IN THE UNITED STATES DISTRICT COURT
FOR THE WESTERN DISTRICT OF TENNESSEE
WESTERN DIVISION

AUNDREY MEALS, individually, and as next friend of JAMES HARVEY MEALS, deceased, and as natural parent, guardian, and next friend of WILLIAM MEALS, a minor child,	)	
Plaintiffs,	)	
v.	)	**No. 03-2077 Ml/An**
CITY OF MEMPHIS, TENNESSEE, and FORD MOTOR COMPANY,	)	
Defendants.	)	

ORDER GRANTING JOINT MOTION IN LIMINE OF DEFENDANTS CITY OF MEMPHIS AND FORD MOTOR COMPANY TO EXCLUDE THE TESTIMONY OF JOHN D. KNIGHT, PH.D.

Before the Court is the Joint Motion in Limine of Defendants City of Memphis and Ford Motor Company to Exclude the Testimony of John D. Knight, Ph.D., filed on October 4, 2004. Plaintiffs responded in opposition on October 12, 2004. The Court held a hearing regarding this matter on February 2, 2005, at which time the Court heard the testimony of Plaintiffs' proffered exert, Dr. Knight. For the following reasons, the Court GRANTS Defendants' joint motion.

With regard to expert testimony, the Federal Rules of Evidence provide that:

> If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise, if (1) the testimony is based upon sufficient facts or data, (2) the testimony is the product of reliable principles and methods, and (3) the witness has applied the principles and methods reliably to the facts of the case.

Fed. R. Evid. 702. Rule 702 "clearly contemplates some degree of regulation of the subjects and theories about which an expert may testify." Daubert v. Merrell Dow Pharm., Inc., 509 U.S. 579, 589 (1993). Under the Federal Rules of Evidence, a trial judge serves as a gatekeeper who "must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable." Id. The gatekeeping function of the trial judge explained in Daubert is not limited to scientific evidence and testimony, but also applies to "technical" and "other specialized" knowledge, including an engineering expert's testimony. Kuhmo Tire Co. v. Carmichael, 526 U.S. 137, 141, 147 (1999) (explaining that the obligations imposed on a trial judge by Daubert apply to all expert testimony).

When an expert is challenged under the standards of Daubert, "[t]he focus, of course, must be solely on principles and methodology, not on the conclusions that they generate." Daubert, 509 U.S. at 594-95. In Daubert, the Supreme Court iterated that "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." Id. at 593. "Additionally, in the case of a particular scientific technique, the court ordinarily should consider the known or potential rate of error ... and the existence and maintenance of standards controlling the technique's operation...." Id. at 594.

In making such determinations, courts examine whether the testimony is "supported by appropriate validation" and the opinions are "ground[ed] in the methods and procedures of science." Id. at 590. The Court must ultimately make an "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. Moreover, the opinion proffered must be analytically related to the underlying data and methodology. General Electric Co. v. Joiner, 522 U.S. 136, 146 (1997).

This action arises out of a multiple vehicle accident which resulted in Minor Plaintiff William Meals sustaining a paraplegia-causing injury. Plaintiffs seek to introduce, through Plaintiffs' expert Dr. Knight, testimony about the relationship between paraplegia and the loss of discretionary time and the valuation of such discretionary time.

Defendants contend that Dr. Knight's testimony should be excluded from trial because he is not qualified to render such

testimony and his conclusions are based on faulty assumptions and flawed methodology. Plaintiffs counter by contending that Dr. Knight has ample education and has experience in the field of statistics and industrial engineering. Plaintiffs further assert that because Dr. Knight utilized specific time-motion methodology that uses the concepts of industrial engineering timing, his methodology appropriately assesses the time Minor Plaintiff William Meals will lose in his non-work, non-sleep hours as a result of the injury he sustained in the accident. In making the findings herein, the Court has considered the testimony of Dr. Knight as well as exhibits in the record including the expert reports.

Dr. Knight has a Bachelor of Science and a Master's degree in industrial engineering and a Doctorate in industrial and systems engineering. He is presently a professor at the University of Tennessee at Martin. Dr. Knight has worked in his field for over thirty years and has served as a consultant on numerous occasions in the areas of motion and time study and standard setting to improve productivity in the factory environment. In particular, Dr. Knight has experience with building models based on mathematics to analyze the amount of time it takes to perform a given task.

At Plaintiffs' request, Dr. Knight performed an analysis based on time and motion study data to quantify the time he

anticipated that Minor Plaintiff William Meals would lose in non-vocational, non-sleep activities as a result of his injuries. Dr. Knight then calculated the monetary value of the lost time as determined by his time and motion model.

While Dr. Knight has education and experience in industrial engineering, prior to his preparation to provide testimony in this case, Dr. Knight had neither education nor experience regarding the functional abilities of persons with paraplegia. Indeed, Dr. Knight testified that has never reviewed any studies about paraplegia and, prior to preparing his opinions in this case, he had never before studied the effects of paraplegia. (Tr. at 494:10-497:9.)

With respect to the methodology utilized by Dr. Knight, Dr. Knight testified that a time and motion study would be performed and data gathered using the same methodology whether or not a subject has paraplegia. According to Dr. Knight, a time and motion study is a systemic observation of the way in which a person performs a task at a normal pace that is timed by an engineer. With respect to the activities chosen by Dr. Knight for the study at issue, Dr. Knight testified that the activities for the model were chosen “based on some observation and on some experience and on actual talking with paraplegics.” (Tr. at 459:8-13.)

Dr. Knight chose the subjects to perform the tasks to generate data for the study based on his perception that the individuals he selected "would be considered extremely good individuals to study." (Id. at 466: 4-5.) Indeed, Dr. Knight testified that he spoke only with two persons with paraplegia, his two test subjects, with respect to designing the study. (Id. at 494:24-495:5, 497:14-25.)

Dr. Knight testified that he has performed an analysis of discretionary time loss only three times, each for the purposes of providing expert testimony for litigation purposes. (Tr. at 484:8-16.) Dr. Knight first calculated the economic discretionary time loss value by determining how many additional minutes it takes a person with paraplegia to perform a task, as compared to a person without paraplegia. He then multiplied that amount of time by a monetary value per hour number, as provided by statistics for earning capacity of a person with a bachelor's degree and with an associate's degree. (Id. 477:20-480:23) However, Dr. Knight testified that he has no references, in terms of articles or studies, for his proffered testimony with respect to the appropriate compensation for discretionary time loss except for his own litigation related work. (Tr. at 485:12-486:22.)

The testimony provided by Dr. Knight casts doubt on the reliability of his testing methods and his theory with respect to

compensation for discretionary time loss. Dr. Knight's only experience with building models to determine discretionary time loss has been associated with providing testimony in the context of litigation. Indeed, the study at issue was performed only for the purposes of this litigation and represents the first and only time Dr. Knight has performed any kind of a study examining persons with paraplegia. There is no indication that Dr. Knight had any objective basis for choosing the representative tasks and test subjects upon which he built his model. When questioned about these fundamental building blocks of his model, Dr. Knight testified that "I feel like my assumptions are valid." (Id. at 494:24-495:16.)

The Court finds that the proffered testimony of Dr. Knight is neither based upon sufficient facts or data nor the product of reliable principles and methods as required by Federal Rule of Evidence 702. In particular, the Court finds that Dr. Knight's methodology and reasoning for selecting representative tasks and subjects for his study were not well-grounded and do not meet the standard for evidentiary reliability. Moreover, the Court finds that Dr. Knight's testimony is not relevant to any material facts in this case and would not assist the trier of fact to understand the evidence or to determine a fact in issue in this action. Fed. R. Evid. 702. Accordingly, the Court GRANTS Defendants'

joint motion and hereby finds that the proffered testimony of Dr. Knight is inadmissible at trial.

So ORDERED this _____ day of April, 2005.

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JON P. McCALLA
UNITED STATES DISTRICT JUDGE