panel_tick_data_uoft.csv

Autogenerated data summary from dataMaid

2023-11-21 21:15:34

Data report overview

The dataset examined has the following dimensions:

Feature	Result
Number of observations	15288
Number of variables	35

Codebook summary table

Label	Variable	Class	# unique values	Missing	Description
Internal (abbreviated) treatment name	**player.inner_name**	character	4	0.00 %	
Unique participant code	**participant_code**	character	71	0.00 %	
Indicates the round number of the experiment or activity the participant was engaged in at the time of the page visit.	**round_number**	numeric	4	0.00 %	
Stock price at a given tick	**price**	numeric	35	0.00 %	
The specific tick (time point) in the trading day (round) when the event occurred.	**tick_number**	numeric	56	0.00 %	

Label	Variable	Class	# unique values	Missing	Description
the probability of a price movement in a favorable direction as determined by a Markovian model of price changes.	**filtered_prob**	numeric	225	0.00 %	
A binary indicator that flags a sequence where the price has decreased for three consecutive ticks within the same round. It is set to 1 only for the first tick in such a sequence, indicating the initiation of a downward trend.	**red_alert**	numeric	2	0.00 %	
Similar to red_alert, but for upward trends. It flags when the price has increased for three consecutive ticks within a round. The indicator is set to 1 only for the first tick in such a sequence, signaling the start of an upward price movement.	**green_alert**	numeric	2	0.00 %	
Adjusted trade sign, neutralized at the first instance when cumulative position equals or exceeds 2, then follows original trade sign.	**optimal_trade_sign**	numeric	3	0.00 %	

Label	Variable	Class	# unique values	Missing	Description
The name or type of the event (e.g. GAME_STARTS, GAME_ENDS).	**name**	character	3	81.26 %	
Reflects position change: 1 for a 'buy' (increase), -1 for a 'sell' (decrease), and 0 for no change.	**position_delta**	numeric	3	0.00 %	
Cumulative trading position per participant per round, based on net buys and sells.	**position**	numeric	2	0.00 %	
Previous tick's trading position for each participant and round.	**position_lag**	numeric	2	0.00 %	
Price at which the current position was taken, carried forward until the next position change.	**purchase_price**	numeric	32	0.00 %	
The financial gain calculated for each transaction, determined by subtracting the purchase price of an asset from its selling price	**capital_gains**	numeric	44	0.00 %	
Indicates if a red alert (downward price trend signal) was triggered in the previous tick for the same participant and round.	**red_alert_L1**	numeric	2	0.00 %	

Label	Variable	Class	# unique values	Missing	Description
Indicates if a red alert was triggered two ticks ago for the same participant and round.	**red_alert_L2**	numeric	2	0.00 %	
Indicates if a red alert was triggered three ticks ago for the same participant and round.	**red_alert_L3**	numeric	2	0.00 %	
Indicates if a green alert (upward price trend signal) was triggered in the previous tick for the same participant and round.	**green_alert_L1**	numeric	2	0.00 %	
Indicates if a green alert was triggered two ticks ago for the same participant and round.	**green_alert_L2**	numeric	2	0.00 %	
Indicates if a green alert was triggered three ticks ago for the same participant and round.	**green_alert_L3**	numeric	2	0.00 %	
name of the block (specific experimental condition for this round/trading day)	**player.block_name**	character	4	0.00 %	
Age of the player.	**player.age**	numeric	6	0.00 %	
Payoff for the player in this round	**player.payoff**	numeric	4	0.00 %	
Gender of the player.	**player.gender**	character	2	0.00 %	

Label	Variable	Class	# unique values	Missing	Description
Did you take any course focused on financial markets	**player.course_financial**	numeric	2	0.00 %	
Do you have any trading experience?	**player.trading_experience**	numeric	2	0.00 %	
Do you use mobile trading apps?	**player.online_trading_experience**	numeric	2	0.00 %	
A binary indicator where 1 represents participants who were in specific game blocks ("block 3 (G second)" or "block 4 (G second)") or 0 otherwise	**ingame_experience**	numeric	2	0.00 %	
Indicates if a round is gamified (1) or not (0), based on round and block criteria.	**gamified**	numeric	2	0.00 %	
Marks a round as salient (1) or non-salient (0), depending on the specific round and block combination.	**salient**	numeric	2	0.00 %	
A participant's assessment of the likelihood of the stock price increasing, provided both before trading begins and midway through the trading day, in response to the question "How likely is the stock to go up next?"	**prediction**	numeric	5	0.00 %	

Label	Variable	Class	# unique values	Missing	Description
Normalized measure of how closely a participant's prediction aligns with the perceived probability.	**prediction_accuracy**	numeric	4	0.00 %	
Self-reported assessment of the player's knowledge in trading	**player.knowledge**	numeric	10	0.00 %	
Participant's average normalized accuracy of first-tick predictions.	**accuracy_pred_zero**	numeric	3	0.00 %	

Variable list

player.inner_name

Internal (abbreviated) treatment name

Feature	Result
Variable type	character
Number of missing obs.	0 (0 %)
Number of unique values	4
Mode	"s1"
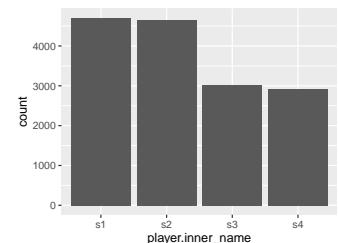
- Observed factor levels: "s1", "s2", "s3", "s4".

participant_code

Unique participant code

Feature	Result
Variable type	character
Number of missing obs.	0 (0 %)
Number of unique values	71
Mode	"0nyvn1ih"
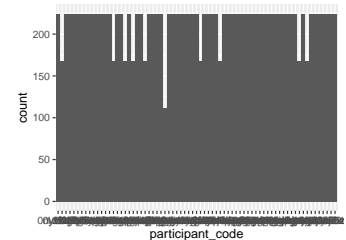
- Observed factor levels: "0nyvn1ih", "0ysr1j7s", "1c9lzru0", "1f2rfly4", "2f9gqu83", "34e7d6u1", "3cbm3sys", "41x3lsag", "5c7udvpd", "5gtepg45", "5kbeb2zm", "5wgi88t6", "5ymfsw49", "7eu86eyg", "7jonfg2l", "7qzgrb99", "8vfnqphr", "8vrmmtmo", "93y42seh", "9xz1zuoz", "aqvtf4p9", "b8u4u74w", "bgjp13q8", "bi2jfx42", "bi5jp617", "bsjfe8ds", "cj9n1uj4", "dhiqzueo", "fcp9s0do", "fizyhuoi", "g4ux0ytr", "galec1ga", "gcs54w3b", "gnzz7gc4",

"gy1a20qq", "hre8fq8i", "i6yb4yej", "in3zb9k3", "iwam94ip", "izacs7fd", "j127swcg", "k744ov5s", "l1c1hcmk", "leux5m59", "lw8audd5", "mbj7g6v1", "mi0088eg", "nlp1gb1k", "op23dxig", "ot80gep3", "p4esvzkg", "pb727kvg", "pg5m7phh", "pgdv91vz", "px6py4fl", "q5w3ghvj", "qzgbjdzz", "r6br4dt3", "rishpgae", "s1qm3487", "sxogauy0", "v3ju8jv9", "vha118yy", "vjy9du3z", "vrwqe4da", "wpwzt9j0", "wrahuh7u", "y0d7uk3z", "yq3wii2n", "yt3h0how", "zzc584nm".

round_number

Indicates the round number of the experiment or activity the participant was engaged in at the time of the page visit.

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	4
Median	4
1st and 3rd quartiles	3; 4
Min. and max.	2; 5
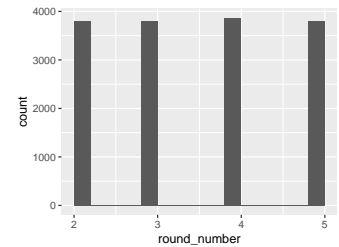
price

Stock price at a given tick

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	35
Median	100
1st and 3rd quartiles	85; 125
Min. and max.	30; 210
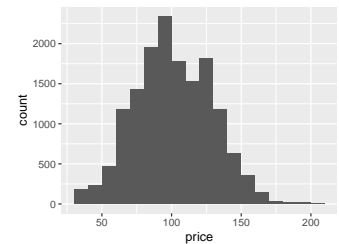
tick_number

The specific tick (time point) in the trading day (round) when the event occurred.

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	56
Median	32.5
1st and 3rd quartiles	18.75; 46.25
Min. and max.	5; 60
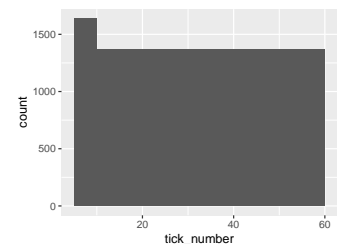
filtered_prob

the probability of a price movement in a favorable direction as determined by a Markovian model of price changes.
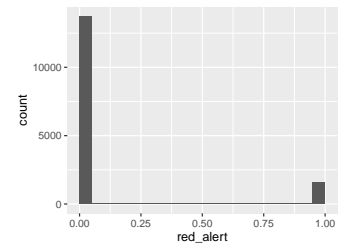
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	225
Median	0.5
1st and 3rd quartiles	0.47; 0.52
Min. and max.	0.41; 0.59
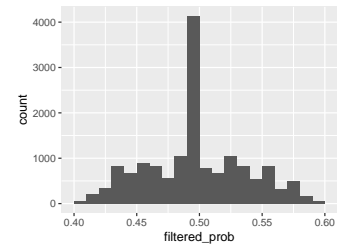
red_alert

A binary indicator that flags a sequence where the price has decreased for three consecutive ticks within the same round. It is set to 1 only for the first tick in such a sequence, indicating the initiation of a downward trend.
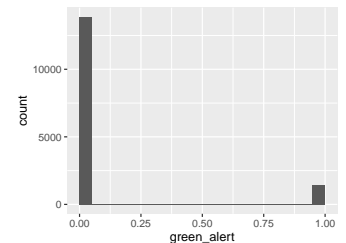
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	0; 1

green_alert

Similar to red_alert, but for upward trends. It flags when the price has increased for three consecutive ticks within a round. The indicator is set to 1 only for the first tick in such a sequence, signaling the start of an upward price movement.

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	0; 1

optimal_trade_sign

Adjusted trade sign, neutralized at the first instance when cumulative position equals or exceeds 2, then follows original trade sign.
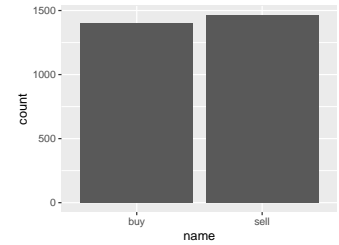
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	3
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	-1; 1
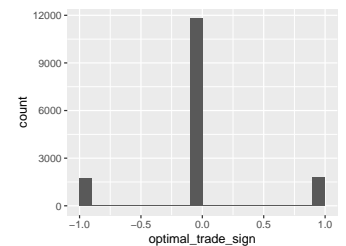
name

The name or type of the event (e.g. GAME_STARTS, GAME_ENDS).

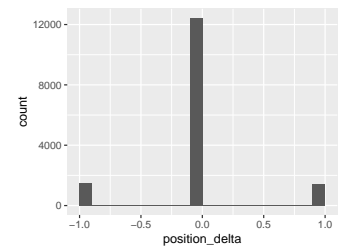| Feature	Result
Variable type	character
Number of missing obs.	12423 (81.26 %)
Number of unique values	2
Mode	"sell"

- Observed factor levels: "buy", "sell".

position_delta

Reflects position change: 1 for a 'buy' (increase), -1 for a 'sell' (decrease), and 0 for no change.
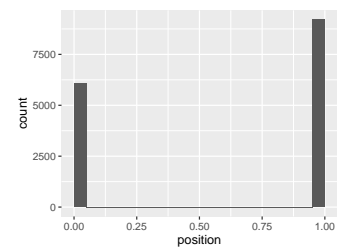
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	3
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	-1; 1

position

Cumulative trading position per participant per round, based on net buys and sells.

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	1
1st and 3rd quartiles	0; 1
Min. and max.	0; 1

position_lag

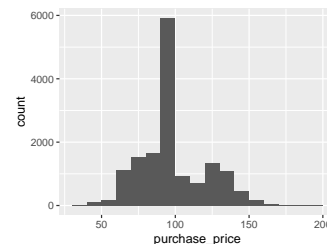*Previous tick's trading position for each participant and round.*

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	1
1st and 3rd quartiles	0; 1
Min. and max.	0; 1
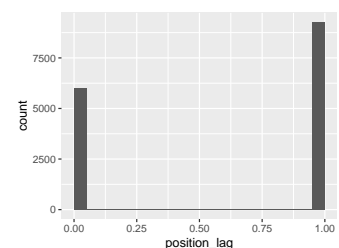
purchase_price

*Price at which the current position was taken, carried forward until the next position change.*

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	32
Median	100
1st and 3rd quartiles	85; 110
Min. and max.	35; 200

capital_gains

The financial gain calculated for each transaction, determined by subtracting the purchase price of an asset from its selling price
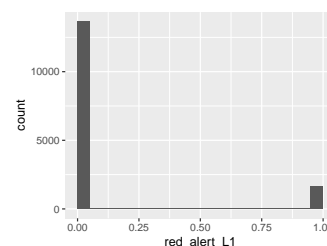
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	44
Median	0
1st and 3rd quartiles	-10; 15
Min. and max.	-110; 110
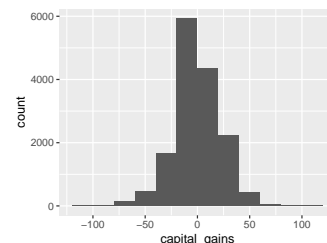
red_alert_L1

Indicates if a red alert (downward price trend signal) was triggered in the previous tick for the same participant and round.
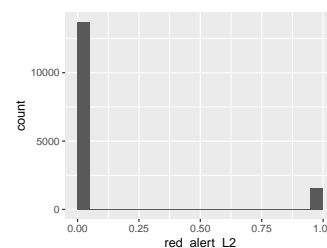
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	0; 1

red_alert_L2

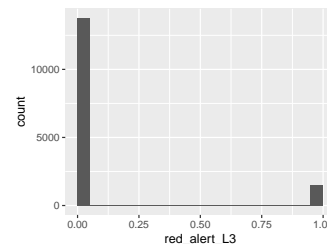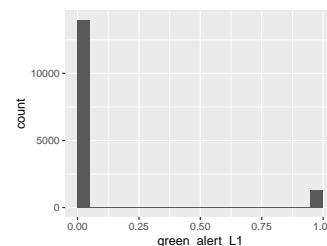*Indicates if a red alert was triggered two ticks ago for the same participant and round.*

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	0; 1

red_alert_L3

Indicates if a red alert was triggered three ticks ago for the same participant and round.

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	0; 1

green_alert_L1

Indicates if a green alert (upward price trend signal) was triggered in the previous tick for the same participant and round.
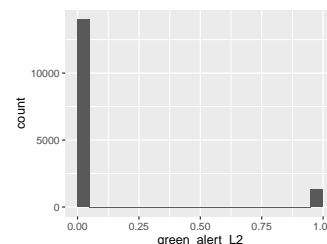
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	0; 1

green_alert_L2

*Indicates if a green alert was triggered two ticks ago for the same participant and round.*

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	0; 1

green_alert_L3

Indicates if a green alert was triggered three ticks ago for the same participant and round.

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 0
Min. and max.	0; 1
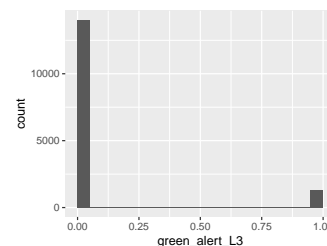
player.block_name

name of the block (specific experimental condition for this round/trading day)

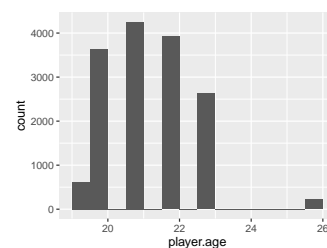| Feature	Result
Variable type	character
Number of missing obs.	0 (0 %)
Number of unique values	4
Mode	"block 4 (G second)"
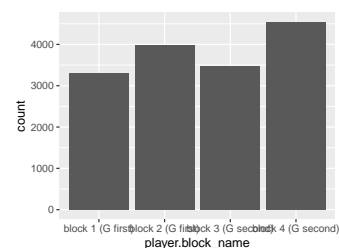
- Observed factor levels: "block 1 (G first)", "block 2 (G first)", "block 3 (G second)", "block 4 (G second)".
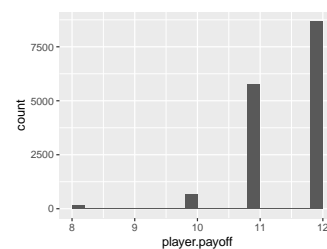
player.age

Age of the player.

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	6
Median	21
1st and 3rd quartiles	20; 22
Min. and max.	19; 26

player.payoff

Payoff for the player in this round

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	4
Median	12
1st and 3rd quartiles	11; 12
Min. and max.	8; 12

player.gender

Gender of the player.

Feature	Result
Variable type	character
Number of missing obs.	0 (0 %)
Number of unique values	2
Mode	"Male"
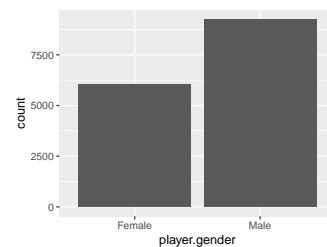
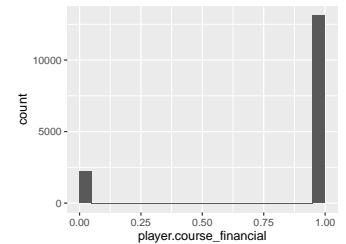

- Observed factor levels: "Female", "Male".

player.course_financial
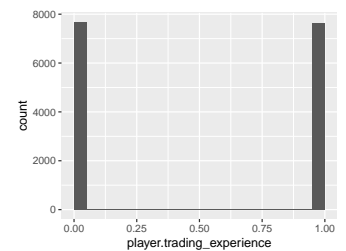
Did you take any course focused on financial markets

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	1
1st and 3rd quartiles	1; 1
Min. and max.	0; 1

player.trading_experience

Do you have any trading experience?

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 1
Min. and max.	0; 1

player.online_trading_experience

Do you use mobile trading apps?

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	1
1st and 3rd quartiles	0; 1
Min. and max.	0; 1
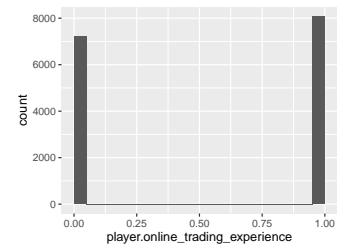
ingame_experience

A binary indicator where 1 represents participants who were in specific game blocks ("block 3 (G second)" or "block 4 (G second)") or 0 otherwise
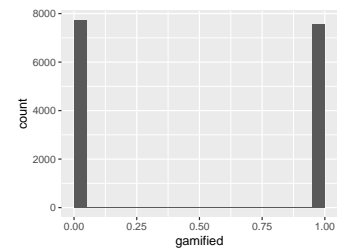
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	1
1st and 3rd quartiles	0; 1
Min. and max.	0; 1
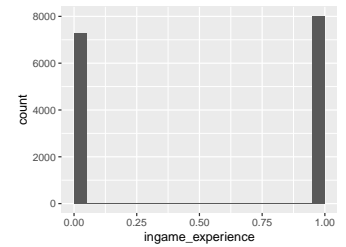
gamified

*Indicates if a round is gamified (1) or not (0), based on round and block criteria.*

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 1
Min. and max.	0; 1

salient

*Marks a round as salient (1) or non-salient (0), depending on the specific round and block combination.*

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	2
Median	0
1st and 3rd quartiles	0; 1
Min. and max.	0; 1
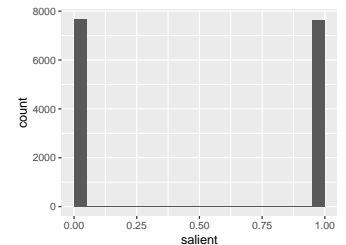
prediction

A participant's assessment of the likelihood of the stock price increasing, provided both before trading begins and midway through the trading day, in response to the question "How likely is the stock to go up next?"
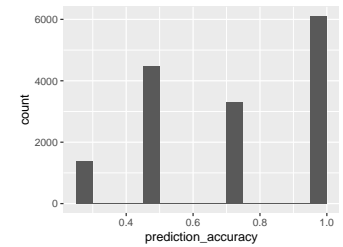
Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	5
Median	4
1st and 3rd quartiles	2; 4
Min. and max.	1; 5
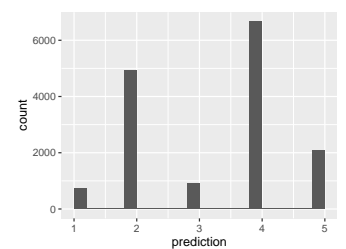
prediction_accuracy

*Normalized measure of how closely a participant's prediction aligns with the perceived probability.*

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	4
Median	0.75
1st and 3rd quartiles	0.5; 1
Min. and max.	0.25; 1

player.knowledge

*Self-reported assessment of the player's knowledge in trading*

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	10
Median	6
1st and 3rd quartiles	5; 7
Min. and max.	1; 10
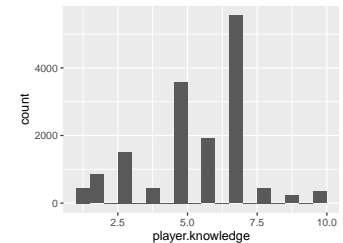
accuracy_pred_zero

Participant's average normalized accuracy of first-tick predictions.

Feature	Result
Variable type	numeric
Number of missing obs.	0 (0 %)
Number of unique values	3
Median	0.5
1st and 3rd quartiles	0; 0.5
Min. and max.	0; 1
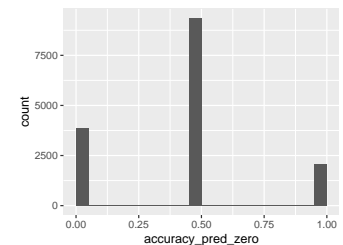
Report generation information:

- Created by: Philipp Chapkovski (username: `chapkovski`).

- Report creation time: Tue Nov 21 2023 21:15:35

- Report was run from directory: `/Users/chapkovski`

- dataMaid v1.4.1 [Pkg: 2021-10-08 from CRAN (R 4.2.0)]

- R version 4.2.1 (2022-06-23).

- Platform: aarch64-apple-darwin20 (64-bit)(macOS 14.1).

- Function call: dataMaid::makeDataReport(data = df, mode = c("summarize", "visualize", "check"), smartNum = FALSE, file = "panel_tick_data_uoft.csv", replace = T, openResult = F, checks = list(character = "showAllFactorLevels", factor = "showAllFactorLevels", labelled = "showAllFactorLevels", haven_labelled = "showAllFactorLevels", numeric = NULL, integer = NULL, logical = NULL, Date = NULL), listChecks = FALSE, maxProbVals = Inf, codebook = TRUE, reportTitle = "panel_tick_data_uoft.csv")