# Online Appendix for "The impact of role models on women's self-selection in competitive environments"

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This Online Appendix consists of five sections. Appendix A shows an overview of the experimental procedure. Appendix B contains screenshots of the actual pages shown to subjects in the experiment. Appendix C provides transcripts to the four videos used in the two role model treatments. Appendix D shows our standard specification on tournament entry controlling for role model fixed effects. Appendix E shows the initial list of potential role models that were collected in a pre-test.

# A Overview of Experimental Procedure

| 1                                      | 2              | 3                            | 4                                    | 5                                      | 6                               | 7                             | 7                                    | 8                            |
|--|----------------|------------------------------|--------------------------------------|--|---------------------------------|-------------------------------|--------------------------------------|------------------------------|
| Demo-<br>graphic<br>question<br>-naire | Treat-<br>ment | Manipu-<br>lation<br>check 1 | Addition<br>task 1:<br>Piece<br>Rate | Addition<br>task 2:<br>Tour-<br>nament | Addition<br>task 3:<br>Choice 1 | Submit<br>task 1:<br>Choice 2 | Relative<br>self-<br>assess-<br>ment | Manipu-<br>lation<br>check 2 |

# **B** Instructions and Questions

#### B.1 Intro

Screen 1 (Introduction and summary of the experiment)

## Welcome!

Thank you very much for supporting our research. This HIT consists of three parts. You will receive a fixed payment of \$5 for completing all parts of this HIT. In addition, you can earn a bonus depending on your performance in the second part. All of your information will be treated anonymously and used solely for our research.

At the end of the HIT we will show you a random code. You must copy the code into the original window of Amazon Mechanical Turk in order to receive your payment for this HIT. Therefore, it is very important that you leave the original window open for the whole time.

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# B.2 Demographic questionnaire

# Screen 2 (Demographic questionnaire)

| What is your gender?  |
|---|
|   |
| o male  |
| ○ female  |
|   |
| How old are you?  |
| now old are you!  |
| [Please choose]   |
|   |
|   |
| What is your highest educational achievement?   |
| Please select the highest level of qualification you have obtained.   |
| Calculation Left school with no qualifications  |
| ○ Still in school   |
| Secondary school-leaving certificate / Junior High Diploma  |
| High school diploma / Intermediate / General Certificate of Secondary Education, secondary school-leaving certificate or equivalent |
| Ompleted apprenticeship   |
| Vocational baccalaureate diploma / vocational secondary certification   |
| A-levels / International Baccalaureate / higher education entrance qualification  |
| Vocational university / university of applied sciences / university degree  |
| Other degree:   |
|   |
|   |
| Next  |
|   |

#### B.3 Treatment

[In the experiment, subjects view one of 5 videos. There are two different videos for the female role model treatment, two different videos for the male role model treatment, and one video for the no role model treatment. In this Appendix, we show a screenshot from the video and the corresponding control and manipulation check questions for the video about Nour Al Nuaimi and for the video for the neutral condition. The questions for the other male and female role model videos are the same as for the video on Nour Al Nuaimi except for the respective names.]

#### Screen 3 (Introduction to Treatment)

#### Part 1

Before clicking on "Next", please TURN ON THE SOUND & of your computer.

On the next screen, we will show you a video. The video will be followed by questions on how you perceive the person you saw in the video.

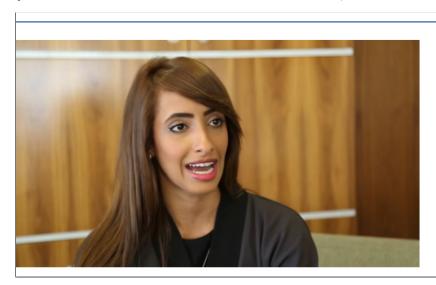
The video is about 5 minutes long. After the video is finished, you will be automatically forwarded to the next page.

Please make sure that the SOUND of your computer is now ON as you will not be able to repeat the video.

Next

# Screen 4 (Treatment video)

[Screenshot from the video of Nour Al Nuaimi (female role model treatment)]



[Screenshot from the video on Uluru (no role model treatment)]



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# Screen 5 (Control question)

 $[{\rm Control\ question\ for\ the\ role\ model\ videos}]$ 

|  | N |
|--|---|
|  |   |
|  |   |
| ontrol question for the neutral video  |   |
| ontrol question for the neutral video  |   |
|  |   |
| ontrol question for the neutral video]  Name one thing that appeared in the video. |   |
| <u> </u>   |   |

# B.4 Manipulation check 1

[This part of the experiment consists of a survey on the perceived personal characteristics of the role models shown in the video. The answers serve as part of our manipulation check. Here, we show which questions subjects received who saw Nour Al Nuaimi. In other role model treatment, the respective name of the role model was displayed. In addition, we show the items subjects in the no role model treatment received.]

#### Screen 6 (Instructions for the manipulation check questionnaire)

Please note when answering the following questionnaire:

- There are no right or wrong answers in this part of the HIT. Simply describe your perceptions honestly and accurately.
- Deciding on an answer may be difficult for some of the statements. If you have a hard time deciding, choose the answer that is MOST true.
- Some of the items will seem repetitive. Do not look back at your previous answers, simply answer each
  question honestly.

Next

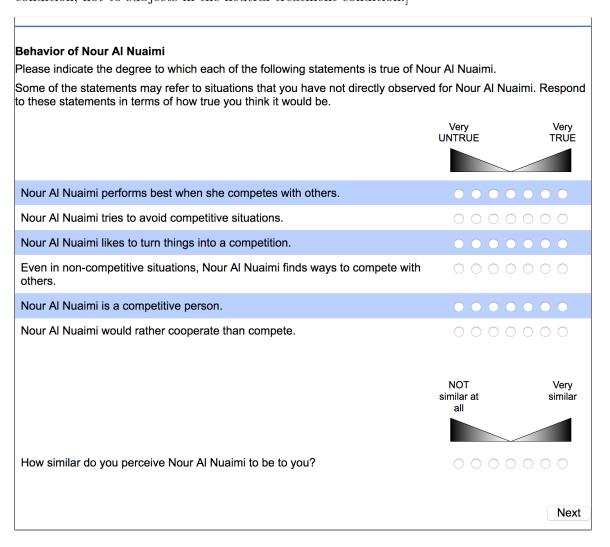
# Screen 7 (Questions on characteristics)

| Characteristics of Nour Al Nuaimi   |         |                           |      |  |  |
|---|---------|---------------------------|------|--|--|
| Please indicate on the scale how you would describe Nour Al Nuaimi on each dimension. |         |                           |      |  |  |
|   |         |                           |      |  |  |
| successful  | •••••   | unsuccessful              |      |  |  |
| unlikeable  | 0000000 | likeable                  |      |  |  |
| powerful  | •••••   | powerless                 |      |  |  |
| agreeable   | 0000000 | disagreeable              |      |  |  |
| mathematically talented   | •••••   | mathematically untalented |      |  |  |
| risk averse   | 0000000 | risk loving               |      |  |  |
| insignificant   | •••••   | influential               |      |  |  |
| selfish   | 0000000 | not selfish               |      |  |  |
| competent   | •••••   | incompetent               |      |  |  |
| ineffective   | 0000000 | effective                 |      |  |  |
| not manipulative  | •••••   | manipulative              |      |  |  |
| unsupportive  | 0000000 | supportive                |      |  |  |
| pleasant  | •••••   | unpleasant                |      |  |  |
| not caring  | 0000000 | caring                    |      |  |  |
|   |         |                           |      |  |  |
|   |         | (                         | Next |  |  |

| ease indicate on the scale how you would |         |              |  |
|--|---------|--------------|--|
| large                                    | •••••   | small        |  |
| insignificant                            | 0000000 | influential  |  |
| beautiful                                | •••••   | ugly         |  |
| cold                                     | 0000000 | hot          |  |
| colorless                                | •••••   | colorful     |  |
| boring                                   | 0000000 | exciting     |  |
| impressive                               | •••••   | unimpressive |  |
| dry                                      | 0000000 | wet          |  |
| dangerous                                | •••••   | safe         |  |
|  |         |              |  |

#### Screen 8 (Items on competitiveness and similarity)

[This screen was only shown to subjects who were either in the male or female role model condition, not to subjects in the neutral treatment condition.]



#### B.5 Addition task 1

Screen 9 (Introduction to Addition tasks)

#### Part 2

Part 2 consists of **four rounds** where we will assess your mathematical skills. None of the rounds will take more than 3 minutes. One of these rounds will be randomly selected as a basis for an **additional performance-dependent bonus**, which you can earn on top of the fixed payment of \$5 that you get for completing all parts of this HIT.

Next

#### Screen 10 (Introduction to the Piece Rate task)

## Round 1 - Piece Rate

In the following, you will be asked to calculate the sum of five randomly chosen two-digit numbers. You will be given 3 minutes to calculate as many of these sums as possible.

You are welcome to use a calculator or make notes on scratch paper.

Next

# Screen 11 (Instructions Piece Rate task)

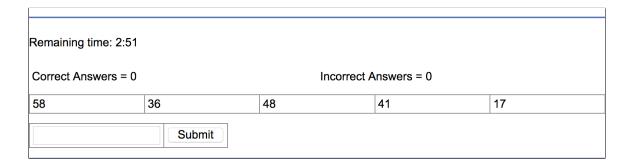
| xample:  |   |   |   |   |   |
|--|---|---|---|---|---|
| •  |   |   |   |   |   |
| 67   | 46  | 76  | 88  | 95  |   |
| 372  |   | Submit  |   |   |   |
|  |   |   |   |   |   |
| ubmit an ansold whether you go so a second a calculate a | wer by clicking our answer is cas soon as you sas many of the | the submit butto<br>correct or not. In<br>submit an answe<br>se sums as pos | on with your mous<br>the above examp<br>r, the next 5 numl<br>ssible. | e. When you en<br>le, the given an<br>pers will appear. | answer using your keyboard. You<br>nter an answer you are immediate<br>swer is correct: 67 + 46 + 76 + 88<br>. Remember, you have 3 minute<br>ment, you get 50 cents for each |
| lease let us   | know if you u   | nderstand thes  | e instructions. If  | anything, wha   | t did you not understand?   |
|  |   |   |   |   |   |
|  |   |   |   |   |   |
|  |   |   |   |   |   |
|  |   |   |   |   |   |
|  |   |   |   |   | Next  |

# Screen 12 (Note on timer and calculator)

On the next page, **the timer will start automatically**. If you would like to use a calculator or make notes on scratch paper, please have calculator, paper, and pen ready before pressing "Next".

Next

# Screen 13 (Addition task)



# Screen 14 (Number of correct answers)



#### B.6 Addition task 2

#### Screen 15 (Explanation on tournament groups)

#### Round 2 - Tournament

As in Round 1, you will be given 3 minutes to calculate the correct sum of a series of five 2-digit numbers.

However, for this round your payment depends on your performance relative to that of a group of other workers in this HIT. Including yourself, each group consists of four people: two male and two female participants. We will assign the three other members of your group randomly over all AMT workers who complete this HIT.



Next

## Screen 16 (Explanation on tournament payment)

| If Round 2 is the one which is randomly selected for your bonus payment, then your earnings depend on the number of correct answers you give compared to the three other people in your group. The group member with the highest number of correct answers will receive a bonus of <b>\$4 for each correct answer</b> , while the other participants receive <b>no bonus</b> payment. |
|---|
| You will not be informed of how you performed in the tournament until all rounds have been completed. If there are ties the winner will be randomly determined.   |
| Please let us know if you understand these instructions. If anything, what did you not understand?  |
|   |
|   |
|   |
|   |
| Novt  |
| Next  |

## Screen 17-18 (Addition task and number of correct answers as in Task 1)

[Subjects worked on the addition task using an identical screen as in Addition Task 1. Afterwards, they were shown the number of correct answers as in Addition Task 1.]

#### B.7 Addition task 3

Screen 19 (Explanation on payment scheme choice)

#### Round 3 - Choice

As in the previous two rounds, you will be given 3 minutes to calculate the correct sum of a series of five 2-digit numbers. This time, you can **choose** yourself which of the two previous **payment schemes** you prefer to apply to your performance on the third round.

Your earnings for this round are determined as follows:

- If you choose the piece rate you receive 50 cents per correct answer .
- If you choose the tournament your performance will be evaluated relative to the performance of the other three participants of your group in the previous tournament. If you give more correct answers than your group members did in Round 2, then you receive eight times the payment from the piece rate, which is \$4 per correct answer. You will receive no payment for this round if you choose the tournament and do not give more correct answers than the others in your group did in the previous tournament. You will not be informed of how you did in the tournament until all rounds have been completed. If there are ties, the winner will be randomly determined.

#### Screen 20 (Choice between payment schemes)

| Please select the payment scheme you would like to apply to your performance in the third round. |      |
|--|------|
| O Piece rate   |      |
| ○ Tournament   |      |
|  |      |
|  | Next |

#### Screen 21-22 (Addition task and number of correct answers as in Task 1)

[Subjects worked on the addition task using an identical screen as in Addition Task 1. Afterwards, they were shown the number of correct answers as in Addition Task 1.]

#### B.8 Submit task 1

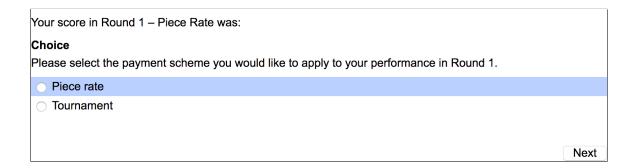
Screen 23 (Explanation on submitting task 1 results)

## Round 4 - Submit Your Round 1 Answers

You do not have to perform anymore calculations in this round. Instead, your bonus payment in this round depends again on the number of correct answers you provided in Round 1. You now have to **choose** which **payment scheme** you want applied to your previous performance in Round 1. You can either choose the piece rate payment scheme or the tournament payment scheme.

Next

#### Screen 24 (Choice between payment schemes)



## B.9 Relative self-assessment

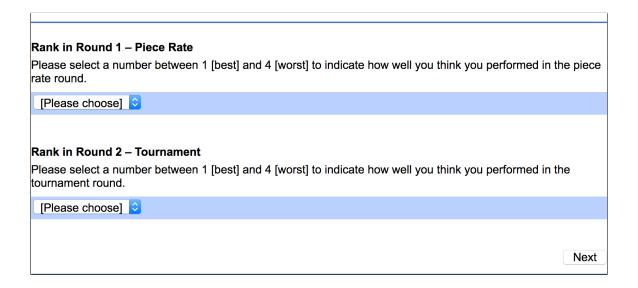
#### Screen 25 (Explanation relative self-assessment)

On the next page you will be asked to estimate your performance relative to your other group members. If you think you performed better than all other group members, your estimated rank would be 1. If you think you performed worst, your estimated rank would be 4. For each correct estimation you will receive a **bonus of \$1**.

In case of ties in the actual ranks, we will count all possible ranks as correct. For example, if you tied for the second place, then answering rank 2 and rank 3 is correct.

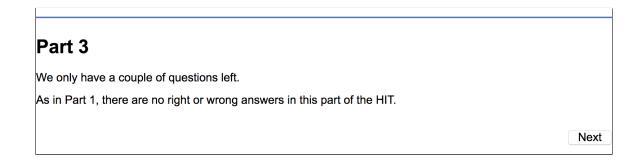
Next

#### Screen 26 (Relative self-assessment)



## B.10 Manipulation check 2

Screen 27 (Introduction for the final questionnaire)



Screen 28 (Manipulation check 2 questionnaire and subjects' math background)

[Questions on whether the role model is perceived as a role model are taken from ?.]

| Personal attitudes   |                     |                     |
|--|---------------------|---------------------|
| Please indicate the degree to which the following statements are true.                         |                     |                     |
|  | Very<br>UNTRUE      | Very<br>TRUE        |
|  | SITINGE             | 11102               |
|  |                     |                     |
| I knew Nour Al Nuaimi before seeing this video.  |                     |                     |
| I think Nour Al Nuaimi's behavior is worth striving for.                                       | 0000                | 000                 |
| Nour Al Nuaimi is someone I could identify with.   | • • • •             | 000                 |
| Nour Al Nuaimi could be a role model for me.   | 0000                | $\circ \circ \circ$ |
| Nour Al Nuaimi represents someone I would like to be.  | 0000                | 000                 |
| If I perform poorly, others will attribute my poor performance to my gender.                   | 0000                | $\circ \circ \circ$ |
| Men are more skilled at solving math-related problems.   | 0000                | 000                 |
| It is important for me to be good at math.   | 0000                | $\circ \circ \circ$ |
|  |                     |                     |
| 1. What is your background in math?  |                     |                     |
| Please indicate all the options that apply to you.   |                     |                     |
| ☐ I have no special knowledge / interest in math.  |                     |                     |
| ☐ I am taking / took advanced math classes in highschool.                                      |                     |                     |
| $\hfill \square$ I major / have majored in a mathematical field in college (e.g., engineering, | math, physics, ecor | nomics).            |
| ☐ I have had or have a job that involves math skills.  |                     |                     |
|  |                     |                     |
|  |                     | Next                |

#### B.11 Outro

#### Screen 29 (Instructions for payment code)

Thank you for completing this HIT!

You will receive a reward of **\$5** plus your **bonus**, which depends on your performance in Part 2. We will calculate your bonus after the HIT has been completed and add it to your reward through AMT's "award a bonus" function.

Below you can find the code you need in order to complete the HIT on Amazon Mechanical Turk. Please copy and paste this code into the original window in Amazon Mechanical Turk. Do not press "Next" without having copied the code. You will not receive payment for this HIT without the code! After copying the code, you can close this browser window.

Code: B75LhwgJHN

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#### Screen 30 (Thank you)

# Thank you for completing this HIT!

Your answers were transmitted, you may close the browser window or tab now.

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 $\mathbf{C}$ **Transcripts** 

C.1Serena Williams

Anchorwoman: Serena Williams is in pursuit of her 17th Grand Slam singles title

at the US Open. Andy Roddick sat down with Williams to talk legacy, fashion, and

being Andy's second tennis star during his stay in the Big Apple.

Serena Williams: I'm always behind Roger.

Andy Roddick: So you're a little bitter that I interviewed Roger before I interviewed

you?

Serena: No, I'm just always behind Roger. In Grand Slams, everything. Everyone is

behind Roger, though.

**Serena:** I'm always saying when I am playing my best, it is difficult for anyone to

beat me.

[sound cut]

**Serena:** Just staying positive, and staying happy and calm on the court.

**Andy:** I have known you since we were kids.

Serena: Yes, when I beat you.

Andy: Well, you did not even let me get to my first question. You just had to pipe

in with that "you beat me." I mean--

Serena: [laughs]

A-22

**Andy:** So the next thing I was going to say before you completely ruined it was that you beat me when we were ten years old. Where does that rank in your list of career accomplishments?

**Serena:** Well for me it is number one or number two. The reason it ranks so high is because through you I have indirectly basically beaten everyone on the men's door.

**Andy:** So it is like the Kevin Bacon rule of tennis: You're only one win away from Pete, Roger--

Serena: Exactly, I have beaten Roger, because I have beaten you; I have beaten Raphael Nadal, I have beaten Pete Sampras. You name them I have beaten them because I beat you.

Speaker: From the public courts of Compton, California, to US Open Champion--

**Andy:** You have a lot of history here, good and bad: your first slam victory, some on-court incidents. We both had some meltdowns here before [laughs].

Serena: [laughs]

**Andy:** What is your relationship like with this tournament when you come back? Is it good, bad?

**Serena:** Being American is always, you know-- It is so special to play on [sic] Arthur Ashe Stadium. It is so special to come out here and play in the Grand Slam. Even though I've had some different experiences here, my first and best memory is winning here in 1999. So it doesn't get better than that.

Andy: I'd be remiss if we were at the US Open and we didn't talk about unfortunate wardrobe choices. How do you--

**Serena:** Tell me, what are you talking about? I've liked my wardrobe choices at the open.

Andy: What I want to know is how do you think I would look like in a catsuit?

**Serena:** I think you would look really hot in a catsuit. I think you would look really hot. We would of course have to adjust it and make it a little longer. Maybe we just gave it a full length leg.

Andy: Would my butt be bigger than yours in a catsuit?

**Serena:** That catsuit was fabulous. Yes, because you have a really big butt [laughs].

Andy: [laughs]

**Serena:** You have a huge butt. It's underrated.

**Andy:** That's heights of hypocrisy. That's heights of hypocrisy that I haven't seen before.

Serena: It is underrated.

**Andy:** Two girls from Compton in a predominantly white sport, coming through, being the best. I mean, if you get one story like that—but you have a sister who has accomplished the same thing. Are you ever able to grasp the enormity of that and what it all means?

Serena: Not yet. I feel like myself and my sister we still are playing and we want to do well. I feel like if I were to sit back and I were to think, "Oh my god that is kind of cool!", then I would become satisfied. I would be, like, "Why am I still playing tennis?" So, I try not to think about it too much, but I do see somewhat the fruits of our labor. There is [sic] so many American ladies playing right now. So many African

American ladies doing well. It is really exciting to see everyone doing so well and knowing that the torch will be passed.

music and infograph are blended in: "Most Grand Slam Women's Singles Titles (Open

Era): Steffi Graf 22, Chris Evert 18, M. Navratilova 18, Serena Williams 16"]

Andy: What's left to accomplish?

Serena: Records. Right?

**Andy:** Don't ask "Right?" to me. I never broke a record.

**Serena:** You did, you had a serving record.

**Andy:** That's broken. That's gone now. I don't even know I had one.

**Serena:** You had it for a while.

**Andy:** For a little bit. It's called renting it. You own it.

Serena: [laughs] Records are always made to be broken. I don't know if I can break some records, but there's [sic] some records that I would like to break and that I have broken. So, I play now for history, and I also play now for fun.

#### C.2Nour Al Nuaimi

Nour Al Nuaimi: My name is Nour Al Nuaimi. I recently graduated from the Harvard Business School with an MBA. Let me start off from the beginning. I went to high school in Sharjah and I went to [foreign language] private school. I graduated and went to the American University of Sharjah. Initially my major was architecture. My parents wanted me to be an engineer. I loved drawing and it was just a natural fit. However, a good mentor/friend of mine suggested that I consider majors in business administration. Amongst these majors I selected finance, because it was the most technical of majors. In addition to the fact that it opens up so many different career paths such as corporate finance, investments, banking.

During my time in the US, my English wasn't that great. I had kind of a thick accent. So I would watch TV series such as Grey's Anatomy or Friends. I would listen to how someone is pronouncing a certain word. I would pause, repeat it, and then continue watching all my show [sic]. It took some time, about a year or so, to have good English. After the US, I graduated and wanted to be a trader. That came from my time interning with Deutsche Bank. I walked into the trading floor and I saw, and I heard, and I felt the excitement coming from the trading desks. Eight computer screens in front of them. They were speaking on two phones, sometimes, yelling, buying, selling stuff. I knew that I wanted to do that. Trading basically is buying and selling securities, like stocks, to make a profit. The strategy is simple, but it takes experience to learn how to do that correctly over and over again.

I decided to do it [unintelligible 00:02:11] full-time at Standard Chartered Bank. So I was with Standard Chartered Bank for about three years. I was very successful in my role. I'm glad to have had a mentor that believed in tough love. He gave me thirty seconds, literally, to prepare for a meeting. My first meeting ever. And told me go. That was a terrifying feeling. It was in my first month on the job, but with time and going through a lot of other experiences like that, I've developed a thicker skin.

After my time at Standard Chartered Bank, I decided to get an MBA in order to benefit my career in the long run. I decided to go to the Harvard Business School. A lot of people actually asked me, "Why do you have to go abroad to get your MBA?" To me, the value of an MBA was 30%, only 30% academic, and 70% everything else. And by everything else, I mean extracurricular activities, CEOs coming to school and

giving talks. Even socializing with your friends. My peers were very successful, from all over the world, and have had amazing experiences in their life. I learned a lot from them.

After my time at HBS, I decided to work in New York for a couple of months to supplement my learning and my MBA. I worked at Perella Weinberg Partners, which is a boutique investment bank in New York City. I did that for three months. I learned a lot from the asset management function. It was a different working environment, working in a city like New York. If you asked me five, ten, fifteen years ago that I'd be where I am today, I wouldn't believe you. What I feel drove me to here was, number one, my education, number two, my experience at Standard Chartered Bank, and, number three, my MBA at the Harvard Business School. It opened up so many doors and opportunities that I did not think possible. My goal with these three things that I have is to, number one, continue to challenge myself both professionally and personally in the years to come. To continue to be a sponge, to learn as much as possible, and to further develop my skillset. From a more long-term perspective, is to hopefully one day start my own investment company or fund that invests in companies in emerging markets across the globe that emphasize and focus on social development.

# C.3 Roger Federer

Andy Roddick: --talk about Michael Jordan, you talk about Tiger Woods, they all talk about, they are competitors. These guys are built. They'll rip your head off. They are just these insane guys. But I don't feel like that adjective is applied to you, when people are discussing you. It has to be in there, right? It is not all talent?

Roger Federer: No, it cannot be all talent. I mean, I have worked hard. I think it has got to be that fire and ice. I think, I am more in the part where I love winning,

and the other guys are maybe more in the "I hate losing" bit. And because I really

enjoy winning, I enjoy playing. Maybe I don't show it, but I have that grit.

Andy: With all you've accomplished and the long list of accolades you have: What

would you rate as your proudest moment or accomplishment of your career? Must be

nice to have options by the way--

Roger: It is good to have options, yes, absolutely. It probably is winning Wimbeldon

the first time in 2003 and then becoming world number one at the beginning of 2004.

It is just like the ultimate achievement in my opinion. That is when the career could

have ended right there already.

Andy: You took my spot of number one, so I don't really appreciate that.

[sound cut]

Andy: We've never talked about the Wimbeldon 2009 final. Going to the locker room

and I am at my locker, being very emotional, breaking down. It was a heartbreaking

loss. The thing that I remember is your team coming in, you giving them silent fist

pounds, and giving them hugs, but it was in a very reserved manner. Because it was

like you were taking into consideration that this was hard for me. Do you remember

that moment at all?

Roger: That moment is probably tougher for you than it was happier for me. I think

it is so important to respect your fellow athletes and competitors. I know how hard

you've tried and how difficult it must be, because unfortunately you can't have it all

and that match--

Andy: Well you can. You selfish bastard.

A-28

Roger: Sort of-- No, but seriously, you deserved it so much. I think that was for me a totally normal thing to do and nothing extraordinary, really.

Andy: It was impressive to me. I certainly appreciated it.

If you had to choose one person who's had the biggest impact over the course of your career, who would that be?

Roger: Peter Carter. For me, he was a very important figure. He was my coach when I was about 10 years old until 14 and then from 16 again until about 19. He was like a bigger brother for me, almost like a father figure.

**Andy:** How did his death change you?

Roger: It shook me. It woke me up and made realize how fortunate I am to be a tennis player and how much he would want me not to waste anything. I think this is when maybe my career went into overdrive. I was like, "Okay, I want to make Peter proud even though he is not with us anymore today."

**Andy:** Looking back, is there anything you regret?

Roger: I wish I could have maybe realized my potential two years earlier, start to work really hard earlier, understand what I was trying to achieve, what was possible. But at the same time, I think, all of that was good for me later on. That I got all the stuff out early: the anger, the sadness, the pressure. I had to deal with so much, I felt, between 16 and 22 that later on made me the player I am today.

**Andy:** So the storyline is coming into the US open: There's a weird number next to your name in the draws: Number 7, which just looks foreign. How do you react to that?

Roger: I am more focused on myself than on what the people are saying or what people think of my game. Because I was struggling with a bit of a back thing, my confidence maybe went away for a little bit. I feel really confident again and know that I have got a chance. Whereas maybe a month or two ago, I was really not sure.

**Andy:** Evidently in sports, no matter how great you are, even the greatest deal with time and age.

Commentator: Roger Federer is out of Wimbledon.

Commentator: [crosstalk] [unintelligible 00:03:55]

**Andy:** What is the hardest part for you, as far as realizing you're mortal?

Roger: I am aware that it's been a difficult year. I am sort of fighting back. When you are younger—17, 19, 21—you have a bad back half a day and then it's all gone. Then it becomes two days. And then all of the sudden, next thing is like five days. That's when it becomes unsettling and not a lot of fun when you're playing too often with pain. But I think it's going to be definitely more the mind and the body dictating how long I can play. But if I take care of it, I have passion for it, and the results are still there, I think I am going to still play for some time.

#### C.4 Marc Cuban

**Interviewer:** Realize, that you were going to be exceptional— If you go back to Pennsylvania, Indiana or Dallas, at what point did you kind of have a feeling that things were going to happen?

Marc Cuban: When I was about twelve years old. I remember asking my dad-- I wanted new basketball shoes because I was a basketball junkie back then. He was like,

"Well your shoes work. If you want a new pair of tennis shoes, you have to go out there and get a job." I'm like, "Dad, I'm twelve years old." It just so happens, he was playing poker with his buddies. One of his buddies was like, "Well, I got a job for you. I've got these garbage bags that we distribute. You could sell them door to door." I am like, "Okay." It was when I was selling them and realizing that I like to sell and that I could sell. I recognized that selling was about providing a service and creating value for people. I knew literally back then that I could always succeed. I mean, I remember I was sixteen, I think, when I started a stamp company and started going to stamp shows and trade shows. Just working a little bit harder than other people and trading up from one stamp to the next. I remember one time, I started with a quarter and bought a stamp and left with fifty dollars thinking, "Hey if I could do this I could do anything." It is not that everything worked. I failed a lot, but I never ever felt like I wouldn't be able to work hard enough to succeed.

**Interviewer:** Well, you have an extreme passion for the Mavs. Even the casual viewer can see how passionate you are. Do you think that that passion transcends into the way you approach business?

Marc: Yes, I think it was the other way around. I think it was the passion I've always had for business and being an entrepreneur that transfers into the Mavs. I've always been passionate. Some people thought it's more OCD than anything else, which I think is a great trait for an entrepreneur. I mentioned the stamp business. I would stay up till three, four in the morning, even though I had to get up and go to school, and read Linn's Stamp News and Scott's Stamp Journals, and have them all memorized. I used that to give myself an edge. Even when I was in college, I'd be in the library reading business books, looking for business biographies, and reading all I could about business. When I had Microsolutions, I started with no money. I'd pull all-nighters in front of borrowed computers, teaching myself software and how to

program. It is just I've always just really enjoyed the competition of business. I think in the sports business I'll talk to our players. It'll be, like, "Well, you guys compete for 48 minutes. You practice a couple of hours. You work on your game independently a couple of hours." But the ultimate sport is business, because you have to compete with everybody. You have to do it 24 by 7 by 365 days a year forever. There's always somebody out there trying to kick your butt. There is always somebody who looks at your business and says, "I can do that better. I have a better idea." You have to compete with that person. All the while you have to make your customers happy, your employees happy. It is the competitive side of me and any entrepreneur that I think that has to drive you. I think that carries over into the Mavericks: I want to win and I want to compete.

Interviewer: Well, when you started Microsolutions it was a small company.

**Interviewer:** What advice would you give small business owners?

Marc: Love what you do. I think too many people think they have to find the one idea. There is nothing wrong with failing. I've told a lot of people it doesn't matter how many times you fail, if you get it right you're an overnight success. All you've got to do is get it right one time and you're that overnight success. I sold powdered milk and that was a disaster. My senior year project in Indiana was opening up a bar that got closed because of a wet-t-shirt-contest with a sixteen-year old. That was a disaster. That was good, because it kept me out of the bar business. I got fired from my first job in the software business because I wanted to close a deal instead of going out and closing a sale. I mean instead of coming in and sweeping the floor. It didn't matter how many times I failed, I just kept on going and going and going. Entrepreneurs need to realize that sometimes it is not the idea, it's not who you know, it's not how much money you have access to. It is really finding something

that you really love to do. I had no idea I loved computers and technology. None. I mean I took one class in Indiana in computers, and I cheated to get through it. I was [unintelligible 00:04:51]. Then I bought a little PC a 99/4a from Texas Instruments for 99 dollars. I started teaching myself to program. Four hours later, five hours later, I would look up and I'd been working this entire time, and I loved it. So that was the difference: I failed a lot of times. I really didn't know where I'd find my success. Then all of a sudden I started playing with PCs and technology, and it just clicked. [cut]

**Interviewer:** In what order of importance would you put when you look at technical understanding, instinct, creativity, or believing that you can do something. What is most important?

Marc: I think the most important is knowing your strengths and weaknesses and knowing what you enjoy doing. If you look at it as a job, you've already lost. It is not going to be your passion. You are going to count the hours. If you look at it as something you love to do and then you know what your strengths are, then you can leverage those strengths in your business and in helping others. Once you recognize your weaknesses, then you can work with people that complement you. I mean, in every one of my businesses, I've had a partner who is very anal. Martin Woodall, Todd Wagner—incredibly anal people. Perfectionists, because I am a slop. I am a big picture, think about what's around the corner, how is technology going to change things, how can I change this industry. Making sure that there is somebody there to dot the i's cross the t's and keep me on the baselines. Recognizing my weaknesses is just as important as recognizing my strengths and my core competencies and having a passion to do them.

## D Validation of role model choice

This section describes our procedure to identify potential female and male role models for our experiment. For our treatment to work, the individuals we present in our videos need to be perceived as role models for competitiveness. In a pretest, we searched and collected twelve videos of female and male individuals that we thought could serve as role models (see Appendix E for the list of potential role models).

These videos were then evaluated by 1,405 AMT workers (different from the subject pool in our experiment) who answered a short survey including four questions to examine whether they perceived these individuals as role models for competitiveness. Subjects gave their answer to all items on 7-point Likert scales and the exact questions are displayed in Online appendix B. Cronbach's alpha of the composite role model variable is 0.8871, indicating its reliability. All of the potential role models are successfully working in competitive environments and are interviewed about their career path. In the videos, they stress their willingness to engage in competitive behavior in order to be successful, and how much they enjoy to compete. Role models' perceived competitiveness is measured using the six items on competitive motivation from the Motivational Trait Questionnaire from ?. Cronbach's alpha of the composite competitiveness variable is 0.8368, indicating that it is reliable.

According to the literature, role model behavior is more likely to be imitated if the role model is perceived as likeable, if her behavior is rewarded, and if she is similar to the observer (?). To examine whether likeability, perceived success, and similarity predict whether a person is seen as a role model, we run ordered probit regressions where the dependent variable is subjects' answer to the question whether the person seen in the video could be a role model. Answers were given on a scale ranging from 0(=very

untrue) to 6(=very true). As independent variables, we include subjects' ratings on whether they thought the person in the video was likeable, successful, competitive, and caring. We proxy for similarity between role model and subject by including a dummy reflecting subjects' gender. Results are presented in table A-1 at the end of this section.

We find that perceived likeability and the extent to which a person is seen as caring, positively predicts whether she is seen as a role model. This result holds for both, female and male role models. However, being perceived as competitive generally has a negative impact on the eligibility of female role models (column (1)), but it has no such impact for male role models (column (2)). Furthermore, female subjects are much less likely than male subjects to accept a male person as potential role model (column (2)).

Out of the twelve potential role models in our pre-test, we select two male and female role models who are perceived as competitive and still displayed equal levels of likeability and role model potential.

Table A-1: Subjects' perception of role models

Results in this table are based on a pre-test, in which 1,405 AMT workers that do not belong to the subject pool of this paper rated one of the twelve potential role model videos listed in Appendix E. Coefficient estimates from OLS regressions where the dependent variable, "Role model", measures the extent to which the person in the video is perceived as a role model by subjects, are presented. \*\*\*,\*\*, and \* represent statistical significance at the 1%, 5%, and 10% levels, respectively.

|                 | Female role model (1) | Male role model (2) |
|-----------------|-----------------------|---------------------|
| Likeability     | 0.486***              | 0.536***            |
|                 | (6.50)                | (7.62)              |
| Success         | 0.079                 | 0.179**             |
|                 | (0.98)                | (2.35)              |
| Competitiveness | -0.097**              | 0.003               |
|                 | (-2.44)               | (0.07)              |
| Caring          | 6.202***              | 4.748***            |
|                 | (7.30)                | (5.43)              |
| Female subject  | -0.011                | $-6.526^{***}$      |
|                 | (-0.01)               | (-4.38)             |
| Adjusted $R^2$  | 0.342                 | 0.374               |
| Observations    | 648                   | 757                 |

# E List of potential role models

This table shows the initial list of potential role models that were collected in a pre-test to find suitable role models for the experiment in this paper. Links to the videos used in the pre-test are provided behind role models' names. These videos were elicited by 1,405 AMT workers that do not belong to the subject pool of this paper. AMT workers were asked to indicate whether "the person in the video could be a role model for me". Answers were given on a 7-point Likert scale Some videos may not be online anymore, but are available from the authors upon request.

| Female role models (1)      | Male role models (2)         |
|-----------------------------|------------------------------|
| 1. Sheryl Sandberg          | 1. Marc Cuban                |
| 2. Marissa Mayer (extract)  | 2. Kevin Systrom             |
| 3. Serena Williams          | 3. Roger Federer             |
| 4. Jennifer Fan             | 4. Ryan Israel               |
| 5. Nour Al Nuaimi           | 5. Rodolfo Martell           |
| 6. Woman in Sales & Trading | 6. Wall street trading floor |