
THE CrossFit JOURNAL

Transcript of Phone Conversation Between Russell Berger and Steven Devor

May 2013

This is the transcript from a recorded interview that took place on April 23, 2013, between Russell Berger and Steven Devor, Ph.D., of Ohio State University.

The interview was on the subject of an Ohio State University study on CrossFit conducted by Michael Smith, Ph.D., now of Gonzaga University, and Allan J. Sommer, Brooke E. Starkoff and Steven T. Devor.

The study, "CrossFit-Based High-Intensity Power Training Improves Maximal Aerobic Fitness and Body Composition," can be viewed [here](#).

(Greetings)

Russell: So the first question is basically just can you give me sort of an overview of, you know, what this study was looking for, what it was about, what it tested for? Just a general summary of what it was.

Steven: Yeah, so I, Russell, I sent you the paper last night, because it occurred to me after we had been back and forth over e-mail, I thought, "Well, I don't even know if he's"—because I know all that's available online without purchasing is an abstract.

Russell: Right.

Steven: And all of the CrossFit bloggers that have, you know, written stuff about it online. My presumption is that they've only seen the abstract.

Russell: OK.

Steven: And I know I have gotten requests from, I mean, as far away as Australia, France, Spain, people all around the world and in the country, in the States, wanting the paper. So I've been sending them exactly what I thought, "Well I need to send this to Russell, so he can at least look at the paper." So, you've got the paper. Basically, what we wanted to do was—. We were very excited to do something with CrossFit, because it's something we believe in. But, and, everybody—. I mean, primarily, people in the CrossFit community are obviously very pro-CrossFit, and, you know, they basically, you know, pardon my sarcasm, but, you know, CrossFit, well, is the greatest thing in the world and will cure every disease known to man if you talk to the right CrossFit people. So, you know, we thought, "OK, we know it's good, we know it's a great way to work out, it's a great mode of fitness." It's something, honestly, that I'm actually very excited about, but we—. But there's really not any good data on: does it actually do what people want to say that it does? Like, does it raise your VO2 max? Does it improve your cardiorespiratory fitness? Does it lower your percent of body fat? Does it actually make you fitter from an exercise-physiologist standpoint? Like, some, some hard numbers that you can hang on it and say, "Yeah, not only is it a great way to work out when we feel like it gets people crazy fit if you're doing it correctly, but look it: now we've got some numbers to say, 'Yes, it actually does,'" so that's why we did this study.

Russell: OK, great.

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Steven: So we wanted to measure, again, VO2 max, percent body fat, and, and then what we, what I think we did a good job with quite frankly, is, then, is you probably saw the (indiscernible) in the papers. We broke people into different groups based on their initial fitness, because we didn't want to just be able to say, "Yeah, look, they got fitter, because"—

Russell: Right.

Steven: There's a law of initial value, and if you're starting with someone who's really un-fit, it's easy to see a big change. But what we we're really excited about was that even the guys in this study who were really good body fatters—very fit dudes, and dudettes—even they saw big improvements in their VO2 max and in their percent body fat. So, we were, I mean, we're very excited about the data. You know, and I—

Russell: So, the, the conclusion from the data is that this is, this is positive for CrossFit.

Steven: Oh my God, yeah, Russell. That's what I don't understand, and, and again, I know we're probably going to talk about Mitch (Potterf, owner of CrossFit 614, which provided athletes for the study), and I can give you my opinion, and, and I know, and I understand why Mitch is upset. I mean, I get it. But, I really don't think he should be, and I can tell you why in a few minutes, if you wanted to talk about that.

Russell: Sure.

Steven: Yet, in my mind, this is like, the best thing that's happened to CrossFit, because I think it, and I'm not trying to break my arm by patting myself on the back or my labs, but in my mind, this is the first paper that really legitimizes, like, it's not just a bunch of really buff guys saying, "Yeah, this is the best, because we say it is, and we feel like it is." Now we can hold up a paper. Again, and not something that's published in the "CrossFit comic book"—that's something I call the CrossFit Journal. Not something that's published in that. We're talking a peer-reviewed piece of science here, that says, "Man, this stuff is really, really a great way to train. It really does everything we thought it did." So, yeah, I view this as being great for CrossFit, and that's why I'm so excited about it. Because I want to be able to legitimize it, and not just have it be, "Yeah we think it's great, and because we say it is, therefore it is." So, yeah, I think it's all very positive.

Russell: OK, and the one exception to that that I think

people are seeing is the high rate, or I guess it was 16 percent—is that the correct rate of—?

Steven: Correct.

Russell: Of dropouts from injuries in the study?

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—Dr. Steven Devor

Steven: Correct. And that's the part that, well, do you want me to comment on that, or is that a question?

Russell: Yeah, I'd just like to hear your interpretation of the data.

Steven: So, yes, and that's the part that Mitch is—and again, if I'm being objective and trying to look at it from his perspective, that's the part that he's understandably upset about. And I get it. But this is the thing that I think is lost on a lot of the people that really embrace CrossFit. The bottom line is, if you're doing CrossFit, like, I mean, part of the CrossFit philosophy is, it's very high intensity. Now, I know it's constantly varied. You're looking at a wide modality here, improving overall fitness. I truly get it. I understand the whole CrossFit thing. But the fact that it's very high intensity and you're throwing weights over your head, and you're doing, frankly, very complicated biomechanics movements—you're—and oftentimes, people that are doing it are not these incredible athletes that you see on TV, both the men and women—

Russell: Right, right, right.

Steven: You know, I mean, they're everyday people, Russell, that have gotten into this. And they probably, and they might not be the fittest guys and gals on the block, and all the sudden they're beating themselves several days a week doing really complicated movements that maybe

they don't do as correctly as they should be, you know what I mean.

Russell: Right.

Steven: And so, whenever you do something that's high intensity, whether it's high-intensity running, if it's high intensity rock climbing—this is not picking on CrossFit. High-intensity interval training, high-intensity power training, guess what? You're going to get a higher rate of overuse injuries, because of the very nature of it, and I think, again, if everybody went by what is really prescribed by CrossFit, that maybe you shouldn't try to destroy yourself every day—imagine that—maybe we would see lower rates of overuse injuries, but I mean—. Let's be honest, I think a lot of people that are engaged in CrossFit now—. And, frankly, the bigger it gets, the worse the problem gets, because you get more bad people involved with it.

Russell: So, you see this as sort of a two-parter. You see this as—and in this study in particular—you see as some potentially some, what's the term I'm looking for? Less-conditioned participants bit off more than they could chew, and then you see the second half as being maybe the trainers aren't really qualified to be teaching these complex movements, or at least giving them out at the high intensity that they're being given out at.

Steven: Well, I agree with you on the first part. Perhaps there were some people enrolled in this study that maybe weren't quite as fit as they should have been, and they're doing the complex workouts and the complex movements, and, so you're going to see, again, the higher rate of overuse injuries. But again, this is not singling out CrossFit. You would see the same thing if this was a high-intensity interval-running workout, over and over and over again. I'm not saying that the trainers at Mitch's gym are bad—. Russell, the bottom line—. I like Mitch. I think his gym does a really good job. I've told him that. That's why we wanted to use his gym. He does a really good job. I think he is one of the people that CrossFit wants to hold up, where I think that there's—. Again, as it gets bigger and bigger, I think there's more and more bad apples, people that are doing it for the wrong reasons. I don't think that Mitch is one of those people.

Russell: OK.

Steven: I really don't. I liked Mitch.

Russell: Yeah, that's fair. I do have a question for you specifically on the 16 percent injury rate, and sort of the data

related to it. So, I'm reading this study, and it says that of the people who dropped out and didn't complete, I guess it's a re-test that you did at the end of the study?

Steven: Yes.

Russell: There were 11 people: two of them cited time constraints, and the other nine were the people that you said were dropped out for some type of injury or overuse injury.

Steven: Right.

“When they said, ‘OK, we’re not coming back,’ we would query them, ‘OK, well, why?’ Like, you know, ‘You gotta give us, like, why the hell aren’t you comin’ back?’”

—Dr. Steven Devor

Russell: So, was this a blind study? Would they be identified in this study?

Steven: Umm, well, we—. We don't know who the ones are that—. Well, no, we do. Well, we were blinded—. I'm trying to remember back now, Russell, because it's been a while. We were blinded to their names, but we obviously saw them in the lab. I mean, they came into the lab, and tested them several times. And the ones that dropped, you know—. When we then, when they said, “OK, we're not coming back,” we would query them, “OK, well, why?” Like, you know, “You gotta give us, like, why the hell aren't you comin' back?” kind of thing, and they all said, you know—. Again, a couple of them were like, “No, I don't have time. I'm not going to do it,” which is not uncommon.

Russell: So you collected the data on those reasons for why in the lab?

Steven: Absolutely. We queried them on why they weren't coming back, and again, I think, Russell, this is the thing that I think is a little bit lost on Mitch, and where, if we have any disagreement on anything, I think it's this: I don't know

if you know Mitch. I don't know if you've ever met Mitch. It doesn't even matter to me. But, Mitch is, he's a big guy. He's a very good CrossFitter, and I think a lot of guys like that—. I don't mean guys like that—. But let me just say, let me just say, Mitch can be, I think, an intimidating person. Let me just say that.

Russell: OK.

Steven: And, Mitch is their, you know, they all look at him as "he's my coach, he's my head trainer, he's the one—. I'm doing this at his gym," and I think there's an element, as I think there would be with anyone, you want to please that person. You want to perform for them, you want to do well for them, "I got into this thing—and now, and maybe my shoulder's really hurting me, but I don't want to tell Mitch, but I'll tell this geeky science guy," you know, and so, it doesn't surprise me that they didn't all just run to Mitch and say, "I'm not finishing, because you hurt my shoulder" or, "My shoulder's hurting." I don't even want to blame it on Mitch. It's not necessarily his fault. It's the very nature of the sport.

Russell: So, do you know Chelsea Rankin, as well?

Steven: I know the name. I don't know her well, but I know the name.

Russell: Chelsea Rankin was the study coordinator for all of this. Actually, she basically took over all of the data collection and the running of the participants through the study for Mitch. And she did this professionally at a hospital for five years before she did this study, so she actually knows her stuff. And what's interesting is I talked to her in an interview, and she said that there were two times only that participants came in the lab. The first one was for the original test—

Steven: Yep.

Russell: And the second one was for the retest—

Steven: Exactly.

Russell: She said that the participants, the people who dropped out or didn't complete the retest were only in the lab for the first test. So then, the people who dropped out and didn't complete the test would not have ever been in the lab again to supply you with data on why they didn't complete the tests.

Steven: Yeah, we—you're right. You're exactly right, Russell. They did not come back. And so then, when we would get a hold of them, or query as to why they didn't

complete—that's what we were told—that they never—you're right, they just never showed back up.

Russell: So, I guess my question then is, she said they would be de-identified to you, and you only recognized them as a number, so you wouldn't have had any contact information in order to get that from them?

"The people who dropped out and didn't complete the test would not have ever been in the lab again to supply you with data on why they didn't complete the tests."

—Russell Berger

Steven: No, that's not true. No, we, we were able to get a hold of them, because that's how we knew that they didn't—. That's how we knew—. That's how we were able to get in touch with them, because we did know their names. Because, you're right, it wasn't blinded, because they were in the lab and we were collecting, and they were getting a VO2 max test, getting body comp, we were talking to them. So we knew who they were.

Russell: But that was only for the first test that they were there to be able to talk to you, and you heard who they were by their first name. Chelsea says that. I'll quote her here. She says, "I'm the only one that knew who did or didn't show up. The participants were de-identified and were only known to the OSU researchers by a number." So that means that—

Steven: Well—

Russell: You knew them as a number. And if they'd been there, she actually said that—. Let me read you the second quote here. She said, "They," referring to you guys, the OSU researchers, "may have spoken to people while they were there doing the post-test, but they never had contact with the people who didn't show up, and I have no idea how they could have." So I followed up on this, and I have a list of eight people who I've identified from the study who did

not show up for the retest or dropped out of the study. And I've been able to contact four of them so far, and all four of them said that they never supplied any reason to anyone as to why they didn't complete the study, because they never spoke to the researchers again.

Steven: I—. Well—. They never spoke to me, because I didn't collect the data.

Russell: Right, well, they didn't mean you. They meant they never spoke to anyone who was a representative of the study to supply even a basic reason why they didn't complete it.

Steven: Yeah, Russell, I'm going to—. I don't—. I mean, I guess, I can't answer that intelligently, because I'm not the one that collected the data. And I'm not trying to skirt your question, because you have a legitimate question.

**“Yeah, Russell, I’m going to—.
I don’t—. I mean, I guess, I can’t
answer that intelligently.”**

—Dr. Steven Devor

Russell: OK.

Steven: I just didn't—. I'm not the one who collected the data.

Russell: OK, so, who's effectively responsible for being able to defend the study and its accuracy?

Steven: Well, that would—. Mike Smith is the one who collected the data.

Russell: Right, when I talked to him about it, he refused to comment. That's the only reason I called you, I guess. Because you're the corresponding author, and I just wanted to get that—that's the main thing, that's obviously the big issue, and I really want to find somebody who can defend it and answer the basic facts on this.

Steven: Well, I can reach Mike, and I can tell him to chat

with you. That's fine with me.

Russell: Yeah, that'd be great.

Steven: Yeah, I just don't know—. I'm going to go ahead and disagree with that. Because I know that he had some kind of contact with people to be able to have them report to him, know this or that, or their injury or whatever, that's why I didn't show back up.

Russell: Well, here's just another quote from Chelsea too, she said, "I did all the data collection for the study," and, let me back up a little bit. Chelsea doesn't work for Mitch. She's just a member at the gym who just volunteered her time for it.

Steven: Sure.

Russell: So she said, "I did all the data collection for the study, and I know every person who didn't retest. It was easy to figure out that they weren't injured. This data is inaccurate, and those individuals were not injured, and that wasn't the reason they didn't test out. To me, this questions the validity of the research." So she feels pretty strongly, like she knew these people, and she knew they never went back to the lab, and she knew exactly who it was, because she was the only person who actually had the identifier that went along with their number to, you know, show who they were. And then, on the other hand, like I said, I contacted four of the participants who claimed—and I don't think they'd have any special interest in being deceptive here—they just claimed they didn't show up because they didn't care, or they didn't have time, or they were working, and they never talked to anybody about why they didn't come back to the study. So, I mean, I have a handful of people there who, I don't think, show any reason for being deceitful, that are claiming that there's no way anyone could have gathered that data even to begin with.

Steven: Well, it—. And again, I'm not disagreeing with you. If that's what they said, I'll believe them at face value. I mean, I—

Russell: You would have to defer to Mike Smith, is what you're saying?

Steven: Yeah, absolutely, yeah. I mean, because, Mike, I mean—. I know he got overuse injury information, or "This is hurting, that is hurting, that's why I'm not returning back to the lab from someone." And, I will—. I can—. I'll get a hold of him this morning.

Russell: That'd be great.

Steven: He is actually in your time zone, and so, he's in Washington State.

Russell: Cool.

Steven: So, I'll tell him, you know, to get a hold of you. Or, somehow I'll get you guys connected.

**“So, I'll tell him (Dr. Smith),
you know, to get a hold of you.
Or, somehow I'll get you guys
connected.”**

—Dr. Steven Devor

Russell: That'd be great. I have another question I think is less something that Mike would need to answer and would relate more to you. So we talked about the 16 percent injuries, or I guess we could say drop-out rate. No, actually, the 16 percent refer to the number nine, so yes, that would be the injury rate.

Steven: Yeah.

Russell: We talked about your thoughts on that being high in this study, because essentially anything that's done at high intensity has a risk of increasing injury rates. So I have a quote from Mitch here—and again, you've already given me your thoughts on Mitch—but I have a quote from Mitch here who says that he called you when he found out about the study and basically said, “Why are you accusing me of doing things I didn't do?” His quote from me was that, “I haven't hurt nine people in four years.” And he says that when he did get on the phone with you and ask you what this was all about, that you said that the study did not indicate that these injuries were from CrossFit, and that they could have been from anything.

Steven: Well, that's true. I mean, because, Russell—

Russell: So it's true that you said that? Or is it true as a conclusion?

Steven: Yes, it is. It, I mean it absolutely is, I mean, because we can't—. In any study, I can't control what people are doing outside of the time they're—

Russell: This particular one talked about—

Steven: OK. I can't control what they're doing outside of when they're doing CrossFit or when they're in the lab. And you're right, they could have, for all I know, fallen off a ladder and had an injury, and that's why they didn't come back, but they're reporting to us, in some way shape or form, that I've got an injury, but—. You're right, it might not be from directly from doing CrossFit.

Russell: OK.

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—Russell Berger

Steven: But I think you can make an argument that, if you're compromising a joint in some way or if you're doing things that are making the joint a little more lax, like the ligaments and tendons around the joint a little more lax, and it makes it so you can't do, or something else that you would normally be able to do then does cause the injury—. You're right, technically doing the CrossFit maneuver didn't cause it, but did it maybe contribute to it? Yeah. And again, that's not unlike any high-intensity training program, though. You might not get injured doing the actual activity, but if it beats you up in such a way that later that day you reach for something over your head and it's like, “Ah, damn,” and that's what causes the injury—. You know, was it while you were doing the activity that caused it? No, not officially, but you know what I'm trying to say.

Russell: So, let's go back to your example there. So, you had participants who were in the study who later in the day did fall off a ladder, and in falling off the ladder they

hurt their arm, you would then look at the correlation between them falling off the ladder and having done CrossFit and you would feel safe saying that high-intensity training was really the root cause of that injury?

Steven: Well, no, not—. Russell, no, come on. Not falling off the ladder.

Russell: Well, your example, so—

Steven: Yeah, not falling off a ladder, but—. Let's say you do this workout early in the morning that's high intensity, and you're doing it consistently enough, and later that day you're playing some soccer in the backyard with your son. And your son is a young child and isn't someone that would challenge you. You know, your child is like in elementary school. And they kick the ball, and you sort of lunge for it—something that would not normally cause an injury—but because you're sort of beat up already that causes the injury. Does that make sense?

Russell: It does, and I would argue—and of course this is just my opinion—that that would be completely unproven, and it's just, at that point you're basically just supplying a narrative for how that injury might have been caused, but you can't prove it. Is that accurate?

Steven: Absolutely.

Russell: So I guess the interest that I have is, when we first started talking about this, you implied that the 16 percent injuries were an accurate reflection of what you expected to see from a CrossFit program, but now you're saying that you don't think that that's true, and it really could have been anything. Is that—?

“You implied that the 16 percent injuries were an accurate reflection of what you expected to see from a CrossFit program, but now you're saying that you don't think that that's true” —Russell Berger
“Well, yeah—.” —Dr. Steven Devor

Steven: Well, yeah—. Again, let me clarify then. I think, is 16 percent the high number? It might be. I mean, Russell, I don't know. I've only done this study once. I mean, I think you could do this study again, and handpick a bunch of people, let's say, that are very good athletes at CrossFit, and you might see extraordinarily low injury rates. But I could do the study and pick a group of people that are unfit, and throw them into a CrossFit environment, and I can—. I would bet—. I bet a month of your salary, that you would see a much higher injury rate then. So, 16 percent might be high. Sixteen percent might be right on. I don't know, that's the number we got—.

Russell: Right, right. Well, I'm not even really talking about that, how big the number is. I'm specifically referring to the accurate reflection of that number as injuries from the CrossFit program. And, so, I guess my question is, it sounds like you have anticipation, or an expectation that you would see some injury rate close to this, because of the nature of the program, but I'm not hearing an explanation as to how this data supports that belief, considering you have no idea what caused those injuries, and we also haven't identified if that data is accurate.

Steven: Well, yes, my expectation is that your injury rate will be higher doing high-intensity power training, high-intensity interval training, than it would be doing low-intensity yoga.

Russell: So, you see this data as evidence that that's true?

Steven: I do. But again, I don't think that's necessarily a bad thing. To me, all it does is it sort of highlights the fact that, yes, this can be an amazing way to train. It gets people really super fit—. See, basically the thrust of the entire paper, what the paper's really about. But, there needs to be some caution here. With any high-intensity interval-training program, with any high-intensity power training, you just need to, I think, have a basal level of fitness going into it, and you just need to be careful with it. That's sort of—. That's what we want the message to be.

Russell: I guess, real specifically, my question is: it sounds like you're overlooking the fact that you don't really know if these injuries were related to CrossFit specifically, and you don't really know, at least at this point, if the data was accurately reflected as what really happened. And you were willing to overlook that because you understand high-intensity training to cause this sort of injury rate anyway, and so you think it's an accurate reflection.

Steven: All I know is that when Mike was able to contact

these people somehow, that's what they reported to him—that they had an injury of some sort and that's why they didn't return. So that's why we chalked it up that way. I'm not trying to say, "Well, I know this would happen anyway." I don't really know if that's what happened in my study, but I'm just re-paraphrasing what you just said.

Russell: Right, right.

Steven: I'm not trying to do that.

Russell: But, for the sake of argument, let's say that the data was accurately collected, and there were nine people who were injured. We still don't know if those injuries were related to CrossFit, but you're willing to overlook that portion, at least, and say, basically, "We can safely say that they were related to CrossFit, because I know that CrossFit or high-intensity training causes these sort of injuries at this rate."

**"I don't know the source of
the injury."**

—Dr. Steven Devor

Steven: Well, again, it caused them at this rate in this study—at least, that's our understanding, and—

Russell: Even though you don't know the source of the injury, you feel comfortable saying that?

Steven: Well, no, that's what I was going to say. I don't know the source of the injury. The only thing I know, Russell, is what the people apparently said to Mike. And I'm willing to put stock in that.

Russell: OK. So you think that you guys actually have data that shows these were CrossFit-related injuries?

Steven: Well, I wouldn't say it's data. I'd say it's self-report. It's somebody giving some indication that, "Look, that's why I didn't show back up," and—. That's all I know, that's all I can tell you.

Russell: So you're saying that Mike Smith would have an answer to that question as well?

Steven: I would think so, yes, because Mike is the one that

talked to the people and collected that data, that's correct.

Russell: And I guess, the reason I went on that thread there, is that you told Mitch, basically, that the study doesn't imply that these injuries were the result of CrossFit. So it seems sort of unfair then, or at least, it seems unprofessional—. It seems to lack the professional rigor that you'd see in a scientific study that points to the 16 percent injury rate from the program if you don't actually know if the injuries were caused by the program.

Steven: Well, yeah, I understand. And again, I'm not trying to parse words, but does the paper actually say—. It probably does. It does say that the drop-off rate was from an injury—. And again, Russell, all I can keep going back to is that that's what we had as self-report from the individuals.

Russell: OK, fair enough.

Steven: Because of an overuse injury, or some kind of an injury, so—

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musculoskeletal and metabolic
injury in these programs."**

—Dr. Michael Smith et al.

Russell: I'll tell you, just a reading of the paper, it says, "In spite of deliberate periodization and supervision of our CrossFit-based training program by certified fitness professionals, a notable percent of our subjects did not complete the training program and return for follow-up testing." And then it goes into the next sentence, "While peer-reviewed evidence of injury rates pertaining to high-intensity training programs is sparse," blah-blah-blah, and it cites another paper that shows that there might be some risk. So, basically, the text of the paper directly implies that the 16 percent were missing due to an injury from the program. But then you said to Mitch that that's not what it implies.

Steven: Well— I guess there's an implication, but there's no—. All, again—. (laughter) I'm really not trying to dodge your question or be difficult. All I know is what we have from what people told Mike: that they didn't show back up, so we had no other thing to assume, other than that the training program had caused the injuries. I mean, whether or not—

Russell: So there's some data out there that will explain all of this, basically?

Steven: Well, I hope there's an explanation out there somewhere that will satisfy you and Mitch, because, again, I'm not—

it's not really adding up. This isn't like a witch hunt on my part. This is the basic tenants of putting together a scientific conclusion. You have to have data that supports that conclusion, and so, I'm not seeing it. And I just wonder, first, why it's not in the study. You know, you have the conclusion here, or at least a very strong implication that nine people were hurt, and they were hurt as a result of participating in this program. But I'm not seeing any data that suggests that. And you've even, in a conversation with Mitch, and now me, questioned whether or not they were actually injured by the program. So it, to me, sort of seems like the professional responsibility of the author of the paper is to defend the conclusions with data and show how you connected the dots, and I'm not seeing that.

Steven: Right, that—. Well, but, again, I think that's why the statement in the paper is as it is. Because, we can't say for sure. I mean, is it implied? Yes. And I think it's reasonable to assume that's what happened. But you're right, we can't say that with absolute certainty, other than what the individual—

Russell: So, why didn't the paper say what you just said? I mean, I think that would be a pretty fair statement to put in text: you know, "We can't actually directly point to any CrossFit-related injuries here, but," anything like that, that's more accurate to reality.

"I think that's why the statement in the paper is as it is. Because, we can't say for sure. I mean, is it implied? Yes. And I think it's reasonable to assume that's what happened. But you're right, we can't say that with absolute certainty."

—Dr. Steven Devor

"I think you can look at it a different way and say, 'Well, you know, look, they don't make a very strong statement here, so do they really know that CrossFit did it?' No."

—Dr. Steven Devor

Russell: Yeah, don't worry about satisfying me. I mean, I'm just basically trying to connect the dots of your study, and

Steven: Well, yeah, but, again, Russell, I think that's basically what it does say, in a more academic, formal sort of way. I mean, I think the implication is there, but—

Russell: I mean, it's a direct implication. I mean, I read the

sentence to you. It's basically saying, "Even though we periodized and supervised this program, people got hurt," and then the next sentence is, "There's not a lot of data on this, but there's emerging reports that CrossFit hurts people." Reading between the lines, that says, "Even though we did X, Y, and Z, this program hurt people, but we don't have data that shows that," and you've even questioned whether or not that those injuries can be tied to CrossFit. So, I just don't see that as anything but misrepresentative of the data.

Steven: Yeah, I can understand how you could interpret it that way. I think you can look at it a different way and say, "Well, you know, look, they don't make a very strong statement here, so do they really know that CrossFit did it?" No. I mean, I think you can interpret it that way, and that's why it's left that way for the reader. And, again—

Russell: But, do you think a scientific, peer-reviewed paper should be making statements that basically imply something they don't have evidence for?

Steven: I think scientific papers make statements every day that are not always 100 percent supported by data but allow the reader to draw a conclusion, yes.

Russell: OK, so even when you actually know that the data doesn't—. I mean, this wasn't like an inference from data, like we think the best explanation is—. You don't have that data to show, as far as we can get to without maybe without talking to Mike Smith, you don't have the data to show that any of these injuries were caused by CrossFit, and yet you have a line in the paper that says, in spite of us doing X, Y, and Z, a notable percent of people doing the program were injured.

Steven: No. Again, all we have is the self-report stuff that Mike collected.

Russell: OK.

Steven: And I'm going to have to stick with that.

Russell: And I think that'd be great if we could get him to discuss this with me. I'd like to hear his point of view on that. Like I said, the conversation I had with him, it sounded like he did not want to comment on that, so I'd be leaning on you a little bit to see if you could help me get that.

Steven: No, I can talk to him. Like I said, I'll get a hold of him today, and try and have him connect with you, so I don't think that'll be a problem, actually. Russell, the thing, again, I do feel like, in spite of what you said a few minutes

ago, that this is a bit of a witch hunt, for a pro-CrossFit agenda. And, I think, we are not anti-CrossFit. I mean, quite to the contrary, that's why we're so excited about this data, because it demonstrates in a very curable way, that, regardless of where you're starting, you can still see really big improvements in your fitness, measured two different ways: your percent of body fat and your VO2 max. So—

"I think scientific papers make statements every day that are not always 100 percent supported by data but allow the reader to draw a conclusion, yes."

—Dr. Steven Devor

Russell: Believe me, I understand that. I actually think that's a really unique observation. I haven't seen any studies, really ever, that show those types of improvements to people who are already low in body fat and have a favorable VO2 max. I guess, really, though, I think this has nothing to do with pro-CrossFit. I'm not trying to get you to change your mind, or show that CrossFit is 100 percent safe. What I'm trying to do here is—

Steven: (Laughter)

Russell: Basically, debunk junk science. Honestly, what I see here is an editorialized conclusion in what should be an unbiased scientific paper that stems from data that doesn't seem to exist. And, so, I see that as basically dereliction of duty on the part of whoever wrote this paper, and basically a failure to meet the professional responsibility of accurately reflecting what happened in the experiment.

Steven: Yeah, uh, that's pretty strong. I don't agree.

Russell: I don't expect you to agree. Like I said, that's how I'm viewing this the more I get into it here. I do think there is something clearly wrong with how this was reflected based off what's being shown in the data. And I'd love to get to the bottom of it. And, like I said, I'm not looking to get you guys painted into a corner where you can't

defend—. I'd like to hear somebody explain this, and I've been racking my brain to try and think of how to make sense of four people telling me they never communicated with anybody from the study as to why they never showed up, and the study coordinator telling me that they would have had no way to communicate with people who didn't show up, and how then we get 11 participants with all individual explanations of why they didn't show up, and of the nine injured, how we get explanations of those injuries were really caused by CrossFit. I'm not seeing a way that any of that can happen.

Steven: Yeah, Russell, I understand from an outside point of view your predicament with this. I mean, I get it. I understand how you can be where you are in your mind. I can only tell you what I know, and I will get Mike to communicate with you to the best of my ability.

Russell: That would be great. And even if you don't get Mike to communicate with me, if you can just get him to send whatever data he didn't send you. It sounds like that's the issue, that there is something that he did not include in the data related to the study that you need a copy of, essentially. And, maybe if you could get it, you could answer, just by reading over it, and telling me what you find.

Steven: Very good. Well, let me—. do you have any other questions related to this?

Russell: No, I don't think so. I think that basically covers it.

Steven: OK. OK, well I will get a hold of Mike yet this morning, and um—

Russell: Great.

Steven: I will have—. Does he have an e-mail for you? Or a—. Well, I guess I've got your phone number.

Russell: Yeah, just use my cell phone number. The other option is (email address), which is the email—

Steven: OK.

Russell: That I talked to you through.

Steven: OK. Very good. All right, Russell, well thanks for your time.

Russell: Thank you. I appreciate all the help, and I look forward to hearing from you, or Mike, or both.

Steven: All right. Thanks a lot. Bye-bye.

(End)

Email received two days later from Dr. Steven Devor to Russell Berger:

Russell,

I have spoken with Dr. Smith at Gonzaga University. We will have no further comment on our Journal of Strength and Conditioning Research (JSCR) CrossFit publication.

We have published a completely unbiased, no agenda, thoroughly peer reviewed scientific paper in what is likely the most highly thought of scientific strength and conditioning journal. We stand behind all of the data that we either collected or that was reported to us. And in spite of what some might think, we have absolutely no reason to misrepresent any aspect of our publication to anyone.

We believe our paper provides a very positive outcome for the CrossFit industry. Our data clearly demonstrates many positive health and fitness outcomes are achievable by those that appropriately engage in high intensity power training (HIPT). However, we also believe appropriate caution should be used when anyone engages in HIPT.

Thank you for your time and the opportunity to contribute to your writing.

Regards,

Dr. Devor

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Kinesiology Program - Department of Human Sciences,
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