) this measure would not account for differences in consumers’ laundry and washer cleaning habits.

Simonson reviewed Butler’s “willingness-to-pay” model and performed two studies directed at the “implications” of her results: (a) a telephone study of Whirlpool front-loading washer owners, which tested owners’ satisfaction with their washers, as well as their purchase criteria for buying washers in the future; and (b) a mall study, which tested the effect of presenting potential washer purchasers with information regarding Whirlpool’s recommended use and care for its front-loading washers. Simonson opines that: (a) owners of Whirlpool front-loading washers are generally very

satisfied with their washers; and (b) disclosing maintenance requirements to consumers prior to purchase has no impact on the likelihood that a consumer will buy a Whirlpool front-loading washer.

Whirlpool retained Bresnahan, an economist, to evaluate Butler's conjoint survey and her opinion that Whirlpool sold its washers for a premium price of approximately \$419. Bresnahan opines that Butler's survey is flawed and that Plaintiffs actually suffered no economic damages. Bresnahan also reviewed various market data, including data pertaining to consumer preferences, purchasing behavior, and sales trends, and concludes this market information does not support Butler's conclusions. Finally, Bresnahan conducted an "operating cost study" which, in Bresnahan's view, shows that a Whirlpool front-loader is less costly to operate than an average-efficiency top-loading machine.

B. Whirlpool's Challenge to Butler (docket no. 302).

Sarah Butler is an expert in the areas of survey research, sampling, market research, and statistical analysis. Plaintiffs retained Butler to estimate any impact on the price consumers would have been willing to pay if Whirlpool had disclosed the additional maintenance tasks associated with mold-related problems in its Duet washers prior to Plaintiffs' purchases. In other words, Butler opines on "the difference in value between what a plaintiff [actually] paid for the washing machine and the value of the machine with the alleged defect."

To do this, Butler designed and conducted an Internet "conjoint study," which included 309 non-class Ohio residents who were considering purchasing a new washer in the next year (and who had never owned a Duet). Butler asked each of the study respondents to: (a) review four hypothetical washers, each with a different combination of six product attributes (type of machine (front- or top-

loading), brand, price, efficiency, capacity, and maintenance required); and (b) choose the preferred washer for purchase.

Butler's survey described the maintenance attribute as follows:

Washing machines can develop biofilm, a build-up of dirt, detergent, and other biological material in the machine, which can lead to the growth of mold or mildew. This build-up can lead to an odor in the interior of the machine and odor in your clothes. To avoid this problem some machines require additional care or maintenance. Depending on the machine, the additional maintenance can include: 1) leaving the door open between washes; 2) inspecting under the door seal monthly and, if stained, cleaning with a bleach solution or; 3) running a cleaning or empty cycle (i.e., a cycle without clothing) using bleach or an approved product at least once a month.

For some machines, the additional maintenance may include three steps 1) leaving the door open between washes; 2) running an empty cycle using bleach or an approved product once a month; and 3) inspecting under the door seal monthly and, if stained, cleaning with a bleach solution.

Report at ¶31 (docket no. 302-1). Top-loading washers included in Butler's survey had only one possible maintenance attribute – “No additional maintenance required;” whereas front-loading washers had six possible maintenance attributes: (i) “No additional maintenance required;” (ii) “Must leave washer door open after every wash;” (iii) “Must inspect under door seal monthly and, if stained, clean with bleach/water;” (iv) “Must run a monthly clean or empty cycle with bleach;” (v) “Must purchase cleaning product that costs \$2.33 a month for use in empty wash cycle;” and (vi) “Must leave washer door open after every wash, inspect and clean under the door seal monthly, and run a monthly clean or empty cycle with bleach or an approved washer cleaning product.” *Id.* at ¶32 (docket no. 302-1).

Butler concludes that if Whirlpool had informed consumers, pre-sale, of the additional maintenance Whirlpool recommends to deter mold-related problems, consumers would have been

willing to pay between \$143 and \$419 less for those front-loading machines. *Id.* at ¶ 42. The parties refer to this as “willingness-to-pay analysis.”

Whirlpool argues Butler’s conjoint study design is flawed for three primary reasons: (1) the conjoint survey improperly presented respondents with choices of hypothetical washing machines that do not exist in the market, such as a front-loading machine requiring *no* biofilm-related maintenance; (2) Butler erred in excluding from her survey members of the Ohio class; and (3) courts have held that conjoint analysis is not an appropriate model to determine damages. These arguments all fail, and Whirlpool’s motion to exclude Butler’s testimony is *denied*.

Initially, the Court rejects Whirlpool’s comparison to *McLaughlin v. American Tobacco Co.*, 522 F.3d 215 (2nd Cir. 2008), where the Second Circuit disallowed plaintiffs from proving damages based upon consumers’ “willingness to pay” for a hypothetical “light” cigarette that actually reduced health risks. That case excluded proof of consumers’ “willingness to pay” primarily because the Court found “premium price” damages *unavailable* as a matter of law. *See McLaughlin*, 522 F.3d at 228 (also noting there is no such thing as a “healthy” cigarette, which was a choice in the survey).

Whirlpool’s argument that Butler, by presenting survey respondents with a non-existent, “no-biofilm-maintenance” front-loading washer, has essentially measured the wrong variable, bears on the weight, rather than the admissibility, of Butler’s testimony. Butler’s methodology is reasonably reliable. In part, Butler included the “no additional maintenance” front-loader as a “status quo option . . . to avoid presenting to respondents a choice exercise which would seem to simply compare a ‘good’ top loader and a ‘bad’ front loader.” April 2013 Report, ¶25 (docket no. 302-7). Even assuming the truth of Whirlpool’s assertion that all front-loading washers require some biofilm-related maintenance (and thus that Butler’s use of a “no-biofilm-maintenance” washer is purely hypothetical), the nature of the

choices Butler presents in her survey is inherent in conjoint analysis. *See, e.g., TV Interactive Data Corp. v. Sony Corp.*, 929 F. Supp. 2d 1006, 1020 (N.D. Cal. 2013) (conjoint analyses “offer[] respondents hypothetical products in several combinations”) (internal quotations omitted).

Whirlpool’s second argument, that Butler inappropriately excluded members of the Ohio class from her survey, also goes to the weight, rather than the admissibility of her results. Indeed, Plaintiffs argue, with some force, that exclusion of Ohio class members from the survey was appropriate to avoid biasing the results, and to more closely replicate the behavior of *prospective* washer purchasers, and that inclusion of class-members would have been a flaw in survey methodology.

The Court also rejects Whirlpool’s third argument, since it misconstrues the nature of the damages that Butler is measuring. While courts have held that conjoint analysis is inappropriate to determine *hedonic* damages (loss of enjoyment in life), Whirlpool is wrong in asserting that Butler’s survey measures this type of damages. Rather, as the Sixth Circuit recognized, Plaintiffs have alleged that all Duet owners “suffered injury immediately upon purchase of a Duet due to the design defect in, and the decreased value of, the product itself.” *Glazer II*, 722 F.3d at 857-58. It is this alleged decrease in value that Butler’s conjoint survey seeks to measure.¹¹ The Court is mindful that “[a] survey need not be perfectly conducted for testimony concerning its results to be admissible. So long as the expert’s testimony and the underlying survey have probative value after all the survey’s deficiencies are taken into account, testimony concerning the results of the survey that meets the basic

¹¹ Indeed, even Whirlpool expert Bresnahan appears to recognize the applicability of such a measure: The next thing you need [after specificity and causation] is valuation, you know, this morning we were talking about consumer surplus or compensation, you need a way to measure the specific consumers’ willingness to pay in different scenarios with and without this product feature Depo. at 116 (docket no. 296-2).

requirements of usefulness and reliability is admissible into evidence, and the trier of fact may accord it the weight it deems proper.” 4 *Weinstein’s Federal Evidence* §702.06[3] (2nd ed. 1997). While “there will be occasions when the proffered survey is so flawed as to be completely unhelpful to the trier of fact and therefore inadmissible, such situations will be rare.” *AHP Subsidiary Holding Co. v. Stuart Hale Co.*, 1 F.3d 611, 618 (7th Cir. 1993); *see also Wendt v. Host Int’l, Inc.*, 125 F.3d 806, 814 (9th Cir. 1997) (“[c]hallenges to survey methodology go to the weight of a given survey, not its admissibility.”); *In re Scrap Metal*, 527 F.3d at 530 (a court “will generally permit testimony based on allegedly erroneous facts when there is some support for those facts in the record.”)

Accordingly, Whirlpool’s motion to exclude Butler’s testimony is *denied*.

C. Whirlpool’s Challenge to Van Audenrode (docket no. 293).

Van Audenrode is an econometrician – an economist who specializes in the application of statistics and advanced mathematics – who supports Butler and adds to her analysis. Specifically, Whirlpool expert Bresnahan criticizes Butler’s conjoint analysis, asserting that: (1) “Butler failed to account for heterogeneity,” that is, differences among consumer preferences; and (2) “Butler’s willingness-to-pay analysis is conceptually flawed as a measure of damages.” Bresnahan Report at ¶6 (docket no. 321-3). Van Audenrode then responds to Bresnahan’s criticisms by evaluating Butler’s study results using several econometric and statistical tools, ultimately reaching the conclusion that Butler’s willingness-to-pay results were sound.

Van Audenrode further opines that “willingness-to-pay” is an appropriate measure of class damages in this action. Finally, Van Audenrode performs his own damage analysis using Butler’s data by constructing a “but-for world,” in which Whirlpool fully disclosed the need for biofilm-related

maintenance prior to sale, and calculates that the difference between the Duets' actual prices and the price consumers would be willing to pay in the "but-for" world is approximately \$160.

Whirlpool moves to exclude Van Audenrode's testimony on three bases: (1) he improperly excludes from his price elevation and consumer surplus analyses "60% of the relevant data;" (2) he incorrectly assumes "top-loading washers do not require 'biofilm-related' maintenance steps;" and (3) he relies on Butler's data, which are flawed and unreliable. The Court rejects each of these arguments, and Whirlpool's motion to exclude Van Audenrode is *denied*.

Van Audenrode explains that what Whirlpool refers to as his "discarding" of data is in fact his use of "constraints" in building his econometric model. A constraint is "a generally accepted technique" to remove data that is "inconsistent with basic economic theory[.]" Report at ¶44. Van Audenrode further explains that any econometric model will generate certain simulations that depart from basic economic theory – for example, hypothetical consumers who prefer paying *more* for an identical product, or performing more maintenance. Accordingly, Van Audenrode states that he used standard econometric practice in applying "constraints" to the model to avoid results that are counterintuitive and inconsistent with basic economic theory.

Whirlpool does not disagree with the underlying economic principles that form the bases for Van Audenrode's constraints. Whirlpool expert Bresnahan opines that "a basic tenet of microeconomic theory . . . [is] that consumers uniformly dislike higher prices." Bresnahan Report at ¶14 (docket no. 336-4). This statement articulates precisely the economic theory incorporated in Van Audenrode's first model constraint. Whirlpool also does not dispute that economic theory supports Van Audenrode's second constraint – that "individuals prefer to . . . spend less time and money performing maintenance tasks." Van Audenrode at ¶44 (docket no. 321-1).

Whirlpool suggests the possibility that some consumers might prefer additional maintenance or higher prices because they might expect such attributes to accompany goods of higher quality. But this possibility does not prove Van Audenrode's analysis is flawed or unreliable. To the extent Whirlpool's experts disagree with Van Audenrode's methodology, these disagreements "bear on the weight of the evidence rather than on its admissibility" and can be explored through cross-examination and refuted with competing expert testimony. *McLean*, 224 F.3d at 801 (quoting *L.E. Cooke Co.*, 991 F.2d at 342).

As to Whirlpool's second argument, Van Audenrode denies that he made any assumptions as to whether top-loading machines have biofilm-related maintenance. Van Audenrode testified that Butler's study drew upon the premise that "people *believe* there is no additional maintenance and care that is involved in top-loading machines." Depo. at 268 (docket no. 321-4). Thus, Van Audenrode stated he "set that additional maintenance requirement to zero . . . to be consistent with the exercise that had been performed in the conjoint [analysis]." *Id.* at 267-68. As with Van Audenrode's use of constraints, Plaintiffs' challenges to the assumptions underlying Van Audenrode's analysis go to the weight of his testimony, and are best addressed through cross-examination.

Finally, since the Court has denied Whirlpool's motion to exclude Butler's testimony, Whirlpool's argument that Van Audenrode impermissibly relied upon Butler's data also fails.

Accordingly, Whirlpool's motion to exclude Van Audenrode's testimony is *denied*.

D. Plaintiffs' Challenge to Bresnahan (docket nos. 295 & 296).

Bresnahan is an economist and a Stanford professor. His research experience includes "the use of empirical methods to construct economic models of firm conduct and consumer preferences in

markets for durable, differentiated products such as cars, business computing systems, and personal computers.” Report at ¶2 (docket no. 296-4). Whirlpool asked Bresnahan to evaluate Butler’s conjoint survey and her finding that Whirlpool sold its washers for a premium price of approximately \$419. Bresnahan opines that economic principles do not support Butler’s “willingness to pay” analysis and concludes that Plaintiffs actually suffered “no economic damages.”

In his lengthy report, Bresnahan discusses the market for residential clothes washers in the United States, consumer preferences and purchasing behavior relating to washing machines, and sales trends. He then analyzes the information available in the market regarding use and care of front-loading washers and concludes buyers had access to required maintenance information throughout the class period. Bresnahan also opines that various forms of evidence contradict Butler’s “willingness to pay” analysis, including: (1) measures of “marketplace success,” such as consumer satisfaction rates, complaint rates and repair rates for Duets, and growth in the front-loader share of the washing machine market; and (2) Bresnahan’s own analysis of operating costs, which shows that a Whirlpool front-loader is less costly to operate than an average-efficiency top-loading machine. He thus opines that the “extremely small . . . difference between the time required for use and care for front- and top-loading washers contradicts Ms. Butler’s conclusion that purportedly burdensome use and care requirements destroy more than half of the value of a front-loading washer.” Report, ¶72 (docket no. 296-4).

Plaintiffs seek to limit Bresnahan’s testimony to the fields of economics and econometrics, and exclude any testimony relating to consumer satisfaction, consumer preferences, consumer expectations, survey research, or conjoint analysis, as well as any purported engineering opinions (including washer design, maintenance, repair rates or reliability). Further, Plaintiffs seek to exclude Bresnahan’s operating cost study, claiming he is not qualified to make assumptions regarding how

consumers perform laundry tasks, and that certain of his conclusions constitute improper legal opinions. For example, Plaintiffs complain that Bresnahan's statements that "the machines are not defective" and "have a superior design" are conclusions beyond his economic expertise and speak to the ultimate issues in this case. Plaintiffs' motion to exclude Bresnahan's testimony is *granted* in part and *denied* in part.

The Court finds, first, that Bresnahan's qualifications as an economist and econometrician qualify him to testify to the topics he addresses, including his critique of Butler's conjoint analysis. Conjoint analysis is a subdiscipline of economics, and is within the scope of Bresnahan's education and experience. *See, e.g., Responsive Innovations*, 2014 WL 1237632 at *3 (N.D. Ohio Mar. 25, 2014) (Boyko, J.) (quoting *Surles ex. rel. Johnson v. Greyhound Lines, Inc.*, 474 F.3d 288, 294 (6th Cir. 2007) ("[i]t is of little consequence to questions of admissibility that an expert lacks expertise in the very specialized area")). Bresnahan has been familiar with conjoint analysis for years, as he authored an article pertaining to conjoint analysis more than thirty years ago, and has advised students on topics pertaining to conjoint analysis.

Further, Bresnahan's review of repair rates and reliability data is an appropriate foundation for his consumer demand analysis, and does not move Bresnahan's opinion into the area of engineering. While Plaintiffs challenge the majority of Bresnahan's opinions premised on marketing data and observations as beyond his expertise, Bresnahan supports all of his comments on these topics by direct

citations to the record or to various third-party literature sources.¹²

Although Bresnahan is qualified generally to offer opinions on the challenged topics, Plaintiffs' challenge to certain of his opinions is well-taken because those opinions are not well-supported or are not based on information or data normally relied upon by economists in forming conclusions. For example, Bresnahan offers certain conclusions based upon market research literature (including the publication *Consumer Reports*) in rebuttal to Plaintiffs' claims both of defect and of failure to disclose. First, since the Court has dismissed Plaintiffs' claim for failure to warn, issues pertaining to Whirlpool's disclosure or lack of disclosure are mostly no longer relevant. Second, the Court finds that *Consumer Reports* in particular is not a source normally relied upon by economists to form conclusions regarding either defect or disclosure. Insofar as Bresnahan's market data analysis (including issues of consumer satisfaction, reliability or marketplace success) is premised on data or information from *Consumer Reports*, it will be excluded.

¹² Specifically, Bresnahan cites to: (a) the Hardaway declaration (*see* docket no. 291-1), various Reports published by market research firm Mintel, and Consumer Reports, among other sources, for his discussion of washer design/functioning, the benefits of front-loaders, and maintenance/care requirements (*see* docket no. 296-4, ¶¶ 20-29); (b) various third-party sources (e.g., "Marketing Management" by Philip Kotler; Mintel report from August, 2010) and Whirlpool internal documents (e.g., "Horizon Purchase Drivers and Buyers - Quantitative Research - Phase II" presentation from January 2008) for his discussion about consumers' pre-purchase information-gathering behavior (*see id.*, ¶¶ 30-34); and (c) the Hardaway declaration (*see* docket no. 291-1), various Reports published by market research firm Mintel, and Consumer Reports in support of his proposition that "[s]ales trends in the U.S. market for residential clothes washers during the class period demonstrate that front-loading washers have gained market acceptance." (Docket no. 296-4, ¶¶ 35-37).

The Court also declines to exclude Bresnahan's operating cost study,¹³ finding that the majority of Plaintiffs' challenges to Bresnahan's assumptions go to weight, not to admissibility. Bresnahan derived the assumptions underlying his analysis from various sources, including Proctor & Gamble surveys, other market literature, and direct laboratory observations. In short, Bresnahan did not make up those assumptions out of thin air. Given Rule 702's liberal policy of admissibility, Bresnahan provides sufficient grounds for the majority of his assumptions. See *Daubert*, 509 U.S. at 596 (“[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional means of attacking shaky but admissible evidence.”).

For the reasons previously stated, however, Bresnahan's reliance on data and information from *Consumer Reports* for some of the assumptions underlying his operating costs study is problematic, as the Court does not find this to be the type of source an economist normally would rely on to derive the information underlying his study. Another district court previously precluded a Whirlpool expert from testifying to conclusions based on information derived from *Consumer Reports*. See *LG Electronics v. Whirlpool Corp.*, 2010 WL 3613814, *6 (N.D. Ill. Sept. 3, 2010) (excluding expert's testimony that a Whirlpool dryer contained “steam” based on descriptions of the appliance contained in *Consumer Reports*).

Further, while the Court recognizes that an expert may rely on hearsay evidence in appropriate circumstances, in a context where the expert's reliance on that evidence appears unreasonable, the

¹³ In his operating cost study, Bresnahan concludes that the estimated lifetime operating costs for a top-loader range from \$984 to \$1,031, whereas the estimated lifetime operating costs for a Whirlpool front-loader range from \$584 to \$629. He also finds that “the time required to operate a top-loading washer to clean a fixed amount of laundry is 61 minutes per month,” excluding time spent on necessary maintenance tasks, whereas “the total time required to operate a front-loading washing machine to clean a fixed amount of laundry, including time for recommended use and care steps, is 59 minutes per month.” Report, ¶ 72 (docket no. 296-4).

Court will not permit a party to use a witness's "status as an expert to present hearsay statements to the jury" *Id.* at *5. Accordingly, to the extent Bresnahan derived assumptions underlying his operating cost study solely from data and information contained in *Consumer Reports*, Bresnahan will not be permitted to testify regarding those sources or assumptions.

Bresnahan also goes one step too far when he states:

The essential point is that an examination of the actual, real-world costs of operating and caring for a Whirlpool front-loading washer do not reveal the substantial disadvantages predicted by Plaintiffs and Ms. Butler. There is a simple explanation for this. *The machines are not defective*, and their superior design, including the time and resource costs of caring for them, saves consumers time and money.

Report at ¶75 (docket no. 296-4) (emphasis added). While "[a]n opinion is not objectionable just because it embraces an ultimate issue," Fed. R. Evid. 704(a), Bresnahan lacks the necessary expertise to opine as to washer defects. *See In re Commercial Money Ctr. Inc.*, 737 F. Supp. 2d 815, 844 (N.D. Ohio 2010) (granting motion to exclude where the expert's report was "riddled with vague and unsupported statements, many of which are outside the area of proper expert testimony"); *Muller v. Synthes Corp.*, 2001 WL 521390 at *6 (N.D. Ill. May 15, 2001) (excluding opinion pertaining to flaws in design where the experts "do not have the factual basis to give an opinion on that matter"). The Court will not permit Bresnahan (or any other economist/damages expert) to offer any opinion suggesting a washer does not have a design defect or has a "superior design" or is "innovative." Bresnahan is not an engineer and has no expertise to render such a conclusion.

For the reasons and to the extent described herein, Plaintiffs' motion to exclude Bresnahan's testimony is *granted* in part and *denied* in part.

E. Plaintiffs' Challenge to Marais (docket nos. 295 & 299).

Plaintiffs move to limit and exclude the rebuttal testimony of Marais, arguing that: (1) Marais offers impermissible legal opinions on the appropriate measure of damages; and (2) Marais' opinions are moot in light of Plaintiffs' withdrawal of their own expert, Taub, whose testimony Marais was proffered to rebut. The Court does not examine the former argument, concluding the latter is well-taken.

In 2009, Plaintiffs submitted the expert report of Taub, who opines that "there is a reliable method with which to calculate the aggregate amount of class wide damages owed to class members" without "individual inquiry" about the extent of damages each Plaintiff suffered. Report at 3 (docket no. 299-1). Taub provided several models to calculate class-wide damages. Whirlpool then engaged Marais to review and respond to Taub's report. Marais rejects Taub's determination that aggregate class damages can be calculated reliably without individualized inquiry. Specifically, Marais opines there is no basis for Taub's conclusions that: (a) Plaintiffs are entitled to recover the *entire* purchase price of the washers as damages; or (b) a set fraction of the purchase price could be uniformly established as a damages measure on a class-wide basis. Marais further opines that the cost of using Affresh is inappropriate as a damages model, since: (a) Whirlpool introduced Affresh only in 2007, well into the class period; and (b) this measure would not account for differences in consumers' laundry and washer-cleaning habits. Finally, Marais disputes Taub's \$11.00 monthly maintenance cost estimate, since Whirlpool recommends "either Affresh *or* liquid chlorine bleach for routine monthly cleaning." Further, according to Marais, use of one Affresh tablet per month costs only \$2.33. All of Marais' opinions are directed specifically and only at criticizing and rebutting the opinions of Taub.

Whirlpool asserts that, regardless of Plaintiffs' withdrawal of Taub, Marais' opinions remain relevant and admissible because they "directly rebut certain of Drs. Gans' and Van Audenrode's opinions." Response at 1, & 4-5 (docket no. 313). Whirlpool explains:

For example, Dr. Gans attempted to calculate aggregate damages as the lifetime cost of a monthly Affresh tablet * * * , just as Dr. Taub did. Dr. Van Audenrode attempted to perform various damages calculations that require the aggregation of class member data * * * , and Dr. Marais's discussion of various individualized factors that must be considered when calculating damages rebuts Dr. Van Audenrode's testimony as well.

Id. at 4.

Whirlpool acknowledges, however, that the opinions of both Gans and Van Audenrode are "later-disclosed." In fact, Marais' reports are dated December 16, 2009 and January 19, 2010, while Gans' and Van Audenrode's reports are dated May 10, 2013 – over three years later.

In his expert report, Marais states that "[c]ounsel for Whirlpool in this matter asked me to review and respond to the November 16, 2009, 'Expert Report Concerning Class Damages' of Dr. Allan J. Taub." Report at ¶3 (docket no. 299-2). Consistent with his limited role as a rebuttal expert, Marais admitted during deposition that he was asked only to "assess" Taub's report, and that "my opinions, as you know, are about what he has put in his report." Depo. at 29-30 & 214 (docket no. 299-3).

Since Plaintiffs had not yet disclosed Gans and Van Audenrode as experts when Marais issued his Reports, Marais does not, and cannot, offer any opinions directed at the work Gans and Van Audenrode undertook. Further, prior to its June 2, 2014 opposition brief, Whirlpool never indicated it offered Marais' opinions to rebut the opinions of Gans or Van Audenrode, nor did Whirlpool supplement Marais' reports for those purposes. While some aspects of Marais' analysis could be read

to address the analyses later performed by Gans and Van Audenrode, it is clear that any trial testimony by Marais directed at those later analyses would constitute a “wholly new, previously unexpressed opinion” that violates Rule 26. *Niles v. Owensboro Med. Health Sys., Inc.*, 2011 WL 3205369 at *5 (W.D. Ky. July 27, 2011). This is all the more true because the willingness-to-pay analyses of Gans and Van Audenrode are meaningfully different from Taub’s analysis. Indeed, Taub’s expert report is four pages long, while Gans and Van Audenrode each submitted reports of over 30 pages. Marais’ criticisms of Taub cannot possibly apply, without new explanation and amendment, to Gans and Van Audenrode.

Whirlpool does not argue it had no opportunity to disclose Marais as an expert in rebuttal to Gans and Van Audenrode, and the Federal Rules provided ample opportunity for Whirlpool to have updated its disclosures. *See* Fed. R. Civ. Proc. 26(a)(2)(E) (“The parties must supplement these [expert] disclosures when required under Rule 26(e)”);¹⁴ *see also* *Southern Elec. Supply Co. v. Lianguard, Inc.*, 2007 WL 2156658, *3 (S.D. Ohio July 25, 2007) (“Should the expert testimony be made solely to rebut other evidence, then the disclosures should be made no more than thirty (30) days after the disclosure by the other party.”).

Failure to disclose a rebuttal expert or to supplement prior disclosure as required by Rule 26 is grounds for exclusion of that undisclosed testimony. *See* Fed. R. Civ. Proc. 37(c)(1) (“If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the

¹⁴ Rule 26(e)(1) provides that “[a] party who has made a disclosure under Rule 26(a) . . . must supplement or correct its disclosure or response: (A) in a timely manner if the party learns that in some material respect the disclosure or response is incomplete or incorrect, and if the additional or corrective information has not otherwise been made known to the other parties during the discovery process or in writing.”

failure was substantially justified or is harmless.”). While Rule 26 contemplates that an expert may “supplement, elaborate upon, explain and subject himself to cross-examination upon his report,” *Thompson v. Doane Pet Care Co.*, 470 F.3d 1201, 1203 (6th Cir. 2006), courts should not permit experts to “testify as to a wholly new, previously unexpressed opinion.” *Niles*, 2011 WL 3205369, at *5 (internal quotations omitted). Marais’ opinions have been always and only directed at undermining Taub’s opinions; Marais never suggested he would criticize anyone else, and Whirlpool never supplemented its Rule 26 disclosures to let Plaintiffs know Marais might do so.

Importantly, excluding Marais does not impair Whirlpool’s ability to attack Plaintiffs’ experts at trial. Whirlpool specifically hired experts Bresnahan and Simonson to rebut the opinions of Gans and Van Audenrode. Unlike Marais, Whirlpool disclosed to Plaintiffs that Bresnahan and Simonson would offer rebuttal testimony directed particularly at Gans and Van Audenrode. Thus, Plaintiffs had an opportunity to learn through discovery the bases of Bresnahan’s and Simonson’s opinions on the willingness-to-pay model. The same is not true for Marais – Plaintiffs had no opportunity to examine Marais regarding his opinions of Gans and Van Audenrode. In sum, while Plaintiffs would suffer prejudice if Marais is allowed to testify, Whirlpool will not suffer prejudice if Rule 37 is enforced and Marais is excluded. *Cf. Jeffries v. Ctr. Life Ins. Co.*, 2004 WL 5506494 at *1 (S.D. Ohio Jan. 28, 2004) (“[a]t this late date in the proceedings, having had no prior opportunity to examine Dr. Halsey regarding his opinions, Plaintiff would be severely prejudiced at the *Daubert* hearing”).

Accordingly, Plaintiffs’ motion to exclude Marais is granted.

F. Plaintiffs’ Challenge to Simonson (docket nos. 295 & 301).

Simonson reviewed Butler’s “willingness-to-pay” model and performed two studies directed at

the “implications” of her results: (a) a **telephone survey** of Whirlpool front-loading washer owners, which tested owners’ satisfaction with their washers, as well as their purchase criteria for buying washers in the future; and (b) a **mail survey**, which tested the effect of presenting potential washer purchasers with information regarding Whirlpool’s recommended use and care for its front-loading washers. Simonson opines these studies show, respectively, that: (a) owners of Whirlpool front-loading washers are generally very satisfied with their washers; and (b) disclosing maintenance requirements to consumers prior to purchase has no impact on the likelihood that a consumer will buy a Whirlpool front-loading washer.

Simonson’s **telephone survey** involved 515 random, non-class owners of Whirlpool front-loaders in the five states bordering Ohio, each of whom had owned the washer for at least one year and had registered the washer with Whirlpool. The **telephone survey** asked respondents: (a) how satisfied they are with their machines, and the factors affecting their rating; (b) their purchase criteria if they were buying a new washer today; (c) the type of washer (front- or top- loading) they would purchase if buying today; and (d) whether they use high-efficiency detergent. The **telephone survey** results, which an independent research firm validated, demonstrate that: (a) almost 80% of the respondents rated their satisfaction level between 8 and 10 on a 1-10 scale; (b) only 6.8% of respondents mentioned odor, mold, or related concerns; and (d) 75% of respondents indicated they would buy a front loader today.

Simonson states that, if Plaintiffs’ allegations and Butler’s survey results were correct, then “owners of Whirlpool front-load washers (who allegedly did not receive the prescribed maintenance information before they made their washer purchases and experienced the alleged problems) would be very dissatisfied with their Whirlpool washers,” would “emphasize the alleged odor/mold problem

when explaining their dissatisfaction,” would indicate that maintenance requirements and the possibility of odor/mold would be “the most or among the most important front-load washer purchase criteria,” and would instead prefer buying a top-loading machine. Report, ¶41 (docket no. 301-4). Simonson claims his **telephone survey** demonstrates that, “contrary to the implications of the Butler Survey and the plaintiffs’ allegations, owners of Whirlpool front load washers . . . are generally very satisfied with their washers,” with only a few mentioning “anything related to odor or mold.” *Id.*, ¶62.

Simonson’s **mall survey** involved over 400 non-Ohio prospective purchasers of front-loaders, divided into two groups – the test group and the control group – and sought to determine whether their pre-purchase receipt of “information concerning the possibility of mold buildup or odor and washer maintenance requirements” would affect their likelihood of purchasing a Whirlpool front loader. *Id.*, ¶17. First, each respondent reviewed eight brochures printed from Home Depot’s website for non-Whirlpool front-loaders and top-loaders. None of these brochures contained use, care, or maintenance requirements. Next, in a separate room, respondents viewed an actual Duet washer and its brochure, with the control group’s brochure omitting any maintenance instructions, and the test group’s brochure containing the following instructions:

Caring For Your Washer

Washing machines can develop biofilm, a build up of dirt, detergent, and other biological material in the machine, which can lead to the growth of mold or mildew. This build up can lead to an odor in the interior of the machine and odor in your clothes. To avoid this problem, Whirlpool recommends that owners of this washer: 1) use only high efficiency or ‘HE’ detergent; 2) leave the door open between washes; 3) inspect under the door seal monthly and, if stained, clean with a bleach solution; and 4) run a Clean Washer cycle with no laundry and with affresh® Washer Cleaner or bleach once a month. Refer to the Use & Care Guide that comes with this washer (also available at Whirlpool.com) for details.

Id. at ¶73. The interviewers instructed respondents to carefully review both sides of the brochure and

to “take as much time to evaluate the washer and brochure as they would take if they were in a store shopping for a new appliance.” Depo at 172 (docket no. 301-6). The interviewers then asked the following question:

Assuming you were buying a new washing machine today and the price of this washing machine is comparable to the price of other front load washing machines available on the market, like the front load washing machines you saw in the other room [in the printouts]. How likely would you be to buy this washing machine? Would you say that you would *Definitely* buy it, you would *Probably* buy it, you *May* or *May Not* buy it, you would *Probably Not* buy it or you would *Definitely Not* buy it?

Report at ¶74 (docket no. 301-4). Respondents then answered questions about: (a) the reasons for that decision, (b) what they liked most and least about the Whirlpool washer, and (c) what information sources, if any, they consult before making a washer purchase decision.

As to the **mall survey**, Simonson claims his results show that: (a) presenting consumers with maintenance instructions prior to purchase has no effect on their likelihood of buying a Whirlpool front-loader; (b) the respondents did not mention maintenance/care requirements as a product feature they like or dislike; and (c) consumers consult a wide variety of information sources before deciding which washer to buy.

Plaintiffs move to exclude Simonson’s testimony as to his **telephone survey** because:

(a) Simonson’s study asked consumers general, open-ended questions regarding their satisfaction, and failed to ask any specific questions regarding mold, odor, or maintenance; (b) consumer satisfaction is a *post-purchase* metric, and is entirely unrelated to Plaintiffs’ alleged *point-of-purchase* damages; and (c) Simonson failed to include a “control”– that is, to compare Whirlpool washer owners’ satisfaction ratings with those of owner of other brands – and thus did not follow generally accepted scientific practice. Plaintiffs rely on *LG*, 2013 WL 3466821 at *7, where the district court excluded an internet-

based satisfaction study that LG offered as evidence of the rate of mold problems among the owners of LG front-loading washers. The *LG* court stated:

Defendant is taking an inferential leap by arguing that this survey leads to an inference that the survey-takers never smelled any mold in their machines just because they indicated during the survey that they were happy with their machines, without any specific query about smell, when that could easily have been asked.

Id. Plaintiffs assert Simonson’s focus on “satisfaction”-related questions, rather than mold, odor or maintenance issues, renders Simonson’s study likewise subject to exclusion.

As to the **telephone survey**, the Court finds Simonson’s methodology reasonably reliable and declines to exclude his results. While the *LG* opinion addresses several weaknesses in satisfaction studies that may bear on Plaintiffs’ cross-examination of Simonson here, the *LG* court noted that the expert’s internet survey suffered from numerous *other* methodological flaws that are not present here. Further, the internet study in *LG* was designed for a different purpose: it sought to determine *how widespread the mold problems were*. Simonson’s **telephone survey**, on the other hand, was directed at determining *the extent to which consumers were unhappy with having to perform maintenance on their Duets*. This is also what Butler’s survey sought to determine, and Simonson’s survey is reasonably designed to accomplish its stated purpose. While Plaintiffs have arguably identified potential weaknesses in Simonson’s work, this is true of virtually all of the damages experts, and the proper venue for challenging these weaknesses is cross-examination, not exclusion.

The Court’s focus is not “whether [the opinion] is correct, but rather . . . whether it rests upon a reliable foundation.” *Stafford*, 721 F.3d at 393-94 (brackets in original, internal quotation marks omitted). *See also Tamraz*, 620 F.3d at 675 (“The important thing is not that experts reach the right conclusion, but that they reach it via a sound methodology.”). Plaintiffs’ challenges bear on the

weight, rather than the admissibility, of Simonson's **telephone survey** opinions. *See Wendt*, 125 F.3d at 814 ("Challenges to survey methodology go to the weight of a given survey, not its admissibility."). In sum, Simonson's **telephone survey** results are admissible.

Turning to the **mall survey**, Plaintiffs contend it should be excluded because Simonson: (a) did not include questions about mold, odor, or maintenance; and (b) first showed participants *brochures* describing non-Whirlpool washers, and then showed participants an *actual* Whirlpool front-loading washer, thereby creating a consumer preference for the Whirlpool machine and biasing the study. Whirlpool responds that Plaintiffs misunderstand the mall survey, pointing out that Simonson did not test consumers' preference for a Whirlpool washer over other washers. Rather, Simonson measured the difference in consumer preferences between a test group, who viewed a Whirlpool washer *with* accompanying maintenance information, and a control group, who viewed the Whirlpool washer *without* the maintenance information. Thus, to the extent the survey "biased" consumer preferences in favor of the Whirlpool washer, the bias existed in both the test and control groups and was irrelevant to Simonson's results.

Plaintiffs raise a valid and disqualifying criticism, however, regarding the **mall survey**, which is illustrated by the following example. Suppose Simonson shows 100 people an old, rusty washboard. Then he divides them up and: (a) shows 50 of them a new Duet with Use and Care instructions that say nothing about maintenance; and (b) shows 50 of them a new Duet with Use and Care instructions that disclose onerous maintenance requirements. Simonson then asks all 100 of the participants which one they would prefer – the Duet or the old, rusty washboard – and all 100 say the Duet.

Whirlpool asserts Simonson's results would demonstrate that people *do not care* about onerous maintenance requirements, or at least that such requirements are not a factor in their decisionmaking at

the time of purchase. As this example illustrates, however, Simonson's results do not reliably support any conclusion regarding consumers' dislike for maintenance requirements. Rather, this example shows only that people so prefer the Duet over the washboard that the onerous maintenance requirements disappear as a factor in that comparison.

This example is basically what Simonson did in his **mall survey**, except replace "old, rusty washboard" with "brochures for other washing machines." This makes the comparison a little more fair, but not much – participants are asked to choose which they would prefer, a real, shiny, new washer which they can touch, or a photo of a washer described in a brochure. There is a very strong potential for consistent bias toward the real washer, no matter what is shown in the brochure. Thus, Whirlpool's assertion that both groups received the same brochures misses the point – which is that a study cannot reliably measure consumer preferences where the available options are unreasonably one-sided. In sum, Simonson's **mall survey** methodology is unreliable, and thus his results are not admissible.

Accordingly, Plaintiffs' motion to exclude Simonson's testimony is *granted* as to his **mall survey** results and *denied* as to his **telephone survey** results.

IV. Whirlpool's Challenge to Plaintiffs' Statistical Expert Griffin (docket no. 291).

Griffin is a statistician who reviewed an analysis conducted by Whirlpool employee Anthony Hardaway. Specifically, Hardaway examined Whirlpool's in-house data regarding the number of Duet owners who complained about mold, or who sought warranty service for mold problems. Hardaway concluded that an extremely small portion of owners had complained about mold or sought warranty service for mold-related problems. In response, Plaintiffs directed their expert, David Griffin, to

review Hardaway's work and conduct an independent analysis. Griffin concludes the *number* (but not the rate) of mold-related complaints is as much as six times what Hardaway reported.

As the parties' briefing makes plain, Griffin and Hardaway in fact examined different data sets in arriving at their conclusions. Hardaway examined the number of complaints about only Whirlpool-branded Duet washers, and only by owners of washers in the 14 States that are the subject of this lawsuit.¹⁵ In contrast, Griffin examined: (a) Sears database service records relating to Whirlpool-manufactured washers under Sears-brand "Kenmore," rather than only the Whirlpool-branded washers at issue; and (b) service records for all 50 states and the District of Columbia, rather than only the 14 states for which Plaintiffs proposed formation of state-wide classes.

Whirlpool does not challenge Griffin's qualifications, but argues he relied on the "wrong data" and his methodology is unreliable. Whirlpool contends Griffin's opinions on the number of potential mold-related complaints about all Whirlpool-manufactured washers – as compared to Hardaway's opinions on the number of complaints about only the Whirlpool-branded washers at issue in this lawsuit – are irrelevant, "meaningless" and will "offer no assistance to the jury regarding the accurate complaint rate." Reply at 3-4 (docket no. 335)¹⁶ As noted, Griffin does not actually calculate a *rate* of potential mold- and biofilm-related calls/complaints. Rather, his results are limited to the *number* of such calls/complaints.

¹⁵ The 14 states for which Plaintiffs proposed formation of state-wide classes were Arizona, California, Florida, Illinois, Indiana, Maryland, North Carolina, New Jersey, New York, Ohio, and Texas.

¹⁶ Whirlpool also attacks Griffin's testimony based on his alleged failure to exclude service records related only to smoky, burning, or diesel odors. (Docket no. 291, at 8). Griffin's November 16, 2009 affidavit indicates his results may be overinclusive, containing all service calls that "*possibly* involved these [smell and biofilm] problems." Docket no. 291-2, ¶ 2 (emphasis added). Hardaway conceded, however, that his results may have suffered from the same problem of over-inclusiveness, yielding service records that "*potentially* could have been related to mold or mildew growth." Docket no. 291-1, ¶ 4 (emphasis in original). In any event, these issues are properly matters for cross-examination, not exclusion.

Whirlpool's criticisms of Griffin's analysis do not support exclusion of his testimony. That Griffin relied on a broader universe of data than Hardaway does not render Griffin's analysis irrelevant, "meaningless," or unreliable. First, Whirlpool is simply wrong that the only relevant complaint and service records are those relating to owners of Whirlpool-branded washers residing in Ohio. Since the Whirlpool-branded washers are mechanically identical to the Whirlpool-manufactured washers sold under other brand names, and the same machines were sold in every state, Griffin's calculations of the number of mold-related complaints about *all* Whirlpool-manufactured washers are clearly relevant to Plaintiffs' claims. Indeed, this testimony bears on the issue of notice to Whirlpool about the magnitude of the mold problem and their knowledge of the alleged defect.

Second, the methodology Griffin employs is technically appropriate, straightforward, and easily reproducible. Although Griffin's data inputs (and thus his search results) differ from those of Hardaway, he arrives at his opinions in a scientifically sound fashion. Griffin performed searches using "the data provided by Whirlpool" and Whirlpool's "own list of key words." Response at 4 (docket no. 322). Griffin documents and explains each step of his work, thereby laying a proper foundation for his analysis. In fact, Griffin so thoroughly explained his methodology that Whirlpool expert Taylor reproduced Griffin's searches and obtained virtually identical results. *See Daubert*, 509 U.S. at 593 ("a key question to be answered in determining whether a theory or technique is scientific knowledge that will assist the trier of fact will be whether it can be (and has been) tested").

To the extent Whirlpool contends Griffin's data sets are not representative of the washers at issue in this litigation, these objections are easily presented in the context of cross-examination or argument at trial. Such challenges go to the weight of Griffin's testimony, not its admissibility. *See Food Lion*, 739 F.3d at 281 (the expert's consideration of some data inputs while omitting others goes

to the accuracy of the conclusions, not the reliability of the testimony).

Accordingly, Whirlpool's motion to exclude Griffin's testimony is *denied*.

IT IS SO ORDERED.

/s/ Christopher A. Boyko
CHRISTOPHER A. BOYKO
UNITED STATES DISTRICT JUDGE

Dated: October 3, 2014