

## THE LONE WOLF OF WALL STREET

THE CONNECTION BETWEEN ISOLATED FINANCIAL DECISION-MAKING AND OVERCONFIDENCE Dominik Piehlmaier, Dee Warmath, Cliff Robb, University of Wisconsin-Madison

## Our primary outcome of interest



Our primary independent variable



## Our research questions

Is there a relationship between sharing investment decision-making and level of overconfidence?

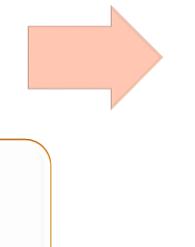
Does that relationship differ by the person with whom you share?

## O·ver·con·fi·dence 'ˌōvərˈkänfəd(ə)ns/ the quality of being too confident; excessive confidence. "you have to guard against overconfidence"

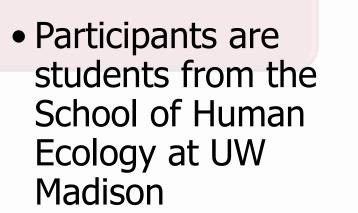


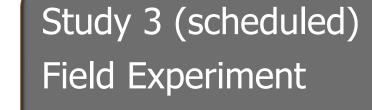
## Study 1 Survey Data Analysis • FINRA Investor

Survey (n=2,000)



Study 2 (ongoing)
Experimental Pilot
Study



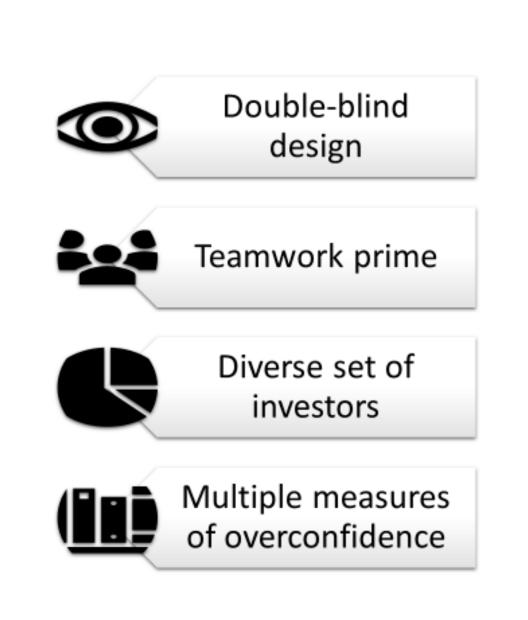


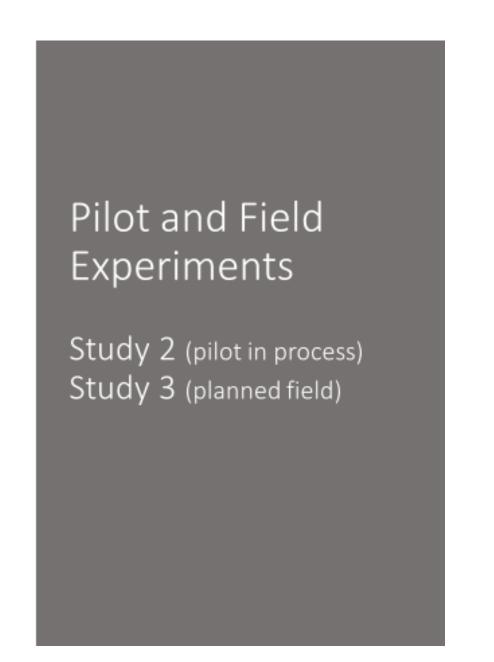
 Participants will be financial advisors and their clients

## he Studies

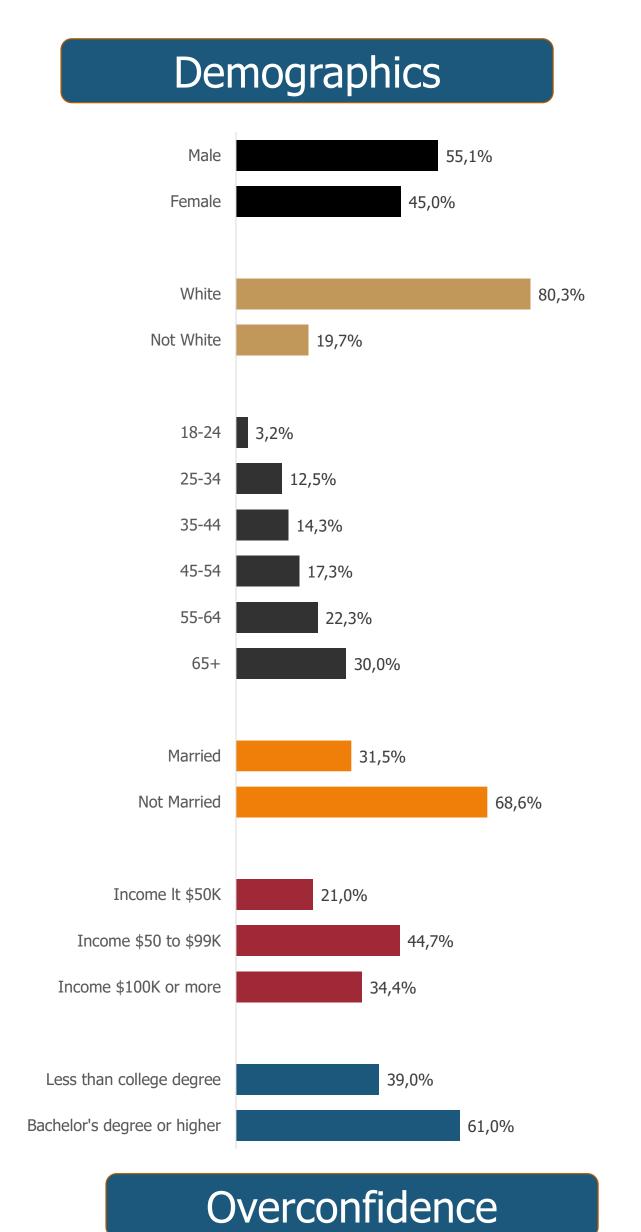
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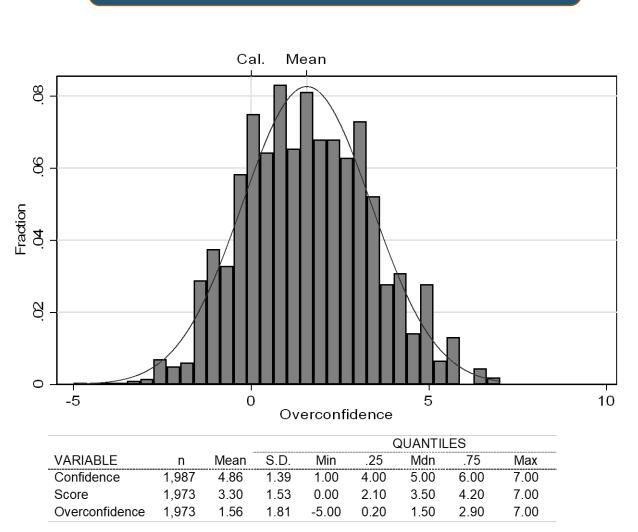
Study 1 Conceptual Model			
$oc_i = \beta_0 + \beta_1 segment_i + \epsilon_i$	(1)		
$oc_i = \beta_0 + \beta_1 segment_i + \beta_2 age_i + \epsilon_i$	(2)		
$oc_i = \beta_0 + \beta_1 segment_i + \beta_2 age + \beta_3 gender_i + \epsilon_i$	(3)		
$oc_i = \beta_0 + \beta_1 segment_i + \beta_2 age + \beta_3 gender_i + \beta_4 ethnicity_i + \epsilon_i$	(4)		
$oc_i = \beta_0 + \beta_1 segment_i + \beta_2 age + \beta_3 gender_i + \beta_4 ethnicity_i + \beta_5 edu_i + \epsilon_i$	(5)		
$oc_i = \beta_0 + \beta_1 segment_i + \beta_2 age + \beta_3 gender_i + \beta_4 ethnicity_i + \beta_5 edu_i + \beta_6 married_i + \epsilon_i$	(6)		
$oc_i = \beta_0 + \beta_1 segment_i + \beta_2 age + \beta_3 gender_i + \beta_4 ethnicity_i + \beta_5 edu_i + \beta_6 married_i + \beta_7 inc_i + \beta_8 edu_i + $	- ε <sub>ί</sub> (7)		





# Study 1 Findings





## Regression Results

VARIABLES         Nested OLS         Probit Marginal Eff           Decision-Making Segments         -0.518***         -0.0823***           With someone – no advisor         -0.0606         -0.0717***           Self but shared with advisor         -0.0606         -0.0717***           (0.100)         (0.0191)           With someone and shared with advisor         -0.0674         -0.0519**           Self – all advisor         -0.404**         -0.0698**           With someone – all advisor         -0.440***         -0.0872**           With someone – all advisor         -0.440***         -0.0872**           With someone – all advisor         -0.440***         -0.0872**           -0.0872**         -0.0163**         (0.0352)           Don't know/Don't want to say         -0.318         -0.0488           (0.462)         (0.0625)           Age Groups         -0.203         -0.0489           25-34         -0.203         -0.0489           40.0271         (0.0381)           35-44         -0.552***         -0.127***           (0.256)         (0.276)         (0.0381)           45-54         -0.992***         -0.190***           45-64         -1.264***         -0.220*** <tr< th=""><th></th><th>(1)</th><th>(2)</th></tr<>		(1)	(2)
With someone – no advisor         -0.518*** (0.0281)         -0.0823***           Self but shared with advisor         -0.0606 (0.100)         -0.0717****           With someone and shared with advisor         -0.0674 (0.125)         -0.0214**           Self – all advisor         -0.404** (0.159)         (0.0322***           With someone – all advisor         -0.440*** (0.159)         (0.0325)           With someone – all advisor         -0.440*** (0.163)         (0.0350)           Don't know/Don't want to say         -0.318 (0.462)         -0.0872***           Age Groups         -0.203 (0.0381)         -0.488 (0.263)           25-34         -0.203 (0.271)         (0.0381)           35-44         -0.552** (0.271)         (0.0385)           45-54         -0.992*** (0.263)         (0.0385)           45-54         -0.992*** (0.263)         (0.0386)           55-64         -1.264*** (0.263)         (0.0384)           55-64         -1.264*** (0.257)         (0.0386)           65+         -1.544*** (0.256)         (0.0374)           Gender (female)         0.269*** (0.0374)           Gender (female)         0.269*** (0.0374)           Education (bachelor's or higher)         -0.642*** (0.000)           (0.0806)         (0.0155)	VARIABLES	* *	` ,
Self but shared with advisor	Decision-Making Segments		
Self but shared with advisor         -0.0606 (0.100) (0.0191)           With someone and shared with advisor         -0.0674 (0.125) (0.0244)           Self – all advisor         -0.404** -0.0698** (0.159) (0.0322)           With someone – all advisor         -0.440*** -0.0872** (0.163) (0.0350)           Don't know/Don't want to say         -0.318 (0.0350)           Don't know/Don't want to say         -0.318 (0.0350)           Age Groups         -0.203 -0.0489           25-34         -0.203 -0.0489           (0.271) (0.0381)         -0.127*** (0.270) (0.0385)           45-54         -0.992*** -0.197*** (0.263) (0.0384)           45-54         -0.992*** -0.190*** (0.263) (0.0384)           55-64         -1.264*** -0.220** (0.256) (0.0384)           65+         -1.544*** -0.265** (0.257) (0.0382)           65+         -1.544*** -0.265** (0.0374)           Gender (female)         0.269*** (0.256) (0.0374)           Gender (female)         0.269*** (0.050)           Ethnicity (non-white)         0.446*** (0.060)           Education (bachelor's or higher)         -0.642*** (0.078)           (0.000)         (0.0178)           Household income         -0.133** (0.0017)           Constant         -0.915** (0.0334)           Observations         1,973 (0.0315)	With someone – no advisor		
With someone and shared with advisor       (0.100)       (0.0191)         Self – all advisor       -0.0674       -0.0519**         Self – all advisor       -0.404**       -0.0698**         (0.159)       (0.0322)         With someone – all advisor       -0.440***       -0.0872**         (0.163)       (0.0350)         Don't know/Don't want to say       -0.318       -0.0488         (0.462)       (0.0625)         Age Groups       -0.203       -0.0489         25-34       -0.203       -0.0489         (0.271)       (0.0381)         35-44       -0.552**       -0.127***         (0.270)       (0.0385)         45-54       -0.992***       -0.190***         (0.263)       (0.0384)         55-64       -1.264***       -0.220***         65+       -1.544****       -0.265***         (0.256)       (0.0374)         Gender (female)       0.269****       0.0402**         Education (bachelor's or higher)       -0.642****       -0.0735***         (0.0806)       (0.0178)         Education (bachelor's or higher)       -0.642****       -0.0735***         (0.0806)       (0.0178)         Household		` ,	` ,
With someone and shared with advisor         -0.0674 (0.125) (0.0244)           Self – all advisor         -0.404*** (0.159) (0.0322)           With someone – all advisor         -0.440**** (0.063) (0.0350)           Don't know/Don't want to say         -0.318 (0.462) (0.0625)           Age Groups         -0.203 (0.271) (0.0381)           25-34         -0.203 (0.271) (0.0381)           35-44         -0.552** (0.270) (0.0385)           45-54         -0.992*** (0.263) (0.0384)           55-64         -1.264*** (0.257) (0.0382)           65+         -1.544*** (0.256) (0.0374)           Gender (female)         0.269*** (0.256) (0.0374)           Gender (female)         0.446*** (0.0806) (0.0157)           Ethnicity (non-white)         0.446*** (0.0806) (0.0157)           Education (bachelor's or higher)         -0.642*** (0.0906) (0.0158)           Married         0.314*** (0.100) (0.0178)           Household income         -0.133** (0.0197*)           Constant         2.915*** (0.0334)           Observations         1,973 (0.034)           Observations         1,973 (0.034)           Observations         1,973 (0.034)	Self but shared with advisor		
Self – all advisor       (0.125)       (0.0244)         Self – all advisor       -0.404***       -0.0698**         With someone – all advisor       -0.440***       -0.0872**         (0.163)       (0.0350)         Don't know/Don't want to say       -0.318       -0.0488         -0.318       -0.0488       (0.0625)         Age Groups       -0.203       -0.0489         25-34       -0.203       -0.0489         (0.271)       (0.0381)       -0.0489         45-54       -0.552***       -0.127***         (0.270)       (0.0385)       -0.092***         45-54       -0.992****       -0.190***         65+       -1.264****       -0.220***         65+       -1.544****       -0.265***         65+       -1.544****       -0.265***         Gender (female)       0.269****       0.0402***         Ethnicity (non-white)       0.446****       0.0620***         Education (bachelor's or higher)       -0.642****       -0.0735***         (0.0806)       (0.0155)         Married       0.314****       0.0521***         Household income       -0.133**       -0.0197*         Constant       0.0501**       (0.00	NACCE TO THE RESIDENCE OF THE PARTY OF THE P	,	,
Self – all advisor         -0.404*** (0.159)         -0.0698** (0.0322)           With someone – all advisor         -0.440*** (0.163)         -0.0872** (0.0350)           Don't know/Don't want to say         -0.318 (0.462)         -0.0488 (0.0625)           Age Groups         -0.203 (0.271)         -0.0489 (0.271)           25-34         -0.2552** (0.270)         -0.0381)           35-44         -0.552** (0.270)         (0.0384)           45-54         -0.992*** (0.263)         (0.0384)           45-54         -0.992*** (0.263)         (0.0384)           55-64         -1.264*** (0.263)         (0.0384)           65+         -1.544*** (0.256)         (0.0374)           Gender (female)         0.269*** (0.256)         (0.0374)           Gender (female)         0.269*** (0.056)         (0.0157)           Ethnicity (non-white)         0.446*** (0.000)         (0.0157)           Education (bachelor's or higher)         -0.642*** (0.000)         -0.0735*** (0.0187)           Household income         -0.133** (0.000)         -0.0197*           Constant         2.915*** (0.334)         -0.0197*           Observations         1,973 (0.0334)         1,973 (0.0334)	with someone and shared with advisor		
With someone – all advisor       (0.159)       (0.0322)         -0.440****       -0.0872**       -0.0872**         -0.018       (0.0350)       -0.0488         -0.0462       (0.0625)         Age Groups       -0.203       -0.0489         25-34       -0.271)       (0.0381)         35-44       -0.552**       -0.127***         (0.270)       (0.0385)         45-54       -0.92***       -0.190***         (0.263)       (0.0384)         55-64       -1.264***       -0.220***         (0.257)       (0.0382)         65+       -1.544***       -0.265**         (0.256)       (0.0374)         Gender (female)       0.269***       0.0402**         Gender (female)       0.269***       0.0402**         (0.0806)       (0.0157)         Ethnicity (non-white)       0.446***       0.0620****         (0.0806)       (0.0157)         Married       0.314****       0.0521***         (0.0806)       (0.0155)         Married       0.314****       0.0521***         Household income       -0.133**       -0.0197*         Constant       2.915***       -0.0197*	Solf all advisor	` ,	` ,
With someone – all advisor       -0.440*** (0.163) (0.0350) (0.0350)         Don't know/Don't want to say       -0.318 (0.462) (0.0625)         Age Groups       -0.203 (0.0381)         25-34       -0.203 (0.0381)         35-44       -0.552** (0.270) (0.0385)         45-54       -0.992*** (0.263) (0.0384)         55-64       -1.264*** (0.257) (0.0382)         65+       -1.544*** (0.256) (0.0374)         Gender (female)       0.269*** (0.256) (0.0374)         Gender (female)       0.446*** (0.000) (0.0157)         Ethnicity (non-white)       0.446*** (0.000) (0.0157)         Education (bachelor's or higher)       -0.642*** (0.0806) (0.0155)         Married       0.314*** (0.000) (0.0187)         Household income       -0.133** (0.0601) (0.0115)         Constant       2.915*** (0.334)         Observations       1,973 (0.351)         R-squared       0.151	Sell – all auvisul		
Don't know/Don't want to say   Co.163   Co.0350   Co.0480   Co.0462   Co.0625	With someone – all advisor	,	` ,
Don't know/Don't want to say	With Someone – all advisor		
Age Groups   25-34	Don't know/Don't want to say	,	` '
Age Groups         25-34       -0.203       -0.0489         (0.271)       (0.0381)         35-44       -0.552**       -0.127***         (0.270)       (0.0385)         45-54       -0.992***       -0.190***         (0.263)       (0.0384)         55-64       -1.264****       -0.220***         65+       -1.544***       -0.265***         (0.256)       (0.0374)         Gender (female)       0.269***       0.0402**         Gender (female)       0.269***       0.0402**         (0.0806)       (0.0157)       0.0520****         Education (bachelor's or higher)       -0.642****       -0.0735***         (0.0806)       (0.0155)         Married       0.314****       0.0521****         (0.100)       (0.0187)         Household income       -0.133**       -0.0197*         Constant       2.915****         (0.334)	Ben t know/Ben t want to day		
25-34	Age Groups	( /	()
35-44		-0.203	-0.0489
Color		(0.271)	(0.0381)
45-54	35-44	-0.552**	-0.127***
(0.263) (0.0384)		(0.270)	(0.0385)
55-64	45-54		
Color		` ,	,
Constant   Constant	55-64		
Gender (female)       (0.256)       (0.0374)         Gender (female)       0.269***       0.0402**         (0.0806)       (0.0157)         Ethnicity (non-white)       0.446***       0.0620***         (0.104)       (0.0178)         Education (bachelor's or higher)       -0.642***       -0.0735***         (0.0806)       (0.0155)         Married       0.314***       0.0521***         (0.100)       (0.0187)         Household income       -0.133**       -0.0197*         (0.0601)       (0.0115)         Constant       2.915***         (0.334)         Observations       1,973       1,973         R-squared       0.151	05.	` ,	,
Gender (female)       0.269***       0.0402**         (0.0806)       (0.0157)         Ethnicity (non-white)       0.446***       0.0620***         (0.104)       (0.0178)         Education (bachelor's or higher)       -0.642***       -0.0735***         (0.0806)       (0.0155)         Married       0.314***       0.0521***         (0.100)       (0.0187)         Household income       -0.133**       -0.0197*         (0.0601)       (0.0115)         Constant       2.915***         (0.334)         Observations       1,973       1,973         R-squared       0.151	65+		
Constant   Constant	O	\ /	,
Ethnicity (non-white)  O.446***  (0.104)  (0.0178)  Education (bachelor's or higher)  O.0806)  Married  O.0806)  (0.0155)  Married  O.0920***  (0.0806)  (0.0155)  Married  O.0100)  (0.0187)  Household income  O.0133**  (0.0601)  Constant  Observations  1,973  R-squared  O.0520***  O.0620***  O.0178)  O.0175)  O.0155)  O.0521***  (0.0601)  O.0115)	Gender (female)		
Constant   Constant		(0.0806)	\
Education (bachelor's or higher) -0.642*** -0.0735*** (0.0806) (0.0155)  Married 0.314*** 0.0521*** (0.100) (0.0187)  Household income -0.133** -0.0197* (0.0601) (0.0115)  Constant 2.915*** (0.334)  Observations R-squared 0.151	Ethnicity (non-white)	0.446***	0.0620***
Education (bachelor's or higher) -0.642*** -0.0735*** (0.0806) (0.0155)  Married 0.314*** 0.0521*** (0.100) (0.0187)  Household income -0.133** -0.0197* (0.0601) (0.0115)  Constant 2.915*** (0.334)  Observations R-squared 0.151		(0.104)	(0.0178)
(0.0806) (0.0155)  Married 0.314*** 0.0521***  (0.100) (0.0187)  Household income -0.133** -0.0197*  (0.0601) (0.0115)  Constant 2.915***  (0.334)  Observations 1,973 1,973  R-squared 0.151	Education (bachelor's or higher)	-0.642***	` '
Married       0.314***       0.0521***         (0.100)       (0.0187)         Household income       -0.133**       -0.0197*         (0.0601)       (0.0115)         Constant       2.915***         (0.334)       (0.334)         Observations       1,973       1,973         R-squared       0.151	3 /		
Household income	Married	,	'
Household income -0.133** -0.0197* (0.0601)  Constant 2.915*** (0.334)  Observations R-squared 1,973 0.151	Marrieu		
(0.0601)       (0.0115)         Constant       2.915***         (0.334)       (0.334)         Observations R-squared       1,973		,	,
Constant       2.915***         (0.334)       (0.374)         Observations       1,973         R-squared       0.151	Household income		
Observations       1,973       1,973         R-squared       0.151		(0.0601)	(0.0115)
Observations         1,973         1,973           R-squared         0.151	Constant	2.915***	
R-squared 0.151		(0.334)	
·	Observations	1,973	1,973
·	R-squared	0.151	
	•		0.1383

### Limitations

Causality – endogeneity problem

Single measure for key construct of overconfidence

Sample of investors with accounts beyond 401(k) or IRA

## **Primary Findings**

Impact of shared decision-making on the most

With spouse/

overconfident investors

8% -

With broker/ advisor

someone in

household

7% -

## **Next Steps**

Field experiment: Observed dyadic interaction and its influence on overconfidence

Industry data: Teamdependent/independent work units and their difference in overconfidence levels

## **Future Research**

Financial decisions other than investments Characteristics of married households that influence the effectiveness of shared decision-making

Characteristics of client-advisor relationships that influence effectiveness of shared decision-making